

Prepared for
Louisiana Department
of Transportation and
Development (DOTD)

September 12, 2023

AECOM



IDIQ Contract for Bridge Rating Statewide

Contract Numbers:

4400027650, 4400027651, and 4400027652

Delivering a better world

September 12, 2023

Louisiana Department of Transportation and Development (LADOTD)
1201 Capitol Access Road, Room 405-E
Baton Rouge, LA 70802

**SUBJECT: IDIQ CONTRACT FOR BRIDGE RATING, STATEWIDE
CONTRACT NOS. 4400027650, 4400027651, AND 4400027652**

Dear Members of the Evaluation Team:

Approximately 10% of LADOTD’s 7,800+ on-system bridges are in poor condition and in need of replacement or rehabilitation to provide safety to the traveling public. More than 50% of these poor-rated structures have operating load ratings that warrant posting (restricting vehicle size and weight). These statistics have warranted an immediate and proactive approach from LADOTD’s Bridge Load Rating Group to improve the condition of Louisiana’s on and off-system structures by:

- Verifying on/off system bridges are rated in accordance with the AASHTO 23 Metrics
- Confirming that load ratings and load postings comply with the NBIS Oversight Program Metrics for Bridge Inspections
- Quickly and accurately responding to overweight vehicle permit load requests

LADOTD’s Bridge Load Rating Group continues to work towards reducing the number of poorly rated bridges and minimizing the number of load postings throughout the state. With the development of their bridge rating IDIQ contracts, LADOTD has engaged additional consultant support to improve these conditions; however, an emphasis is needed to manage these contracts so load rating reports are consistently documented and comply with LADOTD’s load rating protocols, that they include repair recommendations to eliminate load postings, and they include reliable and consistent rating factors when structures are without plans.

With this in mind, LADOTD must engage an experienced load rating team with proven statewide experience, a team that is in line with LADOTD’s current load rating needs, and a team with an innovative and efficient approach to maximize the value of these transportation assets. AECOM is that team and is ideally positioned to partner with the LADOTD Load Rating Group to support this initiative.

In response to this RFP and LADOTD’s ongoing needs for design support for IDIQ task order contracts, AECOM offers the following benefits:

 NATIONAL LOAD RATING EXPERIENCE	 LADOTD LOAD RATING FOCUSED	 INNOVATIVE AND EFFICIENT
<p>Time and again, AECOM’s national load rating practice brings proven experience on statewide load rating contracts around the country. We provide a team with a unique breadth of experience and knowledge base related to best practices, best approaches, and best use of resources to perform AASHTOWare BrR and complex load rating tasks.</p>	<p>Our team’s experience supporting LADOTD’s Bridge Load Rating IDIQ Contracts has allowed us to focus on recent concerns including proper report documentation, compliance to LADOTD load rating protocols, and developing solutions to substandard posting conditions and bridge ratings without plans.</p>	<p>Our familiarity with the limitations and benefits of the AASHTOWare BrR software has allowed our team to maximize its use on atypical bridge load ratings. Our technical lead, Jason Zimpfer recently developed and proposed a systematic and cost-effective approach to load rate LADOTD substructure elements using AASHTOWare BrR software.</p>

We have brought **Stantec Consulting Services, Inc. (Stantec)** on board as a major subconsultant partner for this IDIQ load rating contract. Stantec brings recent and relevant LADOTD IDIQ bridge rating experience to further strengthen our load rating capabilities and quickly incorporate any “lessons-learned” from previous contracts to streamline LADOTD’s rating needs.

As the contract and project manager, I will be the point of contact for this contract. I currently serve as the AECOM's West Gulf Coast Region Bridge Inspection/Load Rating Lead throughout the western United States including Louisiana, Mississippi, and Texas. I have more than 12-years of bridge design, inspection, and load rating experience. My team includes Chris McKown, Deputy Project Manager; Jason Zimpfer, Technical Leader; and Henry Fix, QA/QC Lead. I have worked personally with these leaders and am confident this team will deliver the required bridge load rating solutions for LADOTD.

AECOM is committed to delivering a quality design for the IDIQ Contract for Bridge Load Ratings to LADOTD, while successfully meeting the contract challenges and exceeding the requirements of LADOTD. If you have any questions, please contact me directly at 601.718.4709, or via email, london.whitton@aecom.com.

Sincerely,

AECOM Technical Services, Inc.



Landon Whitton PE
Project Manager
Associate Vice President



Jonathan McDowell, PE
Project Principal
Associate Vice President

An aerial photograph of a bridge under construction, showing a network of steel beams and girders. Two workers in safety gear are visible on the structure. A thick, curved yellow line arches across the top of the image. The background is a vast expanse of water.

AECOM

Sections

01-13

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DOTD FORM: 24-102

PROPOSAL TO PROVIDE CONSULTANT SERVICES

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

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

Prime consultant should enter the firm name in the footer at the bottom of this page. (It will carry over to subsequent pages.)

1. Contract Name as shown in the advertisement	IDIQ Contract for Bridge Rating
2. Contract Number(s) as shown in the advertisement	Contract Nos. 4400027650, 4400027651, and 4400027652
3. State Project Number(s), if shown in the advertisement	NA
4. Prime consultant name (name must match as registered with the Louisiana Secretary of State where such registration is required by law)	AECOM Technical Services, Inc.
5. Prime consultant license number (as registered with the Louisiana Professional Engineering and Land Surveying Board (LAPELS) if registration is required under Louisiana law)	AECOM Technical Services, Inc. (AECOM) LAPELS No. EF.0002331
6. Prime consultant mailing address	8555 United Plaza Blvd., Suite 300 Baton Rouge, LA 70809
7. Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	8555 United Plaza Blvd., Suite 300 Baton Rouge, LA 70809
8. Name, title, phone number, and email address of prime consultant's contract point of contact	Landon Whitton, PE, Associate Vice President 601.717.4709; landon.whitton@aecom.com
9. Name, title, phone number, and email address of the official with signing authority for this proposal	Jonathan McDowell, PE, Associate Vice President 225.922.5934; jonathan.mcdowell@aecom.com

10. This is to certify that all information contained herein is accurate and true, and that the team presently has sufficient staff to perform these services within the designated time frame. By submitting this proposal, proposer certifies that it is not engaged in a boycott of Israel and it will, for the duration of its contract obligations, refrain from a boycott of Israel. Proposer also certifies and agrees that the following information is correct: In preparing its response, the proposer has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israeli-controlled territories, with the specific intent to accomplish a boycott or divestment of Israel. The proposer also has not retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. DOTD reserves the right to reject the response of the bidder or proposer if this certification is subsequently determined to be false, and to terminate any contract awarded based on such a false response.



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

Date: September 12, 2023

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

Firm(s): Firm(s)' %:

NA

12. Past Performance Evaluation Discipline Table:

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

The only past performance evaluation disciplines to be used are: Road, Bridge, Traffic, CE&I/OV, Geotech, Survey, Environmental, Data Collection, Planning, Right-of-Way, CPM, ITS, Appraiser and Other (please specify).

Past Performance Evaluation Discipline(s)	% of Overall Contract	AECOM Technical Services, Inc.	Stantec Consulting Services, Inc.	Each Discipline must total to 100%
Bridge	100%	77.5%	22.5%	100%
Identify the percentage of work for the overall contract to be performed by the prime consultant and each subconsultant.				
Percent of Contract	100%	77.5%	22.5%	100%

13. Firm Size:

For all firms that are part of this team, indicate the approximate number of personnel to be committed to this contract, by DOTD Job Classification and the total number of personnel within the firm that could provide support, if needed. If a specialized job classification is required and not included on the DOTD job classification list, specify "Other (please specify)" and include the classification title inside the parentheses.

The DOTD Job Classification(s) to be used can be found at the following link:

http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/Job_Qualification/Job%20Classifications%20with%20Descriptions.pdf

Firm name	DOTD Job Classification	Number of personnel committed to this contract	Total number of personnel available in this DOTD Job Classification (if needed)
AECOM Technical Services, Inc.	Principal	1	3
	Supervisor - Eng.	2	20
	Supervisor - Other	3	8
	Engineer	10	18
	Engineer Intern	6	18
	Engineer - Other	7	12
	Inspector - Bridge	1	6
Stantec Consulting Services, Inc.	Principal	1	2
	Engineer	4	9
	Engineer Intern	2	8
	Technician	1	2
	Inspector - Bridge	3	10



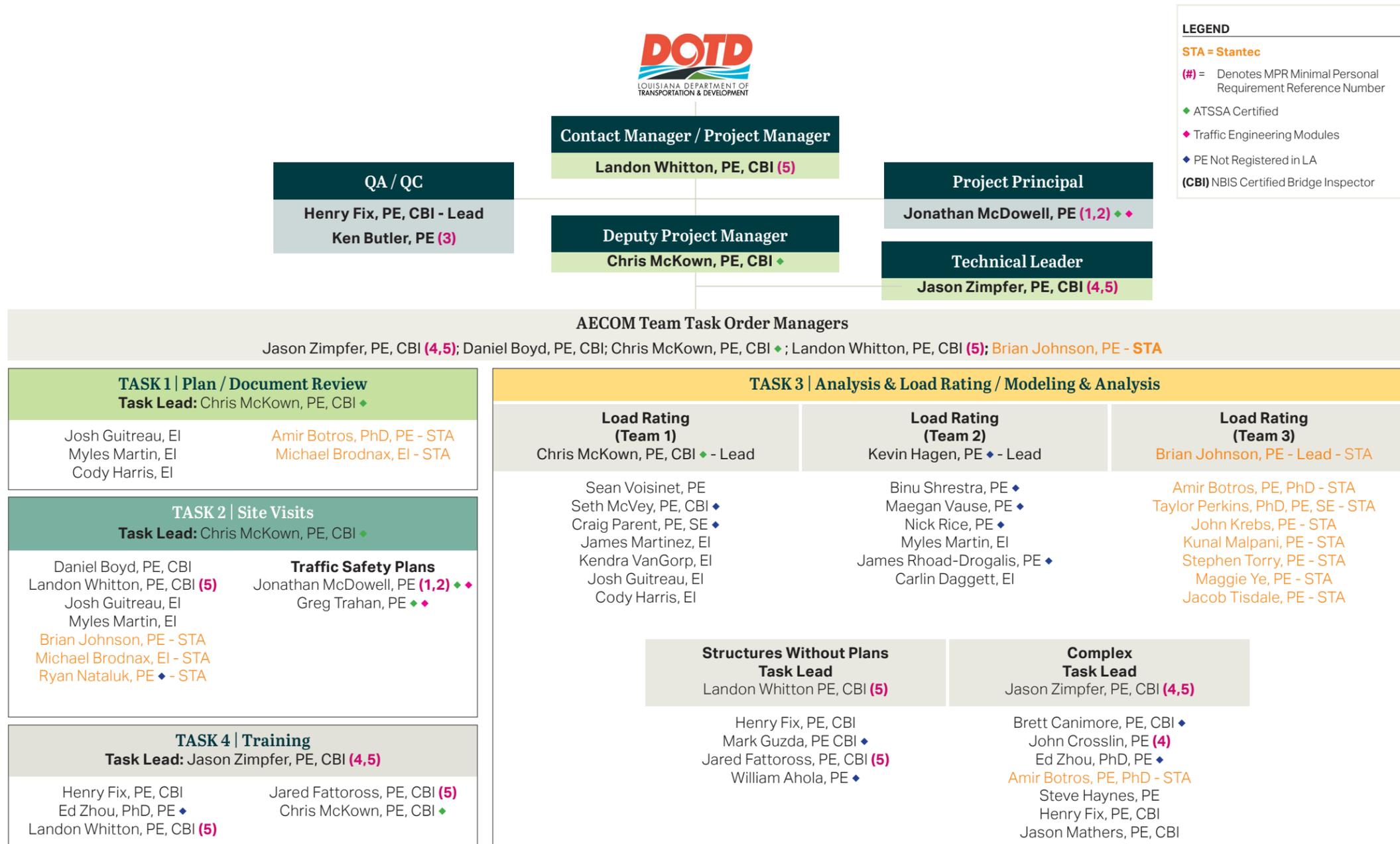
AECOM

Sections

14-16

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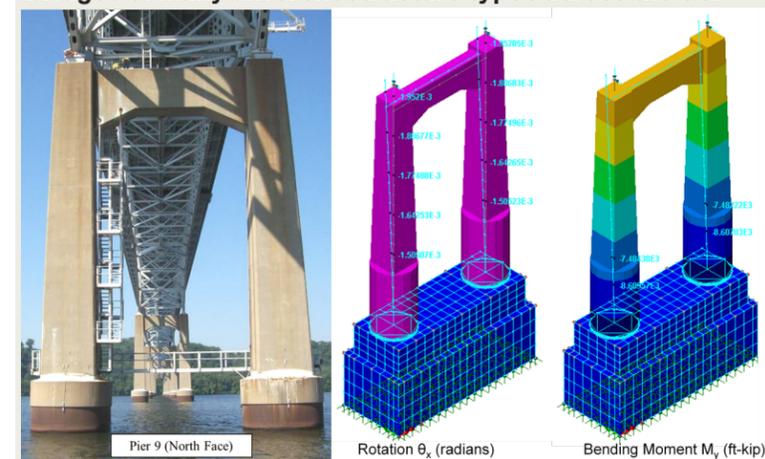
14. Organizational Chart



AECOM Value-Added Services

AECOM will leverage our national bridge management practice in support of this DOTD Bridge Load Rating IDIQ Contract. We can bring these "in-house services" quickly in response to DOTD planned and unplanned task order efforts.

BRIDGE IN-SITU TESTING. Ed Zhou, AECOM's national practice bridge instrumentation, materials, and fatigue/fracture leader can provide the "in-house" specialty services required to test, evaluate and load rating bridge structures through NDT testing, wireless monitoring/measurements and FEM analysis. **Since the mid-90s, Ed has instrumented and evaluated over 100 bridges of many different structure types across the US.**



BRIDGE INSPECTION SERVICES. AECOM has over 150 bridge inspection/load rating professionals within our practice.

These professionals only work on inspection and load rating projects and are experienced in interpreting field information in the context of the load rating of deteriorated structures.

LOAD RATING TRAINING EXPERIENCE. Henry Fix, PE, CBI and William Ahola, PE supported the development and delivery to provide a load rating training course for PennDOT's District Engineers and area staff. Training included PowerPoint Presentations, worked examples, and general load rating guidelines.

Working as a Team!

We are currently working alongside our subconsultant partner, Stantec, on the I-49 Connector Project and have established a great working relationship that we will bring to this contract!

Here's what our clients are saying about the AECOM Team...

"AECOM's expertise is highly valued; this firm is a go-to resource for questions or advice on complex rating situations...and to ensure that MDT's high expectations were met."

- Mary Smith
 Montana Department of Transportation (MDT)

"I want to express my appreciation for AECOM's service on our Complex Bridge Inspection Program. The reports and repair plans were clear and concise and submitted in a timely manner."

- Haylye Brown, PE
 DOTD Bridge Maintenance PM

"I'm delighted to announce that North Dakota has officially completed its Metric 13 PCA. This would not have been possible without your hard work this past 3 years. I'm beyond grateful that we had your (AECOM) team on this project to work through all of the load rating engineering challenges."

- Matt Luger
 State Load Rating Engineer, NDDOT

"They (AECOM) were committed to deliver all bridge related deliverables and respond to all bridge inquiries in a timely and professional manner."

- Jenny Fu
 DOTD Bridge Administrator

15. Minimum Personnel Requirements

Use the table below to identify both prime consultant and sub-consultant staff designated to work on this contract meeting the Minimum Personnel Requirements (MPRs) specified in the advertisement. Ensure the résumé reflects the required experience stated in the MPR. Make sure the P.E. discipline is also listed (highlighted in table) that is meeting the MPR; e.g. professional civil engineer should show the discipline of the license as civil if meeting that MPR.

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	Jonathan McDowell	AECOM Technical Services, Inc.	Civil Engineer PE 30508	LA	3.31.2025
2	Jonathan McDowell	AECOM Technical Services, Inc.	Civil Engineer PE 30508	LA	3.31.2025
3	Ken Butler	AECOM Technical Services, Inc.	Civil Engineer PE 31476	LA	3.31.2025
4	Jason Zimpfer	AECOM Technical Services, Inc.	Civil Engineer PE 45922	LA	3.31.2024
	John Crosslin	AECOM Technical Services, Inc.	Civil Engineer PE 31498	LA	3.31.2025
5	Jason Zimpfer	AECOM Technical Services, Inc.	Civil Engineer PE 45922	LA	3.31.2024
	Landon Whitton	AECOM Technical Services, Inc.	Civil Engineer PE 41523	LA	9.30.2023
	Jared Fattoross	AECOM Technical Services, Inc.	Civil Engineer PE 47927	LA	9.30.2023

16. Staff Experience:				
	Firm	AECOM Technical Services, Inc.		
	JONATHAN MCDOWELL, PE Project Principal		Years of Relevant Experience with this Employer	19
			Years of Relevant Experience with Other Employer(s)	6
Degree(s) / Years / Specialization		BS / 1996 / Civil Engineering		
Active Registration Number / State / Expiration Date		30508 / LA / 03.31.25 ATSSA Traffic Control Supervisor–LA State Specific (2023); LADOTD Traffic Process and Report Parts 1, 2 and 3 (2018); NEPA and Transportation Decision Making (2011); AASHTO Highway Safety Manual (2013)		
Year Registered		2003	Discipline Civil Engineer	
Contract Role(s) / Brief Description of Responsibilities		Meets MPRs 1&2. Principal-in-Charge		
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
09/07-07/15	LADOTD (H.001779.5 & 700-08-0114) Stage 0 Feasibility Study & Report & EA, LA 511 Red River Bridge at Jimmie Davis Highway, Baton Rouge, LA. Project Manager and Lead Road Design Engineer. Led the Stage 0 Feasibility Study; Lead Road Design Engineer and co-author of the engineering report for the EA. Designed geometric layout alternatives for capacity improvements and pedestrian and bicycle accommodations for the bridge crossing of the Red River and along Jimmie Davis Highway (LA 511) from the Red River to US 71. Tasks included the development of the purpose and need statement, the project design criteria, and the geometric alternatives of the bridge, interchange ramps on each side of the bridge, and roadway approaches. Developed a median U-turn alternative and off corridor access improvements to improve corridor connectivity for LA 511 between the Arthur Teague Parkway and US 71.			
07/15-Ongoing	LADOTD (H.004273.5) I-49 Connector, Lafayette Regional Airport to I-10/I-49/US 167 Interchange, Lafayette Parish, LA. Project Manager, Leadership Team Member, and Railroad Coordination & Design Task Manager. Led a NEPA Supplemental EIS and Design of a 5 mile urban freeway corridor. The project includes a Context Sensitive Solutions process that is occurring concurrently with the environmental process. The project includes a signature bridge and an urban master plan for local road and frontage road connections. The project has considered implementation strategies, potential railroad alignment modifications, potential replacement of up to three at-grade crossings with underpasses, and possible modifications to an Amtrak station platform. Highway overpass for the mainline viaduct and the interchange ramps are being considered as well. In addition, he will also perform tasks associated with highway geometrics, highway traffic, and environmental and public involvement tasks.			

05/10-12/13	LADOTD (H.005171.1) I-49 South, Stage 0 (24 Stage 0 & 16 Stage 0) Interim Improvements for Safety & Efficiency, Raceland to Westbank Expressway, Lafourche & Richoc to Berwick, St. Charles, Jefferson & St. Mary Parishes, LA. Lead Road Design Engineer. Tasked to develop a program of Stage 0 projects providing interim capacity and safety improvements along two segments of the US 90 corridor that would upgrade the existing US 90 highway to interstate standards. Responsible for planning and geometric design of the interstate highway, interchange ramps, and intersections with local collector and arterial roadways; preparation of cost estimates for alternative concepts; completion of Stage 0 Checklists; and preparation of an implementation plan. Developed a median U-turn concept that was implemented by the District.
01/11-01/13	LADOTD (H.009998.1) Stage 0 Feasibility Study & Report, LA 935, Ascension Parish, LA. Engineer. AECOM, as a subconsultant, performed a Stage 0 Feasibility Study in accordance with the results of the Roadway Safety Assessment (RSA). The study area is approximately a 4-mile segment of LA 935 from LA 431 to LA 22 in Ascension Parish. From the RSA three proposed alternatives were to be considered for a Stage 0.
03/15-01/17	LADOTD, Stage 0 Feasibility Study & Report, Westside Expressway, Iberville Parish Government, West Baton Rouge, Iberville, Ascension & St. James Parishes, LA. Project Manager and Lead Roadway Designer. Led the planning and development of a high level corridor study to locate a new highway that connects I-10 west of Baton Rouge to LA 3127 with a spur to connect to LA 30 using the Iberville Parish bridge crossing location identified in the Baton Rouge Loop EIS and a secondary bridge connection to I-10 utilizing the Sunshine Bridge (LA 70). Coordinated TransCAD model data with CRPC. Utilized traffic data published in available versions of the Baton Rouge Loop EIS. Completed DOTD Environmental Inventory and Stage 0 Scope and Budget Checklists for each identified independent segment of utility. Presented proposed alignments to LADOTD, Iberville and Ascension Parishes, and various stakeholders identified by Iberville Parish.
08/12-07/14	LADOTD (H.009997.1) Stage 0 Feasibility Study & Report, Johnston Street Study (US 167), Lafayette Parish, LA. Analyzed crash data to identify trends and suggest countermeasures for development of alternatives to improve safety within the corridor of an urban arterial with heavy bicycle traffic. Evaluated the proposed alternatives using Crash Modifications Factors provided in Part D of the Highway Safety Manual. Determined benefit costs for each alternative for use in the evaluation of the alternatives.
06/13-10/14	LADOTD (H.010570.1) Stage 0 Feasibility Study & Report, Williams Boulevard, Jefferson Parish, LA. Analyzed crash data to identify trends and suggest countermeasures to develop alternatives to improve safety within the corridor by converting a five lane urban arterial to a four-lane road with bike lanes. Evaluated the proposed alternatives using the Predictive Method outlined in Part C of the Highway Safety Manual. Determined benefit costs for each alternative to evaluate the alternatives.
09/20-present	City of Baton Rouge/Parish of East Baton Rouge, Feasibility Study & Report/TEPR, College Drive, Baton Rouge, LA. Project Manager. Led Design Study, Traffic Study, and Preliminary Plans for the completion of capacity and safety improvements that also include Complete Streets and Green Infrastructure enhancements on College Drive and adjacent facilities between Perkins Road and Bawell Street including the I-10 interchange. Documented preliminary alternatives using LADOTD Stage 0 Project and Scope and Environmental Checklists to apply for state and federal funding grants. Developed preliminary concepts. QC Reviewed the Safety Analysis.
09/15-04/17	City of New Orleans Department of Public Works, Multimodal Transportation & Traffic & Safety Analysis, & Transportation Plan (NODTA), New Orleans, LA. Design Engineer. Multimodal transportation analysis and plan for the New Orleans Downtown and historic French Quarter neighborhood. Dozens on bicycle, pedestrian and vehicular alternatives were developed and evaluated and selected improvements were programmed, based on the integrated modal-access analysis, including pedestrian LOS modeling around transit stops. Extensive curb-use revisions, car-free zones, and other innovations were developed for the Quarter and CBD.

		Firm AECOM Technical Services, Inc.	
KEN BUTLER, PE QA/QC		Years of Relevant Experience with this Employer	15
		Years of Relevant Experience with Other Employer(s)	22
Degree(s) / Years / Specialization		BS / 1984 / Civil and Environmental	
Active Registration Number / State / Expiration Date		31476 / LA / 3.31.25 Additional active license: VA, FL, MD, PA, SC, NC, CA#, DC, DE, NY, NJ	
Year Registered		1991	Discipline Civil Engineer
Contract Role(s) / Brief Description of Responsibilities		<p>Meets MPR 3. QA/QC. Ken brings 37 years of experience and national recognition for his performance on high profile bridge projects. He has been involved with the management, design, and construction of 35 major and complex bridges worth more than \$5 billion in construction cost. He has played significant roles on eight (8) major alternate delivery projects including: the \$463 million Harry W. Nice/Thomas "Mac" Middleton Bridge in Newburg, MD; \$449 million Frederick Douglass Memorial Bridge Project in Washington D.C.; \$227 million historic Arlington Memorial Bridge design build project in Washington D.C.; the \$1.3 billion PPP I595/I95/I75/FLTP Corridor Improvements in Fort Lauderdale, Florida; the \$250 million design build Carolina Bays Parkway in Myrtle Beach, South Carolina; the \$1.5 billion design build Tren-Urbano mass transit project in San Juan, Puerto Rico; the \$150 million design build Indian River Inlet cable stayed bridge replacement in Rehoboth Beach, Delaware; and the \$1.3 billion PPP Edmonton LRT project (Tawatina extradosed cable stayed bridge) in Edmonton, Alberta, Canada. He has provided designs, project management, construction support and construction engineering inspection services to 14 state agencies, as well as several toll authorities.</p>	
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
06/14-06/18 (Bridge Lead) 06/18-present (QA Lead)	<p>LADOTD (H.004273) I-49 Connector, Lafayette, LA. Ken serves as Principal Structure Lead for the 3.5-mile long elevated precast segmental and prestressed concrete u-girder urban viaduct; four flyover connector ramps; three multi-level interchanges; two elevated SPUI's (signature bridges – arches and cable stayed); eleven overpass structures; three railroad bridges; and 27,000-foot of retaining wall.</p>		
10/19-present	<p>MDTA Harry W. Nice/Thomas "Mac" Middleton Bridge Replacement Project, MD. Ken serves as the design manager for this 1.9-mile long bridge over the Potomac River. Project includes major bridge design over a navigable channel; environmental permitting; 200-ft deep foundations; roadway design; staged construction; and demolition of the existing bridge over the Potomac River. As design manager, Ken is responsible for managing 60+ designers for designs, plans, special provisions, shop drawings, and working plans for all design disciplines; implementing and overseeing the QA/QC program; integrating with contractor, designers and owner in project office; budget and schedule compliance; and constructability and VE reviews. He has full professional liability for all engineering decisions and the final work product. The design took 1-year and he continues to provide construction support to the Design Builder.</p>		

08/17-present	<p>DDOT Frederick Douglass Memorial Bridge Project, Washington, DC. Ken serves as the design manager for this signature bridge project over the Anacostia River. Creation of a signature bridge and overall project aesthetics were key drivers behind the project to satisfy the Commission of Fine Arts and the National Capital Planning Commission. The 1,445-ft long bridge is comprised of three springing cable stayed arch spans at 452.5'-540'-452.5' supported by cable stays. The project includes traffic ovals; major Interstate reconstruction; complex MOT; utilities; new river bridge being built parallel to existing bridge; roadway transitions; H&HA scour; drainage and erosion and sediment control; environmental permitting; roadway lighting; bike/pedestrian facilities; landscape; etc. Duties include managing 130 designers for designs, plans, special provisions, shop drawings, and working plans for all design disciplines; implementing and overseeing the QA/QC program; integrating with contractor, designers and owner in project office; budget and schedule compliance; and constructability and VE reviews. He has full professional liability for all engineering decisions and the final work product. Load rating as well as an Owner & Inspection Manual were also part of the design scope. Ken began this project in 2016 during the pre-bid phase and was committed full time for two years through the design and construction. The design took 1.5 years and he continues to provide construction support to the Design Builder.</p>
10/18-12/21	<p>NPS/FHWA-EFLHD Arlington Memorial Bridge, Washington, DC. Ken served as the Designer of Record for this historic arch bridge rehabilitation project over the Potomac River. Primary components of the project included complete re-decking of the 2,162-foot-long bridge with precast concrete deck panels using stainless steel reinforcing; complete replacement of interior arch supports; and total replacement of the central bascule span with 280-foot-long fixed steel girder spans. Ken's roles on Arlington Memorial Bridge and the Frederick Douglass Memorial Bridge Project were concurrent, and Ken had full professional liability for engineering decisions and final work product.</p>
01/14-12/20	<p>City of Edmonton Tawatina Bridge on Valley Line SE, Edmonton LRT, Alberta, Canada. Ken was a technical advisor responsible for reviewing the extradosed cable stayed bridge base design & performance specifications; supporting the owner during technical proposal reviews and bid selection; and providing technical input during construction to the owner. The concrete segmental extradosed cable stayed bridge is 1,248-ft long over the North Saskatchewan River and includes 290-ft of cable stay spans.</p>
03/11-08/14	<p>TxDOT, IH-35 Bridges over Brazos River, Waco, TX. Ken served as the technical director for these twin extradosed cable-stayed bridges that serve as the gateway entrance for the city of Waco, Texas. He was responsible for the technical development of the bridge design. His services included input and oversight of design methods & criteria, stay configuration, superstructure details, erection schemes, and analysis procedures. The bridge is a 3-span structure 185'-250'-185' (steel trapezoidal box superstructure). As Technical Director he was also responsible for assigning the design team as well as the quality control team.</p>
01/11-08/14	<p>LADOTD (State Project No. 700-92-0016) Florida Avenue Bridge, New Orleans, LA. Bridge lead for the design efforts for the \$100 million 1,500-foot-long 5-span main unit crossing the Inner Harbor Navigational Canal. Directed the preliminary and final design phases for the section of bridge, which includes a 470-foot main span over the canal with 156-foot vertical and 300-foot horizontal navigational clearances. Two alternates were developed during the final design for the main unit including steel plate girders and cast-in-place variable depth concrete box girders. The overall project consisted of approximately two miles of elevated structure including high level approaches comprised of prestressed concrete bulb-T girders and curved steel girder interchange ramps.</p>

		Firm AECOM Technical Services, Inc.	
JASON ZIMPFER, PE, CBI Load Rating Technical Lead		Years of Relevant Experience with this Employer	14
		Years of Relevant Experience with Other Employer(s)	0
Degree(s) / Years / Specialization	MS / 2007 / Structural Engineering; BS / 2006 / Civil Engineering		
Active Registration Number / State / Expiration Date	45922 / LA / 03.31.24 Additional active license: UT, PA, DE, TX, PR, NJ, CO, FL, MT		
Year Registered	2013	Discipline	Civil Engineer
Contract Role(s) / Brief Description of Responsibilities	<p>Meets MPRs 4&5. Technical Lead. Jason will serve as a load rating task manager for this contract. He has 14 years of extensive and varied analysis, design, research, and bridge inspection experience. He has performed load rating analyses of more than 1,600 bridges and culverts in more than 15 states and is a certified bridge safety inspector. He has a decade of extensive experience with the AASHTOWare BrR software for a wide range of structure types. His analysis experience also includes coordinating load ratings of deficient structures, movable bridges, truss gusset plate analysis, complex structure analysis, and finite element modeling. He has been involved with long-span truss inspection, analysis, and rehabilitation, and has performed structural research at a graduate level. Training: ASCE Load Rating of Highway Bridges; Bridge Safety Inspector Training Course (NHI 130055) 2009; Bridge Safety Inspection Training Refresher Courses, 2011 through 2022, PA.</p>		
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
02/23-present	<p>LADOTD (Contract No. 44-21593, State Project No. H009859) IDIQ Contract for Bridge Load Rating Services, Task Order No. 1. Subconsultant responsible for bridge superstructure and substructure load ratings using AASHTOWare BrR software and other approved LADOTD software applications. Task manager responsible for all AECOM deliverables. One bridge analysis has been submitted under this agreement, which includes 140 bridges throughout Louisiana.</p>		
01/18-present	<p>Montana Department of Transportation (MDT), Load Rating Bridges Term Contracts 2018-2021 & 2021-2024. Task leader responsible for quality, schedule, budget, technical aspects, and communication for load rating services for this statewide contract. The goal of this project is to provide load rating services on an as-needed basis for all of the state's legal loads. The work includes the analysis and rating of more than 800 bridges to date throughout the state. The bridges include steel truss-floorbeam-stringer systems with gusset plate analysis, glue laminated timber, solid-sawn timber, reinforced concrete, prestressed concrete, multi-girder steel, corrugated metal pipe, and steel girder-floorbeam-stringer systems. AECOM used AASHTOWare Bridge Rating (BrR) software to analyze all structures that the program is capable of modeling, and Midas Civil for 3D FEM analysis, when required.</p>		
08/14-09/17	<p>LADOTD (Contract No. 44-2687 State Project No. H.009730.5) US-190 Krotz Springs Atchafalaya Bridge Bearing Repair, LA. Structural engineer responsible for preliminary and final design of superstructure jacking and repair of the nested rocker bearings supporting the free end of a three-span, 1500 ft long cantilever through truss.</p>		

04/20-12/22	NDDOT, Local Public Agency Bridge Inspection and Load Rating, Northwest Region. Technical advisor for project involving the load rating of 619 local agency bridges in northwest North Dakota. Bridge types include trusses, steel girder, prestressed concrete girder, R/C slabs, T-Beams, and timber. AASHTOWare BrR was used for the majority of the ratings. Substructures and truss bridge pins were rated, as needed, using in-house developed manual calculation and spreadsheet tools.
07/17-08/22	Mississippi Office of State Aid Road Construction, Bridge Load Rating, MS. Structural engineer and technical advisor responsible for coordination, calculation checking, and quality control of load rating efforts for this assignment of more than 300 bridges over multiple contracts, using the AASHTOWare Bridge Rating (BrR) software, including steel, reinforced concrete, prestressed concrete, and timber superstructures, as well as timber pile substructures and timber decks. Field-noted deterioration is included in calculations and load rating models.
06/19-08/19	NASA/Kennedy Space Center: Indian River Bridge Derating Assessment Study, Kennedy Space Center, FL. Task leader for the load rating analysis of twin double-leaf bascule span bridges carrying the NASA Causeway at Kennedy Space Center over the Indian River. Main bascule spans and steel girder approach spans were analyzed using the AASHTOWare Bridge Rating (BrR) software for NASA special transport vehicles and Florida legal vehicles. The analysis considered counterweight loads behind the trunnion, as well as modeling the effect of the live load anchor and center span lock.
05/12-12/18	Pennsylvania Department of Transportation - District 5-0, Load Rating Analysis, Carbon, Monroe, and Schuylkill Counties, PA. Lead structural engineer responsible for coordinating all load ratings performed on the contract (approximately 150). Load ratings are performed on deteriorated structures based on the NBIS inspections provided by AECOM. Responsible for regular client communication, reporting results to PennDOT, and posting and repair recommendations based on analysis results.
05/14-02/18	Montana Department of Transportation (MDT), Statewide Load Rating Term Contract, MT. Lead structural engineer responsible for coordination, calculation checking, and quality control of load rating efforts for this four-year assignment with approximately 150 bridges, using the AASHTOWare Bridge Rating (BrR) software, including steel, reinforced concrete, prestressed concrete, and timber superstructures. Task includes rating of steel trusses with gusset plate analysis, curved girder, and arch analyses.
11/15-05/17	Minnesota Department of Transportation (MnDOT), Bridge 62090 (High Bridge) Re-Deck Project, MN. Structural engineer responsible for coordinating load rating efforts for 8 approach spans of this curved and splayed steel plate girder bridge using AASHTOWare Bridge Rating (BrR) software. Performed QC review of calculations and program inputs, coordinated repair recommendations associated with the redecking and strengthening of this steel tied-arch structure with curved plate girder approach spans.
01/15-08/15	Utah Department of Transportation, Load Rating Analysis, UT. Structural engineer responsible for checking load rating calculations for more than 20 prestressed and reinforced concrete bridges and culverts using the AASHTOWare Bridge Rating (BrR) software. Assisted in the creation of Utah state load rating policy for bridges without available plans and responsible for implementing this policy in the several dozen bridge and culvert analyses.

		Firm AECOM Technical Services, Inc.	
JOHN CROSSLIN, PE Load Rater - Complex Bridge		Years of Relevant Experience with this Employer	22
		Years of Relevant Experience with Other Employer(s)	5
Degree(s) / Years / Specialization		BS / 1996 / Civil Engineering	
Active Registration Number / State / Expiration Date		31498 / LA / 03.31.25 Additional active license: TN, AL, KY, TX	
Year Registered		2009	Discipline Civil Engineer
Contract Role(s) / Brief Description of Responsibilities		Meets MPR 4. Complex Load Rating Engineer. John will support the load rating analysis of complex bridges using finite element modeling software, approved by LADOTD.	
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).		
3/19-Present	Mystic River Crossing Bridge. Part of the design team for this six span steel spine girder arch bridge. This multi span bridge featured a 220'-0" arch span bridge and steel V-piers.		
1/18-2/22	DCKA-2017-C-0755, Frederick Douglass Memorial Bridge. Part of the design team for this three-span arch bridge. The span lengths were 452'-6", 540'-0", and 452'-6" for an overall bridge length of 1445'-0". This bridge was particularly challenging due to the hexagonal shape of the rib cross-section combined with the parabolic variation of the depth of the upper and lower web plates. The arch rib depth varied from 14'-0" at the base to 6'-0" at the crown. Also responsible for the design of the arch rib splices, longitudinal girders, and the transverse floor-beams. In addition to the design process, he was the lead in charge of the load rating .		
12/16-5/22	RPF-IMF-NHF-I059(387), I-20/59 Over McFarland Boulevard. Lead designer for this single span arch bridge. The span length was a little over 256'. This bridge was particularly challenging due to the construction phasing requirements. The arch rib was a trapezoidal steel box with a parabolic variance in depth. The floor system consisted of 7 trapezoidal box girders in the longitudinal as well as transverse floor beams. In addition to the design process, he was the lead in charge of the load rating .		
2/11-7/11	IM 0354 (234), IH-35 over the Brazos River, Waco, TX. Designer of the structural steel components for this three span Extradosed Cable Stayed Structure. The spans of this structure were 185'-0", 250'-0", and 185'-0". The structure utilized two trapezoidal box girders with a web depth of 78". The girder spacing was set at 46'-8" to accommodate the cable stayed system. The wide girder spacing made it necessary to use a system of stringers with spaces from 14'-0" to 15'-0". The design and detailing of the cable anchorages to the girder presented some unique challenges involving the use of internal diaphragms and jacking stiffeners.		
07/10-09/12	420809-3-52-01, I-595 Broward County FL. Bridge designer of three complex curved I-girder bridges with steel integral caps. Part of the design process also included a load rating for the steel girders as well as the integral steel caps. In addition to these bridges, a three-girder system trapezoidal box girder with a horizontal curve, integral steel cap, and multiple degrees of skew.		

6/17-9/22	<p>Frederick Douglass Memorial Bridge. Bridge engineer and lead load rating engineer for this for this three-span arch bridge. The span lengths were 452'-6", 540'-0", and 452'-6" for an overall bridge length of 1445'-0". This bridge included hexagonal shaped ribs, combined with the parabolic variation of the depth of the upper and lower web plates. The arch rib depth varied from 14'-0" at the base to 6'-0" at the crown. John led the design of the arch rib splices, longitudinal girders, and the transverse floor-beams. John also led the team in charge of the complex bridge load rating.</p>
2/06-5/07	<p>Cumberland River Pedestrian Bridge, Metropolitan Government of Nashville, TN. Project manager and lead engineer responsible for the design and details of this multi-span pedestrian bridge over the Cumberland River in Nashville Tennessee. This bridge utilized a single trapezoidal tub girder with an 11.5-ft web. This girder utilized both Grade 50W steel and HPS Grade 70W steel. This project included two tall piers with rectangular hollow core sections and an 8-ft diameter drilled shaft with a triple reinforcement cage. This bridge is also a simulated suspension bridge.</p>
06/13-present	<p>Alabama Department of Transportation, Birmingham Northern Beltline over Self Creek. Lead designer on an eight span 1,600 ft long curved steel bridge with eighty-foot-tall piers resting on drilled shafts. This bridge was particularly challenging from a geometric standpoint as well as an overall modeling perspective. This bridge was modeled in MDX as well as CSiBridge.</p>
8/14-11/16	<p>Route 29 Over the Staunton River, VA. Lead designer for the steel super-structure of this eight-span steel bridge. The total bridge length is 1,392ft and utilized haunched webs to aid in clearance requirements over the Norfolk Southern Railway. The web depth varied from 72" to 54".</p>
6/15-11/15	<p>Routh 264 CD Road, City of Norfolk, VA. Lead designer on a ten-span curved steel with many unique features. This bridge was bifurcated and has a girder line that terminates near the mid-point of one of the spans creating the necessity for a transfer girder. All these factors created a unique modeling condition for this geometrically complex structure.</p>

	Firm	AECOM Technical Services, Inc.	
LANDON WHITTON, PE, CBI Project Manager		Years of Relevant Experience with this Employer	6
		Years of Relevant Experience with Other Employer(s)	6
Degree(s) / Years / Specialization	BS / 2009 / Mechanical Engineering		
Active Registration Number / State / Expiration Date	41523 / LA / 09.30.23 Additional active license: MS, AR		
Year Registered	2015	Discipline	Civil Engineer
Contract Role(s) / Brief Description of Responsibilities	Meets MPR 5. Project Manager. Landon will be the project manager for this contract. He has technical and management experience in many facets of engineering projects. Landon's technical experience is in Bridge Load Ratings , design, and inspection. He routinely manages bridge and hydraulic projects.		
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
04/20-present	North Dakota County Bridge Inspections, Project Manager, Inspection Team Leader. North Dakota Department of Transportation hired AECOM to perform inspections and load ratings (using AASHTOware BrR) on over 700 county bridges across the northwestern part of the state. The substructures were a mix of timber pile bents, reinforced concrete configurations, steel H-pile bents and masonry abutments. The superstructure types inspected/evaluated during this project included: steel I-beams, prestressed girders, trusses, RC channel beams, RC culverts, RC slabs, and steel pipe culverts.		
08/17-08/23	State Aid Complex Inspections, Project Manager, Project Manager, Inspection Team Leader. Mississippi Office of State Aid have hired AECOM to perform inspections and load ratings on over 300 county and urban bridges across the Northern part of the state. Landon manages the project as well as performing bridge inspection on the project. The substructures were a mix of timber piling, steel H-pile, and reinforced concrete piles. The superstructure types inspected/evaluated during this project included; steel I-beams, prestressed girders, trusses, RC channel beams, RC culverts, RC slabs, girders made from steel railroad cars, and steel military bridges.		
04/18-12/18	MDOT, Post-Tensioned Load Ratings, Project Manager and Load Ratings Engineer. MDOT hired AECOM to perform load ratings on 13 Post-tensioned bridges using CSIBridge software. The superstructure types were Box-Girder w/ post tensioning over the piers, I-girders w/ post tensioning, and haunched I-girders with post-tensioning. Landon served as Project Manager and as well as Load Ratings Engineer .		
07/22-12/22	MDOT, I-110 over Biloxi Back Bay Movable Bridge In-Depth Inspection. MDOT hired AECOM to perform the In-Depth inspection of I-110 over Biloxi Back Bay. This bridge includes a twin double leaf bascule main span. Landon was the project manager and an inspection team leader on the project and assisted with preparation of the report.		
06/20-01/22	MDOT, I-20EB/I55NB Box Girder Rehabilitation Conceptual Design. MDOT hired AECOM to provide Phase A bridge conceptual plans for rehabilitation and replacement options for I-20 EB to I-55 NB. The bridge is a dapped end box girder bridge, and the rehabilitation options maintained one lane of travel during construction. Landon served as project manager on the contract.		

06/20-01/22	MDOT I-20EB to I-55NB Box Girder Inspection and Analysis. MDOT hired AECOM to perform a field inspection and load rating , including accessing the interior of the box girders and providing an in-depth inspection of the dapped end girder details, on this 17-Span, multi-celled box girder bridge. The load rating utilized CSIBridge and post processing hand calculations. Landon served as project manager and participated in the inspection of the girders.
07/20-04/22	MDOT, SR 3 Phase B Post-Tensioned Haunched I-girder Bridge Design (July 2020) and Phase C (ongoing). MDOT contracted AECOM to perform bridge engineering services for the Phase B Bridge Design for SR 3 Bridge No. 183.8 and Bridge No. 184.2 in Tate County. Per the Phase B contract, AECOM created construction plans for both structures. Per Phase C contract, AECOM provided Post tensioning inspection services for the haunched post-tensioned I-girder superstructure on Bridge 183.8 with a main span length of 250ft. Landon was the project manager for the projects.
01/16-07/22	MDOT, Scour Evaluations, Bridge Engineer. MDOT hired AECOM to perform Scour Evaluations of I-59 over Tangipahoa River, and I-55 over Black Creek and Little Black Creek. Landon was responsible for the inspection of the substructure, as well as assisting in determining substructure penetration depths for future scour events. <ul style="list-style-type: none"> - I-55 over Tangipahoa River in Pike River County, MS - I-59 over Black Creek and Little Black Creek Lamar, MS - I-10 over Pascagoula River, Escatawpa River, and Black Creek
04/23-06/23	WisDOT, Michigan Street over Sturgeon Bay Routine/NSTM (Fracture Critical)/In-Depth Inspections, Inspector. WisDOT hired AECOM to perform a Fracture Critical and Routine Element Inspection of the moveable truss bridge on Michigan Street over Sturgeon Bay. AECOM also performed an In-Depth inspection on the gusset plates. Landon served as a Bridge Inspector on the project and participated in rope access inspection of the bridge.
07/23-08/23	KYTC William H. Natcher Bridge (US-231 over Ohio River) Fracture Critical, NBI, and Element Level Inspections, Inspector. KYTC hired AECOM to perform Fracture Critical, NBI, and Element Level Inspections of the cable stayed bridge on US-231 over the Ohio River. Landon served as a bridge team leader on the project and inspected the fracture critical members on the bridge.
12/18-07/20	MDOT Seismic Guide. MDOT contracted AECOM to create a Seismic Design guide that provides step-by-step procedures for seismic design of a substructure. The guide is an interactive excel spreadsheet that interacts with CSIBridge to create a model of the bridge to perform a seismic analysis. Landon was Project Manager on the contract.
09/20-present	MDOT SR 63 Bearings Inspection/Phase A (2020-2021) and Phase B (2022-2023), Project Manager. MDOT hired AECOM to provide in-depth inspection and conceptual design recommendations on the repairs or replacements for the bearings on SR 63 over Escatawpa River. The bridge consisted of steel fixed, steel movable, and neoprene bearings. After Phase A, AECOM was contracted to provide construction drawings for the rehabilitation and replacements of the bearings. Landon was project manager for both contracts.
06/22-present	MDOT, MS-178 over Byhalia Creek and Barrow Creek Phase-A Hydraulic Recommendations. MDOT retained consulting firms to perform Phase A bridge hydraulic recommendations. Landon is the Project Manager and assisted in the bridge layouts.

		Firm AECOM Technical Services, Inc.	
JARED FATTOROSS, PE Load Rater		Years of Relevant Experience with this Employer	11
		Years of Relevant Experience with Other Employer(s)	1
Degree(s) / Years / Specialization		BS / 2010 / Civil Engineering; MS / 2015 / Civil Engineering	
Active Registration Number / State / Expiration Date		47927 / LA / 09.30.23 Additional active license: CO, MS	
Year Registered		2023	Discipline Civil Engineer
Contract Role(s) / Brief Description of Responsibilities		Meets MPR 5. Analysis and Load Rating Engineer. Jared will be a structural engineer performing load ratings as part of the Bridge Rehabilitation Design Team for this contract. He has technical experience in numerous types of engineering projects. His technical experience includes design, load rating , and inspection of transportation structures. Jared manages bridge design, rehabilitation, and analysis projects. He is also a certified bridge and tunnel inspector.	
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
03/23-07/23	Kansas City Southern Railway (KCS), Timber Bridge Rating, Sparta Road Bridge over KCS Gibsland, LA. Performed QA and technical lead verification check on the load rating calculations for one existing structure using AASHTOWare BrR software in accordance with the LADOTD Bridge Design and Evaluation Manual and AASHTO specifications. The structure included a timber girder and steel girder superstructure founded on timber piles and bent caps. All timber components were rated using ASR methodology while the steel girders were rated using LRFR methodology. This structure was rated in its current condition and its repaired condition.		
01/23-06/23	OSARC, Non-Complex Load Ratings, Various Locations, MS. Bridge load rating engineer of record for six existing structures using AASHTOWare BrR and Mathcad software in accordance with the Mississippi Department of Transportation Bridge Safety Inspection Policy and Procedure Manual and AASHTO specifications. The structures included conventionally reinforced concrete girders, prestressed girders, steel H-piles, and concrete bent caps, which were rated using LFR methodology.		
11/22-06/23	OSARC, Bridge Load Ratings, Various Locations, MS. Bridge load rating QC and engineer of record for existing structures using AASHTOWare BrR and Mathcad software in accordance with the Mississippi Department of Transportation Bridge Safety Inspection Policy and Procedure Manual and AASHTO specifications. The structures were reinforced concrete box culverts, steel, timber, and concrete structures.		
12/22-12/22	KYTC, Load Rating on Emergency Flood Bridges, Various Locations, KY. Jared performed QA checks on four new bridge structures, which were rated in AASHTOWare BrR using LRFR methodology.		
06/22-12/22	NDDOT, State Owned Bridge Ratings, Various Locations, ND. Bridge load rating engineer of record for existing structures using AASHTOWare BrR software in accordance with the NDDOT Load Rating Manual and AASHTO specifications. The structures included concrete box culverts which were rated using LFR methodologies.		

10/20-06/22	NDDOT, Northwest LPA Load Ratings, Various Locations, ND. Bridge load rating engineer of 190 existing structures using AASHTOWare BrR software in accordance with the NDDOT Load Rating Manual and AASHTO specifications. The structures inventory included steel, timber, masonry, reinforced concrete, and prestressed concrete bridge types rated using ASR, LFR, and LRFR methodologies. Jared also performed QC checks on structures of various types, and field inspected these structures as per FHWA-NBI specifications.
09/21-06/22	OSARC, Non-Complex Load Ratings, Various Locations, MS. Bridge load rating engineer of record for existing structures using AASHTOWare BrR and Mathcad software in accordance with the Mississippi Department of Transportation Bridge Safety Inspection Policy and Procedure Manual and AASHTO specifications. The structures included conventionally reinforced concrete girders, prestressed girders, steel H-piles, and concrete bent caps, which were rated using LFR methodology.
12/21-12/21	EI Paso County Department of Public Works, Bridge Load Rating, South Academy Blvd. over US 85 and BNSF RR, CO. Jared performed QC check and EOR on the load rating of NB and SB South Academy Blvd. over US 85 and the BNSF Railroad Road. The bridges were widened, and load rated using AASHTOWare BrR for LFR and LRFR methodologies in accordance with the Colorado DOT Load Rating Manual.
09/19-06/20	OSARC, Non-Complex Load Ratings, Various Locations, MS. Bridge load rating engineer for existing structures using AASHTOWare BrR and Mathcad software in accordance with the Mississippi Department of Transportation Bridge Safety Inspection Policy and Procedure Manual and AASHTO specifications. The structures included conventionally reinforced concrete girders, prestressed girders, steel H-piles, and concrete bent caps, which were rated using LFR methodology.
01/19-12/19	ODOT, Bridge Load Ratings, Various Locations, OH. Bridge load rating engineer and quality checker for 30 bridges in Ohio using AASHTOWare BrR software. The structures typically included rolled steel beams and welded steel plate girders rated in accordance with Ohio DOT policies and AASHTO specifications. The rating team evaluated multiple complex structures to determine innovative methods to rate in BrR rather than using more costly methods using finite element analysis software.
06/16 - 3/17	New Jersey Department of Transportation, Load Rating, Route U.S. 1&9 (Pulaski Skyway), NJ. Load rating engineer of 45 built-up steel floorbeams, for bridge widening program. Existing members, and proposed widened sections were live load rated using BRASS girder software, and modeled in CSi Bridge to determine and refine the more complex distribution of dead loads.
01/21-08/21	MDOT, I-20 East to I-55 North, Rankin County, MS. Engineer for a 1,310-foot-long for a 1,310-foot-long, 17-span reinforced concrete box girder bridge with dapped ends. Due to observed cracking found during inspection of the dapped ends, a rating analysis was performed that ultimately led to the posting and closing of a single lane of traffic on the bridge. Responsibilities included complex bridge modeling and rating analysis.

		Firm AECOM Technical Services, Inc.	
CHRIS MCKOWN, PE, CBI Deputy Project Manager		Years of Relevant Experience with this Employer	3
		Years of Relevant Experience with Other Employer(s)	7
Degree(s) / Years / Specialization	MBA / 2019 / Business Administration; BS / 2012 / Civil Engineering (with Structures Minor)		
Active Registration Number / State / Expiration Date	41077 / LA / 03.31.25 Additional active licenses: CO		
Year Registered	2016	Discipline	Civil Engineer
Contract Role(s) / Brief Description of Responsibilities	Deputy Project Manager. Chris's role on the design team is influenced by his 10 years of experience with the structural design of bridges. Chris has worked designing bridges in both the public and private sector and has experience with steel girder design, prestressed girder design, reinforced concrete design, accelerated bridge construction, phased construction, load rating , and providing construction support. Chris is well versed in the AASHTO bridge design codes and LADOTD's Bridge Design and Engineering Manual and applicable design methodologies. Chris recently obtained his Certified Bridge Inspector certification.		
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
04/23-present	LADOTD, Load Rating IDIQ TO#1, Statewide. Staff design engineer for the Load Rating IDIQ responsible for the rating and evaluation of approximately 140 bridges throughout the state. Bridge types in this task order include precast/cast-in-place slabs, steel I-beams and concrete prestressed girders. Many bridges are supported by timber piles. Awaiting NTP to begin work. AECOM is a subconsultant to M&M on the project.		
04/23-present	LADOTD, Bridge Preservation IDIQ TO#1, Statewide. Design engineer and deputy project manager for the task order for a bridge spot replacement on LA 561 near Hebert, LA. The existing structure will be replaced with PPC girders on the existing alignment. Recent submittals include 60% Preliminary Plans.		
03/20-present	LADOTD, I-49 Connector, Lafayette, LA. Design engineer responsible for advancing preliminary conceptual design plans for the Mainline Viaduct and the Willow breakout. Performed review of the three Mainline Viaduct structure type options and the options presented for the Signature Bridge. Advanced conceptual TS&Ls for a segmental box girder superstructure type. Performed reviews of structural quantities, conceptual cost estimates and MOT plans.		
02/21-present	EI Paso County, South Academy Blvd over BNSF Rehabilitation, Colorado Springs, CO. Design Engineer and Engineer of Record for the design of widening and rehabilitation of three separate structures on South Academy Boulevard in Colorado Springs, CO for capacity improvements. The widened superstructures will be a mixture of prestressed I-girders, prestressed box girders, and steel plate girders. The project also includes plans for scour mitigation and structural rehabilitation to extend the service life of the existing structures.		

02/20-present	TxDOT, I-635 LBJ East, Dallas, TX. Staff Design Engineer on the project. The project's scope is for the construction of an approximately 11.2-mile corridor of Highway I-635 LBJ East from US 75 to IH-30 in Dallas County to improve safety, mobility, and relieve congestion in the region. Provided independent design checks and plan verifications (QC) for one prestressed girder bridge and all the sign structures on the project. Active in construction support activities, including but not limited to checking fabrication shop drawings, answering RFIs, provided additional engineering analysis to support construction activities, and plan revisions.
07/16-01/20	LADOTD (H.003184) I-10: TX State Line East of Coone Gully, Calcasieu Parish, LA. Design Engineer and Engineer of Record on the project to widen approximately 11 miles of I-10 from Vinton, LA to the Texas state line. The project called for the complete replacement of nine different structures within the project limits. Engineer of Record for various components across the eight slab span bridges on the project. The structures will be replaced using phased construction.
10/14-08/19	LADOTD (H.002446) LA 40: Tchefuncte River Bridge, Near Folsom, LA. Engineer of Record and Bridge Design Task Lead for the complete replacement of the LA 40 bridge over the Tchefuncte River near Folsom, LA. The project called for the replacement of the existing structurally deficient bridge utilizing phased construction. Responsible for the complete design of the new 420' long slab span structure including all substructure components. An "as-designed" load rating of the new structure was provided in AASHTOware.
04/14-06/19	LADOTD (H.010009) LA 507 over I-20, Lincoln Parish, LA. Design Engineer and Engineer of Record for the complete replacement of the bridge superstructure of the LA 507 overpass near Simsboro, LA. The project called for accelerated bridge construction for the replacement of the bridge superstructure and various structural repairs. The bridge was built on site and moved into place over the course of several weekends. Responsibilities include the design of the deck, the steel girders, and the new bearings. Special consideration was given to minimize construction time and any road closures. An "as-designed" load rating of the new structure was provided in AASHTOware.
03/17-12/17	LADOTD (H.012422) I-110: Interchange Modification @ Terrace. Engineer of Record for the exit ramp superstructure on the project to provide a new exit ramp off Southbound I-110. The project was designed to improve access to an under-served community, eliminate dangerous weaving movements at the I-10/I-110 merge, and to allow modifications to existing exit ramps on future projects. Responsibilities included construction phasing, superstructure design of the steel I-girder exit ramp, plan development, and construction support. An "as-designed" load rating of the new structure was provided in AASHTOware.
09/20-04/21	CDOT, IM 0252-495: I-25 Rehab (MP127-135). Staff Design Engineer on the project. The project's scope was to rehabilitate approximately 8 miles of I-25 in Colorado Springs, CO. The project included multiple bridge widenings. Provided a complete independent design check and plan verifications of the proposed widened structure over Dry Wash Creek. The existing structure consisted of a 3 span steel rolled beam superstructure supported by a multicolumn bent on spread footings. The new portion of the bridge was widened to match the existing structure.
03/16-08/16	LADOTD (H.001439) LA 1 Bridges near Grand Isle. Design Engineer on the project to for the replacement for three structures experiencing severe corrosion and concrete spalling in the vicinity of Grand Isle, LA. Performed "as-designed" ratings on the substructure elements at all three sites. These ratings also served as an independent check of the design.
06/15-04/18	LADOTD (H.010916) Prien Lake Redeck & Safety Improvements. Design Engineer on the project to re-deck the main spans, improve the safety of the structure by the addition of new barriers, and add inspection walkways to assist the inspection of the variable depth fracture critical plate girders on the main span. Tasked with detailing barrier transitions, construction phasing plans, and the calculation of plan quantities.

		Firm AECOM Technical Services, Inc.	
HENRY FIX, PE, CBI QA/QC Lead		Years of Relevant Experience with this Employer	26
		Years of Relevant Experience with Other Employer(s)	8
Degree(s) / Years / Specialization	BSCE / 1987 / Civil Engineering; MSCE / 1992 / Structural Engineering		
Active Registration Number / State / Expiration Date	38224 / LA / 03.31.24 Additional active license: AR, AZ, DE, FL, MD, NJ, PA, PR		
Year Registered	1992	Discipline	Civil Engineer
Contract Role(s) / Brief Description of Responsibilities	<p>QA/QC Lead. Henry has substantial analysis and design experience on a wide range of bridge, bridge inspection, highway, and railway projects. He has an extensive background in structural modeling and design, utilizing finite element software, including STAAD, GTSTRUDL, and ANSYS. He is also proficient with design and analysis programs including AASHTOWare BrDR, BAR7, BOX, ABUT and LRFD design. An NBIS certified bridge inspector since 1989, Henry has participated in a broad range of bridge inspection activities as an Inspection Team Leader.</p> <p>Training: Bridge Safety Inspector Training, NJDOT, 1988; PennDOT BSITC Certification, 1989; Refresher course 2010-2020; OSHA Construction Safety Awareness Training, 2006; Fall Protection Training Program, 2006, 2009, 2021</p>		
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
12/12-06/18	<p>LADOTD (Contract No. 44-2687 State Project No. H.009730.5) In-Depth Inspection of Complex Structures, Statewide, LA. Structural Engineer of Record, inspection team leader, and project quality representative for the four-year retainer contract to perform in-depth bridge inspections of assigned complex structures. Assigned bridges include the Gramercy Bridge (2013), US 190 EB and WB Structures over the Atchafalaya River (2014), I-210 Lake Charles Bridge (2014), Louisa Bridge (2015), Vicksburg Bridge (2015), Mississippi River Gulf Outlet Bridge (2015), Miller's Bluff Bridge (2016), Greater New Orleans Bridge (2016), LA 182 Morgan City Bridge (2017) and LA 315 Dularge Bridge (2017). Assigned work also included the design to reset the rocker nest truss bearings of the US 190 WB Structure over the Atchafalaya River.</p>		
01/14-07/15	<p>Sonoma Marin Area Rail Transit (SMART), Haystack Bridge, Petaluma, CA. Structural engineer for the rehabilitation and installation of a relocated Scherzer rolling bascule, through truss rail transit bridge. The bridge was disassembled from its location on the Texas Coast and transported to the site where it was inspected for the analysis, rehabilitation and re-assembled as a crossing over the Petaluma River. AECOM was a subconsultant to the contractor Shimmick Construction for the design/build project. Work included assessing the condition of the structure, analyzing the load capacity of the deteriorated members and gusset plates, recommending repairs and rehabilitating the structure for installation.</p>		

04/06-05/10	Delaware River Port Authority (DRPA), Walt Whitman Bridge 2006 Biennial Inspection, PA and NJ. Structural engineer and inspection team leader for the inspection and gusset plate load rating tasks. In response to the I-35 bridge collapse the client requested a load rating and capacity analysis of the gusset plates for the approach deck truss spans of this major structure carrying I-76 over the Delaware River between New Jersey and Pennsylvania. This was a supplement to the biennial inspection contract which required a full NBIS inspection of the suspension bridge, the approach deck truss spans, the girder-floorbeam-stringer spans and the multi-girder approach spans and corridor overpasses.
2014-Present	Montana Department of Transportation (MDT) – Statewide Load Rating, Various Locations, MT. Senior structural engineer and project quality representative responsible for structural analysis and project quality of load rating for back-to-back four-year assignments with approximately 400 bridges, using the AASHTOWare Bridge Rating (BrR) software, including steel, reinforced concrete, prestressed concrete, and timber superstructures. Task includes rating of approximately 75 steel trusses, gusset plate analysis, curved girder and arch structure analysis.
02/11-06/11	Pennsylvania Department of Transportation (PennDOT), State Project No. E01047, District 11-0, Allegheny and Beaver County NBIS, Ambridge-Aliquippa Bridge Load Rating , Pittsburgh, PA. Lead structural engineer responsible for the load rating analysis of the gusset plates for this 1730-foot, five-span, cantilever, steel, through truss over the Ohio River and the approach pony truss span. The bridge was being rehabilitated and AECOM was asked to analyze the capacity of the gusset plates in response to the increased emphasis on gusset plates as a result of the I-35W bridge collapse.
05/06-05/14	Delaware Department of Transportation (DelDOT), Rehabilitation of Bridge 1-501, The Newport Viaduct, Newport, DE. Deputy project manager and lead structural engineer for the inspection and rehabilitation of a twin span, 1984 foot, 19-span viaduct with continuous and simple span configurations. The superstructure is a composite steel tub girder with varying cross-sections. The bridge carries SR 141 over the Christina River, Amtrak’s Northeast Corridor, State Route 4 and various local streets. A routine inspection discovered over 1200 fatigue cracks in the webs at the internal diaphragm connection plates. Finite element modeling of the condition and various retrofit schemes were examined to remediate the cracking.
04/10-12/10	Delaware River Port Authority (DRPA), Betsy Ross 2010 Biennial Inspection, PA and NJ. Deputy project manager, lead structural engineer and project safety coordinator for the inspection and load rating of the Betsy Ross Bridge Facility. This contract included a complete rating of all the bridges and culverts on the facility, including the main truss bridge, the approach truss spans, the approach girder spans, numerous overpass structures, and two culverts. A final report was prepared that included the load rating analysis, a description of the inspection findings, recommendations for repairs, SI&A PONTIS and BMS updates.
09/09-03/10	Pennsylvania Turnpike Commission (PTC) Systemwide Inspections, PA. Structural engineer for the load rating analysis of The Hawk Falls 739-foot truss (NB-610) and the Beaver River 1480-foot truss (WB-211) bridges to analyze the capacity of the gusset plates. This work was done as a part of the systemwide inspection agreement.
06/12-05/19	Pennsylvania Department of Transportation (PennDOT) District 5-0, State Project No. E02417, NBIS State Bridge Inspections, Carbon, Schuylkill and Monroe Counties, PA. Structural engineer for the inspection and load rating of various bridges. Load ratings included various structure types including concrete bridges, multi-girder steel bridges, and culverts. For some of the load ratings , repair designs were developed to mitigate the reduced postings that would have resulted from the observed deficiencies discovered during the inspections.

		Firm AECOM Technical Services, Inc.	
KEVIN HAGEN, PE Load Rating Team 2 Lead		Years of Relevant Experience with this Employer	17
		Years of Relevant Experience with Other Employer(s)	6
Degree(s) / Years / Specialization	BS / 2000 / Civil Engineering		
Active Registration Number / State / Expiration Date	31211 / MS / 12.31.23 Additional active license: MN		
Year Registered	2020	Discipline	Civil Engineer
Contract Role(s) / Brief Description of Responsibilities	Analysis and Load Rating Engineer. Kevin is a project manager and senior engineer with a diverse background in design and rating for a variety of bridge projects. Kevin is experienced with a variety of bridge types including concrete slab-spans, prestressed concrete girders, concrete channel beams, steel girders, and timber slabs and girders. Kevin routinely manages teams of engineers at AECOM to deliver bridge design and rating projects or tasks.		
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).		
4/22-12/22	NDDOT, Bridge Load Ratings for State Owned Bridges, West Region. Project manager for the load rating of 131 bridges in Western North Dakota. All structures for this assignment were concrete box culverts. Many structures were rated using AASHTOWare BrR. In some cases, structures were judgement rated due to the absence of plan details or unique conditions. A variety of reinforcing conditions, fill heights and conditions were encountered which required client coordination for agency level decisions on general procedures. Responsible for managing a team of rating engineers and delivering ratings on schedule; verification reviews of ratings to confirm rating methods, general accuracy of results and conformance to NDDOT Load Rating Manual and submittal requirements; and oversight & compliance with NDDOT and AECOM QC/QA procedures.		
4/20-12/22	NDDOT, Local Public Agency Bridge Inspection and Load Rating, Northwest Region. Task manager for the load rating of 619 local agency bridges in northwest North Dakota. Bridge types include trusses, steel girder, prestressed concrete girder, reinforced concrete slabs and T-beams, timber, concrete box culverts and corrugated metal pipe culverts. Many structures were rated using AASHTOWare BrR. Metal pipe culverts were rated using spreadsheet calculations. Substructures and bridge pins were also rated, as needed, using spreadsheet calculations. Responsible for managing a team of rating engineers and delivering ratings on schedule; verification reviews of ratings to confirm rating methods, general accuracy of results and conformance to NDDOT Load Rating Manual and submittal requirements; and oversight & compliance with NDDOT and AECOM QC/QA procedures.		
8/21-7/23	MDOT – OSARC, Statewide Timber and Complex Bridge Inspections and Ratings. Task manager for load rating/load rating updates of 130 local agency bridges in Mississippi. Structure types included precast concrete channel beams, steel girders, steel thru-girders with floor beams and stringers, concrete box culverts and railroad car bridges. Superstructures were rated using AASHTOWare BrR. Pile bent substructures were rated, as needed, based on section loss. Responsible for coordination and oversight of the bridge ratings including providing guidance and direction on the rating of deteriorated bridge elements and quality control review of the final rating packages.		

3/21-12/21	City of Waterloo, IA, 2021 Biennial Bridge Review. Ratings task manager for Specialized Hauling Vehicle rating updates to 51 bridges to maintain compliance with FHWA requirements. Complete rating calculations were also performed using AASHTOWare BrR for six additional bridges. Structure types include steel girder bridges, concrete slabs, prestressed concrete girders and box culverts. Responsibilities included coordination of rating activities, quality control reviews of final rating packages, and submittal of ratings to IADOT via SIIMS.
7/20-8/20	MDOT – OSARC, Non-Complex Load Ratings Task 4. Task manager for the load rating of 21 local agency bridges in Mississippi. Structure types included precast concrete channel beams, steel girders, concrete box culverts and a cast-in-place concrete T-beam. Superstructures were rated using AASHTOWare BrR 6.8.4. Pile bent substructures were rated, as needed, based on section loss. Responsible for coordination and oversight of the bridge ratings including providing guidance and direction on the rating of deteriorated bridge elements and quality control review of the final rating packages.
9/20-3/21	MDOT – OSARC, Timber Bridge Inspection and Load Rating. Task manager for the load rating of 99 local agency bridges in Mississippi. Superstructure types include timber and concrete; however, all the bridges are supported by timber piling. Superstructures are being rated using AASHTOWare BrR 6.8.4. Pile bent substructures are being rated, as needed, based on section loss. Responsible for coordination and oversight of the bridge ratings including providing guidance and direction on the rating of deteriorated bridge elements and quality control review of the final rating packages.
8/20-11/20	MDOT – OSARC, Complex Bridge Inspection and Load Rating. Task manager for the load rating of approximately 30 local agency bridges in Mississippi. Superstructure types include steel railcar, steel military, steel I-girder of varying levels of deterioration, prestressed concrete, reinforced concrete channel beams, and timber beams. Superstructures are being rated using AASHTOWare BrR 6.8.4 and in some cases judgement ratings. Pile bent substructures are being rated, as needed, based on section loss. Responsible for coordination and oversight of the bridge ratings including providing guidance and direction on the rating of deteriorated bridge elements and quality control review of the final rating packages.
6/20-8/20	MDOT – OSARC, Non-Complex Load Ratings Task 3. Rating engineer for four cast-in-place concrete culverts. These structures were rated in accordance with MDOT's Box Culvert Standards using AASHTOWare BrR 6.8.4. Responsible for completing culvert ratings and assembling rating submittals in accordance with MDOT OSARC requirements.
5/14-Ongoing	Wisconsin Valley Improvement Company. Project manager and senior bridge engineer for routine, element level bridge inspections in accordance with Wisconsin Department of Transportation (WisDOT) and National Bridge Inspection Standards (NBIS) Regulations for nine client bridges. Responsible for coordinating bridge inspections and reviewing inspection reports. In addition, oversaw and reviewed initial load ratings for each of the bridges as well as load rating updates as bridge conditions changed.
01/21-08/21	MDOT, I-20 East to I-55 North, Rankin County, MS. Engineer for a 1,310-foot-long for a 1,310-foot-long, 17-span reinforced concrete box girder bridge with dapped ends. Due to observed cracking found during inspection of the dapped ends, a rating analysis was performed that ultimately led to the posting and closing of a single lane of traffic on the bridge. Responsibilities included complex bridge modeling and rating analysis.

		Firm AECOM Technical Services, Inc.	
JASON MATHERS, PE Complex Bridge		Years of Relevant Experience with this Employer	17
		Years of Relevant Experience with Other Employer(s)	0
Degree(s) / Years / Specialization	BS / 2007 / Civil Engineering		
Active Registration Number / State / Expiration Date	46129 / LA / 03.31.24 Additional active license: DE, PR, PA, NJ, FL, MT		
Year Registered	2021	Discipline	Civil Engineer
Contract Role(s) / Brief Description of Responsibilities	<p>Complex Load Rating Engineer. Jason has experience in the inspection, load rating, analysis, and repair of bridge structures. He has performed bridge related services for over two thousand structures in twenty-two states/territories for thirty-two different owners. He has served on bridge inspections with the responsibilities of scheduling and tracking of multiple teams with specialized access equipment, communicating with subcontractors and onsite contractors, developing maintenance needs and critical repairs, and generating detailed technical reports with photographs. He has reviewed load ratings and designed repairs for steel, timber, and both pre-stressed and mild reinforced concrete bridge types. He has utilized ASD, LFD, and LRFD analysis methodologies, and is proficient in AASTHO BrR (previously Virtis), PennDOT analysis programs, and LARS; as well as structural design programs, STAAD and Midas Civil. Training: Bridge Safety Inspector Training Course - 2005, PA; Bridge Safety Inspection Training Refresher Courses - 2007 through 2021, PA; NHI Course No. 130078 - Fracture Critical Insp. Techniques for Steel Bridges – 2009; ASCE Load Rating of Highway Bridge, 2010; DelDOT Interaction of Structural and Mechanical System on Movable Bridges, Hardesty & Hanover - 2012; SPRAT Level III Rope Access Worker, 2012-Present; Aspen Aerial Under Bridge Unit Training - 2006; ANSI A92 Training for Type 2B & 3B MEWP – 2020.</p>		
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
02/14-04/17	<p>LADOTD (Contract No. 44-2687, Project No. H.009730.5) In-depth Inspection of Complex Bridges, Various Locations, LA. Inspection team leader for fracture critical/in-depth Inspection of long span bridges. Crescent City Connector, 1575’ Cantilevered Truss; I-210 over Prien Lake, 450’ Deck Girder; Hwy 182 over Atchafalaya River, 607ft Truss; Rope Access Team Leader responsible for hands-on inspection of the fracture critical members of the Main Span. Utilized rope access to inspect main truss members unable to be reached by typical methods.</p>		
03/14-09/23	<p>Montana Department of Transportation (MDT), Statewide Load Rating, Various Locations, MT. Structural engineer responsible for analysis and review of several bridge load ratings using AASHTO BrR and Midas software. Bridge types varied from slabs, horizontally curved, Girder/Floor-truss/Stringer, to Truss structures comprised of concrete (mild and prestressed reinforcement), steel, and timber materials. Truss ratings also included gusset plate analysis. Several truss bridges were field measured utilizing rope access techniques.</p>		

04/08-12/12	DelDOT, Moveable Bridge Inspections, New Castle, Kent, and Sussex Counties, DE. Structural inspector for the regular NBIS and interim inspections of several movable bridges over waterways. Inspections included fixed trunnion and rolling lift bascule type bridges.
06/19-08/19	NASA/John F. Kennedy Space Center, Load Rating of Bascule Spans, Indian River Bridge Derating Assessment Study, Kennedy Space Center, FL. Structural engineer responsible for the load rating of the Main Bascule Spans and steel side spans for the NASA Causeway over the Indian River. Rating included evaluation of NASA special transport vehicles and Florida legal vehicles.
05/16-05/20	Delaware River Port Authority (DRPA), Betsy Ross 2016 & 2020 Biennial Inspection, PA and NJ. Inspection team leader for the inspection of 1620' long continuous steel truss crossing of the Delaware River. Responsibilities included hands on inspection of the fracture critical members and fatigue sensitive details.
05/14-12/14 and 05/18-12/18	Delaware River Port Authority (DRPA), Commodore Barry 2014, 2018, & 2022 Biennial Inspection, PA and NJ. Inspection team leader and rope access worker for the inspection of 1644' long cantilevered truss crossing of the Delaware River. Responsibilities included hands on inspection of the fracture critical members and fatigue sensitive details.
04/16-01/17	West Virginia Division of Highways, CPL Thomas Bennett Memorial Bridge Analysis, Monongalia County, WV. Structural engineer performing a load rating analysis of the CPL Thomas Bennett Memorial Bridge (Uffington Truss). The bridge consists of nine spans, a three-span continuous deck truss and three continuous deck girder approach spans, with an overall length of 1,550 feet.
06/16-02/17	US Army Corps of Engineers, Dam Spillway Bridge Evaluation, Secure Facility, Middle East Region. Structural engineer responsible for analysis of a damaged prestressed concrete bridge on a Secure Facility. Developed independent model with AASHTOware BrR to verify primary 3D finite element model. Determined adequacy of bridge to carry military live loads.
04/23-present	LADOTD, Load Rating IDIQ TO#1, Statewide. Staff design engineer for the Load Rating IDIQ responsible for the rating and evaluation of approximately 140 bridges throughout the state. Bridge types in this task order include precast/cast-in-place slabs, steel I-beams and concrete prestressed girders. Many bridges are supported by timber piles. Awaiting NTP to begin work. AECOM is a subconsultant to M&M on the project.

	Firm AECOM Technical Services, Inc.				
WILLIAM AHOLA, PE Load Rater - Structures without Plans	<table border="1"> <tr> <td data-bbox="1205 196 1850 250">Years of Relevant Experience with this Employer</td> <td data-bbox="1850 196 1946 250">22</td> </tr> <tr> <td data-bbox="1205 250 1850 303">Years of Relevant Experience with Other Employer(s)</td> <td data-bbox="1850 250 1946 303">27</td> </tr> </table>	Years of Relevant Experience with this Employer	22	Years of Relevant Experience with Other Employer(s)	27
Years of Relevant Experience with this Employer	22				
Years of Relevant Experience with Other Employer(s)	27				
Degree(s) / Years / Specialization	BS / 1974 / Civil Engineering; MS / 1979 / Civil Engineering				
Active Registration Number / State / Expiration Date	039638R / PA / 09.30.23 Additional active licenses: NJ				
Year Registered	1980	Discipline	Civil Engineer		
Contract Role(s) / Brief Description of Responsibilities	<p>Structures without Plans. William's experience encompasses structural design, bridge load ratings, and the inspection of bridges and building structures. He has been a certified bridge safety inspector since 1985, and has served as team leader for NBIS, biennial, in-depth, and underwater inspections in all Pennsylvania Department of Transportation districts, Delaware Department of Transportation, Delaware River Port Authority, US Army Corps of Engineers, Pennsylvania Turnpike, and New Jersey of Transportation. He was a team leader and inspection unit coordinator of projects for the New York State Thruway Authority and the New York State Department of Transportation. He is experienced in the use of load rating software applications including AASHTOWare BrR and current directives for the load rating of complex bridge superstructures consisting of steel, timber, P/S and CIP concrete. He was a co-developer of the PennDOT Load Rating Training Course. William also has extensive experience encompassing structural design and analysis of bridges and building structures. He has performed structural analysis and design for new bridge and bridge rehabilitation projects in Pennsylvania, New Jersey, New York, and Delaware. His experience includes design of reinforced concrete, prestressed concrete and structural steel superstructures supported by deep foundations and spread footings. His structural steel design experience includes design of a new welded plate thru-girder superstructure that addressed concerns about redundancy by incorporating internal redundancy into the tension zones of the girders. His bridge rehabilitation experience includes design of retrofits for pin and hanger bridges, structural rehabilitation of movable bridges, and seismic retrofits using base isolation bearings.</p>				
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).				
01/18-present	<p>Montana Department of Transportation (MDT), Statewide Load Rating, Term Contracts 2018-2021 & 2021-2024, Various Locations, MT. Structural engineer responsible to provide load rating services for this statewide contract as a calculation QC reviewer. The goal of this project is to provide load rating services on an as-needed basis for all of the state's legal loads. The work includes the analysis and rating of nearly 800 bridges to date throughout the state, including the load rating of dozens of structures without plans. The bridges include steel truss-floorbeam-stringer systems with gusset plate analysis, glue laminated timber, solid-sawn timber, reinforced concrete, prestressed concrete, multi-girder steel, corrugated metal pipe, and steel girder-floorbeam-stringer systems. AECOM used AASHTOWare Bridge Rating (BrR) software to analyze all structures that the program is capable of modeling.</p>				

07/17-01/20	OSARC, Bridge Load Rating, Various Locations, MS. Structural engineer responsible for QC calculation checking of load rating efforts for this assignment for over 100 bridges, using the AASHTOWare Bridge Rating (BrR) software, including steel, reinforced concrete, prestressed concrete, and timber superstructures, as well as timber pile substructures and timber decks. Field-noted deterioration is included in calculations and load rating models, and field measured properties are used where plans are not available.
05/14-02/18	Montana Department of Transportation (MDT), Statewide Load Rating, Term Contract 2014-2017, Various Locations, MT. Structural engineer responsible for coordination, calculation checking, and quality control of load rating efforts for this four-year assignment with approximately 150 bridges, using the AASHTOWare Bridge Rating (BrR) software, including steel, reinforced concrete, prestressed concrete, and timber superstructures. Task includes rating of steel trusses with gusset plate analysis, curved girder, and arch analyses.
07/12-07/18	Pennsylvania Department of Transportation - District 5-0, Load Rating Analysis, Carbon, Monroe, and Schuylkill Counties, PA. Senior structural engineer responsible for calculation review for this project including more than 250 bridge load rating analyses. Load ratings were performed on deteriorated steel and concrete structures based on the NBIS inspections provided by AECOM. Many of these structures are based on field measured properties since they are structures without plans.
06/14-06/19	PennDOT, District 6-0, General Bridge Inspection Services. Structural engineer for the inspection program for >800 locally owned bridges in the district. Responsibilities included overseeing the quality of inspections and load rating work by consultants and coordinating the response of the local owners to assure compliance with PennDOT and FHWA requirements. Work was completed under three separate contracts.
03/08-06/09	PennDOT Bureau of Design, Bridge Load Rating Training Course. Developer/Instructor of a one-day training course and a series of two-day training courses for all PennDOT Districts. The purpose of the training is to teach bridge load rating engineers the current policy, techniques, and procedures for accuracy, completeness, and uniformity in load rating bridges.
12/01-12/06	PennDOT, Bureau of Design, Statewide Bridge Safety Inspection Quality Assurance. Inspection Team Leader and Load Rating Engineer for the Quality Assurance (QA) evaluation of PennDOT's Bridge Inspection Program. The project entailed an independent re-inspection and evaluation of selected bridges in all PennDOT Districts and the Pennsylvania Turnpike, reviewing PennDOT's Bridge Management System (BMS) coding, load ratings , report development, maintenance recommendations and file management. The project goal was to establish statewide uniformity, consistency and accuracy in PennDOT's bridge inspection program. The six-part agreement consisted of four annual inspection cycles, encompassing a total of 1,340 bridges throughout Pennsylvania.
01/98-12/98	Pennsylvania Department of Transportation, District 5-0, SR 82 Birdsboro Bridge over the Schuylkill River and Conrail, Berks County, Pennsylvania. Senior structural engineer and team leader that developed the rating analysis and rehabilitation recommendations for the Birdsboro Bridge, a 9-span concrete open spandrel arch bridge. Performed detailed finite element analysis and load rating arch of ribs using STAAD. NDT of the arch and pier elements was provided to determine the extent of the cracking in the primary members to validate the assumptions used during the analysis.

		Firm AECOM Technical Services, Inc.	
BRETT CANIMORE, PE, CBI Load Rater - Complex Bridge		Years of Relevant Experience with this Employer	24
		Years of Relevant Experience with Other Employer(s)	7
Degree(s) / Years / Specialization	MS / 2009 / Engineering Management; BS / 1994 / Civil Engineering Technology		
Active Registration Number / State / Expiration Date	053513E / PA / 09.30.25 Additional active license: DE, GA, MD, MI, MT, NJ, NY, FL, AR, PR		
Year Registered	1999	Discipline	Civil Engineer
Contract Role(s) / Brief Description of Responsibilities	Complex Load Rating Engineer. Brett has more than 30 years of experience in bridge inspection, load rating analysis, rehabilitation, and design. He has been a Certified Bridge Safety Inspector since 1995. Brett has served as project manager, project engineer and lead structural engineer on a variety of projects and has been involved in more than 12,000 routine and in-depth NBIS inspections and bridge load ratings . Training: Bridge Safety Inspector Training Course; 1995, PA; Bridge Safety Inspection Training Refresher Courses; 1997 through 2022, PA; NHI Course No. 130078 - Fracture Critical Insp. Techniques for Steel Bridges, 2002 & 2018.		
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
02/23-Present	LADOTD (Contract No. 44-21593 State Project No. H.009859) IDIQ Contract for Bridge Load Rating Services, Statewide, LA. Project manager for the load rating analysis of 140 bridges (superstructure and substructure) using AASHTOWare BrR software and other approved LADOTD software applications.		
12/12-6/18	LADOTD (Contract No. 44-2687 State Project No. H.009730.5) In-Depth Inspection of Complex Structures, Statewide, LA. Project manager for the four-year retainer contract to perform in-depth bridge inspections of assigned complex structures. Assigned bridges include the Gramercy Bridge (2013), US 190 EB and WB Structures over the Atchafalaya River (2014), I-210 Lake Charles Bridge (2014), Louisa Bridge (2015), Vicksburg Bridge (2015), Mississippi River Gulf Outlet Bridge (2015), Miller's Bluff Bridge (2016) Greater New Orleans Bridge (2016). LA 182 Morgan City Bridge (2017) and LA 315 Dularge Bridge (2017). Assigned work also included the design to reset the rocker nest truss bearings of the US 190 WB Structure over the Atchafalaya River and the deck condition survey of the 18-mile long I-10 Bridge.		
01/18-Present	Montana Department of Transportation (MDT), Load Rating Bridges Term Contract (2018-2021 and 2021-2024). Project manager to provide load rating services for this statewide contract. The goal of this project is to provide load rating services on an as-needed basis for all of the state's legal loads. The work includes the analysis and rating of over 800 bridges to date throughout the state. The bridges include steel truss-floorbeam-stringer systems with gusset plate analysis, glue laminated timber, solid-sawn timber, reinforced concrete, prestressed concrete, multi-girder steel, corrugated metal pipe, and steel girder-floorbeam-stringer systems. AECOM used AASHTOWare Bridge Rating (BrR) software to analyze all structures that the program is capable of modeling.		

05/19-Present	<p>PennDOT BOMO, Agreement E04533, Local NBIS Bridge Inspections, Statewide, PA. Project manager for NBIS bridge inspections (550 bridges) and bridge load ratings (150 bridges) of locally owned bridges for DCNR, PennDOT District 4-0, District 5-0 and District 8-0. Each work order included various types and sizes of bridges such as reinforced concrete, P/S concrete, steel beam, steel truss and timber bridges. Many of the bridges are load-restricted or closed, and some bridges required a new load rating analysis due to deterioration. Both assignments included the development of Plan of Actions to address priority maintenance deficiencies and/or load capacity restrictions.</p>
02/18-3/22	<p>Montana Department of Transportation (MDT), Agricultural Loads on Montana Bridges. Project manager to provide a review and analysis of data from existing weigh-in-motion (WIM) stations throughout the state to determine the presence of agricultural vehicles that are utilizing overload provisions after harvesting operations. The vehicles found to be utilizing overload provisions are analyzed for a variety of bridge spans and compared to existing design and rating vehicles in the state. Notional agricultural loads are created to model the effects of these overloaded vehicles, and procedures are recommended for statewide load rating and posting practice to include a consideration of these overloaded agricultural vehicles using calibrated live load factors.</p>
10/18-12/19	<p>Dominion Energy Questar Pipeline, Historic Cameron Bridge In-Depth Inspection, Cameron, AZ. Project manager for a fracture critical inspection and overall condition assessment of the historic Cameron Suspension Bridge over the Little Colorado River in Cameron, AZ. The purpose of the inspection was to determine the overall condition of the bridge components, perform a “hands-on” inspection of the fracture critical members and fatigue sensitive details and to identify any structural deficiencies. AECOM inspectors utilized industrial rope access to gain access for the 100% hands-on inspection effort. This project also included a complete load rating analysis in accordance with the AASHTO Manual for Bridge Evaluation (MBE). The load rating analysis will consider three scenarios for the bridge’s capacity. A baseline analysis of the as-built capacity, an as-inspected analysis which considers the identified deficiencies and an as-repaired analysis to consider the capacity of the bridge with assumed, minimal repairs to restore any ineffective member(s) to their original capacity. Since construction plans are not available for the structure, field measurements and a site survey were conducted to capture the overall dimensions of the structure, including the heights of the towers, the lengths of the span and the profiles of the bridge deck and the suspension cables. Light detection and ranging (LIDAR) scanning will be used since it is the most efficient way to gather this information. A 3-D point cloud will be generated that will capture a representation of the structure.</p>
05/14-2/18	<p>Montana Department of Transportation (MDT), Load Rating Bridges Term Contract (2014-2017). Project manager to provide load rating services for this statewide contract. The goal of this project is to provide load rating services on an as-needed basis for all of the state’s legal loads. The work included the analysis and rating of 150 bridges throughout the state. The bridges include glue laminated timber, reinforced concrete, prestressed concrete, multi-girder steel, steel girder-floorbeam-stringer and steel trusses. AECOM used AASHTOWare Bridge Rating (BrR) software to analyze all structures that the program is capable of modeling.</p>
07/12-7/18	<p>PennDOT District 5-0, Agreement E02417, NBIS Inspection of 543 State Owned Bridges, Carbon, Monroe, and Schuylkill Counties, PA. Project manager for the NBIS three-cycle contract focusing on structures within the designated counties and along high ADT interstate corridors. AECOM performed more than 350 load rating analyses on state-owned structures in these counties, using BAR7, PS3, BOX5, and ARCHv1.1 software. Project included routine NBIS inspections, interim inspections, emergency on-call services, load ratings analyses, CoRe element inventory and element level inspections. The structure types included rolled steel I-beam, prestressed box girder, concrete encased I-beam, girder-floorbeam-stringer, reinforced concrete slab, steel truss, pre-post tensioned concrete I-beam, reinforced concrete T-beam, reinforced concrete arch, and built-up and welded steel plate girder bridges. Field-noted deterioration was incorporated in calculations based on detailed field inspection.</p>

		Firm AECOM Technical Services, Inc.	
DANIEL BOYD, PE, CBI Load Rater - Site Visits		Years of Relevant Experience with this Employer	4
		Years of Relevant Experience with Other Employer(s)	13
Degree(s) / Years / Specialization		BS / 2006 / Civil Engineering	
Active Registration Number / State / Expiration Date		36728 / LA / 03.31.24 Additional active license: MS, TX	
Year Registered		2011	Discipline Civil Engineer
Contract Role(s) / Brief Description of Responsibilities		Analysis and Load Rating Engineer. Daniel has more than 17 years of structural engineering experience in the transportation industry. He most recently was a part of two design build projects, serving as a structural Independent Design Check Engineer for two prestressed bridge packages, and as structural task lead for the design of overhead traffic signs for LBJ East in Dallas, TX, and as bridge design engineer and Independent Design Check engineer for Oak Hill Parkway in Austin, TX. His technical experience also includes steel girder bridge design, precast/prestressed concrete girder design, structural steel design, structural concrete design, and deep and shallow foundations design. He has a thorough working knowledge of AASHTO and Louisiana DOTD Standards, as well as ACI, AISC, and ASCE. He has experience in both new construction and design projects, as well as retrofit and/or expansion projects requiring modifications to existing structures, bridges, and foundations to meet current engineering codes and industry best practices. Daniel is also a certified bridge inspector.	
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
01/20-present	TxDOT, LBJ East Design Build Project, Dallas, TX. Completed detailed Independent Design Checks (IDC) for two prestressed bridge packages in the project. IDC analyses were performed for entirety of each bridge structure, from geometry, superstructure design, substructure design, and foundation design to verify the validity of each design. Structural Task Leader and engineer of record for the design of Overhead Sign Structures, consisting of 137 custom Overhead Sign Bridge (OSB) Structures and Cantilever Overhead Sign Structures (COSS), as well as ITS and Tolling equipment structures. The structure inventory included a combination of both ground mounted and bridge mounted applications. Design included analysis of the steel trusses for the OSB and COSS structures, analysis and design of custom aesthetic concrete support columns for the truss structures, and deep foundations for each structure. Served as structural task leader during Design Services During Construction (DSDC) phase to answer RFI's, resolve field issues, review shop drawings, plan and schedule drawing and/or calculation revisions, etc.		

03/21-present	TxDOT, Oak Hill Parkway, Austin, TX. Design engineer for one bridge team, providing analysis and design for multiple substructures and foundations, Independent Design Check (IDC) engineer for the design of three prestressed bridge packages, and all IDC engineer for all Overhead Sign Structures for the project. IDC analyses were performed for entirety of each bridge structure, from geometry, superstructure design, substructure design, and foundation design to verify the validity of each design. Provided engineering support during Design Services During Construction (DSDC) phase to answer RFI's, resolve field issues, review shop drawings, etc.
10/20-02/21	TxDOT, IH 820 SE Connector Design-Build Project, Fort Worth, TX. Performed preliminary structural design for multiple substructure and foundation arrangements, including inverted-tee bents, multi-column bents, hammer-head bents, and the foundations for each of these, as part of the preliminary design phase of a large design-build project. Also performed QA/QC on numerous bridge calculations, and detailed plan reviews on bridge plan drawings.
03/21-09/21	LADOTD SPN H.004273.5, I-49, Connector, Lafayette, LA. Performed a review of I-49 mainline viaduct layouts for the three different structural options being presented to LADOTD for selection. Performing reviews and updating structural quantities and costs to reflect current design layouts and current bid pricing to ensure consistency across the three structural options.
04/20-11/20	Port of Gulfport, Port of Gulfport Connector, Gulfport, MS. Structures discipline leader for preliminary phase of Gulfport connector project. Performed preliminary structural design for prestressed concrete girders and steel plate girder superstructures, preliminary substructure design, and geometric design for a new bridge structure on 30th Ave. spanning Hwy. 90 providing direct trucking access into the Port of Gulfport.
10/19-12/20	Coastal Protection and Restoration Authority, LA 23 Bridge over Mid-Barataria Sediment Diversion, Plaquemines Parish, LA Structural Engineer that assisted in the Design Plans for the new bridge and roadway structure over the new sediment diversion. The project consists of a new concrete precast girder bridge, approximately 2,200 feet in length, and the connecting asphalt roadway. Provided calculation and plans peer reviews and QA/QC.
10/06-08/11	LADOTD, US 71/165 Fort Buhlow Bridge/KCS Railroad Overpass, Alexandria, LA. Structural design engineer. Designed main river spans consisting of two 3-span units (one each direction) with 300'-400'-300' steel plate girder spans, and multiple steel simple spans greater than 200' crossing river levees. Designed all aspects and components of the steel plate girder bridge units, including diaphragms, bolted splices, bearing, stiffeners, etc. Also performed analysis and design of prestressed concrete girders, concrete bridge deck and columns, pile bents and piles, and performed peer review on other components of the project. Collaborated with steel fabricator to review/approve shop drawings and RFI's.
01/07-12/07	City-Parish of East Baton Rouge, Highland Road (LA 42) Improvements (Perkins to Airline), Baton Rouge, LA Civil/ Structural design engineer for two new bridges on Highland Road at Ward's Creek crossing. Performed structural analysis on multiple aspects of project. Design included concrete bridge deck, guard rails, analysis and design of prestressed quad beam concrete girders, girder bearing design, and prestressed concrete piles and concrete bents. Also performed calculation reviews on multiple aspects of project.

		Firm AECOM Technical Services, Inc.	
NICK RICE, PE Load Rater		Years of Relevant Experience with this Employer	5
		Years of Relevant Experience with Other Employer(s)	8
Degree(s) / Years / Specialization		BS / 2009 / Civil Engineering	
Active Registration Number / State / Expiration Date		44306 / WI / 07.31.24	
Year Registered		2015	Discipline Civil Engineer
Contract Role(s) / Brief Description of Responsibilities		Analysis and Load Rating Engineer. Nick has been a project engineer on a variety of bridge projects and has assisted in the design and plan preparation of transportation projects involving urban, rural, and interstate bridge design. His technical bridge experience includes concrete slab structures, prestressed concrete girder structures, steel girder structures, post-tensioned structures, sign structures, culvert structures, retaining wall structures, and bridge rehabilitation.	
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
01/21-08/21	MDOT, I-20 East to I-55 North, Rankin County, MS. Load rating engineer for a 1,310-foot-long, 17-span reinforced concrete box girder bridge with dapped ends. Due to observed cracking found during inspection of the dapped ends, a rating analysis was performed that ultimately led to the posting and closing of a single lane of traffic on the bridge. Responsibilities included complex bridge modeling and rating analysis.		
08/22-05/23	TxDOT, South-East Connector Design-Build Project, Dallas, TX. Bridge team lead for the final design of 4 transportation bridges which include 3 grade separation structures and one direct connector. The superstructure consisted of Tx54 & Tx62 girders built on multi-column and single column bent substructures. Responsibilities included final design and final plan review.		
09/20-06/22	Oak Hill Parkway Design-Build Project, US 290 EB Overpass over William Cannon Drive, Austin, TX. Lead structural engineer and bridge team lead for the design of a 3,328-foot-long, 30-span prestressed concrete girder bridge using Tx54 prestressed concrete girders built on conventionally reinforced multi-column bents & straddle bents and post-tensioned concrete straddle bents. CSiBridge software was used in the analysis & design of the inverted T post-tensioned straddle bent caps. Responsibilities include final design and final plan review.		
08/19-09/20	TxDOT, IH-635 LBJ East Design-Build Project, Dallas, TX. Bridge team lead for the final design of seven transportation bridges, including 2 railroad overpass bridges. The 7 transportation bridges were designed using Tx54 prestressed girder superstructures built on TxDOT standard abutments and a combination of single-column bents, multi-column bents, and straddle bents. Responsibilities included final design and final plan review.		

01/19-08/19	Windsor-Detroit Bridge Authority, Gordie Howe International Bridge Project, Detroit, MI. Structural engineer for the redundancy analysis of 6 steel plate girder ramp structures within the Michigan Interchange. As part of the project requirements, all steel tension members with regions under tension were designed to ensure load path redundancy. All 6 bridges were approximately 41'-0" wide with spans that varied from 90'-0" to 270'-0" and plate girder web depths that varied from 48" to 96" deep. Responsibilities included the bridge redundancy analysis and preparation of a bridge redundancy report.
03/18-09/18	Wisconsin Department of Transportation, IH 43 SB to IH 39/90 SB Flyover Bridge, Beloit, WI. Project structural engineer for the design of a 2,220-foot-long, 11-span curved steel girder bridge. The superstructure was built eccentrically on sill abutments and hammerhead bents. The superstructure was divided into two separate units with modular expansion joints; high load multi-rotational bearings were utilized at each substructure. The longest span in each unit was 265 feet long and required the use of top flange lateral bracing to control lateral deflections of the girders due to wind loading during construction. Responsibilities included final design and plans checking.
09/16-08/17	Wisconsin Department of Transportation, Southwest Region, STH 82 over the Wisconsin River, Marion, WI. Project structural engineer for an 11-span, 1600-foot-long 72" prestressed girder bridge over the Wisconsin River. The prestressed girder superstructure was built on sill type abutments and hammerhead piers. The superstructure was split into three units with modular expansion joints and steel reinforced elastomeric bearings. Due to deep scour depths, the substructure piling was designed for large unbraced lengths. Responsibilities included final design, final plan review, preparation of final specification and estimates.
08/17-10/17	Wisconsin Department of Transportation, Northwest Region, STH 124 over the Chippewa River, Chippewa Falls, WI. Technical review engineer for an emergency bridge rehabilitation project. The Chippewa River bridge is an 1100-foot-long continuous steel girder bridge on sill abutments and hammerhead piers. It was discovered thru dive inspections that two of the bridge footings constructed on rock had poorly consolidated concrete leaving large voids in the footings. This led to the immediate closure of STH 124. As a result, micro piles were used to pin the existing footings and construct new footings at the waterline. Responsibilities included the technical review of consultant designed pier retrofits and development of substructure forces for the pier retrofit design.

		Firm AECOM Technical Services, Inc.	
KENDRA VANGORP, EI Load Rater		Years of Relevant Experience with this Employer	14
		Years of Relevant Experience with Other Employer(s)	0
Degree(s) / Years / Specialization	BS / 2007 / Civil Engineering; MS / 2009 / Civil Engineering		
Active Registration Number / State / Expiration Date	EI 0064207 / CO		
Year Registered	--	Discipline	--
Contract Role(s) / Brief Description of Responsibilities	Analysis and Load Rating. Kendra has experience in multidisciplinary transportation projects including design of numerous highway structures, concrete box culverts, and retaining walls; load rating hundreds of existing and proposed bridges; and bridge widening, rehabilitation, preventative maintenance, and inspection. Design and load rating analysis experience include various structure types including precast prestressed I-girders, box girders, and steel plate girders over waterways, roadways, and railroads for state and local agencies.		
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
01/19-12/19	ODOT, Bridge Load Ratings, Various Locations, OH. Bridge load rating and quality checker for 30 bridges in Ohio using AASHTOWare BrR software. The structures typically included rolled steel beams and welded steel plate girders rated in accordance with Ohio DOT policies and AASHTO specifications. The rating team evaluated multiple complex structures to determine innovative methods to rate in BrR rather than using more costly methods using finite element analysis software.		
06/16-06/18	CDOT, Bridge Load Ratings, Various Locations, CO. Bridge load rating and quality checker for over 60 structures using AASHTOWare BrR software in accordance with the CDOT Bridge Load Rating Manual and AASHTO specifications. Structure types include concrete slab and girder, continuous concrete slab and girder, continuous steel girder bridges, and reinforced concrete t-beam structures. The project included working directly with the CDOT to deliver rating packages under tight schedule and budget constraints.		
05/12-09/15	UDOT, UDOT Bridge Load Rating Program, Various Locations, UT. Rating of over 150 structures using AASHTOWare BrR Software in accordance with the 2014 UDOT Bridge Management Manual. The structures included reinforced concrete box culverts, concrete frames, prestressed concrete bridges, and analysis of bridges without as-built plans.		
03/20-01/21	The City of Colorado Springs, Colorado Avenue Bridge Rehabilitation, Colorado Springs, CO. Responsible for load rating and quality checking the design and rehabilitation plans for two 95'-0" wide, 6-span precast concrete I-girder bridges over Sierra Madre Street and UPRR, and Monument Creek. The bridge decks were evaluated using ground penetrating radar survey to determine deck deterioration and depth of cover to reinforcing, as well as infrared thermographic survey to locate deck and overlay delamination. These bridges further underwent a life cycle cost analysis comparing two deck repair and overlay material alternatives, followed by recommendations for repair of displaced bearing devices; replacement of aging expansion joints; and repair of localized deck deterioration.		

05/18-06/19	CDOT, I-76 over Clear Creek Fatigue Study, Adams County, CO. Field inspection for a fatigue study for EB and WB I-76 over Clear Creek. These bridges are highly skewed, multi-span, steel plate girder bridges that collectively have over 60 known distortion induced fatigue cracks due to a gap between the cross-frame stiffener and the bottom flange. The project included detailed inspections; instrumentation with strain gages and displacement transducers; full scale load testing; data collection and analysis; three-dimensional finite element analysis (FEA); and developing conceptual fatigue retrofit details. Field testing was used to calibrate the FEA to have an accurate tool to evaluate fatigue retrofit strategies. Adjustments to the model such as member properties and boundary conditions, allow the model to be refined to replicate the load test responses.
03/17-06/23	City and County of Denver, Park Avenue Viaduct Rehabilitation, CO. Bridge engineer for the \$14 million rehabilitation of an elevated viaduct structure consisting of five steel plate girder viaducts that frame into a central post-tensioned concrete waffle slab located over the BNSF and UPRR railroads and RTD tracks. The project includes modular expansion joint and bearing replacement; bridge deck repairs; replacement of concrete curb ramps and sidewalk on the waffle slab; concrete repair under the waffle slab; complex replacement of four overhead mast arm signals; painting steel girders; and resurfacing the bridge.
09/21-06/23	City and County of Denver, Havana over Sand Creek Preventative Maintenance, Denver, CO. Bridge engineer for the sidewalk extension and preventative maintenance a 4-span, post-tensioned concrete bridge over Sand Creek in northeast Denver. As part of the maintenance efforts, infrared thermographic inspection was performed to locate delamination areas in the concrete deck for repair. Additional repairs to extend the bridge design life included expansion joint, bridge rail, pedestrian rail, end rail transitions, and asphalt replacement; epoxy injection and sealing of cracks; sidewalk resurfacing; and superstructure and substructure structural concrete coating.
01/21-Ongoing	TxDOT, Southeast Connector Design Build, Fort Worth, TX. \$1.6 billion design-build project to reconstruct and widen 16.6 miles of I-820, I-20 & US-287. Kendra was responsible for the preliminary and final design of numerous superstructure and substructure elements of four multi-span overpass structures utilizing prestressed concrete TxDOT I-girders.

		Firm AECOM Technical Services, Inc.	
BINU SHRESTRA, PE Load Rater		Years of Relevant Experience with this Employer	10
		Years of Relevant Experience with Other Employer(s)	2
Degree(s) / Years / Specialization	BE / 2007 / Civil Engineering; MS / 2010 / Civil Engineering		
Active Registration Number / State / Expiration Date	54871 / MN / 06.30.24		
Year Registered	2017	Discipline	Civil
Contract Role(s) / Brief Description of Responsibilities	Analysis and Load Rating Engineer. Binu has 12 years of experience as a structural engineer. Her technical experience includes design and analysis of prestressed concrete, timber, steel, concrete slab, substructure designs and other transportation related structures. Binu was engineer of record for a rehabilitation and load rating for recent project with Hennepin County. She has served as Load Rating Engineer on variety of inspection and ratings projects in North Dakota, Mississippi, and Iowa		
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).		
9/21-6/23	Mississippi Office of State Aid Road Construction, Timber & Complex Bridge Inspection and Load Rating 2021-2022, 2022-2023, Jackson, MS. As a load rating engineer, responsibilities included the checking of rating analysis for Concrete, timber, and complex county owned bridges. Data for load rating was gathered through plans, shop drawings and field measurements. Superstructure load ratings were performed using AASHTOWare BrR in accordance with the OSARC load rating guidance. Superstructure types included timber beam, nailed laminated slab and concrete channel beam. Timber piles and pile caps were load rated using in-house calculation spreadsheets.		
4/20-4/21	North Dakota Department of Transportation, 2020-2021 LPA Bridge Inspection & Load Rating. As a load rating engineer, responsibilities include the checking of rating analysis and serving as the engineer of record. Data for load rating is gathered through plans, shop drawings and field measurements. Superstructure load ratings are performed primarily using AASHTOWare BrR in accordance with the NDDOT load rating guidance. Timber substructures are load rated using in-house calculation spreadsheets. Project includes inspecting and load rating approximately 750 in-service bridges at the County and LPA level. Structure types include timber (beam and nail laminated), rolled steel beams, various prestressed concrete shapes, slab bridges, trusses.		
10/20-9/23	South Dakota Department of Transportation, West River Bridge Bundle Project. The scope of this project includes design of two bridge bundles in West region of South Dakota. As a designer responsibilities include design and checking of 3 span Concrete slab bridge and CIP box culverts.		
4/20-9/23	CSAH 152(Osseo Road) Deck Replacement. As an engineer of record for the deck replacement project, coordinated with Hennepin County regarding deck replacement, joint replacement, Plan and Specifications preparation. Also coordinated with State Aid Bridge office regarding load rating of the structures.		

4/23-9/23	Kentucky Transportation Cabinet, Load Rating on Emergency Flood Bridges, Louisville, KY. The scope of the project includes the load rating of bridges replaced in place of flood damaged structures. Bridges are rated using AASHTOBrR in accordance with KYTC load rating guidance.
12/17-06/18	KY244 Over CSX RR and US 23, Greenup County, KY. As a designer, responsibilities included design of piers for KY244 bridge over CSX RR and US23. KY244 bridge is on the Ohio riverbank and spans over railroad, highway and existing KY244 bridge. The piers were designed for vessel collision and seismic loads. Piers were designed to be supported on piles.
07/15-present	Metropolitan Council, Southwest Light Rail Transit - Metro Green Line Extension, Minneapolis, Minnesota. The scope of the project included design of several roadway & LRT bridges and several miles of retaining wall for Greenline LRT Extension. As a designer, responsibilities included design of Superstructure and substructure components of the bridges and design of retaining wall for LRT loadings. Also, served as a checker for the structures and is currently providing design support during construction.
06/17-09/17	Granger Creek Bridge, Iowa. As a designer, responsibilities included design of superstructure and substructures for Granger creek which is 3 span curved steel bridge. Granger Creek bridge is continuously welded steel girder bridge. Bridge abutments and walls are supported on piles and the piers are supported on spread footing.
07/17-09/18	Catfish Creek Bridge, Iowa. As a substructure designer, responsibility included design of Piers for East and West bridges over Catfish creek which are 5 span Prestressed Concrete Beam bridge. Two bridge piers are supported on spread footing and other two are supported on piles.
01/21-08/21	MDOT, I-20 East to I-55 North, Rankin County, MS. Engineer for a 1,310-foot-long, 17-span reinforced concrete box girder bridge with dapped ends. Due to observed cracking found during inspection of the dapped ends, a rating analysis was performed that ultimately led to the posting and closing of a single lane of traffic on the bridge. Responsibilities included complex bridge modeling and rating analysis.

		Firm AECOM Technical Services, Inc.	
SETH MCVEY, PE, CBI Load Rater		Years of Relevant Experience with this Employer	8
		Years of Relevant Experience with Other Employer(s)	2
Degree(s) / Years / Specialization	BS / 2014 / Civil Engineering; MS / 2015 / Structural Engineering		
Active Registration Number / State / Expiration Date	25972 / NM / 12.31.24 Additional active license: CO, ND, SD, TS, UT		
Year Registered	2020	Discipline	Structures
Contract Role(s) / Brief Description of Responsibilities	Analysis and Load Rating Engineer. Seth will be a structural engineer performing load ratings as part of the Bridge Rehabilitation Design Team for this contract. He has technical experience in numerous types of engineering projects. His technical experience includes design, load rating , and inspection of transportation structures. Seth additionally manages bridge design, rehabilitation, and analysis projects.		
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
08/23-08/23	City of Mesa, AZ, Canal Bridge Load Ratings, Various Locations, AZ. Seth performed QC checks on 3 existing structures, which were rated using AASHTWare BrR using LFR methodology. The existing structures consist of reinforced concrete slabs.		
07/23-07/23	South Dakota Department of Transportation (SDDOT), West River Culvert Load Ratings, Various Locations, SD. Seth performed Quality Control (QC) checks on the load rating calculations for 4 new structures using AASHTOWare BrR software in accordance with the SDDOT Load Rating Manual and AASHTO specifications. The structures included concrete box culverts which were rated using LRFR methodology.		
03/23-07/23	Kansas City Southern Railway (KCS), Timber Bridge Rating, Sparta Road Bridge over KCS Gibsland, LA. Performed QC check on the load rating calculations for 1 existing structure using AASHTOWare BrR software in accordance with the Louisiana Department of Transportation Bridge Design and Evaluation Manual and AASHTO specifications. The structure included a timber girder and steel girder superstructure that is founded on timber piles and timber bent caps. All timber components were rated using ASR methodology while the steel girders were rated using LRFR methodology. This structure was rated in its current condition and its repaired condition.		
01/23-06/23	OSARC, Non-Complex Load Ratings, Various Locations, MS. Bridge load rating engineer of two existing structures using AASHTOWare BrR and Mathcad software in accordance with the Mississippi Department of Transportation Bridge Safety Inspection Policy and Procedure Manual and AASHTO specifications. The structures included conventionally reinforced concrete girders, prestressed girders, steel H-piles, and concrete bent caps, which were rated using LFR methodology.		
11/22-06/23	OSARC, Bridge Load Ratings, Various Locations, MS. Bridge load rating engineer of one existing structure using AASHTOWare BrR and Mathcad software in accordance with the Mississippi Department of Transportation Bridge Safety Inspection Policy and Procedure Manual and AASHTO specifications. The structure was a reinforced concrete box culvert rated using LRFR methodology. Seth also performed QC checks on 1 structure, which was a steel girder bridge with a steel grate deck rated using LFR methodology.		

12/22-12/22	KYTC, Load Rating on Emergency Flood Bridges, Various Locations, KY. Seth performed QC checks on two new bridge structures, which were rated in AASHTOWare BrR using LRFR methodology.
10/22-12/22	Pacificorp, Cutler Dam Bridge Load Ratings, Box Elder County, UT. Seth performed QC check on 2 existing structures, which were rated using CSiBridge using LRFR methodology.
06/22-12/22	NDDOT, State Owned Bridge Ratings, Various Locations, ND. Bridge load rating engineer of seven existing structures using AASHTOWare BrR software in accordance with the NDDOT Load Rating Manual and AASHTO specifications. The structures included concrete box culverts which were rated using LFR methodologies. Seth also performed QC checks on 14 existing reinforced concrete box culvert structures, rated using AASHTOWare BrR, using LFR methodology.
10/20-06/22	NDDOT, Northwest LPA Load Ratings, Various Locations, ND. Bridge load rating engineer of 190 existing structures using AASHTOWare BrR software in accordance with the NDDOT Load Rating Manual and AASHTO specifications. The structures steel, timber, masonry, reinforced concrete, and prestressed concrete bridge types rated using ASR, LFR, and LRFR methodologies. Seth also performed QC checks on four structures of various types.
09/21-06/22	OSARC, Non-Complex Load Ratings, Various Locations, MS. Bridge load rating engineer of 23 existing structures using AASHTOWare BrR and Mathcad software in accordance with the Mississippi Department of Transportation Bridge Safety Inspection Policy and Procedure Manual and AASHTO specifications. The structures included conventionally reinforced concrete girders, prestressed girders, steel H-piles, and concrete bent caps, which were rated using LFR methodology.
12/21-12/21	El Paso County Department of Public Works, Bridge Load Rating, South Academy Blvd. over Bradley Road, CO. Seth performed QC check and EOR on the load rating of NB and SB South Academy Blvd. over Bradley Road. The bridges were widened, and load rated using AASHTOWare BrR for LFR and LRFR methodologies in accordance with the CDOT Load Rating Manual.
09/19-06/20	OSARC, Non-Complex Load Ratings, Various Locations, MS. Bridge load rating engineer of 15 existing structures using AASHTOWare BrR and Mathcad software in accordance with the Mississippi Department of Transportation Bridge Safety Inspection Policy and Procedure Manual and AASHTO specifications. The structures included conventionally reinforced concrete girders, prestressed girders, steel H-piles, and concrete bent caps, which were rated using LFR methodology.
06/18-02/19	NMDOT, Complex Bridge Load Ratings, Various Locations, NM. Seth performed load rating calculations for 10 existing bridge structures using AASHTOWare BrR and CSiBridge. The structure types varied and included reinforced concrete slabs, steel plate girders, steel tub girders, and prestressed concrete tub girders.
06/2014-12/2015	NMDOT, Load Rating Analysis of NMDOT Bridge Inventory. Seth performed load rating calculations using AASHTOWare BrR for over 50 existing bridge structures. These bridges were in New Mexico and were load rated in accordance with the NMDOT Bridge Procedures and Guidelines. Structure types include steel, concrete, and timber.

		Firm AECOM Technical Services, Inc.	
STEVE HAYNES, PE Load Rater - Complex Bridge		Years of Relevant Experience with this Employer	18
		Years of Relevant Experience with Other Employer(s)	21
Degree(s) / Years / Specialization	BS / 1978 / Civil Engineering		
Active Registration Number / State / Expiration Date	43319 / LA / 09.30.24 Additional active license: CO		
Year Registered	2019	Discipline	Professional Engineer
Contract Role(s) / Brief Description of Responsibilities	Complex Load Rating Engineer. Steven is a senior project manager and bridge designer with extensive experience in analysis, design, and construction management of bridges and other structures. He will apply his knowledge in support of the bridge team. He is knowledgeable of the AASHTO bridge design specifications and AASHTO bridge construction specifications for steel, precast, and post-tensioned concrete bridges, including the design of complex substructures.		
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).		
7/18-present	TxDOT, Skillman Tied Arch Bridge, Dallas, TX. Lead engineer for the design and load rating of a 285' Steel Tied Arch Bridge over Interstate Highway 635 for the IH 635E Design Build Project. Designed the tied arch consists of 2 main arch ribs and a center partial arch rib 60'-6" tall with network hangers. The overall bridge width is 217.5' minimum width to accommodate truck turn-arounds. The turn-arounds cantilever over 30' beyond the arch ribs and must accommodate HL93 Loads and WB62 Truck Turning Movements. Challenges include designing steel floor beams for the large cantilevers and the design of the arch hangers assuming loss of one of the network hangers. The design complies with TxDOT and AASHTO LRFD Requirements.		
7/15-present	LADOTD (State Project No. H.004273.5) I-49 Connector, Lafayette Regional Airport to I-10/I-49/US 167 Interchange, Lafayette Parish, LA. Structural task assignments included the conceptual designs of Signature Bridge Options totaling approximately 840 feet in length and a main span approximately 400'. Technical Task Leader and for AECOM's portion of this design study report. Provided QC for the superstructure and design of the substructure elements for this bridge, including straddle bents in excess of 130' in length. AECOM was tasked with the design for Spliced U-Girder Alternative. The viaduct consisted of multiple structures. The study area and was in excess of 15000' long with a number of ramps. Considering the parallel I-49 structures, the overall bridge length studied was in excess of 10,000 feet each and over 120 spans total. Midas and CSiBridge were utilized for the designs of the structures. Designed the structure in accordance with LADOTD's Guidelines and AASHTO LRFD requirements.		
10/17-12/19	Washington D.C. Department of Transportation, Frederick Douglass Memorial Bridge, Washington D.C. Structural engineer designing foundations for this 3-span suspended arch bridge crossing the Anacostia River. The bridge is 1445' in length and spans 540' over the main channel. Challenges included designing deep pile foundations in soft soils, including the design of the bridge for active threats, such as ship collisions which could potentially damage several supporting piles at the piers. The design plans comply with Washington D.C.'s DOT Standards and AASHTO's LRFD Requirements.		

1/07-12/08	North Texas Tollway Authority, SH 121 (Southwest Parkway) at I-30 Interchange (Segment 1), Denton County, TX. Structural engineer, structural analyst, and designer for five bridges. Bridges ranged from 6 to over 20 spans and consisted of prestressed concrete beams in the span ranges from 90 to 122 feet. Challenges included a several straddle bents with spans in excess of 60 feet and cantilever bents in excess of 20 feet. The design and plans comply with NTTA, TxDOT, and AASHTO's LRFD requirements.
01/90-12/90	Washington State Department of Transportation, Arch Bridge Load Ratings, WA. Member of a team of engineers preparing a program for load rating various types of concrete arch bridges for WSDOT in accordance with FHWA requirements for safety inspection of bridges and the National Bridge Inventory System. The program was developed specifically to accommodate post-tensioned segmental arch structures that had been constructed at various sites throughout Washington State.
01/07-06/07	City of Weatherford, FM2552 over Town Creek and Union Pacific Railroad - FM2552 Reroute, Weatherford, TX. Project engineer for design of the 644-foot-long, 7-span bridge over Town Creek and the UPRR. The bridge was designed in accordance TxDOT and AASHTO standard specifications. The superstructure consists of prestressed concrete Type IV I-beams; however, special consideration was required for three spans that were designed on a 700-foot radius. Special consideration was also required to accommodate UPRR requirements, which included a special safety fence that was designed to satisfy local aesthetic requirements.
06/07-12/07	TxDOT, Dallas District, I-635 Widening, Kingsley Road Overpass, Dallas County, TX. Structural analyst and designer for superstructure design for the bridge widenings for eastbound and westbound I-635 bridges. The bridges were widened to accommodate HOV lanes and were approximately 286 feet long. The design matches the existing structural members consisting of four spans of structural steel plate girders. Every effort was made to ensure that bearings, bracing and bent designs were adequately detailed to accommodate the severe 55-degree skew angle. This project was completed on an extreme fast track to ensure that funding deadlines were met for TxDOT. The designs were prepared according to TxDOT and AASHTO standard specifications.
10/08-12/08	Washington Department of Transportation, SR 519/I-90 Connection, Design-Build, Seattle, WA. Senior structural engineer for design of a 1018-foot curved bridge connector from westbound I-90 to Atlantic Street near Safeco Field. The structure consists of five spans with the longest span being 275 feet designed in accordance with Washington DOT's Bridge Design Manual and AASHTO's LRFD bridge design specifications. The design required application of the latest proposed code and included the use of a site-specific response spectrum for the structure. The design category is SDC D, which is the most severe of categories.
10/06-12/06	Washington Department of Transportation, I-405, Kirkland Nickel Stage 1, Kirkland, WA. Senior structural engineer assisting in the design of the soil nail wall and related stilling basin structures at Forbes Creek and provided quality assurance checking of the I-405 Bridge over NE 116th Street. Also was tasked with providing software verification for WSDOT's design software, PGSuper.
06/05-12/05	TxDOT, US 281 Over Mud Creek, San Antonio, TX. Prepared bridge layouts for four structures over Mud Creek and designed the parallel main lane. Designed 3-span bridges, 174 feet long, with flared beams to accommodate ramps from collector roads and frontage road access. The project was completed on a fast track in less than two months. Designs were prepared in accordance with TxDOT standards.

		Firm AECOM Technical Services, Inc.	
MAEGAN VAUSE, PE Load Rater		Years of Relevant Experience with this Employer	10
		Years of Relevant Experience with Other Employer(s)	0
Degree(s) / Years / Specialization		BS / 2011 / Civil Engineering; MS / 2014 / Structural Engineering	
Active Registration Number / State / Expiration Date		53421 / CO / 10.2023	
Year Registered		2017	Discipline Civil Engineer
Contract Role(s) / Brief Description of Responsibilities		Analysis and Load Rating Engineer. Maegan will be a member of a box culvert load rating and modeling team. She is a structural engineer with design and management experience for a variety of transportation projects. Her experience includes project management, structural design, cost-estimating, load ratings , construction support, and bridge drafting and detailing.	
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).		
6/16-08/18	CDOT Staff Bridge, Bridge Load Ratings, Denver, CO. Responsible for rating and checking numerous bridge ratings. Ratings included calculating load input data, live load distribution factors and building models in AASHTOWare. Project included the rating and checking of fifty Colorado concrete slab girder bridges. Bridges were originally designed under LFD loading and were constructed between 1959 and 1972. Ratings were completed using AASHTOWare BrR and based on available bridge plans.		
01/19-12/19	ODOT Bridge Load Ratings, Columbus, OH. Responsible for rating and checking 30 bridges including complex steel truss bridges, and concrete arch bridges requiring finite element analysis. AECOM team was tasked with rating and checking 133 bridges for Ohio DOT as a part of their effort to reduce their rating backlog. Structures included prestressed concrete girders, CIP concrete structures, rolled steel & plate girder bridges, steel truss bridges and several complex bridges requiring finite element analysis. Analysis was done using AASHTOWare BrR, MIDAS, and STAAD.		
04/16-11/20	C470 Design Build, Colorado. Structural designer with responsibilities including miscellaneous design and construction support including load ratings . Required load ratings included load rating existing and widening prestressed concrete girder bridges using AASHTOWare BrR. A nonstandard gage vehicle (NSG) was modeled for permitted concrete slip form pavers crossing the structure during construction. Also responsible for rating existing concrete box culverts for increased surcharge loads due to proposed mechanically stabilized earth walls. Design-build project that provided construction and design services on 12.5 miles of C-470. Project included widening and overlay with the addition of new managed lanes, new and widened bridges, noise barriers and interchange improvements.		

06/20-present	MAMSIP I-25 South Widening, Colorado Springs, CO. Structural design and structures task lead for the widening of two parallel structures along I-25 mainline. Project included the widening and rehabilitation of 7 miles of I-25 mainline including the widening of two existing structures: I-25 over Dry Wash and I-25 over Clover Ditch. Lead a team of six in the design and detailing efforts of the bridge widening. Design included steel girders, precast prestressed box girders, h-piles, phased construction, and bridge rehabilitation efforts. Responsibilities also included Life Cycle Cost Analysis, bridge ratings, interdisciplinary coordination, and post design services.
06/20-present	S. Academy Interchange Bridges, Colorado Springs, CO. Structural design and structures task lead. Project was tasked to design the replacement of I-25 Mainline over S. Academy Blvd. Lead team of four in design and detailing efforts. Lead structural design engineer responsible for design of multi-column bents, precast prestressed BT girders, drilled caissons, abutment design, h-piles, phased construction, and bridge wall design. Responsibilities also included, leading the structural drafting & detailing, bridge load rating , interdisciplinary and subconsultant coordination, and post design services.
01/20-present	CDOT R4, Eastern Plains Timber Bridge Replacement, Weld County, CO. Deputy project manager and bridge CAD manager. Blended team project with multidisciplinary design services for the replacement of 10 timber bridges in eastern Colorado. Responsibilities include structures CAD management, client, interdisciplinary and subconsultant coordination, schedule tracking and submittals.
09/21-present	Mail Creek Pedestrian Bridge, Fort Collins, CO. Project manager and structural designer. Lead structural design engineer responsible for design of two pedestrian bridges; two span bridge over UPRR and one short span slab structure over a drainage ditch. Design includes, slab girders, CIP abutments and pier design, h-piles and drilled shafts. Maegan was also responsible for structures CAD management, client, interdiscipline and subconsultant coordination, schedule tracking and submittals.

		Firm AECOM Technical Services, Inc.	
CARLIN DAGGETT, EI Load Rater		Years of Relevant Experience with this Employer	9
		Years of Relevant Experience with Other Employer(s)	0
Degree(s) / Years / Specialization		BS / 2010 / Civil Engineering; MS / 2012 / Civil Engineering	
Active Registration Number / State / Expiration Date		--	
Year Registered		--	Discipline --
Contract Role(s) / Brief Description of Responsibilities		Analysis and Load Rating. Carlin has experience in multidisciplinary transportation projects including design of numerous highway structures, concrete box culverts, and retaining walls; load rating numerous existing and proposed bridges; and bridge widening, rehabilitation, preventative maintenance, and inspection. Design and load rating analysis experience include various structure types including precast prestressed I-girders, box girders, and steel plate girders over waterways, roadways, and railroads for state and local agencies.	
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
01/19-12/19	ODOT, Bridge Load Ratings, Various Locations, OH. Bridge load rating and quality checker for 30 bridges in Ohio using AASHTOWare BrR software. The structures typically included rolled steel beams and welded steel plate girders rated in accordance with Ohio DOT policies and AASHTO specifications. The rating team evaluated multiple complex structures to determine innovative methods to rate in BrR rather than using more costly methods using finite element analysis software.		
06/16-06/18	CDOT, Bridge Load Ratings, Various Locations, CO. Bridge load rating and quality checker for over 30 structures using AASHTOWare BrR software in accordance with the CDOT Bridge Load Rating Manual and AASHTO specifications. Structure types include concrete slab and girder, continuous concrete slab and girder, continuous steel girder bridges, and reinforced concrete t-beam structures. The project included working directly with the CDOT to deliver rating packages under tight schedule and budget constraints.		

		Firm AECOM Technical Services, Inc.	
JAMES MARTINEZ, EI Load Rater		Years of Relevant Experience with this Employer	2
		Years of Relevant Experience with Other Employer(s)	0
Degree(s) / Years / Specialization	BS / 2021 / Civil Engineering: MS / 2022 / Civil Engineering (Structural)		
Active Registration Number / State / Expiration Date	--		
Year Registered	--	Discipline	--
Contract Role(s) / Brief Description of Responsibilities	Analysis and Load Rating. James will perform load rating calculations as part of the Bridge Rehabilitation Team for this contract. He has experience in multiple projects including design of substructures and superstructures, load rating existing and newly constructed bridges as well as concrete box culverts. Load rating analysis include various structure types including prestressed concrete girders, conventionally reinforced concrete girders, box girders, steel built-up girders, steel rolled girders, steel plate girders, and timber girders over waterways, roadways, and railroads for state and local agencies. He has also rated timber, steel, and concrete substructures.		
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
03/23-present	KYTC, Load Rating on Emergency Flood Bridges, Various Locations, KY. Bridge load rating of 15 new structures using AASHTOWare BrR software in accordance with the Kentucky Bridge Inspection Procedures Manual and AASHTO specifications. The structures include box girders, steel rolled girders, and steel plate girders which were rated using LRFR methodology.		
07/23-07/23	SDDOT, West River Culvert Load Ratings, Various Locations, SD. Bridge load rating of four new structures using AASHTOWare BrR software in accordance with the SDDOT Load Rating Manual and AASHTO specifications. The structures included concrete box culverts which were rated using LRFR methodology.		
03/23-07/23	KCS, Timber Bridge Rating, Sparta Road Bridge over KCS Gibsland, LA. Bridge load rating of one existing structure using AASHTOWare BrR software in accordance with the Louisiana Department of Transportation Bridge Design and Evaluation Manual and AASHTO specifications. The structure included a timber girder and steel girder superstructure that is founded on timber piles and timber bent caps. All timber components were rated using ASR methodology while the steel girders were rated using LRFR methodology. This structure was rated in its current condition and its repaired condition.		
01/23-06/23	OSARC, Non-Complex Load Ratings, Various Locations, MS. Bridge load rating of six existing structures using AASHTOWare BrR and Mathcad software in accordance with the Mississippi Department of Transportation Bridge Safety Inspection Policy and Procedure Manual and AASHTO specifications. The structures included conventionally reinforced concrete girders, prestressed girders, concrete box culverts, steel H-piles, and concrete bent caps, which were rated using LFR methodology.		

11/22-06/23	<p>OSARC, Bridge Load Ratings, Various Locations, MS. Bridge load rating of 27 existing structures using AASHTOWare BrR and Mathcad software in accordance with the Mississippi Department of Transportation Bridge Safety Inspection Policy and Procedure Manual and AASHTO specifications. The structures included conventionally reinforced concrete girders, timber girders, steel rolled girders, steel plate girders, steel built-up girders, timber piles, timber bent caps, and concrete bent caps, which were rated using LFR and ASR methodology.</p>
06/22-12/22	<p>NDDOT, State Owned Bridge Ratings, Various Locations, ND. Bridge load rating of 25 existing structures using AASHTOWare BrR software in accordance with the NDDOT Load Rating Manual and AASHTO specifications. The structures included concrete box culverts which were rated using LFR methodology.</p>
05/22-08/22	<p>OSARC, Bridge Load Ratings, Various Locations, MS. Bridge load rating of six existing structures using AASHTOWare BrR and Mathcad software in accordance with the Mississippi Department of Transportation Bridge Safety Inspection Policy and Procedure Manual and AASHTO specifications. The structures included conventionally reinforced concrete girders, timber piles, timber bent caps, and concrete bent caps, which were rated using LFR and ASR methodology.</p>

	Firm AECOM Technical Services, Inc.		Years of Relevant Experience with this Employer 11	
JAMES RHOAD-DROGALIS, PE Load Rater			Years of Relevant Experience with Other Employer(s) 0	
Degree(s) / Years / Specialization		BS / 2012 / Architectural Engineering; MS / 2012 / Civil Engineering		
Active Registration Number / State / Expiration Date		47302 / WI / 07.31.24 Additional active license: OH, KY, ND		
Year Registered		2016	Discipline	Civil and Structural Engineer
Contract Role(s) / Brief Description of Responsibilities		Analysis and Load Rating Engineer. James bring 11 years of technical expertise as a structural engineer consists of designing, load rating and inspecting bridges, and other transportation related structures. His technical bridge experience includes prestressed concrete, timber, steel, concrete slab and substructure design. James has served as the engineer of record on over 100 bridge load ratings in the past year. James' inspection experience includes conducting routine, fracture critical, and major bridge inspections in accordance with FHWA (Federal Highway Administration) requirements.		
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
11/20-06/23	Mississippi Office of State Aid Road Construction, Timber & Complex Bridge Inspection and Load Rating 2019-2023, Jackson, MS. As a load rating engineer, responsibilities included the checking of rating analysis for timber and complex county owned bridges. Data for load rating was gathered through plans, shop drawings and field measurements. Superstructure load ratings were performed using AASHTOWare BrR in accordance with the OSARC load rating guidance. Superstructure types included timber beam, nailed laminated slab and concrete channel beam. Timber piles and pile caps were load rated using in-house calculation spreadsheets			
05/20-06/22	North Dakota Department of Transportation, County Wide Bridge Inspection and Load Rating, Bismarck, ND. As a load rating engineer, responsibilities include the checking of rating analysis and serving as the engineer of record. Data for load rating is gathered through plans, shop drawings and field measurements. Superstructure load ratings are performed primarily using AASHTOWare BrR in accordance with the NDDOT load rating guidance. Timber substructures are load rated using in-house calculation spreadsheets. Project includes inspecting and load rating approximately 750+ in-service county owned bridges. Structure types include timber (beam and nail laminated), rolled steel beams, various prestressed concrete shapes, slab bridges, trusses.			
05/22-09/22	North Dakota Department of Transportation, State Owned Bridge Load Rating, Bismarck, ND. As a load rating engineer, responsibilities include the checking of rating analysis and serving as the engineer of record. Data for load rating is gathered through plans and shop drawings. Culvert load ratings are performed primarily using AASHTOWare BrR in accordance with the NDDOT load rating guidance. Project includes load rating approximately 120 in-service state owned reinforced concrete box culverts.			

10/18-02/20	KYTC, Bridging Kentucky Program, Louisville, KY. The scope of the project includes the replacement or rehabilitation of over 1,000 bridges throughout the state. AECOM's role is to provide services starting with project scoping and continuing through construction services. Each bridge is inspected to determine if it meets the programs requirements and evaluate the feasibility of repairs. Responsibilities as a bridge Team Leader on this project include leading the design, contract drawing and construction document preparation. Structure types include box culverts, steel and various concrete beam superstructures.
02/20-05/20	TxDOT, I-635 LBJ East Design-Build, Dallas, TX. Structural engineer provided independent design calculation checks for three prestressed beam bridges. This check was completed to satisfy the project special provisions which required a registered Professional Engineer with at least five years of experience to perform. The intent was to have an independent engineer provide a calculation check of all structural elements to verify their adequacy with the design plans. The three structures ranged in complexity from a three-span (93'-147'-93') skewed bridge to a 16-span prestressed bridge. Substructures included multi-column bents, single column hammerhead piers and straddle bent configurations. All foundations on the project were founded on drilled shafts. If discrepancies were found, design forces and stresses were compared the design team's and updates were made to structural elements as necessary.
11/19-02/20	Wisconsin Department of Transportation, STH 64 over Wolf River, Wolf River, WI. Structural engineer was the engineer of record for the load rating of a two-span continuous rolled steel beam bridge over Wolf River. The project scope included a deck overlay, expansion joint replacement and beam painting. Structural Engineer was responsible for originating and signing load rating for the rehabilitated structure.
03/21-03/21	City of Waterloo, 2019 Biennial Bridge Review, Waterloo, IA. Project included the load rating of the Ranchero Road Bridge over Black Hawk Creek in Waterloo, IA. The multi-span steel girder bridge was load rated using AASHTOWare BrR in accordance with the IowaDOT Bridge Rating Manual. The load rating was performed to maintain compliance with FHWA requirements which includes the load rating of Special Haul Vehicles.
03/21-03/21	City and County of Denver, General Engineering Services, Denver, CO. Project included the load rating of the State Street Bridge over Quarter Section Run Creek in Denver, IA. The multi-span concrete slab bridge was load rated using AASHTOWare BrR in accordance with the IowaDOT Bridge Rating Manual. The load rating was performed to maintain compliance with FHWA requirements which includes the load rating of Special Haul Vehicles.
11/17-01/18	Ohio Turnpike and Infrastructure Commission, 2016-2018 Bridge Load Ratings, Berea, OH. Reviewing consultant bridge load ratings using AASHTO BRR software. The objective of the project was to update all turnpike bridges for current live loading configurations, including the recent FHWA required emergency vehicles, and develop new load ratings .
01/13-12/17	Pennsylvania Department of Transportation - District 6, I-95 and Girard Avenue Interchange Improvement Project, Philadelphia, PA. Structural designer responsible for the design and analysis of several bridges in the preliminary and final design stages for the widening and reconstruction of 3 miles of Interstate 95 located in Center City Philadelphia. Also responsible for the review of construction shop drawings including structural steel drawings and girder erection sequences. AECOM is responsible for environmental studies, a point-of-access study, preliminary design, final design, and construction services. The scope of this project also includes the reconfiguration of the Girard Avenue Interchange to allow traffic to travel directly from I-95 southbound to Delaware Avenue and from Delaware Avenue to I-95 southbound. The project will be constructed in six separate sections over a period of ten years, with an estimated construction cost of over \$1 billion.

		Firm AECOM Technical Services, Inc.	
CRAIG PARENT, PE, SE Load Rater		Years of Relevant Experience with this Employer	27
		Years of Relevant Experience with Other Employer(s)	0
Degree(s) / Years / Specialization		BSCE / 1995 / Civil Engineering; MSCE / 1997 / Civil Engineering	
Active Registration Number / State / Expiration Date		36117 / CO / 10.31.23 Additional active license: CA, UT	
Year Registered		2002	Discipline Civil Engineer
Contract Role(s) / Brief Description of Responsibilities		Analysis and Load Rating Engineer. Craig has extensive experience managing on-call contracts, individual task orders, and project specific contracts including small bridge rehabilitation and replacements; complex structural repair and retrofit; emergency repair and replacement; and large multidisciplinary projects such as grade-separated interchanges. His rehabilitation and repair experience includes non-destructive load testing, bridge deck scanning (GPR and IR), finite-element modelling, bridge jacking, substructure replacement, foundation augmentation, concrete deck repair, fatigue retrofit, and bearing and expansion joint replacement.	
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
07/20-09/21	Repair Assessment of Bridge No. 93.1, I-20 EB to I-55 NB, Jackson, MS. Independent technical reviewer for the load rating and repair recommendations for Bridge No. 93.1 in Rankin County, MS. This bridge exhibits diagonal cracking of the concrete girders and spalling at the dappedgirder ends which weakened the structural integrity of the bridge and warranted a load posting. The load rating was completed using a 3D finitemodel using CSiBridge software. Craig provided subject matter expertise for rehabilitation measures such as bearing repair/replacements, bridge seal using high molecular weight methacrylate (HMWM), concrete patching, expansion joint replacement, and dapped girder rehabilitation.		
03/20 – 01/21	The City of Colorado Springs, Colorado Avenue Bridge Rehabilitation, Colorado Springs, CO. Bridge engineer responsible for load rating and quality checking the design and rehabilitation plans for two 95'-0" wide, 6-span precast concrete I-girder bridges over Sierra Madre Street and UPRR, and Monument Creek. The bridge decks were evaluated using ground penetrating radar survey to determine deck deterioration and depth of cover to reinforcing, as well as infrared thermographic survey to locate deck and overlay delamination. These bridges further underwent a life cycle cost analysis comparing two deck repair and overlay material alternatives, followed by recommendations for repair of displaced bearing devices; replacement of aging expansion joints; and repair of localized deck deterioration.		
01/19 - 12/19	ODOT, Bridge Load Ratings, Various Locations, OH. Task leader and quality checker for 60 bridges in Ohio using AASHTOWare BrR software. The structures typically included rolled steel beams and welded steel plate girders rated in accordance with Ohio DOT policies and AASHTO specifications. The rating team evaluated multiple complex structures to determine innovative methods to rate in BrR rather than using more costly methods using finite element analysis software.		

06/16 – 06/18

CDOT, Bridge Load Ratings, Various Locations, CO. Task leader and quality checker for over 60 structures using AASHTOWare BrR software in accordance with the CDOT Bridge **Load Rating** Manual and AASHTO specifications. Structure types include concrete slab and girder, continuous concrete slab and girder, continuous steel girder bridges, and reinforced concrete t-beam structures. The project included working directly with the CDOT to deliver rating packages under tight schedule and budget constraints.

		Firm AECOM Technical Services, Inc.	
SEAN VOISINET, PE Load Rater		Years of Relevant Experience with this Employer	10
		Years of Relevant Experience with Other Employer(s)	0
Degree(s) / Years / Specialization	BS / 2009 / Architectural Engineering		
Active Registration Number / State / Expiration Date	41523 / LA / 09.30.23 Additional active license: TX, CO		
Year Registered	2022	Discipline	Civil Engineer
Contract Role(s) / Brief Description of Responsibilities	Analysis and Load Rating Engineer. Sean is a bridge engineer with 10 years of experience in the design, rehabilitation, and widening of urban street, highway and railway bridges in Colorado, Texas, Utah and Louisiana. His experience includes design and management for a variety of transportation structures including complex retaining walls, concrete box culverts, drainage junction structures, and traffic sign structures. His experience also includes preparing final design calculations, construction plans, project special provisions and project cost estimates formatted in accordance with capital project guidelines.		
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
03/18-present	LADOTD (H.004273) I-49 Connector, Lafayette, LA. Structural engineer for the conceptual and preliminary design of this 7-mile reconstruction of I-49 through downtown Lafayette, LA. This project has a budget projected over \$1 billion and includes approximately 20 bridges and numerous retaining walls. Sean is responsible for developing conceptual layouts and preliminary design for eight precast concrete segmental span-by-span ramp bridges that frame into the 2-mile viaduct structure through the Lafayette Central Business District.		
04/18-09/18	CDOT, SH 59/I-70 Emergency Bridge Replacement (CDOT NPS Contract), Seibert, CO. Structures engineer for the emergency bridge replacement project of the SH59 Bridge over I-70 in eastern Colorado. Sean developed preliminary superstructure layout alternatives and provided final design and detailing of the steel sheet pile retaining walls for this multi-disciplinary, blended-team project bridge and interchange reconstruction project. CMAR contracting enabled CDOT's project team to replace the bridge and bring the interchange geometry to current AASTHO standards re-opening the interchange 76-days after the initial closure		
02/21-12/21	City of Fort Collins, Lemay Avenue over BNSF/Vine Improvements, Fort Collins, CO. Structure engineer for the design development for a new bridge crossing over Vine Street and the BNSF Railway tracks in northeast Fort Collins. Using a CM/GC project delivery, Sean designed the single-span bridge comprised of a prestressed concrete box girder superstructure on integral abutments on steel piles with geosynthetic reinforced soil (GRS) supporting walls and a pedestrian underpass box culvert structure with wingwalls. Design efforts included railroad coordination and design submittals developed in accordance with the UPRR/BNSF RR Grade Separation Guidelines.		

09/18-05/19	LADOTD (H.011670) I-10 at Loyola Avenue Interchange Design-Build Tender Offer, Kenner, LA. Structure engineer for interchange improvements at the I-10 at Loyola Drive to provide new direct access ramps to handle traffic to and from the new passenger terminal at Louis Armstrong International Airport. Design tasks included evaluating alternative technical concepts, preliminary design and layouts for prestressed concrete LG girder superstructures, proposal plan development and quantity calculations for contractor estimating and bid.
01/21-present	TxDOT, Southeast Connector Design-Build, Fort Worth, TX. Structure engineer and task manager for this \$1.6 billion design-build project to reconstruct and widen 16.6 miles of I-820, I-20 & US-287. During the project pursuit, Sean was responsible for developing alternative technical concepts and managed a team to develop bridge layouts and preliminary proposal plans for 32 bridges, including quantity calculations for contractor estimating and bid. Sean is currently the structures task lead for the final design of seven highway overpass and ramp structures comprised of prestressed concrete Tx I-girders.
07/19-12/21	TxDOT, I-635 LBJ East Design-Build, Dallas, TX. Design-Build project to reconstruct and widen 11 miles of interstate roadway. Sean was the structural design engineer responsible for a 24-span (3100 ft) direct connector bridge at the I-635/I-30 Interchange comprised of prestressed concrete Tx I-girders on hammerhead bents on two drilled shaft footing caps and multi-column straddle bents on monoshaft foundations. Additional responsibilities included final substructure and foundation design for the 280 ft span Skillman St. Tied Arch Signature Bridge supported on abutment caps and drilled shafts.
04/16-11/20	CDOT, C-470 Express Tolled Lanes Design-Build, Denver, CO. As part of CDOT's \$215 million C-470 Express Lanes Design Build Project, AECOM designed and constructed (16) bridges and (18) overhead sign structures for this 12.5-mile corridor in Denver, Colorado. Sean was the lead structural designer for six bridge widenings comprised of prestressed concrete BT girder superstructures on hammerhead bents on drilled caissons and integral abutments on steel piles. Sean was also lead designer for a 9-span (1150 ft) flyover structure with prestressed concrete BT girders on hammerhead bents and semi-integral inverted tee bents on drilled caissons and semi-integral abutments on drilled caissons and performed extensive structural drafting and detailing. Independent designer responsibilities included several cast-in-place cantilever retaining walls, special drainage junction structures, sound walls, non-standard monotube overhead sign structures, and bridge widening load ratings. Sean was also the Structures Task Lead for post-design construction support services including answering RFIs, field design changes, and overseeing deck rehabilitation and other construction activities.
10/12-06/17	Regional Transportation District of Denver, I-225 Light Rail Line Design-Build, Aurora, CO. Design-build of a 10.5-mile LRT extension with eight stations and seven bridges. Sean was the lead wall designer for various structures including cast-in-place cantilever walls, caisson walls, soldier pile walls and geometric layouts and design coordination for mechanically stabilized earth walls and soil nail walls. Superstructure designer for a 9-span (700 ft) ballasted light rail bridge utilizing prestressed BT girders. Substructure designer for a prefabricated pedestrian bridge supported on abutment caps on drilled caisson foundations. Additional responsibilities included extensive structural drafting and detailing as well as post-design construction support services including structural shop drawing reviews and field design changes.
08/18-02/20	CDOT, I-25 Improvements MM127-MM138, Colorado Springs, CO. Sean was the structural designer responsible for assessing the existing structures in the corridor to determine feasibility of bridge widening versus replacement. Additional tasks included concept level design and layout of a steel through plate girder railroad bridge replacement over I-25.
11/14-07/19	CDOT, SH60 & SH257 over Little Thompson River Bridge Replacements, Milliken, CO. Sean was the lead designer for a 3-span bridge and the independent designer for a 2-span bridge over the Little Thompson River. Superstructures were comprised of prestressed BT girders on multi-column bent caps on drilled caissons and integral abutments on steel piles. Additional design responsibilities included performing an existing conditions assessment with scour analysis based on damages that occurred due to flooding, which resulted in a recommendation for two bridge replacements, and completion of structure type selection reports.

	Firm	AECOM Technical Services, Inc.		
	ED ZHOU, PHD, PE Load Rater - Complex Bridge		Years of Relevant Experience with this Employer	29
			Years of Relevant Experience with Other Employer(s)	9
Degree(s) / Years / Specialization	BS / 1982 / Civil Engineering; MS / 1990 / Civil Engineering; PhD / 1994 / Structural Engineering			
Active Registration Number / State / Expiration Date	21330 / MD / 09.2.24 Additional active license: DE, VA			
Year Registered	1995	Discipline	Professional Engineer	
Contract Role(s) / Brief Description of Responsibilities	Complex Load Rating Engineer. Ed is AECOM's Bridge Instrumentation & Evaluation Lead in North America, with 28 years of experience in engineering practice. He has comprehensive knowledge and experience in multiple aspects throughout the bridge life cycle including structural analysis through finite element modeling, design, inspection, load rating , problem diagnosis, non-destructive evaluation (NDE), structural health monitoring, preservation, as well as repair, retrofit, rehabilitation, and replacement design of many types of bridge structures. He is an expert in fatigue and fracture of steel bridges and served as a past Chairman of ASCE Fatigue & Fracture Committee. Ed specializes in evaluation of existing bridges using a variety of instrumentation/testing/monitoring technologies and application of digital imaging and unmanned aircraft system (UAS) technologies for condition and deterioration assessment. He also has current experience in development of effective asset management tools to support bridge owners for data-driven decisions. Ed is an active member of TRB Committee AKB40 'Testing and Evaluation of Transportation Structures' and has played a key role in development of multiple national guidelines and standards: co-author of TRB Circular E-C257 'Primer for Bridge Load Testing'; expert panel member of NCHRP Project 20-05 'Load Rating of Bridges and Culverts with Missing or Incomplete As-Built Information'; and co-PI of NCHRP Project 12-81 'Evaluation of Fatigue on the Serviceability of Highway Bridges.			
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
12/19-02/20	CDOT, Live Load Test for Investigating Concrete Cracking of Pier 5 Straddle Beam of WB-WB Ramp Bridge over C-470 Express Lanes, Douglas County, CO. Technical leader for live load testing of reinforced concrete straddle beam (6'-6" wide by 9'-0" deep by 81'-0" long) of Pier 5 of the 9-span prestressed concrete girder structure with a total length of 1,156 ft. The testing was for investigating concrete cracking in the straddle beam discovered during construction before the bridge opened to regular traffic.			

04/14-present	<p>CTDOT, Two-Year Structural Monitoring of Extradosed/Cable-Stayed Pearl Harbor Memorial Bridge (I-95 over Quinnipiac River) of Post-Tensioned Segmental Concrete Box Girders, CT. Technical leader for the development and implementation of a two-year structural monitoring program for the extradosed/cable-stayed 3-span dual structures consisting of post-tensioned segmental concrete box girders. Work scope includes: design of a comprehensive structural monitoring system (SMS) consisting of 252 sensors; development of a procurement package including instrumentation plans, performance specifications and qualification requirements; inspection and oversight during system installation by contractor; acceptance testing and commissioning of SMS; specification and oversight of live load and cable plucking tests at beginning, middle, and end of monitoring period; data collection, processing, management, analysis, interpretation and reporting throughout monitoring period; assessment of actual bridge behavior in comparison with analytical predictions by design models; establishment of normal behavior envelopes and anomalous behavior thresholds for sensor measurements; and recommendations to provide guidance for bridge maintenance, inspection, and load rating. Also included in this project is photogrammetric mapping of existing concrete cracks on interior of box girders and exterior of tower legs in 12 areas surrounding crackmeters at beginning, middle and end of two-year monitoring period.</p>
11/20-present	<p>VDOT, Route 360 Corridor Evaluation of 22 Structures, Fredericksburg District. Ed serves as NDT task lead on this task to evaluate rehabilitation needs for 22 structures along the Route 360 corridor. He was responsible for development and quality assurance review on our program for assessment of the existing structure condition, including Infrared scanning for delamination detection, 3-dimensional ground penetrating radar for deck condition assessment, and digital image mapping for crack detection. Structures range in length up to 500 feet and include both concrete and steel superstructures. The analysis results supported our data-driven process for rehabilitation recommendations and budget prioritization.</p>
05/18-06/19	<p>CDOT, I-76 over Clear Creek Fatigue Study, Adams County (CDOT NPS Contract), CO. Lead instrumentation engineer for a fatigue study for EB and WB I-76 over Clear Creek. These bridges are highly skewed, multi-span, steel plate girder bridges that collectively have over 60 known distortion induced fatigue cracks due to a gap between the cross-frame stiffener and the bottom flange. The project included detailed inspections; instrumentation with strain gages and displacement transducers; full scale load testing; data collection and analysis; three-dimensional finite element analysis (FEA); and developing conceptual fatigue retrofit details. Field testing was used to calibrate the FEA to have an accurate tool to evaluate fatigue retrofit strategies. Adjustments to the model such as member properties and boundary conditions, allow the model to be refined to replicate the load test responses.</p>
07/18-09/20	<p>VDOT, Vibration Testing and Evaluation of External P-T Tendons in Segmental Concrete Box Girders of Cable-Stayed Varina-Enon Bridge (I-295 over James River). Technical leader for applying the taut cable vibration measurement (TCVM) method for condition evaluation of external post-tensioning (P-T) tendons inside segmental concrete box girders of the 28-span dual structures built in 1990 with concerns on steel strand corrosion inside the grouted PVC duct.</p>

		Firm AECOM Technical Services, Inc.	
MARK GUZDA, PE, CBI Load Rater - Structures without Plans		Years of Relevant Experience with this Employer	17
		Years of Relevant Experience with Other Employer(s)	0
Degree(s) / Years / Specialization	BS / 2004 / Civil Engineering; MCE / 2006 / Civil Engineering		
Active Registration Number / State / Expiration Date	38306 / MD / 04.06.24 Additional active license: NC, NY, MI		
Year Registered	2010	Discipline	Structural Engineer/Bridges
Contract Role(s) / Brief Description of Responsibilities	Structures without Plans. Mark has extensive experience with structural monitoring using various nondestructive field instrumentation technologies. Additional expertise includes finite element modeling, bridge load rating and bridge condition inspection. He is proficient with various structural design and analysis software including and various bridge inspection software.		
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
05/22-10/22	Design and Installation of Bridge Maintenance Monitoring Systems for Two Bascule Bridges, Kennedy Space Center, Cape Canaveral, FL, NASA. AECOM is performing on-going continuous monitoring of two bascule bridges, the Haulover Canal Bridge (No. 703004) and the Banana River Bridge (No. 703003). AECOM designed and installed an automated continuous monitoring system for the purpose of condition monitoring and maintenance strategies since these bridges are aging assets and experience heavy traffic loads and occasional shuttle crossings. Each bridge has a wireless monitoring system consisting of two gateways with cellular modems communicating with 60 wireless sensor nodes. The 60-sensor monitoring systems consist of strain gages, strain rosettes, triaxial accelerometers and biaxial inclinometers. Responsibilities include project management tasks; monitoring system design; developing as-built plans; field instrumentation; data processing QAQC; client training; and report preparation.		
09/20-02/21	MBTA, Proof Load Test of PSC Girder Bridge for Refined Load Ratings, Dorchester MA. AECOM performed a proof load test of Bridge No. B-16-129 (4VM) (Dorchester Ave over MBTA Red Line Cabot Connector and Commuter Rail Tracks). Conventional load ratings yielded overly conservative load ratings reporting near zero load carrying capacity. MBTA requested that the bridge be load rated through proof load testing to warrant the safe crossing of MBTA buses until the bridge be replaced (scheduled 2021-2022). AECOM performed proof load testing of the structure yielding results that the bridge can safely remain open to MBTA commuter bus traffic. Responsibilities included project management tasks, field load testing; data processing QAQC; refined load ratings and report preparation.		
01/20-02/20	CDOT, Live Load Test of Reinforced Concrete Bridge Pier Straddle Beam, Denver CO. AECOM performed a live load test of the reinforced concrete straddle beam of Pier 5 for the WB-WB Ramp Bridge over C-470 Express Lanes (Bridge No. F-11-1M). The newly constructed bridge experienced cracking in the straddle beam of Pier 5 shortly after construction. The purpose of the load test was to assess the performance of the cracked straddle beam to the heaviest anticipated live load condition. Load testing confirmed that the straddle beam remained in the linear elastic range with zero return of all strain gages and crack displacement gages installed to the beam. Responsibilities included project management tasks, field load testing; data processing; and report preparation.		

11/19-02/20	<p>MassDOT, Proof Load Test of PSC Girder Bridge for Refined Load Ratings, Milford MA. AECOM performed the first bridge proof load test in the state of Massachusetts on Bridge No. M-21-015 (1EF) (Dilla Street over Louisa Lake Outlet). Conventional load ratings yielded overly conservative load ratings reporting near zero load carrying capacity. MassDOT requested that the bridge be load rated through load testing. AECOM recommended and performed proof load testing of the structure yielding results suggesting the bridge can safely remain open to MassDOT legal load traffic. Responsibilities included project management tasks, field load testing; data processing QAQC; refined load ratings and report preparation.</p>
01/17-09/23	<p>MoCo DOT, Load Testing of 40 Posted Bridges for Refined Load Ratings, Montgomery County MD. AECOM is performing field instrumentation and load testing for 40 posted bridges to accurately evaluate their load ratings and determine whether their weight restrictions may be removed. The 40 bridges are of various structural types, ages and physical conditions. Several bridges have no as-built information for calculation of structural capacity. The scope of work includes preliminary field inspection and field measurements of key structural dimensions and section loss, finite element modeling, field instrumentation and load testing using diagnostic or proof testing methods and refined load ratings as prescribed in the AASHTO Manual for Bridge Evaluation. Responsibilities include project management tasks; field instrumentation; data processing QAQC; and report preparation.</p>
06/17-08/17	<p>DRPA, Bridge Load Testing for Refined Load Rating Criteria for the DRPA Automated Permitting System (DAPS 6.0) of the Betsy Ross Bridge, PA and NJ. AECOM performed field instrumentation and load testing of and developing load rating criteria for two structures: Bridge No.3 Route 90 over US 130 and NJ approach spans between Piers E7-E11 of the BRB. Work scope included installing strain gages on multiple steel girders; measuring structural responses during multiple crossings of test vehicles in different patterns; and developing new load rating criteria for deck-girder composite action and live load distribution factor. The new criteria are for load rating of overweight permit vehicles using the line-girder analysis software BAR7 in DRPA's Automated Permitting System, resulting in improved load ratings that were previously insufficient for some vehicles. Responsibilities included field instrumentation; data processing; and report preparation.</p>

		Firm AECOM Technical Services, Inc.	
MYLES MARTIN, EI Load Rater		Years of Relevant Experience with this Employer	1
		Years of Relevant Experience with Other Employer(s)	0
Degree(s) / Years / Specialization	BS / 2022 / Civil Engineering		
Active Registration Number / State / Expiration Date	99471 / LA / 03.31.25		
Year Registered	2022	Discipline	Engineer in Training
Contract Role(s) / Brief Description of Responsibilities	Analysis and Load Rating. Myles' role on the design team is to execute the structural engineering tasks assigned or as otherwise directed under general supervision.		
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
09/23-present	LADOTD (No. H.011993) LA-10 Bayou Carron Bridge Project, Opelousas, LA. EIT responsible for taking project to 100% final design.		
07/23-present	TxDOT, I-635 LBJ East Design Build Project, Dallas, TX. Performed construction support activities and quality support/quality assurance tasks for multiple bridge structures throughout project		
06/23-08/23	E. St. Bernard Parish, Louisiana International Terminal, New Orleans, LA. EIT responsible for the 30% submittal of the preliminary plans for the St. Bernard and Judge Perez bridge general plan and layout sheets.		
04/23-07/23	El Paso County, South Academy Blvd over BNSF Rehabilitation, Colorado Springs, CO. Assisted in 90% submittal for South Academy Boulevard in drawings and detailing of the soundwall standard details and calculations involving the soundwall data summary.		
11/22-12/22	Kansas City Southern Railway, North/ South Jefferson Retaining Wall, Pittsburg, KS. EIT responsible for the 90% submittal of the preliminary plans of the North and South Jefferson retaining walls. Performed calculations of structural quantities, conceptual cost estimates, generating profile in InRoads and providing the CAD drawings of the retaining walls plan & elevation sheets, typical sections and general notes sheets.		
09/22-12/22	Pennington County, West Rivers, Rapid City, SD. EIT responsible for the 60% and 90% submittal of the north and south approach slab details which were part of the overall box culvert road structure plans. Performed calculations of structural quantities, conceptual cost estimates and providing the CAD drawings of the north and south approach plan sheets, approach section details and handrail section details.		

		Firm AECOM Technical Services, Inc.	
JOSHUA GUITREAU, EI Load Rater		Years of Relevant Experience with this Employer	1
		Years of Relevant Experience with Other Employer(s)	0
Degree(s) / Years / Specialization		BS / 2022 / Civil Engineering	
Active Registration Number / State / Expiration Date		35162 / LA / 09.30.24	
Year Registered		2023	Discipline Engineer in Training
Contract Role(s) / Brief Description of Responsibilities		Analysis and Load Rating.	
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
05/23-present	LADOTD, LA-561 Boeuf River Bridge Replacement. Responsible for preliminary bridge layout and design, preliminary structural design to generate pile loads, reinforced deck design, as well as performing site visit meeting with LADOTD to assess condition of current bridge and determine new bridge design parameters.		
08/23-present	LADOTD, LA-10 Bayou Carron Bridge Project. Responsible for calculating bridge service loads for LADOTD geotechnical analysis.		
11/22-present	EBR Parish, College Drive, Baton Rouge, LA. Performed design check/design analysis for box culvert and box culvert headwall.		
07/22-present	TxDOT, I-635 LBJ East Design-Build Project. Performed construction support activities and quality support/quality assurance tasks for multiple bridge structures throughout project.		
11/22-12/22	SDDOT, West River Bridges. Responsible for design of box culvert wingwall.		

		Firm AECOM Technical Services, Inc.	
CODY HARRIS, EI Load Rater		Years of Relevant Experience with this Employer	0.5
		Years of Relevant Experience with Other Employer(s)	0
Degree(s) / Years / Specialization		BS / 2023 / Civil Engineering	
Active Registration Number / State / Expiration Date		35490 / LA / 09.30.23	
Year Registered		2023	Discipline Engineer in Training
Contract Role(s) / Brief Description of Responsibilities		Analysis and Load Rating Staff. Cody's role on the design team is to execute the structural engineering tasks assigned or as otherwise directed under general supervision.	
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
07/23-present	DOW, SRO Bridge Inspections, Orange, TX. Performed preliminary site inspection to photograph and document existing bridge conditions for 100+ Vehicle, Pedestrian, and Pipe bridges.		
06/23-present	E. St. Bernard Parish, Louisiana International Terminal, New Orleans, LA. EIT responsible for the 30% submittal of the preliminary plans for the St. Bernard and Judge Perez bridge general plan and layout sheets.		
07/23-08/23	LADOTD, College Drive Expansion, Baton Rouge, LA. Created a construction phasing diagram consisting of typical sections displaying the traffic rerouting and construction sequence using Microstation V8i.		

		Firm AECOM Technical Services, Inc.	
GREG TRAHAN, PE, RSP₁ Maintenance of Traffic		Years of Relevant Experience with this Employer	17
		Years of Relevant Experience with Other Employer(s)	1
Degree(s) / Years / Specialization		BS / 2005 / Civil Engineering	
Active Registration Number / State / Expiration Date		36041 / LA / 03.31.25	
Year Registered		2011	Discipline Civil Engineer
Contract Role(s) / Brief Description of Responsibilities		<p>Maintenance of Traffic. Greg is a civil engineer experienced with working on roadway design and traffic projects. He has worked hard delivering credible and quality projects for AECOM since graduating college. During his time with AECOM, he has had experience as a project engineer and project manager for many transportation, planning, design, specification, and construction projects.</p> <p>Training. Highway Safety Manual Workshop; 2015 ATSSA Certified–Traffic Control Technician/Supervisor/ Flagger; 2016 ATSSA Certified–High Friction Surface Treatment Inspection & Installation; LA DOTD Traffic Process and Report Parts 1,2, and 3 (2018), 2023 ATSSA Certified–Traffic Control Supervisor Refresher</p>	
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
09/17-present	<p>Coastal Protection and Restoration Authority, LA 23 Over Mid-Barataria Sediment Diversion, Plaquemines Parish, LA. Project Engineer that assisted in the Design Plans for the new bridge and roadway structure over the new sediment diversion. The project consists of a new concrete precast girder bridge, approximately 2,200 feet in length, and the connecting asphalt roadway. Design Plans include Plan and Profile sheets, Drainage Plan and Profile sheets, Sequence of Construction Plans. There will be multiple construction activities being conducted at one time, the sequence of Construction is a critical element of design in order to manage traffic and maintain roadway operations even if evacuation routes would be required.</p>		
03/14-09/14	<p>LADOTD, Krotz Springs Bridge and Business US 90 Bridge In-Depth Bridge Inspection, LA. Project Engineer that assisted in the Maintenance of Traffic Plans for the inspection of the Krotz Springs Bridge and the Business US 90 Bridge. These plans included provisions to detour traffic from the closed portions of the bridge or entrance ramps.</p>		
02/07-06/10	<p>Baton Rouge Dept. of Public Works, Siegen Lane Improvements, Highland Rd. to 650’ south of Perkins Rd., Baton Rouge, LA. Project engineer that assisted in the design and plan development to widen 1.18-mile segment of Siegen Lane to a four lane boulevard. Tasks include the geometric design of the roadway, subsurface drainage, and the development of the sequence of construction. The drainage area encompassed approximately 225 acres. A study was conducted on the multiple detention ponds, using a pond modeling program to determine if the box culvert system would need to be upgraded. A HEC-RAS model was conducted on an existing drainage ditch crossing Siegen Lane to ensure that the proposed drainage would not exceed the existing tail water elevation. The sizing and spacing of culverts and inlets was determined using the LADOTD HYDRWIN hydraulics program. Prepared quantities and cost estimates for the project.</p>		

05/14-present	LADOTD, Earhart Expressway Extension to US 61, Jefferson Parish, LA. Project Engineer for the traffic study involving the new extension of the Earhart Expressway a six lane urban freeway, to Airline Drive, a four-lane highway, for a total of ten lanes. The study will include analyzing existing and future conditions along the US 61 (Airline Highway) and LA 3154 (Dickory Avenue). As part of this project Greg is analyzing design alternatives, traffic data collection (speed and vehicular classification) along the corridor, and crash data.
11/04-12/07	LADOTD (State Project No. 700-92-0016) Florida Avenue Bridge over IHNC, New Orleans, LA. Assisted in the geometric design of two interchange ramps connecting to Florida Ave. Bridge and two relocated parking areas for two major public installations in the project area. He assisted in the design of girder splices for the steel main span alternative. He also assisted in the preparation of quantity calculations and cost estimates for the steel main span alternative.
05/13-present	LADOTD (State Project No. H.001779.5) Red River Bridge at Jimmie Davis Highway (LA 511) EA, Bossier and Caddo Parishes, LA. Assisted in preparing a feasibility study to widen the existing crossing of the Red River along Jimmie Davis Bridge and to connect shared use bicycle and pedestrian paths on each side of the river. Task included geometrics study of highway and interchange ramps to produce three feasibility alternatives.
12/1-4/17	LADOTD, Safety Studies Retainer Contract, Low Cost Safety Improvements, Statewide, LA. Project Engineer for the preparation of Safety Improvement Plans (SIP) for 282 systemic curves located throughout the state of Louisiana. The tasks associated with this project include; site visits to the curves, plan preparation of safety countermeasures for each curve, cost estimates for the plan set, and a pre-construction meeting with each DOTD district. Each site visit includes; a ball bank test, photo and an existing conditions documentation of each curve. The plan preparation includes deriving safety countermeasures at each curve location, preparing a letter size plan set of the safety countermeasures, including the Crash Modification Factors (CMFs) within the plan sheet, and preparing cost estimates for the safety countermeasures. After the completing each letter size plan sets, a meeting was held with each District to discuss countermeasures.
2/16-present	Jefferson Parish Public Works, Mounes St. Drainage Improvements, Jefferson Parish, LA. Project Engineer for the traffic control plans for the construction of the drainage improvements along Mounes Street. Plans included the phasing of traffic to install inground box culverts within the limits of the travel lanes.
5/10-9/12	LADOTD (State Project No. H.005171.1) I-49 Study to Identify Interim Improvements for Safety & Efficiency, St. Mary Parish, LA. Aided in identifying roadway projects that would provide increased capacity or improved safety along the US 90 corridor. Some of the improvements may upgrade portions of US 90 to interstate standards.
05/1-04/13	LADOTD, LA 935 Feasibility Study, Safety Retainer Contract, Ascension Parish, LA. Project Engineer performed a Stage 0 on a segment of LA 935 from LA 431 to LA 22. Developed a conceptual alternative for the realignment of LA 935, including the typical section, design criteria, plan, and cost estimate. The road paralleling Black Bayou was realigned approximately 20' off the original alignment. This realignment allowed for the road to be widening to 12' lanes and add shoulders to provide a recovery area for drivers. AECOM also performed a cost analysis to ensure the feasibility of a build/no-build condition, minimize required Right-of-Way and/or acquisition of properties.

		Firm Stantec Consulting Services Inc.	
AMIR BOTROS, PHD, PE Load Rater - Complex Bridge		Years of Relevant Experience with this Employer	3
		Years of Relevant Experience with Other Employer(s)	15
Degree(s) / Years / Specialization	PhD / 2015 / Civil Engineering; MS / 2009 / Civil Engineering; BS / 2005 / Civil Engineering		
Active Registration Number / State / Expiration Date	43701 / LA / 03.31.24		
Year Registered	2019	Discipline	Civil Engineer
Contract Role(s) / Brief Description of Responsibilities	Complex Load Rating Engineer. As lead engineer, Amir will supervise the structure engineering team on the load rating tasks under this retainer contract. Additionally, he will perform complex structural analysis/finite element analysis (if necessary), and review load rating reports prepared by structural team members. Amir has been a member of the precast prestressed concrete institute (PCI) for many years and has participated in many of the PCI research projects.		
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
01/21-present	Mississippi Office of State Aid Road Construction, Mississippi Statewide Complex Bridge Inspections & Load Ratings, Statewide, MS. Load Rating QA/QC. Amir oversees QA/QC load rating analyses for over 200 bridges annually. Inspections performed by Stantec assist with developing load rating models and performing analysis using AASHTOWare BrR, RC Pier, and STAAD. Load ratings are performed in accordance with AASHTO MBE and using the load factor rating (LFR) method to match the original design as requested by the client. Structure types include steel trusses, structural steel plate girders, reinforced concrete girders and slabs, reinforced concrete box culverts, and prestressed concrete girders.		
10/21-04/22	MDOT, Truss Bridge Inspections And Load Ratings, Statewide, MS. Lead Structural Engineer. Project included inspecting and load rating four complex steel through truss bridges. Amir's responsibilities included performing quality reviews of load ratings for the four truss bridges. AASHTOWare BrR was used to model and analyze all truss members including main members, floor beams, stringers, and gusset plates. LFR method was used at the request of MDOT and to have the ability to compare with the original designs.		
08/22-11/22	ALDOT, Load Rating Of 12 Complex Bridges, Statewide, AL. Lead Structural Engineer. Project consisted of rating 12 complex bridges in accordance with ALDOT Policies and Guidelines for Bridge Rating and Evaluation using AASHTOWare BrR. The bridge types comprised of continuous cast-in-place concrete T-beam spans, post-tensioned channel beams, continuous steel plate-girders, and concrete encased steel I-beams. Amir reviewed the as-built drawings /standard plans of the bridges, determined appropriate load rating method, supervised engineers on load rating analysis, and reviewed load rating summary reports.		

02/21-04/21	City Of Baton Rouge, Load Rating Of Mall Of Louisiana Bridges, Baton Rouge, LA. Lead Structural Engineer. Project consisted of rating of three bridges in accordance with LADOTD Policies and Guidelines for Bridge Rating and Evaluation. Bridge types comprised prestressed LG concrete girders and Quad beams. Substructures comprised reinforced concrete caps and prestressed concrete piles. Amir reviewed the as-built plans of the bridges, determined appropriate load rating method, supervised engineers on load rating analysis and reviewed the load rating reports.
02/21-07/21	ALDOT, Load Rating Of 42 Bridges, Statewide, AL. Lead Structural Engineer. Load rating of 42 bridges in accordance with ALDOT Policies and Guidelines for Bridge Rating and Evaluation. Bridge types comprised of cast in place simple and continuous concrete T beam spans, Post-tensioned Channel beams and continuous steel plate-girders. Amir reviewed the as-built / standard plans of the bridges, determining the appropriate load rating method, supervising engineers on the load rating analysis and review of load rating reports.
10/19-12/20	LADOTD (H.009859.5) RC Culverts Testing And Rating of 100 Culverts, Statewide, LA. Lead Structural Engineer. Project consisted of developing a load rating methodology for reinforced concrete box culverts that accounts for the actual field conditions, performance history, and advanced modeling techniques. Results were verified through diagnostic testing of a sample of culverts representing the existing LA inventory. Amir's responsibilities included building 3D FE analytical models of the parametric study, designing instrumentation and diagnostic load test procedure, development of load rating guidelines and a technical report that summarizes the proposed load rating guidelines and supervising engineers on load rating 100 representative culverts selected from the existing Louisiana inventory using the proposed guidelines.
02/19-12/20	LADOTD (H.012485.5) Load Rating of 396 Off System Bridges, Statewide, LA. Lead Structural Engineer. Load rating of 396 bridges in accordance with LADOTD Policies and Guidelines for Bridge Rating and Evaluation. Bridge types comprised cast in place concrete slab spans, precast concrete slab spans, prestressed concrete girders, steel plate-girders, in addition to RC box and arch culverts. Substructures comprised various components including reinforced concrete caps, timber caps, timber piles and steel H piles. Amir determined the appropriate load rating method, supervised engineers on the load rating analysis and reviewed load rating reports.
11/19-01/20	LADOTD (H.009859.5) Evaluation and Load Testing of Five Bridges, Cameron, LA. Lead Structural Engineer. Five bridges were posted for a load lesser than LA State Legal Loads and/or Special Hauling Vehicles. Based on vast experience with similar bridges, load test coupled with detailed three-dimensional Finite Element Analysis reveal that bridges can carry higher loads than those estimated by design codes. Amir's responsibilities included supervising the crew on performing the load tests, developing Finite Element models, and performing refined analysis for the controlling spans in the five bridges with the aim of removing current load posting.
05/20-07/20	LADOTD (Order No.10 H.014288.5) Mermentau Bridge Repairs, Cameron, LA. Lead Structural Engineer. Mermentau Bridge main span is a swing steel low truss (Pony Truss) with a span length of 204 ft. Bridge is posted to 10-15 tons weight. Amir's responsibilities included development of a 3D finite element model using Midas Civil for the bridge. Configuring and design of the diagnostic testing procedure for the identified deficient members. Revising the rating analysis after consideration of the benefit from the test results. Design of appropriate strengthening systems for the legal deficient members with the objective of removing the posting weight

		Firm Stantec Consulting Services Inc.	
MICHAEL BRODNAX, EI Load Rater - Site Visits		Years of Relevant Experience with this Employer	4
		Years of Relevant Experience with Other Employer(s)	0
Degree(s) / Years / Specialization		BS / 2019 / Civil Engineering	
Active Registration Number / State / Expiration Date		34127 / LA / 03.31.24	
Year Registered		2019	Discipline Engineer in Training
Contract Role(s) / Brief Description of Responsibilities		Analysis and Load Rating. Michael has been involved in structural designs ranging from deck, prestressed box girder and concrete substructure. Michael has performed numerous inspections and load ratings on Mississippi and Alabama Bridges. Michael is familiar with several design and analysis software programs including RC-Pier, CONSPAN, and AASHTOWare Bridge Rating. NBIS Certified Team Leader	
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
12/20-04/22	MDOT, Truss Bridge Inspections and Load Ratings, Statewide, MS. Bridge Load Rater . Multiple steel trusses are inspected, and load rated by creating structural models of all primary members and connections. Michael develops structural models of steel trusses including fracture critical members and gusset plate connections using AASHTOWare BrR.		
07/19-present	Mississippi Office of State Aid Road Construction, Mississippi Statewide Complex Bridge Inspections & Load Ratings, Statewide, MS. Bridge Inspector and Load Rater . This project consists of inspections and load ratings on timber, complex, and non-complex structures in accordance with AASHTO and FHWA NBI specifications. Michael inspects and load rates various bridge types ranging from steel trusses, steel rail cars, box culverts, timber stringers, prestressed concrete girders, and steel plate girders. Michael uses AASHTOWare BrR, Bentley Concrete, and STAAD models to complete ratings as well as in house rating tools.		
07/19-present	MDOT, I-10 Canal Road Interchange, Gulfport, MS. Bridge Designer. Michael designs prestressed concrete girders, concrete substructures such as hammerhead piers, pile bents, and column bents. Michael load rates each bridge using AASHTOWare BrR software, CONSPAN, MDX steel design software, Microsoft office, bluebeam pdf editor.		
08/19-present	LADOTD, I-10 Loyola Design-Build, New Orleans, LA. Bridge Designer. Michael designed concrete substructures such as hammerhead piers and pile cap footings. He designs prestressed concrete girders and concrete decks. He designs and develops plans for concrete noise barriers and their concrete foundations using Microsoft office, STAADpro models, Bentley Microstation, CONSPAN, RC Pier, and bluebeam pdf editor. Also reviewed and approved production shop drawings for construction.		
05/20-present	MDOT, SR27 Bridge Replacements, Hinds County, MS. Bridge Designer. This project consists of designing and preparing final bridge plans for a new prestressed concrete girder structure in Hinds County. Michael designs and rates the prestressed concrete girders using CONSPAN software.		
08/22-11/22	ALDOT, Load Rating of 12 Complex Bridges, Statewide, AL. Bridge Load Rater . Project consisted of rating 12 complex bridges in accordance with ALDOT Policies and Guidelines for Bridge Rating and Evaluation using AASHTOWare BrR. Michael performed load ratings using as-built drawings / standard plans and developed load rating summary reports.		

		Firm Stantec Consulting Services Inc.	
BRIAN JOHNSON, PE Load Rater		Years of Relevant Experience with this Employer	18
		Years of Relevant Experience with Other Employer(s)	5
Degree(s) / Years / Specialization		MS / 2000 / Civil Engineering; BS / 1999 / Civil Engineering	
Active Registration Number / State / Expiration Date		31273 / LA / 09.30.24	
Year Registered		2004	Discipline Civil Engineer
Contract Role(s) / Brief Description of Responsibilities		Analysis and Load Rating Engineer. Brian brings over 23 years of engineering experience specifically related to structural projects and serves as the Structural Section Manager in the Baton Rouge office. His primary expertise lies in analysis, design, rating, inspection, and rehabilitation of bridges. Brian has managed bridge projects with a variety of structure types such as prestressed concrete girders, steel truss vertical lift bridges, long span steel trusses, horizontally curved steel plate girders, concrete box culverts, and retaining walls. He has overseen several NSBI bridge inspection projects and been involved in several hydraulic studies for bridge replacement projects in both Mississippi and Louisiana. NBIS Certified Team Leader	
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
01/17-10/18	LADOTD, Load Rating and Posting Of 110 On-System Bridges, Statewide, LA. Project Manager. Brian was responsible for managing load rating activities, scheduling progress meetings, managing the status of each bridge, delivering progress submittals, and coordination with LADOTD. This project involved the load rating and posting of 110 on-system bridges for LADOTD. Bridges were located throughout the state and were load rated in accordance with current LADOTD and AASHTO specifications. AASHTOWare BrR, CSI Bridge, and RC-Pier were used to determine rating factors and posting requirements.		
03/13-03/17	LADOTD, Load Rating and Posting Of 630+ On-System Bridges, Statewide, LA. Project Manager. Brian was responsible for managing load rating activities, scheduling progress meetings, managing the status of each bridge, delivering progress submittals, and coordination with LADOTD. A monthly meeting was scheduled with the client to assist with addressing incomplete data needs and modeling approaches for more complicated structures. Over 630 bridges statewide were load rated in accordance with current LADOTD and AASHTO specifications. Models were developed in AASHTOWare BrR, CSI Bridge, STAAD and RC-Pier to determine rating factors and bridge posting requirements. Structure types included structural steel plate girders and rolled beams, prestressed concrete girders, concrete slab spans, hammerhead and multi-column concrete bents, and steel beam bents.		
02/19-11/22	ALDOT, Bridge Load Rating, Statewide, AL. Project Manager. Brian managed three different task orders with ALDOT to perform load ratings on 84 bridges. Structure types included steel plate girders, prestressed concrete girders, concrete T-beams, voided concrete slabs, and post-tensioned channel beams. AASHTOWare BrR was used for modeling and analysis. Ratings were in accordance with the AASHTO LFR method and current ALDOT standards. Brian's responsibilities included performing quality assurance on load rating reports and transmitting deliverables to ALDOT.		

10/17-01/19	MDOT, AASHTOWARE Bridge Load Rating, Statewide, MS. Project Manager. Brian served as the project manager for the load rating of 120 bridges using AASHTOWare BrR. Structure types included steel plate girders, prestressed concrete girders, concrete T-beams, concrete slab spans, and integral reinforced concrete multi-cell box girders. Ratings were performed in accordance with current MBE standards. Brian was responsible for managing project activities, developing rating criteria, scheduling internal and external progress meetings, performing QC/QA, and delivering final reports.
08/10-present	Mississippi Office of State Aid Road Construction, Mississippi Statewide Complex Bridge Inspections & Load Ratings, Statewide, MS. Project Manager. Brian manages all field and office work for inspecting and load rating over 200 bridges annually throughout the state. Inspections and load ratings are performed in accordance with current NBIS and procedures as outlined in the AASHTO MBE. Brian is responsible for managing project activities, inspection scheduling, and performing QC/QA on field inspections, load ratings , and inspection reports. Structure types include steel trusses, structural steel plate girders, steel railroad flat cars, reinforced concrete girders and slabs, reinforced concrete box culverts, and masonry arches.
10/09-06/11	LADOTD, US 90 Interchange at La 85 Design-Build, Iberia Parish, LA. Structural QA/QC. Brian managed QC review on the structural elements for this project to elevate the rural arterial to urban interstate standards. These included a cast-in-place concrete deck and rail, Type III and Type IV pre-stressed girders, multicolumn bents with pile footings, pile supported end bents, and bearing pads. All independent designs were in accordance with AASHTO LRFD Bridge Design Specifications and as-designed / as-built load ratings were in accordance with AASHTO MBE.
12/20 - 04/22	MDOT, Truss Bridge Inspections and Load Ratings, Statewide, MS. Project Manager. This project consisted of inspecting and load rating four unique steel through trusses. Brian served as project manager and was responsible for coordinating inspection schedules, overseeing report development, reviewing load rating reports, and communications with MDOT. Detailed, arm's length, inspections were performed on the steel truss spans only. Load ratings were performed in accordance with the AASHTO LFR method and MDOT standards. Results from the analyses were used to determine fracture critical members that could not be determined from traditional structural mechanics. Final inspection reports will be used by MDOT to develop repair / rehabilitation plans.
03/14-05/15	LADOTD (H.010662) LA 511 Jimmie Davis Bridge Rehabilitation, Bossier, LA. Project Manager. Total structure length is 2,823 linear ft., including three main steel truss simple spans crossing the Red River; 610 ft. approach spans at each side consisting of steel, two-girder systems with floor beams. Stantec provided design and plans for complete rehabilitation and repainting. Rehabilitation consisted on total deck replacement, over 200 structural repairs to truss span floor system, replacement of the link joint (hangers) of the approach spans, joint rehabilitation and barrier replacement. Load rating analyses were performed for each superstructure type and gusset plates on the as-rehabilitated bridge.
04/11-03/15	I-210 Cove Lane Interchange, LADOTD H.010151, Lake Charles, LA. Lead Structural Engineer. Brian managed the structural design of a single-span, 130-ft long, prestressed concrete girder bridge along I-210 over Cove Lane and twin concrete slab span bridges over Cline Canal. Bridge approaches consisted of an MSE wall system supported by a cast-in-place load transfer platform using over 8,000 timber and concrete piles. Brian provided construction support by reviewing shop drawings, addressing RFIs, and performing construction engineering. All design was performed in accordance with AASHTO LRFD Bridge Design Specifications.
08/19-present	LADOTD (Contract No. H.011670) I-10 Loyola Interchange Design-Build, New Orleans, LA. Lead Structural Engineer. Brian leads the structural design efforts of two new flyover ramps (concrete slab spans, prestressed concrete girder spans, twin horizontally curved steel tub girder spans, and complex substructure units), one bridge widening (concrete slab spans), noise barriers, precast box culverts, roadway and pier protection barriers, and miscellaneous structural elements. During design Brian orchestrated a series of meetings with the contractor, fabricators, vendors, and suppliers to optimize and streamline the design. In addition, he oversees construction support which includes shop drawing reviews, addressing RFIs, and providing construction engineering services.

		Firm Stantec Consulting Services Inc.	
JOHN KREBS, PE Load Rater		Years of Relevant Experience with this Employer	11
		Years of Relevant Experience with Other Employer(s)	4
Degree(s) / Years / Specialization		MS / 2008 / Civil Engineering; BS / 2007 / Civil Engineering	
Active Registration Number / State / Expiration Date		37259 / LA / 09.30.24	
Year Registered		2012	Discipline Civil Engineer
Contract Role(s) / Brief Description of Responsibilities		Analysis and Load Rating Engineer. John has 15 years of engineering of experience providing engineering design and load ratings for bridges and interchanges for LADOTD, MDOT, and KYTC and currently serves as a project manager in the Structural Division at Baton Rouge. His primary expertise lies in the engineering analysis and design of a variety of structure types such as prestressed concrete girders, reinforced concrete substructure elements, and retaining walls. He has been heavily involved in the inspection and load rating of existing bridges in both Louisiana and Mississippi. John has an excellent working knowledge of AASHTO LRFD and the LADOTD Bridge Design Manual. He is proficient in several commercial software packages including AASHTOWare BrR, RC-Pier, CONSPAN, MDX, and STAAD. NBIS Certified Team Leader	
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
07/15-06/18	LADOTD, US 90 Interchange at LA 318 Design-Build, St. Mary Parish, LA. Structural Engineer. This stretch of US 90 has been designated as the future I-49 corridor. The bridges consisted of LG-54 prestressed concrete girder spans with lengths up to 111-ft supported by multi-column concrete bents. John assisted in the proposal development by performing preliminary designs of the major structural elements, and, later, managed the construction support efforts.		
04/11-03/15	LADOTD (H.010151) I-210 Cove Lane Interchange and Improvements Project, Lake Charles, LA. Project Engineer. John was responsible for the design and plan development of three bridges and an MSE wall system load transfer platform. The bridge along I-210 consists of a single 130-ft long LG-54 prestressed concrete girder span founded on true abutments (spread footings). The remaining bridges consist of concrete slab spans founded on concrete pile bents. All design was performed in accordance with AASHTO LRFD Bridge Design. Project received the Highways/ Bridges: Award of Merit from the Engineering News Record for Texas and Louisiana in October 2016.		
12/15-present	LADOTD (Contract No. H.005967) Nelson Road Extension and Bridge, Lake Charles, LA. Structural Engineer. John worked on the bridge and structural design efforts during preliminary plans. Project tasks included preliminary design of bridge superstructure, substructure including foundations, median barrier design and as-designed load rating . Other design elements include navigational lighting bridge attachments, steel bracket light supports with concrete anchors to the bridge structure. Structural design was performed in compliance with AASHTO LRFD Specifications. In addition, he completed the vessel study report detailing the expected water-borne vessel traffic and establishing the need for pier protection structures.		

03/20-10/22	LADOTD (Contract No. H. 009498) LA 121 Calcasieu River Bridges, Hioneston, LA. LADOTD Bridge Task Manager. John was responsible for the independent design and plan review of the three LA 121 bridges. Bridge design items included reinforced concrete deck, LG-36 prestressed concrete girders, steel reinforced elastomeric bearing pads, and reinforced concrete end bent and intermediate bent caps. John also managed plan changes as well as quantity input into the AASHTOWare Project database. In addition to design, John updated the internally cured concrete special provision for colloidal nano silica. The three bridges consisted of a total of five three-span deck units, and a testing scheme was noted in the plans applying the updated special provision.
08/20-06/22	LADOTD (Project No. H.001799) LA over I-20, Minden, LA. LADOTD Bridge Design Engineer. John was tasked with the independent design of the LG-36 prestressed, the intermediate multi-column bent, and the drilled shaft loads for both the end bent and the intermediate bent. John also determined the pier protection barrier rail and guard rail layout for the intermediate bent columns in the I-20 median. John was part of the QC effort on the plan details, quantities, and elevations.
10/17-01/19	MDOT, AASHTOWARE Bridge Load Rating, Statewide, MS. Project Engineer. John served as a project engineer for the load rating of 120 bridges using AASHTOWare BrR. Structure types included steel plate girders, prestressed concrete girders, concrete T-beams, concrete slab spans, and integral reinforced concrete multi-cell box girders. Ratings were performed in accordance with the current MDOT and AASHTO standards. John was responsible for day-to-day support of the load rating engineers and performing QC/QA on finished load ratings.
03/13-03/17	LADOTD, Load Rating and Posting of 630+ On-System Bridges, Statewide, LA. Project Engineer. John served as a project engineer for the load rating of over 630 on-system bridges. The bridges were load rated in accordance with current LADOTD and AASHTO specifications. Models were developed in AASHTOWare BrR, CSI Bridge, STAAD and RC-Pier to determine rating factors and bridge posting requirements. Structure types included structural steel plate girders and rolled beams, prestressed concrete girders, concrete slab spans, hammerhead and multi-column bents, and steel beam bents. John was responsible for QA/QC of rating analyses and the final rating reports.
08/10-present	Mississippi Office of State Aid and Road Construction, Mississippi Statewide Complex Bridge Inspections & Load Ratings, Statewide, MS. Project Engineer and Inspection Team Leader. John serves as a project engineer and inspection team leader. As an inspection team leader, John is qualified to direct a team in the field to inspect and document bridge deficiencies according to the National Bridge Inventory standards. As a project engineer, John assists in load rating of bridge structures using AASHTOWare BrR and RC-Pier in accordance with the latest Manual for Bridge Evaluation (MBE) as well as QC/QA of bridge load rating calculations and reports. Structure types on this project include steel trusses, steel plate girders, prestressed concrete, concrete boxes, concrete channel beams, masonry arches, steel railroad flat cars, and box culverts.
08/10-present	Mississippi Office of State Aid and Road Construction, Mississippi Statewide Timber Bridge Inspections & Load Ratings, Statewide, MS. Project Engineer and Inspection Team Leader. John serves as a project engineer and inspection team leader. As an inspection team leader, John is qualified to direct a team in the field to inspect and document bridge deficiencies according to the National Bridge Inventory standards. As a project engineer, John assists in load rating of bridge structures using AASHTOWare BrR and RC-Pier in accordance with the latest Manual for Bridge Evaluation (MBE) as well as QC/QA of bridge load rating calculations and reports. The bridges for this project are located across 10 different Mississippi counties. Superstructure types include concrete channel beams, prestressed concrete girders, timber stringers, and steel girders. These bridges are predominantly supported by timber piles categorizing them as timber structures.
02/19-04/19	ALDOT, Load Rating of 30 Bridges, Statewide, AL. Project Engineer. John served as a project engineer for the load rating of 30 bridges in AASHTOWare BrR. The bridges were load rated in accordance with current ALDOT and AASHTO specifications. Bridge types rated were steel plate girders, prestressed concrete girders, reinforced concrete T-beams, and precast prestressed concrete voided slabs. John served as QA/QC for the AASHTOWare ratings and final rating reports.

		Firm Stantec Consulting Services Inc.	
KUNAL MALPANI, PE Load Rater		Years of Relevant Experience with this Employer	10
		Years of Relevant Experience with Other Employer(s)	0
Degree(s) / Years / Specialization		MS / 2012 / Civil Engineering; BS / 2010 / Civil Engineering	
Active Registration Number / State / Expiration Date		No. 37259 / LA / 09.30.24	
Year Registered		2018	Discipline Civil Engineer
Contract Role(s) / Brief Description of Responsibilities		Analysis and Load Rating Engineer. Kunal has 10 years of engineering experience with an emphasis on structural projects. His primary focus has been in the analysis, design, rating , and inspection of a variety of bridge types including prestressed concrete girders, structural steel plate girders, concrete slab spans, multi-column concrete bents, and pile bents. He is proficient in commercial software packages such as AASHTOWare BrDR, RC-Pier, CONSPAN, MDX, and STAAD. In addition to bridge design, Kunal has been involved in the design of highway sign structures and reviewing structural shop drawings. NBIS Certified Team Leader.	
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
03/13-03/17	LADOTD, Load Rating and Posting of 630+ On-System Bridges, Statewide, LA. Engineer Intern. Kunal was responsible for performing load ratings and developing summary reports on a variety of structures including prestressed concrete girders, concrete slab spans, structural steel spans, timber and steel pile bents, and concrete hammerhead piers. More than 630 bridges statewide were load rated in accordance with current LADOTD and AASHTO specifications. Models were developed in AASHTOWare BrR and RC-Pier to determine rating factors and bridge posting requirements.		
09/13- 1/17	LADOTD, Retainer Contract for Bridge Load Rating, Statewide, LA. Load Rating Engineer. Kunal was responsible for developing LFR rating procedure using AASHTOWare BrR and STAAD for superstructure as per AASHTO MBE. Highlights of the project include rating Long Span Steel Through Trusses, Short span Steel Pony Trusses, and Masonry Arch Bridges.		
01/17-10/18	LADOTD, Load Rating and Posting of 110 On-System Bridges, Statewide, LA. Structural Engineer. Kunal's responsibilities included developing the LRFR rating procedure using the AASHTO Bridge Rating Software for superstructure and LEAP RC Pier for substructure as per AASHTO MBE and LADOTD rating guidelines. Project included load rating and posting of various bridge superstructure types including slab spans, prestressed concrete girders, rolled steel girders, and built-up steel plate girders. Bridges are located throughout the state and were load rated in accordance with LADOTD and AASHTO specifications. ASHTOWare BrR, CSI Bridge, and RC-Pier were used to determine rating factors and posting requirements. Highlight of the project was rating an 18,000 ft. long bridge with 268 spans on I-10 over New Orleans City Streets.		

10/17-01/19	MDOT, AASHTOWARE Bridge Load Rating, Statewide, MS. Load Rating Engineer. Project included load rating of 120 bridges in MS. Load ratings were performed in accordance with the AASHTO LRFR or LFR method and current MDOT Standards. Only superstructure elements were considered for the load rating analysis. Structure types included steel plate girders, prestressed concrete girders, reinforced concrete T-beams, concrete slabs, and reinforced concrete multi-cell box girders (integral and non-integral). Kunal was responsible for load ratings and performing QC/QA. Highlight of project was modeling the integral concrete box girders which took an extreme (up to 40 hours) to run in the software.
02/19-04/19	ALDOT, Load Rating of 30 Bridges, Statewide, AL. Load Rating Engineer. The project included load rating of 30 bridges in Alabama. Load ratings were performed in accordance with the AASHTO LFR method and current ALDOT Standards. Only superstructure elements were considered for the load rating analysis. Structure types included steel plate girders, prestressed concrete girders, reinforced concrete T-beams, and concrete slabs. Comprehensive analysis referred to as Non-Standard Gage (NSG) or Distribution Factor-Line Girder Analysis was performed when Emergency Vehicle produced a rating factor less than 1.0. Kunal was responsible for load ratings and performing QC/QA.
06/16-present	Mississippi Office of State Aid Road Construction, Mississippi Statewide Complex Bridge Inspections & Load Ratings, Statewide, MS. Load Rating Engineer and Inspection Team Leader. Project included inspection and load rating of over 100 off-system bridges in 17 different Mississippi Counties. Inspections and load ratings are performed in accordance with current NBIS and procedures as outlined in the AASHTO MBE. Structure types include steel trusses, structural steel plate girders, steel railroad flat cars, reinforced concrete girders and slabs, reinforced concrete box culverts, and masonry arches. Kunal is responsible for field inspections, load ratings , inspection reports, and QC/QA on load ratings .
08/19-present	Mississippi Office of State Aid Road Construction, Mississippi Statewide Timber Bridge Inspections & Load Ratings, Statewide, MS. Load Rating Engineer and Inspection Team Leader. Kunal is responsible for inspecting and load rating 120 bridges with timber elements in 10 different Mississippi Counties. Inspections are at arms-length and in accordance with NBIS. Load ratings are performed using AASHTOWare BrR, RC Pier, and in-house analysis tools for timber and in accordance with ASD and LFR guidelines. Predominately the bridges consist of timber piles; however, a large number are full timber structures.
07/15-06/18	LADOTD, US 90 Interchange at LA 318 Design-Build, St. Mary Parish, LA. Structural Engineer for the twin bridges. Each bridge consists of LG-54 prestressed concrete girder spans on multi-column concrete bents and concrete wall piers. His responsibilities included performing design, performing the as designed load rating , and reviewing shop drawings.
09/15-07/16	LADOTD, I-20 and Tarbutton Road Interchange, Ruston, LA. Structural Engineer. Project consists of replacing an existing concrete overpass structure over I-20 near Ruston, LA with a two-span structural steel plate girder structure. Substructure units are supported by drilled shafts to minimize the bridge footprint. Design was performed in accordance with AASHTO LRFD. Kunal assisted with quality control of the superstructure and substructure design and performed the as-designed load rating .
01/16-06/20	SR145 Bridge Replacements, Prentiss County, MS. Project Engineer. Kunal was responsible for the substructure design, calculating quantities, performing as-designed load ratings , and reviewing construction submittals. Stantec was responsible for designing and detailing the replacement of five structurally deficient bridges along MS SR 145 in Prentiss County. The bridges consist of AASHTO and Bulb-T PSC girder spans supported by steel pipe pile & concrete caps. The project's proximity to potential seismic activity warranted the consideration of seismic forces in the substructure designs.
07/18-present	SR 12 over Sunflower River, Humphreys, Washington County, MS. Project Engineer. Kunal was responsible for directing and checking the analysis, design, load rating , and detailing of the 910 ft. 3-span continuous steel plate girder bridge carrying SR 12 over sunflower river. The substructure consisted of multi-column bents supported on drilled shafts.

		Firm Stantec Consulting Services Inc.	
RYAN NATALUK, PE Load Rater		Years of Relevant Experience with this Employer	16
		Years of Relevant Experience with Other Employer(s)	9
Degree(s) / Years / Specialization		BS / 1997 / Civil Engineering	
Active Registration Number / State / Expiration Date		37837 / CO / 10.31.23	
Year Registered		2003	Discipline Civil Engineer
Contract Role(s) / Brief Description of Responsibilities		Analysis and Load Rating Engineer. Ryan has 25 years of experience in structural inspection and highway per the National Bridge Inspection Standards (NBIS) using the National Bridge Inventory (NBI) and AASHTO Element Level NBE coding systems, as well as per AREMA standards. He has worked for a variety of DOTD's and private clients performing inspections on all types of concrete, steel, and timber bridges with main spans reaching 800 feet. Ryan has performed and managed staff for more than 25,000 routine, fracture critical, in-depth, damage, and initial bridge and overhead sign inspections in 16 states and Canada. He's skilled in load rating of steel, concrete. NBIS Certified Team Leader; Sprat Level III	
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
05/12-05/16	WVDOT, Load Rating and Posting of On-System Bridges, Statewide. Project Manager, Senior Team Leader, and SPRAT Climbing Supervisor for the 1,900-foot-long fracture critical cantilever through truss: Silver Memorial Bridge under a six-year contract with the WVDOT. Careful maintenance of ropes and hand-held inspection equipment allowed our inspectors to complete the inspection without the use of mechanical equipment, traffic control, or traffic disruptions. The bridge, which carries US 35 across the Ohio River from West Virginia into Ohio, was completed in 1969 as a replacement and monument for an earlier structure, the Silver Bridge. The original Silver Bridge collapsed in a historic tragedy that led the United States Congress to establish NBI and NBIS Standards between 1968 and 1971.		
03/14-05/15	LADOTD (H.010662) LA 511 Jimmie Davis Bridge Rehabilitation, Bossier, LA. Lead Inspector. Total structure length is 2,823 linear feet, including three main steel truss simple spans - 354 ft., 402.5 ft., and 354 ft. long respectively - crossing the Red River; 610 ft. approach spans at each side consisting of steel, two-girder systems with floor beams. Stantec provided design and plans for complete rehabilitation and repainting. Rehabilitation consisted on total deck replacement, over 200 structural repairs to truss span floor system, replacement of the link joint (hangers) of the approach spans, joint rehabilitation and barrier replacement.		
05/17-08/17	MDOT, SR 609 over Old Fort Bayou In-Depth Bridge Inspection, Ocean Springs, MS. Field Team Leader. Ryan was a field team leader for the in-depth inspection of the 1760-ft long bridge that consists of a double leaf steel girder bascule span (176-ft) and 17 prestressed concrete girder approach spans. Inspection types included routine NBI, element level, in-depth and fracture critical which include full electrical, mechanical, and structural inspection of all components of the bascule span.		

01/20-present	North Dakota DOT, Bridge Inspection and Load Rating for Local Public Agency and Privately Owned Bridges, ND. Principal. Ryan is leading all inspections using the National Bridge Elements and North Dakota's own Agency Developed Elements and Bridge Management Elements. The data is captured in Bridge Intelligence's inspectX platform with associated material defects, photographs, critical findings, and alert codes. In addition to maintenance and rehabilitation recommendations, our teams provide streambed profiles and vertical clearance information, owner and railroad coordination, and FAA clearances for unmanned aerial vehicle (UAV) flights. Our work captures critical findings within the system and sends alert code notifications to the bridge owners. Load ratings are completed using AASHTOWare Bridge Rating software or other software for unusual structures.
05/12-10/14	Oregon International Port of Coos Bay, Coos Bay Bridge Inspection, Coos Bay, OR. Inspector. Ryan performed a deteriorated rivet count along fracture critical members to determine the number of replacement bolts needed to rehabilitate the members. He used conventional rock climbing and rappelling techniques to access the structure.
04/17-08/17	MDOT, SR 605 over the Industrial Waterway In-Depth Bridge Inspection, Gulfport, MS. Field Team Leader. Ryan was a field team leader for the in-depth inspection of the 1390-ft long bridge that consists of a double leaf steel girder bascule span (211-ft) and prestressed concrete girder approach spans. Inspection types included routine NBI, element level, in-depth and fracture critical which include full electrical, mechanical, and structural inspection of all components of the bascule span.
05/16-12/16	MDOT, US 82 Cable Stay In-Depth NBI Inspection, Washington County, MS. Assistant Project Manager and Field Team Leader. Ryan was the assistant PM and field team leader for the in-depth, fracture critical and element level inspection of the US Route 82 over the Mississippi River. Scope included performing a routine element level inspection using the National Bridge Elements, a fracture critical inspection of the main river span floor systems including edge girders and floor beams, an in-depth hands-on SPRAT access inspection of all 112 stay cables.
08/07-present	CDOT, On + Off-System Bridge Inspections, Statewide, CO. Project Manager. Ryan leads bridge inspection, load rating , and scour analysis services for approximately 4,900 off-system bridges in 64 counties and over 100 cities across Colorado per the National Bridge Inspection Standards (NBIS). He's responsible for routine, fracture critical, and special damage inspections on bridges and culverts greater than 20 feet in clear span. Performed field inspections in accordance with all CDOT, FWHA, NBIS, SPRAT and OSHA guidelines and requirements. Confined space entry protocol and Non-Destructive Testing methods are commonly used during these field inspections. In 2014, he collected CoRE Element data for structure components via Pontis with transition to new National Bridge Elements (NBE) via AASHTOWare Bridge Management (BrM). Collects inventory and inspects newly constructed bridges performed at the request of CDOT. Load ratings are performed using the AASHTOWare Bridge Rating program and per the CDOT Bridge Rating Manual. All scour analyses are performed per the FHWA's HEC 18: Evaluating Scour at Bridges. Final bridge reports are submitted. In-depth elemental reporting includes recommendations for maintenance, replacement and/or repair, sketches, photographs, and streambed measurements.
09/12-present	Nevada DOT, Bridge Inspection and Analysis Services, Statewide, NV. Project Manager/Sr. Team Leader. Responsible for routine and fracture critical inspections per NBIS. Through two consecutive four-year contracts, Stantec inspected nearly 1,000 bridges per year, including routine, fracture critical, access required, damage, and tunnel inspections per NBIS and NTIS. Additional services included non-destructive testing using magnetic particle, dye penetrant, ground penetrating radar, infrared, impact echo, and sounding. 30 load ratings were completed on as-needed basis. Approx. 150 require specialized access and/or confined space entry either by UBIV or SPRAT certified rope access. Collected inspection data electronically.
08/13-2020	West Virginia DOT, 2nd Lt. Theodore R. Woo Memorial Bridge, Charleston to Dunbar, WV. Sr. Team Leader for first element-level inspection of the 2383' long bridge. Composed of 11 continuous steel multi-girder spans and three spans of continuous steel haunched girders with a floorbeam and stringer floor system. First annual in-depth periodic inspection was included an arm's length inspection of every member on structure.

		Firm Stantec Consulting Services Inc.	
TAYLOR PERKINS, PHD, SE, PE Load Rater		Years of Relevant Experience with this Employer	16
		Years of Relevant Experience with Other Employer(s)	0
Degree(s) / Years / Specialization		PhD / 2017 / Structural Engineering; MS / 2008 / Civil Engineering; BS / 2007 / Civil Engineering	
Active Registration Number / State / Expiration Date		47449 / LA / 09.30.23	
Year Registered		2023	Discipline Structural Engineer
Contract Role(s) / Brief Description of Responsibilities		Analysis and Load Rating Engineer. Taylor has been involved in the plan preparation, design, load rating , and rehabilitation of complex highway and rail bridges of nearly every type. His experience includes concrete bridges, structural steel bridges, long span bridges, seismic evaluation and retrofit, and various types of foundation systems. Taylor has completed Sprat Level I rope access training and has assisted in a wide range of bridge inspections. Certified Rope Access Level I	
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
03/15-present	Kentucky Transportation Cabinet District 1, US 60 Over Cumberland River Bridge Replacement (Smithland Design), Smithland, KY. Deputy Project Manager and Load Rating Engineer of Record. This \$60M project replaces the existing structure, which carries US 60 over the Cumberland River in the town of Smithland, KY. As deputy Project Manager, Taylor has been involved with the project from the planning and environmental phase. During this phase 1, Taylor led the navigation simulation modeling, a span arrangement and structure type selection study, and performed USCG coordination. The replacement structure has a 40-ft roadway width with two 12-ft lanes and 8-ft shoulders. The 1909'-10" long structure consists of a 3-span 368' PPC I-beam south approach unit, a 700'-4" single truss span over the river, and a 6-span 841'-6" PPC I-beam north approach unit. The main navigation truss span is a modified warren through-truss that eliminates vertical members and utilizes rigid frame connections at the top and bottom chord to eliminate the need for sway bracing. The bridge is in a high seismic hazard zone, consequently a response spectrum analysis was performed using a site-specific response spectrum and the structure was designed and detailed to meet AASHTO LRFD criteria for Seismic Zone 3. As Co-Engineer of Record for the main truss span and the supporting piers, Taylor was responsible for all aspects of design and plan production. During the construction phase of the project, Taylor served as document controls manager, working closely with the KYTC Resident Engineer to coordinate construction submittals and address issues that arose. Taylor also served as the load rating engineer of record.		

03/16-09/18	<p>Kentucky Transportation Cabinet, Statewide Fracture Critical Inspection Services - Package 2 - Simon Kenton Bridge Load Rating, Statewide, KY. Load Rating Lead. Taylor was the load rating engineer of record for the Simon Kenton Bridge, a 1990-ft. long suspension bridge over the Ohio River in Maysville, KY. The structure consists of 465-foot side spans and a 1060-foot main span. The load rating includes 3-D finite element modeling of the full structure in CSi Bridge, with nonlinear effects included to account for large displacements and stress-stiffening of the cables. Components included in the load rating are stringers, floorbeams, stiffening trusses, including gussets, hanger cables with connections, main suspension cables, steel tower piers, and suspension cables anchorages. The rating is performed using LRFR methodology, the rating vehicles include HL-93, four state posting vehicles, four specialized hauling vehicles, and FHWA FAST act's emergency vehicles.</p>
03/18-12/19	<p>TBTA Biennial Bridge Inspection, Robert F. Kennedy Bridge Load Rating, New York, NY. Technical Lead for the load rating of the 200+ ft spans of the Robert F. Kennedy Bridge over the East River and Bronx Kill in NYC. The rated portions include a suspension bridge unit with 1,380-ft main span and 672-ft side spans as well as several through-truss spans. Ratings were performed for both the LRFR and ASR methodologies and incorporated AASHTO specialized hauling vehicles and FHWA FAST act's emergency vehicles. For the suspended spans, a nonlinear finite element model was built in CSi Bridge analyze the large displacements and stress-stiffening effects of the suspension cables. Ratings included stringers, floorbeams, and stiffening trusses, including gussets. Ratings for the Bronx Kill truss spans included stringers, floorbeams, main truss members, and gusset plates. The project also includes ratings for the orthotropic steel decks, which were modeled in 3-D using Ansys.</p>
09/18-present	<p>Kentucky Transportation Cabinet, Statewide Fracture Critical Inspection Services (Package 2) Simon Kenton Bridge Load Rating, Maysville, KY. Load Rating Lead Engineer/EOR for the Simon Kenton Bridge, a 1990-ft long suspension bridge over the Ohio River. Structure consists of 465-ft side spans and a 1060-ft main span. The load rating includes 3-D finite element modeling of the full structure in CSi Bridge, with nonlinear effects included to account for large displacements and stress-stiffening of the cables. Components included in the load rating are stringers, floorbeams, stiffening trusses, including gussets, hanger cables with connections, main suspension cables, steel tower piers, and suspension cables anchorages. Rating is performed using LRFR methodology, the rating vehicles include HL-93, four state posting vehicles, four specialized hauling vehicles, and FHWA FAST act's emergency vehicles.</p>
11/18-present	<p>West Virginia Highways, I-70 Bridges Upgrade Design & QAM Services (WVDOH), Wheeling, WV. Structural Engineer. Project required rehabilitation to bring the inventory rating of the 70-year-old bridge up to HL-93 standards. Taylor is responsible for technical oversight of the rehabilitation plan as well as QA/QC of the 3-D finite element Arch analysis model and capacity checks for the in-situ and rehabilitated structural elements of the bridge including, arch rib, tie chord, hangers, and floor system members. Evaluation of the arch included extensive global stability evaluations of arch rib buckling modes.</p>
09/16-08/18	<p>Kentucky Transportation Cabinet, Statewide Bridge Load Rating - Package 1 - Arch Load Ratings, Various Locations, KY. Load Rating Engineer-of-Record for three arch bridges. Structures include: 535-ft twin tied arches that carry I-24 over the TN River, 186-ft open spandrel steel arch that carries Highland Ave. over I-471 in Campbell Co., and 100-ft concrete infill arches that carry KY 90 over the Cumberland River. The LRFR ratings incorporated all pertinent structural elements and included HL-93, four state posting vehicles, four specialized hauling vehicles, state superload vehicles, and FHWA FAST act's emergency vehicles.</p>
06/09-08/15	<p>Virginia Department of Transportation, US 460 Connector Design-Build, Buchanan County, VA. Structural Engineer. The 1,728-ft long six-span twin bridges feature two PPC I-beam approach spans and a four-span cast-in-place, post-tensioned segmental concrete box girder unit with box girder depths of 31 feet at the continuous piers. The substructures consist of unique H-column piers, integral with superstructure, with heights up to 230 ft. Taylor performed QC checking of the longitudinal and transverse load ratings of the as-built superstructure.</p>

		Firm Stantec Consulting Services Inc.	
JACOB TISDALE, PE Load Rater		Years of Relevant Experience with this Employer	4
		Years of Relevant Experience with Other Employer(s)	0
Degree(s) / Years / Specialization		BS / 2018 / Civil Engineering	
Active Registration Number / State / Expiration Date		47913 / LA / 09.30.23	
Year Registered		2023	Discipline Civil Engineer
Contract Role(s) / Brief Description of Responsibilities		Analysis and Load Rating Engineer. Jacob is a structural engineer with over four years of experience. He has been involved in structural designs ranging from deck, prestressed box girder and concrete substructure. He has been involved in the load rating and inspections of numerous State Aid Complex and Timber Bridges. Jacob is familiar with several design and analysis software programs including RC-Pier, CONSPAN, and AASHTOWare Bridge Rating. NBIS Certified Team Leader	
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
12/18-present	Mississippi Office of State Aid Road Construction, Mississippi Statewide Complex Bridge Inspections & Load Ratings, Statewide, MS. Bridge Inspector and Load Rater . Stantec is responsible for inspecting and load rating over 400 bridges in 20 different Mississippi Counties. Inspections and load ratings are performed in accordance with current NBIS and procedures as outlined in the AASHTO MBE. Jacob is responsible for performing load rating analyses of inspected structures in accordance with current AASHTO requirements. Structures include prestressed concrete girders, structural steel girders, concrete box culverts, and precast prestressed channel beams.		
12/18-present	Mississippi Office of State Aid Road Construction, Mississippi Statewide Timber Bridge Inspections & Load Ratings, Statewide, MS. Bridge Inspector and Load Rater . Stantec is responsible for inspecting and load rating over 100 bridges in 17 different Mississippi Counties. Inspections and load ratings are performed in accordance with current NBIS and procedures as outlined in the AASHTO MBE. Jacob is responsible for performing load rating analyses of inspected structures in accordance with current AASHTO requirements. Structures include prestressed concrete girders, structural steel girders, and precast prestressed channel beams with timber substructures.		
12/18-01/19	MDOT, AASHTOWARE Bridge Rating, Statewide, MS. Bridge Load Rater . The project included load rating of 120 bridges in Mississippi. Load ratings were performed in accordance with the AASHTO LRFR or LFR method and current MDOT Standards. Only superstructure elements were considered for the load rating analysis. Structure types included steel plate girders, prestressed concrete girders, reinforced concrete T-beams, concrete slabs, and reinforced concrete multi-cell box girders (integral and non-integral). Jacob assisted in performing load ratings and developing summary reports		

02/19-04/19	<p>ALDOT, Load Rating of 30 Bridges, Statewide, AL. Bridge Load Rater. Jacob was responsible for performing load ratings and developing summary reports on this contract that included load rating of 30 bridges in Alabama. Load ratings were performed in accordance with AASHTO LFR method and current ALDOT standards. Only superstructure elements were considered for the load rating analysis. Structure types included steel plate girders, prestressed concrete girders, reinforced concrete T-beams, and concrete slabs. Comprehensive analysis referred to as Non-Standard Gage (NSG) or Distribution Factor-Line Girder Analysis was performed when Emergency Vehicle produced a rating factor less than 1.0.</p>
08/19-present	<p>LADOTD (Contract No. H.011670) I-10 Loyola Design-Build Interchange, New Orleans, LA. Bridge Designer. Jacob serves as a design engineer on this multimillion-dollar design-build project that will improve access and traffic operations to and around the new Northfield Terminal at the New Orleans International Airport. The project consists of a DDI, in addition to flyover ramps leading to/from the Airport on the east side of the interchange. The flyover ramps consist of curved twin steel tub girders, prestressed concrete girders and slab spans being supported by a combination of hammerhead bents, wall bents and pile bents. The project is one of the first in the state to implement LU girders. Jacob's responsibilities include the design of slab spans, substructure elements, reviewing shop drawings, and performing as-designed load ratings on structural components.</p>
08/22-11/22	<p>ALDOT, Load Rating of 12 Complex Bridges, Statewide, AL. Bridge Load Rater. Project consisted of rating 12 complex bridges in accordance with ALDOT Policies and Guidelines for Bridge Rating and Evaluation using AASHTOWare BrR. The bridge types comprised of continuous cast-in-place concrete T-beam spans, post-tensioned channel beams, continuous steel plate-girders, and concrete encased steel I-beams. Jacob was responsible for performing load ratings and developing summary reports.</p>
02/19-present	<p>LADOTD, LA 12 Bridge Replacements, Calcasieu Parish, LA. Bridge Load Rater. Jacob is responsible for performing load ratings on the as-design and as-built conditions. This project consists of replacing six structurally deficient bridges along LA State Route 12 in Calcasieu Parish using phase construction. All bridges consist of LA Quad beam girder spans supported on pile bents.</p>

	Firm	Stantec Consulting Services Inc.		
STEPHEN TORRY, PE Load Rater		Years of Relevant Experience with this Employer	3	
		Years of Relevant Experience with Other Employer(s)	1	
Degree(s) / Years / Specialization		MS / 2019 / Civil Engineering; BS / 2018 / Civil Engineering		
Active Registration Number / State / Expiration Date		47545 / LA / 09.30.25		
Year Registered		2023	Discipline	Civil Engineer
Contract Role(s) / Brief Description of Responsibilities		Analysis and Load Rating Engineer. Stephen has previous experience in rating a variety of different bridge structures which include curved steel superstructures, cast in place concrete slab spans, precast concrete slab spans, prestressed concrete girders, steel plate girders, channel beams, timber floor beams, timber stringers, culverts, and reinforced concrete beams. Stephen has experience in rating reinforced concrete caps, timber caps, concrete piles, timber piles, and steel H piles. In addition to load rating , Stephen has experience in field inspection that he has utilized to improve his ability to spot critical failure locations when performing load rating analysis. Stephen has rating experience in AASHTOWare Bridge Rating, LEAP RC-PIER, LEAP CONSPAN, MIDAS Civil, and STAAD. NBIS Certified Team Leader		
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
01/20-present	Mississippi Office of State Aid Road Construction, Mississippi Statewide Complex Bridge Inspections & Load Ratings, Statewide, MS. Bridge Inspector and Load Rater . This project consists of inspections and load ratings on timber, complex, and non-complex structures in accordance with AASHTO and FHWA NBI specifications. Stephen inspects and load rates various bridge types ranging from steel I girders, prestressed concrete beams, and steel rail cars (which have since been converted into small bridge spans) using AASHTOWARE Bridge Rating. Substructure types included reinforced concrete caps using LEAP RC-Pier.			
01/22-present	LADOTD (Contract No. H.011670) I-10 / Loyola Interchange Improvement, Jefferson Parish, LA. As a structural engineer Stephen performed the load rating of the bridge substructure and superstructure in accordance with LADOTD Policies and Guidelines for Bridge Design Load Rating . Superstructure spans included prestressed LG and LU girders and the substructure consisted of concrete pile bents as well as concrete hammer head piers.			
08/22-11/22	ALDOT, Load Rating Of 12 Complex Bridges, Statewide, AL. Bridge Load Rater . Project consisted of rating 12 complex bridges in accordance with ALDOT Policies and Guidelines for Bridge Rating and Evaluation. The bridge types comprised of continuous cast-in-place concrete T-beam spans, post-tensioned channel beams, continuous steel plate-girders, and concrete encased steel I-beams. Stephen performed load ratings using as-built drawings / standard plans and developed load rating summary reports.			
02/21-03/21	City of Baton Rouge, Load Rating of Mall of Louisiana Bridges, Baton Rouge, LA. Bridge Load Rater . Stephen performed load rating of three bridges in accordance with LADOTD Policies and Guidelines for Bridge Design Load Rating. Superstructure spans included skewed prestressed AASHTO girders that supported a curved deck, as well prestress quad beam spans. Superstructure was rated using AASHTOWARE Bridge Rating. Substructure ratings were of concrete pile bents using LEAP RC-Pier.			

08/20-09/20	LADOTD (Contract No. H.005967) Nelson Road Extension Bridge, Lake Charles, LA. Bridge Design and Load Rater . Stephen performed load rating of various bridges in accordance with LADOTD Policies and Guidelines for Bridge Design Load Rating . Superstructure ratings included prestressed LG Girders and slab spans using AASHTOWARE Bridge Rating. Substructure ratings were of concrete pile bents using LEAP RC-Pier.
05/19-10/19	LADOTD (Contract No. H.012485.5) Load Rating of 396 Off System Bridges, Statewide, LA. Bridge Load Rater . Stephen performed load rating of various bridges in accordance with LADOTD Policies and Guidelines for Bridge Evaluation. Bridge types included cast in place concrete slab spans, precast concrete slab spans, prestressed concrete girders, steel I plate girders, and RC box culverts. The substructures comprised various components including reinforced concrete caps, timber caps, timber piles and H piles
05/19-10/19	LADOTD (Contract No. H.009859.5) 27 Complex Off-System Bridges Rating and Evaluation, Statewide, LA. Bridge Load Rater . Stephen performed load rating of various bridges in accordance with LADOTD Policies and Guidelines for Bridge Evaluation. Bridge types rated include steel plate-girders and prestressed concrete girders. Bridge superstructures involved complex irregular geometry for their on/off ramps which were not analyzed using AASHTO approximate methods and therefore those bridge/ramp junctions were analyzed using finite element models developed using MIDAS civil software.

		Firm Stantec Consulting Services Inc.	
MAGGIE YE, PE Load Rater		Years of Relevant Experience with this Employer	3
		Years of Relevant Experience with Other Employer(s)	4
Degree(s) / Years / Specialization		MS / 2016 / Civil Engineering; BS / 2013 / Civil Engineering	
Active Registration Number / State / Expiration Date		44061 / LA / 03.31.24	
Year Registered		2019	Discipline Civil Engineer
Contract Role(s) / Brief Description of Responsibilities		Analysis and Load Rating Engineer. Maggie assists the project manager with bridge designs, compiling bridge plans, and QC/QA of load rating models and reports. She also helps EIs in developing load rating models.	
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
03/20-present	Mississippi Office of State Aid Road Construction, Mississippi Statewide Complex Bridge Inspections & Load Ratings, Statewide, MS. Bridge Engineer. Maggie's main task is to QC and QA the load rating models and reports that are developed by the EIs. She uses Bridge Rating and RC-Pier load rating software to review different types of bridges, including timber bridges, box culvert bridges, slab spans, prestressed beams etc. She also reviews the hand calculation of LLDF for culvert box, dead load input for substructure, and timber piles' load rating factors.		
10/21-04/22	MDOT, Truss Bridge Inspections and Load Rating, Statewide, MS. Bridge Load Rater. Maggie used the existing plans and site measurements to load rate the complex truss bridge. The load rating consisted of rating truss members, gusset plates, stringers, and floor beams. She prepared the load rating reports including detailed truss rating results in accordance with client's requirement.		
02/19-08/19	LADOTD, Load Testing of Berwick Bay Bridge and LA-1 Bridge, Statewide, LA. Site Engineer. Maggie assisted the project engineer to installing sensors on the bottom of the bridge deck and connecting the sensors to computers. She guided the loaded truck on the bridge and analyzed the collected deflections from sensors. She gained on-site experience as well as knowledge that the load rating results were much more conservative than the load testing results.		
02/19-08/19	LADOTD (H.009859.5) 27 Complex Off-System Bridges Rating and Evaluation, Statewide, LA. Structural Engineer. This project consisted of load rating of 27 complex off-system bridges in accordance with LADOTD Policies and Guidelines for Bridge Rating and Evaluation. The bridge types comprised ferry-toll, pontoon, steel I-beam, plate girder swing spans, plate girder continuous spans, plate girder bascule spans, low truss swing spans, plate girder swing spans and steel box girder. Maggie's responsibilities included reviewing the as-built drawings of the bridges and determining the appropriate load rating method, developing the load rating models and preparing the load rating reports.		

02/19-08/19	<p>LADOTD (H.012485.5) Load Rating of 396 Off System Bridges, Statewide, LA. Bridge Load Rater. Load rating of 396 bridges in accordance with LADOTD Policies and Guidelines for Bridge Rating and Evaluation. Bridge types comprised cast in place concrete slab spans, precast concrete slab spans, prestressed concrete girders, steel plate-girders, in addition to RC box and arch culverts. Substructures comprised various components including reinforced concrete caps, timber caps, timber piles and steel H piles. Maggie participated in performing the load rating analysis for the bridges and preparation of the load rating reports.</p>
11/19-04/20	<p>LADOTD, US-90 Macarthur Interchange Phase II, Jefferson, LA. Bridge Designer. This project consisted of designing two access ramps to/from the service roads to the elevated viaduct. Ramps structures consisted of complex structural elements including precast- prestressed U-shaped girders and LG-girders, inverted-T piers, complex columns, and foundations. Maggie's responsibilities included performing the final design of the superstructure including the deck, prestressed LU girders and LG girders for the 22 spans off-ramp and the 24 spans on-ramp along with preparation of the plans.</p>
08/19-01/20	<p>LADOTD, Load Rating of 18 Complex Bridges, Statewide, LA. Bridge Load Rater. Maggie conducted the load rating of several complex bridges including a steel bascule span bridge and irregular geometry steel plate girder bridge. The load rating involved engineering judgment and hand-calculation of the counterweight of the bascule span bridge. She also rated a curved steel plate girder span and a straight steel girder with curved deck span.</p>
04/17-10/18	<p>LADOTD (H.011484) US 80 Red River Texas Street Bridge, Inspection, Load Rating and Rehabilitation, Bossier, LA. Bridge Designer. The US-80 Texas Street Bridge, built in 1934, is a historic bridge which carries US-80 over the Red River at Shreveport, LA. Bridge consists of 45 spans with a total length of 2,895 ft. The approach spans consist of reinforced concrete T-beam girders, steel girders, and steel deck trusses. The main span consists of a three-span steel truss with a total length of 884 feet. Phase II of the project included rehabilitation of all deficient structural components of the truss spans and approach spans that were identified based on the load rating and evaluation completed in Phase I. Maggie participated in the design and detailing of the strengthening systems for the truss members, gusset plates and the column bents and preparation of the final plans for the bridge.</p>



Section

17

Delivering a better world

17. Firm Experience:				
Firm Name	AECOM Technical Services, Inc.		Past Performance Evaluation Discipline(s)*	Bridge
Project Name	State Aid Bridge Inspection & Related Services IDIQ Master Contract: 2019-2022		Firm Responsibility (Prime or Sub?)	Prime
Project Number	NA	Owner's Name	MOOT Office of State Aid Road Construction	
Project Location	Statewide, MS		Owner's Project Manager	Harry Lee James
Owner's Address, Phone, Email	412 E Woodrow Wilson Ave, Jackson, MS 39216; 601.359.7150; hjames@osarc.ms.gov			
Services Commenced by This Firm (mm/yy)	08/19	Total Consultant Contract Cost (\$1,000's)	\$5,000	
Services Completed by This Firm (mm/yy)	08/22	Cost of consultant services provided by this firm (\$1,000's)	\$3,300	

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

RELEVANCE TO LADOTD BRIDGE RATING STATEWIDE

- ✓ AASHTOWare BrR Rating
- ✓ Complex Bridge Load Rating (Truss)
- ✓ Posting Mitigation Strategies
- ✓ High Volume Statewide Load Rating Program (300+ ratings)
- ✓ On-call rapid response for high-priority ratings



State Aid Timber and Complex Bridge Inspections and Load Ratings (2021-2022). AECOM provided inspection and load ratings of 187 bridges that were identified as having timber substructure and/or steel superstructures. **The timber substructures were inspected primarily using non-destructive testing techniques, with spot checks using timber coring. Inspectors identified capacity losses, and documented the type size and location of all defects for every timber pile and cap.**

The superstructures included steel truss, pin and hanger assemblies, steel built-up sections, rolled steel shapes, military structures, railroad cars, reinforced concrete (RC) channels, RC I-beams, and others. Appropriate access methods were documented in the inspection plan. Methods used for this contract included rope access performed by SPRAT certified inspectors, under bridge inspection vehicles, and more traditional methods (ladders, waders, etc.).



State Aid Timber and Complex Bridge Inspections and Load Ratings (2020-2021). AECOM provided inspection and load ratings of 142 bridges that were identified as having timber substructure and/or steel superstructures. The bridges were inspected following the same scope as described in the 2021-2022 cycle narrative.



State Aid Complex Bridge Inspections and Load Ratings (2019-2020). AECOM provided inspection and load ratings of 88 bridges that were identified as having steel superstructures. The bridges were inspected following the same scope as the complex inspections described in the 2021-2022 cycle narrative.

Firm Members Involved: **L. Whitton, K. Hagen, J. Zimpfer, J. Fattoross, J. Martinez, S. McVey, B. Shrestra, J. Rhoad-Drogalis**

Firm Name	AECOM Technical Services, Inc.		Past Performance Evaluation Discipline(s)*	Bridge
Project Name	Montana Department of Transportation Bridge Load Ratings		Firm Responsibility (Prime or Sub?)	
Project Number	N/A	Owner's Name	Montana Department of Transportation (MDT)	
Project Location	Various Locations, Montana		Owner's Project Manager	Mary Smith
Owner's Address, Phone, Email	2701 Prospect Avenue, Helena, MT 59620; 406.444.7641; msmith@mt.gov			
Services Commenced by This Firm (mm/yy)	04/14	Total Consultant Contract Cost (\$1,000's)	\$6,202	
Services Completed by This Firm (mm/yy)	ongoing	Cost of consultant services provided by this firm (\$1,000's)	\$5,510	

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

RELEVANCE TO LADOTD BRIDGE RATING STATEWIDE

- ✓ AASHTOWare BrR Rating
- ✓ Complex Bridge Load Rating (Truss, Suspension, Curved Girder, and more)
- ✓ Posting Mitigation Strategies
- ✓ High Volume Statewide Load Rating Program (950 ratings)
- ✓ FEM Analysis for complex structures outside BrR limitations
- ✓ On-call rapid response for high-priority ratings



AECOM was selected by Montana Department of Transportation as the first-ranked consultant for three consecutive four-year statewide load rating contracts (2014-2017, 2018-2021, 2021-2024). AECOM is the lead engineer for the live load rating analysis of more than 950 bridges for the state of Montana utilizing the AASHTOWare Bridge Rating (BrR) software to analyze all structures that the program is capable of modeling. The goal of this project is to provide load rating services on an as-needed basis

for all the state's legal loads, including the FAST Act emergency vehicles, EV2 and EV3. AECOM also assisted MDT in mitigating dozens of potential postings on bridges. As a result of excellent performance in AECOM's first contract, additional complex structure work was added, including the analysis of 75 steel truss structures, many of which required gusset plate analysis in accordance with AASHTO standards.

AECOM's ratings have also included a suspension bridge, steel truss structures, riveted, haunched steel girders, prestressed concrete girders, and continuous concrete slabs. AECOM has also analyzed: timber structures, steel rigid K-frame, curved steel girder, steel girder-floor truss-stringer, rolled steel multi-girder, glulam timber beam, reinforced concrete T-beam, riveted and welded plate girder systems, as well as metal culverts. Unique features in these structures included cantilevered ends of continuous concrete T-beams, concrete slab systems that were integral with substructure units, in-span hinges, and rating of laminated timber decks.

Field measurements and deterioration were considered in the modeling of bridges in the BrR software. AECOM was responsible for identifying several bugs in the AASHTOWare software which were reported to the software manufacturer. Workarounds were developed to address program limitations, and when the BrR software could not be used, Midas Civil was used to perform finite element analysis.

Firm Members Involved: J. Zimpfer, J. Mathers, B. Canimore, H. Fix, W. Ahola

Firm Name	AECOM Technical Services, Inc.		Past Performance Evaluation Discipline(s)*	Bridge
Project Name	NDDOT County/Local Bridge Inspections & Load Ratings		Firm Responsibility (Prime or Sub?)	Prime
Project Number	NA	Owner's Name	North Dakota Department of Transportation	
Project Location	Northwest Region, North Dakota		Owner's Project Manager	Bryon Fuchs
Owner's Address, Phone, Email	608 E Boulevard Ave, Bismarck, ND 58505; 701.328.2516; blfuchs@nd.gov			
Services Commenced by This Firm (mm/yy)	04/20	Total Consultant Contract Cost (\$1,000's)	\$4,290	
Services Completed by This Firm (mm/yy)	06/22	Cost of consultant services provided by this firm (\$1,000's)	\$3,812	

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

RELEVANCE TO LADOTD BRIDGE RATING STATEWIDE

- ✓ AASHTOWare BrR Rating
- ✓ Complex Bridge Load Rating (Truss, Pin) Posting Mitigation Strategies
- ✓ High Volume Statewide Load Rating Program (645 ratings)
- ✓ On-call rapid response for high-priority ratings



AECOM inspected and load rated approximately 762 bridges in northwest North Dakota over a 2-year period in accordance with FHWA and National Bridge Inspection Program standards.

AECOM provided an NBI-element inspection of each bridge and took field measurements of structures without plans for load rating purposes. Each structure had a variety of superstructure and substructure types.

AECOM is completing load ratings for approximately 645 of the bridges that were inspected. Not all bridges were load rated due to in-place closures, scheduled replacement, or duplicate inspections in year 2 of the contract.

All bridges were load rated in accordance with NDDOT Load Rating Manual, AASHTO Manual for Bridge Evaluation (MBE) and applicable AASHTO design standards. The majority of the bridges were rated using AASHTOWare BrR. **AECOM's load rating engineers used a combination of existing plans, shop drawings, previous ratings, field measurements, and materials data from the AASHTO MBE to develop the BrR ratings.**

Firm Members Involved: L. Whitton, K. Hagen, J. Zimpfer, J. Fattoross, J. Martinez, S. McVey, B. Shrestha, J. Rhoad-Drogalis

Firm Name	AECOM Technical Services, Inc.		Past Performance Evaluation Discipline(s)*	Bridge
Project Name	Bridge Load Rating IDIQ		Firm Responsibility (Prime or Sub?)	Sub
Project Number	H.009859.5	Owner's Name	Louisiana Department of Transportation and Development	
Project Location	Louisiana	Owner's Project Manager	Billy Metcalf	
Owner's Address, Phone, Email	1201 Capital Access, Baton Rouge, LA 70808; 225.379.1741; William.metcalf@la.gov			
Services Commenced by This Firm (mm/yy)	02/23	Total Consultant Contract Cost (\$1,000's)	--	
Services Completed by This Firm (mm/yy)	ongoing	Cost of consultant services provided by this firm (\$1,000's)	\$2,227	

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

RELEVANCE TO LADOTD BRIDGE RATING STATEWIDE

- ✓ AASHTOWare BrR Rating
- ✓ Posting Mitigation Strategies
- ✓ Superstructure and substructure ratings



AECOM is responsible, as a subconsultant on this statewide bridge load rating IDIQ contract, for the analysis of approximately 140 bridges. The structures represent a number of LADOTD's standard plans, as well as a range of structure types, including prestressed girders, reinforced concrete slabs, culverts, and steel girders.

The AECOM team has submitted one bridge analysis in this ongoing contract, and as part of this analysis, **AECOM developed and submitted an innovative analysis method for concrete bent caps using the capabilities of the BrR software with unique truck definitions to**

simulate transverse movement of vehicle wheel loads along the axis of the bent cap. This method was developed to facilitate the inclusion of the substructure rating in the same model file, to enhance rating efficiency, and to benefit from the specification checking and rating capabilities built into the BrR software.

This assignment includes the analysis of both superstructure and substructure elements, as well as the development of mitigation strategies to avoid posting bridges which yield low ratings.

AECOM has thoroughly researched available plans on DOTD servers as well as in Assetwise. Our research included extracting information from previous analyses and inspection reports, and we have developed a rating progress tracking tool to facilitate coordination of the various steps in the rating, QC, and reporting processes. Our investigation also included identifying and documenting in our tracking tool the appropriate standard drawings used for superstructures and substructures to allow us to enhance our efficiency in rating similar structures on this and future assignments of bridges.

The AECOM team has engaged with LADOTD and is poised to respond to any questions or concerns related to rating methods, approaches, assumptions and posting mitigations. We bring to this project and understanding of the vital relationship that exists between bridge owner and consultant, and we are serving as an extension of the DOTD staff in the way we take ownership of the bridges we analyze and partner to find creative solutions, both analytically and by way of posting mitigation.

Firm Members Involved: **J. Zimpfer, J. Mathers, B. Canimore, C. McKown**

Firm Name	AECOM Technical Services, Inc.		Past Performance Evaluation Discipline(s)*	Bridge
Project Name	I-20 EB to I-55 NB, Inspection, Load Rating, and Rehabilitation		Firm Responsibility (Prime or Sub?)	Prime
Project Number	NA	Owner's Name	Mississippi Department of Transportation	
Project Location	Rankin County, MS	Owner's Project Manager	Scott Westerfield	
Owner's Address, Phone, Email	401 North West Street, Jackson, MS 39201; 601.359.7200; swesterfield@mdot.ms.gov			
Services Commenced by This Firm (mm/yy)	06/20	Total Consultant Contract Cost (\$1,000's)	\$95	
Services Completed by This Firm (mm/yy)	01/22	Cost of consultant services provided by this firm (\$1,000's)	\$95	

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

RELEVANCE TO LADOTD BRIDGE RATING STATEWIDE

- ✓ AASHTOWare BrR Rating
- ✓ Posting Mitigation Strategies
- ✓ FEM Analysis for complex structures outside BrR limitations

Inspection and Load Rating. MDOT contracted AECOM to perform a field inspection, load rating, and prepare conceptual plans for the potential repairs of Bridge No. 93.1 on I-20 Eastbound to I-55 Northbound in Rankin County. AECOM was issued a supplemental agreement to perform a finite element analysis to determine the structure's behavior, enabling recommendation for a more permanent repair to the structure.

AECOM provided the following specific services:

- Field inspection of Bridge No. 93.1. This inspection consisted of accessing the inside of the box girders for inspection. The inspection determined the extents of existing defects with the box girders, and thorough documentation provided.
- Finite Element analysis utilizing CSI bridge and hand calculations in order to determine the structure's behavior, enabling more permanent repair strategies.

The girder ratings for both flexure and shear were calculated directly by CSiBridge using the provisions of the AASHTO Load Factor Rating method, then post-processed for dapped end ratings. Post-process analysis of dapped ends for "corbel condition" failure modes, as per PCI Design Handbook, - 7th Edition, were performed on spreadsheets. The dapped end ratings ultimately controlled for load posting.

- Conceptual repair plans after AECOM deemed that repairs were necessary to maintain the sufficiency of the bridge.

Phase A Rehabilitation and Replacement. Based on the findings from the structural analysis, MDOT contracted AECOM to provide Phase A Bridge Conceptual Plans for rehabilitation of the subject bridge.

AECOM provided the following services:

- Two conceptual design recommendations for repair of the structure;
- One conceptual design recommendation for replacement of the structure;
- Load rating for each option; and
- Road closure time estimate for each option

AECOM provided concepts that would lead a long term solution to remove the load posting on the structure, and are currently working on final plans for this solution.

Firm Members Involved: L. Whitton, K. Hagen, J. Fattoross, B. Shrestra, N. Rice

Firm Name	Stantec Consulting Services Inc.		Past Performance Evaluation Discipline(s)*	Bridge
Project Name	LADOTD Bridge Load Rating Retainer		Firm Responsibility (Prime or Sub?)	Prime
Project Number	N/A	Owner's Name	Louisiana Department of Transportation and Development	
Project Location	Statewide, Louisiana		Owner's Project Manager	Billy Metcalf
Owner's Address, Phone, Email	1201 Capital Access, Baton Rouge, LA 70808; 225.379.1741; William.metcalf@la.gov			
Services Commenced by This Firm (mm/yy)	03/13	Total Consultant Contract Cost (\$1,000's)	\$2,993	
Services Completed by This Firm (mm/yy)	03/17	Cost of consultant services provided by this firm (\$1,000's)	\$2,110	

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

RELEVANCE TO LADOTD BRIDGE RATING STATEWIDE

- ✓ Condition Verification
- ✓ Bridge Load Rating
- ✓ Existing Document Review
- ✓ Bridge Status Log



Stantec was responsible for managing and performing load ratings on 635 statewide on-system bridges using the Load and Resistance Factor Rating (LRFR) method.

The scope of services included plan and document review, condition verification, load rating analyses, and developing reports with posting recommendations.

Structure types included concrete slab spans, prestressed concrete girder spans, structural steel girder units, voided concrete decks, steel trusses, pile bents (timber, concrete, and steel), and concrete hammerhead piers.

During the initial stage of the project, Stantec was responsible for gathering as-built plans, shop drawings, original design calculations (if available), documentation of repairs and rehabilitations, and previous inspection reports. These documents were reviewed to develop bridge models and determine deficiencies to be included.

Superstructure elements were analyzed using AASHTOWare Bridge Rating. Substructure units, such as pile bents and hammerhead piers, were analyzed using RC-Pier and/or STAAD. The models were used to load ratings based on the present condition, capacity, and loads (dead and live) of each bridge.

Over the course of the project, Stantec established several processes to assist with tracking data gathered and the status of each bridge to be load rated. The most effective process was the scheduling of monthly progress meetings with LADOTD representatives to discuss analysis procedures and establish ground rules on assumptions and modeling. Meeting minutes were used to document decisions made, identify action items to assist with data gathering, and adjust the design criteria regularly. In addition to meetings, a bridge database was developed, and updated weekly, to assist with tracking the status of bridge types (slab spans, medium spans, long spans, and complex) and tracking missing and needed information to complete the load rating for each bridge. To improve the checking process, an overall project Quality Management Plan (QMP) was developed that included a set of checklists to be included in the QA/QC documentation.

Firm Members Involved: B. Johnson, K. Malpani, J. Krebs, A. Botros*
(*not w/Stantec at time)

Firm Name	Stantec Consulting Services Inc.		Past Performance Evaluation Discipline(s)*	Bridge
Project Name	Truss Bridges Inspection and Load Rating		Firm Responsibility (Prime or Sub?)	Prime
Project Number	NBIS (140)/108451-101000	Owner's Name	Mississippi Department of Transportation	
Project Location	Itawamba, Leflore, Quitman and Stone Counties, Mississippi	Owner's Project Manager	Neal Terry	
Owner's Address, Phone, Email	401 North West Street, Jackson, MS 39201; 601.359.7200; nterry@mdot.ms.gov			
Services Commenced by This Firm (mm/yy)	12/20	Total Consultant Contract Cost (\$1,000's)	\$461	
Services Completed by This Firm (mm/yy)	04/22	Cost of consultant services provided by this firm (\$1,000's)	\$461	

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

RELEVANCE TO LADOTD BRIDGE RATING STATEWIDE

- ✓ Bridge Design (New, Rehab, Repair)
- ✓ Bridge Inspections
- ✓ Bridge Load Rating
- ✓ Construction Support Services



Stantec performed detailed inspections and load ratings for four steel through trusses.

MDOT initiated this project to establish process and procedures to assist with future maintenance needs on other trusses. The project's goal was to develop an inspection report, including a load rating summary, that could be used to develop rehabilitation and/or

repair plans without performing extensive field work.

MDOT originally selected six trusses; however, due to scope of work modifications two of the bridges were removed. Each of these trusses were constructed in the late 1940s and early 1950s with lengths varying from 120'-1" to 180'-1". A few have suffered damage due to vehicular impacts while in service.

An in-depth, hands-on inspection of every truss member, with the superstructure, was performed. Climbing techniques were implemented when required to access areas unreachable by ladder. Prior to the field work, available data for each bridge was reviewed and used to develop inspection field sketches in the field. Detailed measurements were required to confirm existing shop drawings to ensure the load rating model depicted accurate field conditions. Existing shop drawings, when available, were verified in the field. To supplement existing bridge files, additional CAD sketches were developed based inspection findings. A final inspection report, which included available data, field observations, and element quantities was delivered to MDOT for each structure.

Using the gathered data and field measurements, models were developed in AASHTOWare BrR to perform load ratings. Each truss member, including gusset plates, were analyzed in accordance with the Load Factor Rating (LFR) method for inventory, operating, MDOT legal, and emergency vehicle loads. Once the load rating was accepted by MDOT, the inspection reports were updated to account for any adjustments in the fracture critical member schematic.

Firm Members Involved: B. Johnson, R. Nataluk, A. Botros, M. Ye

Firm Name	Stantec Consulting Services Inc.		Past Performance Evaluation Discipline(s)*	Bridge
Project Name	Mississippi Complex Bridge Inspection and Load Rating		Firm Responsibility (Prime or Sub?)	Prime
Project Number	N/A	Owner's Name	Mississippi Office of State Aid Road Construction	
Project Location	Statewide, Mississippi		Owner's Project Manager	David Barrett
Owner's Address, Phone, Email	412 Woodrow Wilson Ave., Jackson, MS 39215; 601.359.7129; dbarrett@osarc.state.ms.us			
Services Commenced by This Firm (mm/yy)	08/20	Total Consultant Contract Cost (\$1,000's)	\$1,567	
Services Completed by This Firm (mm/yy)	ongoing	Cost of consultant services provided by this firm (\$1,000's)	\$1,289	

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

RELEVANCE TO LADOTD BRIDGE RATING STATEWIDE

- ✓ Bridge Load Rating
- ✓ Rope Access Techniques
- ✓ Bridge (NBIS), Element Level & Fracture Critical Inspections



The Mississippi Office of State Aid Road Construction implemented a bridge inspection program on bridges that have been identified by county engineers as complex bridges in 2010.

Stantec is responsible for performing bridge inspections and determining bridge load ratings for complex bridges located in 11 different

counties in Mississippi. An arm's length inspection is required for each bridge component which requires us to use an under bridge access platform truck on some bridges and introduce truss climbing on others. Structure types range from concrete and steel to timber and masonry. Currently in our inventory are two steel truss bridges which require truss climbers to perform a detailed inspection. All Stantec team leaders are NBI certified.

During field operations, we are responsible for coordinating with local emergency responders and county engineers when traffic is impacted. When a lane or bridge closure is required to perform the inspection, we are responsible for providing the necessary equipment, supplies, and manpower to operate the closure. All closures are in accordance with current MUTCD requirements.

Bridge load ratings are performed in accordance with AASHTO Load Factor Rating (LFR) or Allowable Stress Design (ASD) requirements. Each structure's inspection and load rating results are documented using InspecTech for that particular year. Stantec has been awarded this project on a two-year term contract since 2011. Stantec's inventory on the most recent contract exceeded 151 different bridges.

Firm Members Involved: B. Johnson, J. Krebs, K. Malpani, A. Botros, M. Ye, M. Brodnax, J. Tisdale, S. Torry, R. Nataluk, T. Perkins



Section

18

Delivering a better world

18. Approach and Methodology

The AECOM team brings significant Bridge Load Rating IDIQ experience to LADOTD from our current LADOTD and other nationwide IDIQ contracts and has developed an approach for this LADOTD's Bridge Load Rating IDIQ specifically tailored to match the bridge load rating department goals and vision statement which includes:

- On/Off System bridges are rated in accordance with the AASHTO 23 Metrics
- Load rating and load postings comply with the NBIS Oversight Program Metrics for bridge inspections, and
- Overweight vehicle permit load requests are evaluated quickly and accurately.

Additionally, our pre-marketing efforts with the LADOTD Load Rating Group, preliminary load rating investigations, and our active LADOTD Load Rating IDIQ Contract have strengthened our understanding of some of the current DOTD concerns including: inadequate rating report documentation; non-compliant DOTD load rating protocols, sensitivity/ approach to mitigating load posting conditions, and challenges related to load rating structures without plans.

Our Project Manager, **Landon Whitton**, and our Baton Rouge staff are supported by AECOM's national bridge load rating staff, consisting of over 150 bridge staff throughout the country. This team has proven, relevant experience delivering Load Rating IDIQ Contracts for our state and local agency partners throughout the US (refer to Figure 1). Time and again, this team consistently provides accurate and cost-effective rating reports leveraging our internal IT networking capabilities to facilitate seamless multi-state office coordination.

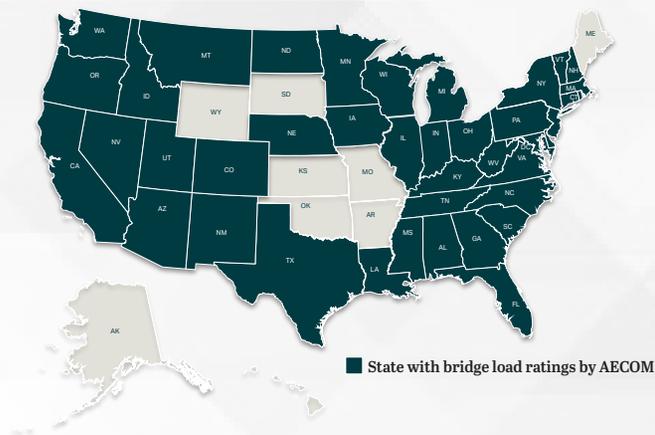


Figure 1: AECOM's National Load Rating Practice

We Know Bridge Load Rating

Our load rating engineers have analyzed structures ranging from simple, single-span bridges and box-culverts to complex truss, suspension, and segmental structures. *This national experience coupled with our current LADOTD Load Rating IDIQ contract experience and that of our subconsultant, Stantec will bring the necessary load rating resources and expertise required of this LADOTD IDIQ Contract.* Table 1 highlights a few examples of our recent bridge load rating contract experience.

Agency	Structures	Contracts/Yrs	Bridge Type							Work Performed						
			P/S Conc Grdr	Conc Slab/T-Bm	Steel Girders	Truss Str	Gusset Plates	Timber	CBC/Culverts	W/O Plans	Inspected	In situ Testing	Load Ratings	Repairs	Training	
DOTD	139	1	•		•									•		
DOTD (Stantec)	652	4	•	•	•	•	•			•	•			•	•	
UDOT	100	2	•		•					•	•			•		•
PennDOT	560	6	•	•	•	•	•		•	•	•			•	•	•
ODOT	136	2	•	•	•					•	•			•		
KYTC	182	5	•	•	•	•	•			•	•	•		•	•	
MDT	950	9	•	•	•	•	•		•	•	•			•	•	
MS (OSARC)	250	5	•	•	•	•	•	•	•	•	•			•	•	
RIDOT	250	10+	•	•	•	•	•			•	•	•		•	•	•
NDDOT	762	2	•	•	•	•	•	•	•	•	•			•	•	•

Table 1: AECOM Team National Load Rating Practice Experience

We have selected staff that have significant experience working as a team on similar relevant projects. Several are part of AECOM's Bridge Load Rating Practice who routinely work together on typical, atypical, and complex bridge load rating projects. Recent examples include:

- **Landon Whitton, PM and Jason Zimpfer, AECOM's Technical Lead** worked collaboratively to develop streamlined load rating solutions to facilitate the inspections, data collections and load ratings for 250 MS bridges and over 750+ bridges for NDDOT over an 18-month period.
- **Jason Zimpfer and Chris McKown, DPM** recently developed an innovative, streamlined approach using AASHTOWare BrR for select substructure load ratings as part of our current DOTD Bridge Load Rating IDIQ Contract .

AECOM ADVANTAGE

Approximately one-third of our bridge load rating engineers are certified bridge inspectors (CBI). Having several CBIs onsite during these field assessments are critical to confirm that the measurements accurately reflect the current structure deterioration.

Task 1: Plan and Document Retrieval and Review

We understand that having the proper documents is critical to performing the work. Upon NTP, our team will schedule a project kick-off to communicate the following:

- Project Team Assignments and DOTD/PM Coordination
- Project Schedule and Confirmation of Scope of Work
- Approach to Project
- Communication Protocols
- Team Meeting Requirements

Our team will complete a thorough investigation of the available project as-built plans, inspection reports, previous rating documents and repair/rehab details that document the current structure condition. **Similar to our current load rating task order, our team will collect project information through sources such as LADOTD's AssetWise Bridge Record Database, FileNet Manager Systems, Inspection File Servers (Section 51 and 25), District and Parish Offices, and from other consultants who may have performed relevant work.** This information will be compiled, organized, and evaluated to identify any missing information and confirm an efficient approach to the load rating efforts.

Task 2: Site Visits

Site visits will be performed, as required, to assure our ratings consider the current structure field conditions. These site visits will follow the DOTD Bridge Inspection Manual (Section 5.16), AASHTO's MBE and the EDSM IV.4.1.2 requirements so the project data is accurately collected and recorded using DOTD forms, tablets, and mobile devices.

Our team understands the importance of developing and implementing a project-specific safety plan and accurately obtaining super and substructure conditions. Our safety plan will address the project-site safety concerns, include a traffic control plan (developed in accordance with the DOTD MUTCD guidelines), and identify any non-redundant steel tension (i.e., fracture critical) members, if required. This plan will also identify all field staff, District personnel, contact information and PPE, and local emergency service locations.

Task 3: Analysis and Load Rating Modeling & Analysis

We will use the bridge load rating methods as outlined in the DOTD Bridge Design and Evaluation Manual (BDEM) Specifications Part II, Vol V, Section 6 – Load Ratings, relevant Bridge Design Technical Memorandum (i.e., 70, 79, 90 and 94) documents, and the AASHTO Manual for Bridge Evaluation.

Ratings will be performed using the AASTHOWare Bridge Rating (BrR) software, or other LADOTD-approved software (as appropriate), coupled with our in-house analysis tools to streamline calculation efforts.

As the load rating is developed, our engineers will confirm that the structural analysis considers bridge deficiencies, material properties, structure age, etc. so that the load rating results will lead to accurate load rating factors that reflect current conditions and uncertainties while not relying on overly conservative assumptions.

Our team will develop a LADOTD Project-Specific Bridge Load Rating Protocol that references the above-mentioned load rating specifications, required data/design information, and the determination of the appropriate bridge load rating software. In addition to the field collected bridge specific data, our team will confirm material properties and bridge details based on our data collection efforts and LADOTD's Specifications and Standard Plans that were applicable during bridge's initial construction as well as any bridge rehabilitation details that occurred afterwards.

Typical vs. Atypical BrR Bridge Load Ratings

Most of the bridge load ratings will be performed using BrR, but other LADOTD-approved BrR software may occasionally be needed, in which cases preapproval will be sought before its use. **Our team has significant experience using BrR for our clients throughout the country numbering in the thousands of analyses on virtually every bridge type that the BrR software is capable of modeling.** We have developed a thorough understanding of assumptions, design methodologies, and applicability for all the different bridge structure types using BrR.

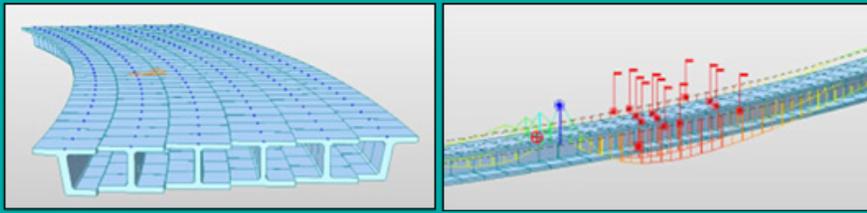
Over the years, AECOM's bridge load rating experts have developed an understanding of the BrR software limitations, as well as published and unpublished software bugs. AECOM has identified a number of these bugs and logged them with the BrR technical support team. We have also identified several "work-around" load rating tips that permit the use of the BrR software for more atypical bridge configurations. A small selection of these BrR Challenges and AECOM Approaches are noted Table 2.

BrR Challenge	AECOM Approach
Curved and splayed plan geometry	Use multiple superstructure definitions, each crafted to accurately represent a selected portion of span(s) within the larger superstructure. By using the user-defined points of interest feature, a single BrR run yields complete structure rating results by forcing BrR to extract ratings from multiple models.
Shape definitions not permitted by BrR	Model member types by overriding capacities in BrR where appropriate, e.g., steel box-shaped cross-girders are modeled by overriding the shear capacity of these multi-web members.
Cantilevered truss analysis with suspended approach girders	Model the approach span girders as shallow, weightless trusses with a hinge/hanger that allows transfer of live load effects from the approach span girders to the end of the cantilevered truss.
Variable deck thickness	Input the smaller deck thickness and manually calculate the additional non-composite dead load for input in select girder member definitions.

Table 2: AECOM's BrR Atypical Software Solutions

AECOM ADVANTAGE

AECOM utilized a hybrid approach to model a concrete multi-cell box girder in BrR using output from a curved FEM model in Midas. Scale factors were used in the BrR model to account for the effects of horizontal curvature from the FEM analysis, and the adjusted BrR model was demonstrated to match dead and live load responses to serve as the official rating model.



Load Rating Bridges Without Plans

We have load rated bridges without plans for many of our DOT and local agency clients and have developed standard protocols either based on the DOT's defined procedures or drawn from AECOM's extensive bridge rating experience. This experience has allowed our design team to effectively develop bridge load rating results for timber structures, concrete box culverts, and concrete slab bridges using ultrasonic thickness gauges, GPR rebar locators, and 3D scanning techniques

COMPLEX BRIDGE RATING EXPERIENCE

Our statewide MDT load rating contracts required the analysis of riveted, haunched steel girders, curved girders, girder-floorbeam-stringer systems, steel trusses with gusset plate analysis, and historic suspension bridge analysis. Because we also perform in-depth inspections on complex structures, our knowledge extends beyond the theoretical and provides us with a holistic knowledge that aids our ability to analyze complex structures and identify strategies for rehabilitation and repair, where needed.



Pugsley Suspension Bridge, Montana

alongside DOT available Standard Plans to develop conservative and reasonable rating results.

Complex Bridge Load Ratings

When the use of BrR software is deemed not feasible or the output results in a posting finding, AECOM will use 3D FEM Software listed on LADOTD's approved software list to develop a refined load rating model. As required, our team can develop influence lines for the critical superstructure and substructure elements for use on LADOTD's COMPSTIL2 in-house software.

Posting Mitigation Strategies

If the initial rating results in a substandard load rating factor, AECOM will first consider creative modeling techniques, less conservative assumptions, and 3D FEM software to more accurately define the structure parameters and deficiencies to determine if the load rating and subsequent posting is justified. AECOM also has in-house capabilities to perform bridge instrumentation and load testing as a supplemental mitigation strategy.

With these initial posting recommendations, AECOM will meet with the DOTD/PM and District Staff, to communicate our rating results, present feasible structure mitigation repair details, and provide a recommendation for repair. Typical repair recommendations include timber deck, stringer, and cap replacements, concrete patching, prestressed strand external splicing and the use of FRP wrapping of prestressed and R/C girders and pier caps to improve capacity.

AECOM ADVANTAGE

Betsy Ross Bridge, Philadelphia, PA: AECOM designed a gusset plate and bottom chord repair detail to strengthen cracked fracture critical bottom chord members identified during our inspection and load rating capacity of this signature truss.



TIMBER BRIDGE EXPERIENCE

AECOM performed bridge inspection, load rating and bridge rehabilitation for the Sparta Rd Bridge over KCS RR near Gibsland, LA. This old timber structure had significant timber deck, pile and pier cap decay warranting a detailed inspection, deterioration assessment, and pre- and post-repair bridge load ratings.



Project Quality Deliverables

AECOM provides accurate and consistent quality load rating reports by first collaborating with LADOTD Bridge Design staff to confirm the calculation format and report templates that set a baseline for all reports and allow for future efficiency. Calculations, model input, and final reports undergo a systematic internal line-by-line QC review, followed by completion of a bridge rating QA/QC checklist to minimize commonly overlooked details. A final internal QA review confirms results are reasonable and the final product meets LADOTD's standards and requirements. QA/QC Lead Henry Fix will confirm each deliverable has been through our quality management procedures prior to submittal to the DOTD.

As noted in the DOTD BDEM Part II, Vol V, Section 6 – Load Ratings and in the RFP, AECOM team will submit an electronic copy of the final rating package for each bridge that includes, but is not limited to:

- PE stamped and signed Bridge Load Rating Summary Sheet
- Project documentation that includes assumptions, material properties, and description of bridge condition
- Critical rating values and rating output of every rated member
- Influence lines for elements not able to be analyzed in BrR
- Load rating calculations and design files
- BrR and/or FEM design models
- Relevant bridge plans

Task 4: Training

Our senior staff, including our QA/QC Lead, Henry Fix, PE, CBI and William Ahola, PE, have previous experience developing load rating training coursework for our clients and AECOM staff. Both contributed and led training discussions for PennDOT's Load Rating Analysis Course.

Developing a training approach for complex bridge load ratings will echo the guidelines noted in the LADOTD BDEM and BDTM 96, Load Rating, Posting and Strengthening Procedures. Complex bridge load ratings will also need a detailed approach to confirm the appropriate use of software.

A sample agenda along with key talking points noted in Table 3.

DOTD Complex Bridge Loading Ratings	
Agenda Item	Key Talking Points
Data Collection	Confirm structure condition, field measurements, and material properties capture existing conditions.
Typical or Atypical Bridge Modeling?	Utilize BrR or FEM Modeling Tools (i.e CSi Bridge, MDX, Leap, etc.) to identify load rating results.
BrR Modeling Tips & Tricks	Address how BrR can be used for atypical conditions including: curved/splayed bridge geometry, varying material girder properties, cantilevered truss analysis with suspended approach girders, etc.
FEM Modeling for Bridge Load Ratings	Choosing the appropriate FEM software will depend on the nature of the structure type and geometry.
2D, 3D, or Grid Modeling?	Discussion of types of finite element analysis, appropriateness for various situations, mesh refinement, and program capabilities for various modeling strategies
Gusset-Plate Analysis Techniques	Plate-Theory 101, Common Misconceptions, Modeling in BrR, Understanding MBE Requirements.
Fracture Critical Elements	Significance of FCM's, Application of system factors, Modeling transverse members in BrR, Truss analysis

Table 3: Draft Complex Load Rating Training Agenda.

Project Schedule

To demonstrate our approach to a sample task order assignment, we have presented a sample bridge load rating task timeline in Table 4.

Project Scoping	1-2 months. Project definition, scope development, work hour/fee negotiation, NTP, and project kick-off
Plan/Document Review	1 month. Confirm rating criteria, collect project plans and relevant information. Review data and discuss prioritization preferences with DOTD/PM.
Site Visit	2 months. Confirm required locations, develop and confirm safety plans, equipment/logistics, perform site visit and take field measurements, prepare condition reports and sketches.
Analysis and Load Rating	6-8 months. Confirm load rating priority and perform BrR and Complex Load Ratings. Develop recommendations for repair for load posted bridges. Summarize/report all findings.
Training – Complex Ratings	1-2 months. Confirm agenda and course objectives with DOTD/PM. Development course work and provide training

Table 4: Sample Load Rating Task Timeline



Section

19

Delivering a better world

19. Workload:

Firm(s) All firms must be represented in this table	Past Performance Evaluation Discipline(s) *	Contract Number and State Project Number	Project Name	Remaining Unpaid Balance**
AECOM Technical Services, Inc.	Road, Bridge	Contract No. 4400004662 H.004367.5	Earhart Expressway to US 61	\$215,483
	Traffic	Contract No. 4400004662 H.004367.5	Earhart Traffic Evaluation	\$27,990
		Contract No. 4000004128 H.004273.5	I-49 Connector (Sub)	
	Planning		Tasks 1, 5, 6, & 12	\$378,525
	Traffic		Task 2	\$34,207
	Road		Task 4	\$14,923
	Bridge		Task 8	\$220,534
	Environmental		Task 10	\$70,4131
	Road, Bridge	Contract No. 4400023921 H.001970.5	LA 561: Boeuf River Bridge near Hebert	\$160,655
	Bridge	Contract No. 4400023921 H.011993	LA 10: Bayou Carron Bridge	\$203,542
	Bridge	Contract No. 4400021593 H.009859	Load Rating (sub to M&M)	\$2,128,352

Firm(s) All firms must be represented in this table	Past Performance Evaluation Discipline(s) *	Contract Number and State Project Number	Project Name	Remaining Unpaid Balance**
Stantec Consulting Services, Inc.	Bridge	S. P. No. 700-99-0430	Retainer Contract for Bridge Preservation [Statewide, Louisiana]	
			T.O. 701-65-1018 Bayou Tech Bridge	\$1,053
	CE&I/OV Road Other/Lighting	Contract No. 4400024629 S. P. No. H.005967.6	Nelson Road Ext. and Bridge [Calcasieu Parish]	
			CE&I and Construction Support	\$483,575
			Striping Pln. Changes	\$4,610
			Roadway & Nav. Lighting	\$44,598
	Planning Traffic ITS Road Bridge ROW Survey Other/PR; Ltg; Av.	Contract No. 440004128 S. P. No. H.004273.5	Lafayette Regional Airport to I-10/I-49/US 167 Interchange [Lafayette Parish]	
			Prog. Mgmt.; Context Sensitive Design Process; Impl. Strategies	\$1,117,329
			Traffic Engineering	\$95,570
			ITS	\$16,585
			Geometric Design/Analysis	\$42,808
			Structure & Bridge	\$418,193
			ROW Acquisition	\$73,509
			Survey	\$22,731
			Public Relations/Comm.; Lighting; Aviation	\$80,419
			Other/Lighting	Contract No. 4400011353 S. P. No. H.014302.6
	H.014302.6 US 165 Roadway Lighting [Ouachita Parish]	\$19,301		
	Road CE&I/OV Bridge Other/Lighting	S. P. No. H.011670	Loyola Dr./I-10 Interchange to New Airport Terminal Design Build (Sub to Gilchrist Co., LLC) [Jefferson Parish]	
			Roadway	\$0
			CE&I/OV	\$0
Bridge			\$0	
Other/Lighting	Aesthetic Lighting	\$0		

Stantec Consulting Services, Inc.	Traffic	Contract No. 4400020058	IDIQ Contract for Intelligent Transportation Systems (ITS) Design and Implementation Services [Statewide, LA]	
			H.013710.6 I-10: US-61 to Laplace ITS Deployment [Ascension, St. James & St. John Parishes]	\$8,315
			H.002424.5 LA 70: Sunshine Bridge - LA 22 [St. James & Ascension Parishes]	\$427
			H.015136 Statewide ITS Architecture Update [Statewide]	\$34,351
			H.013261.6 I-110 ITS Deployment [EBR Parish]	\$23,537
			H.011152.6 I-12: US 190 to LA 59 [St. Tammany Parish]	\$35,513
			H.013866.6 I-12: LA 21 to US 190 [St. Tammany Parish]	\$29,610
			H.003047.6 I-10: Pecue Lane/I-10 Interchange Phase III [EBR Parish]	\$32,541
			H.002424.6 LA 70: Sunshine Bridge - LA 22 [St. James & Ascension Parishes]	\$24,198
			H.015137.1 Bonnet Carre ITS Upgrades [St. John the Baptist, St. Charles & Jefferson Parishes]	\$120,244
			T.O. 16 I-10 WBR Queue Warning System [Iberville & WBR Parishes]	\$215,835
			T.O. 17 New Orleans Regional Arch Updates [Orleans, St. Tammany & Tangipahoa Parishes]	\$89,244
			T.O. 18 Shreveport Phase 2b ITS SEA Updates [Caddo Parish]	\$85,645
T.O. 19 Monroe Phase 3 SEA [Ouachita Parish]	\$101,775			

Stantec Consulting Services, Inc.	Other (Lighting)	Contract No. 4400020064	IDIQ Contract for Electrical Services [Statewide, LA]	
			H.014286.5 I-10: LA 26 (Jennings) Interchange Lighting [Jefferson Davis Parish]	\$297
			H.014272.5 I-10: LA 97 (Jennings) Interchange Lighting [Jefferson Davis Parish]	\$19,263
			H.014287.5 I-10: LA 99 (Welsh) Interchange Lighting [Jefferson Davis Parish]	\$54,095
			H.014286.6 I-10: LA 26 (Jennings) Intchg Lighting [Jefferson Davis Parish]	\$140,423
		Contract No. 4400024461	LA 385: Ryan Street Intersection Improvements [Calcasieu Parish]	
	Traffic	S. P. No. H.012685.5	Traffic Study; Signal Design	\$136,229
	Road		Roadway Design	\$224,828
		Contract No. 4400023972	IDIQ Contract for Cultural Resources	
	Environmental		H.014197.5 Phase I Cultural Resources Survey [Tensas Parish]	\$0
		Contract No. 1	State of LA, DOTD versus 2845 Loyola Blvd., LLC ET AL [Jefferson Parish]	
	Right-of-Way	S. P. No. H.011670	Right-of-Way Expert Witness	\$6,050
		Contract No 44-17922	IDIQ Contract for Intelligent Transportation Systems (ITS) System Design, Integration and System Verification Services [Statewide, LA]	
Other/C&AV		H.012845.1 Connected & Autonomous Vehicles - Team Support [Statewide]	\$337,878	
	Contract No. 44-04761	I-12 to Bush Corridor, LA 3241: I-12 to LA 36 (Sub to Evans-Graves Engineering, Inc.) [St. Tammany Parish]		
Other/Lighting		H.004957.5 I-12/LA 434 Lighting Project	\$217,517	

(Add rows as needed)

DO NOT SUM

* The only past performance evaluation disciplines to be used are: Road, Bridge, Traffic, CE&I/OV, Geotech, Survey, Environmental, Data Collection, Planning, Right-of-Way, CPM, ITS, Appraiser and Other (please specify). If a firm has more than one past performance evaluation discipline for any single project, the firm can use multiple rows to express the remaining unpaid balance per evaluation discipline.

** Round to the nearest dollar. Do not round to the nearest thousands. If there are no active contracts with a remaining unpaid balance, place N/A in the Remaining Unpaid Balance column. NOTE: ALL FIRMS MUST BE REPRESENTED IN THIS TABLE. LEAVING THE "REMAINING UNPAID BALANCE" COLUMN BLANK IS NOT ACCEPTABLE.



LONG-ALLEN BRIDGE
BUILT UNDER THE
ADMINISTRATIONS OF
GOV. HUEY P. LONG
GOV. B. K. ALLEN

Sections

20-23

Delivering a better world

20. Certifications/Licenses:

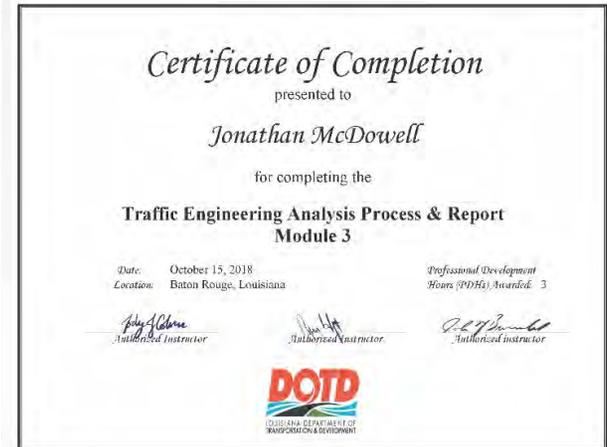
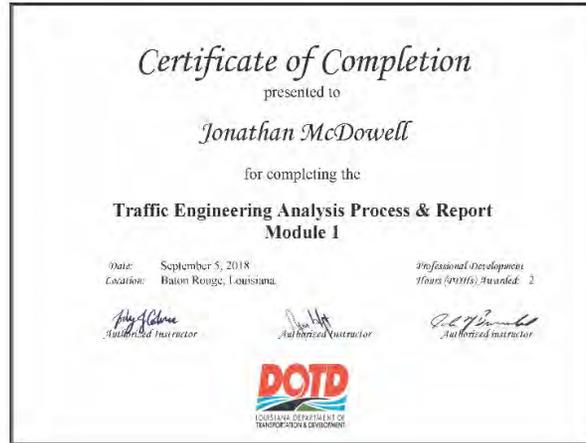
If the advertisement requires submission of licenses and/or certificates, include them here. Otherwise, leave this section blank.

AECOM ATSSA



Traffic Engineering Modules

AECOM, Jonathan McDowell



AECOM, Greg Trahan



Additional certifications of key staff - others available upon request





NBI



National Highway Institute
Certificate of Training



John P. Krebs

has Successfully Completed

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Office of State Aid Road Construction

Date: August 30-September 01, 2022 Hours of Instruction: 18
Location: Ridgeland, MS

John A. Williams
Instructor

Mari J. Willard
Local Coordinator
Thomas Harman
Thomas Harman, Director
National Highway Institute

NHI



National Highway Institute
Certificate of Training



Brian Johnson

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Louisiana Department of Transportation & Development

Date: April 20-22, 2021 Hours of Instruction: 18
Location: Virtual Delivery, LA

John A. Williams
Instructor
Michael Davis
Instructor

Allison H. Landry
Local Coordinator
Thomas Harman
Thomas Harman, Director
National Highway Institute



National Highway Institute
Certificate of Training



KUNAL MALPANI

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

LA DOTD/LTRC

Date: January 7-9, 2019 Hours of Instruction: 18
Location: Baton Rouge, LA

John A. Williams
Instructor

Allison H. Landry
Local Coordinator
Michael Davis
Michael Davis, Director
National Highway Institute



National Highway Institute
Certificate of Training



JACOB TISDALE

has Successfully Completed

FHWA-NHI-130055 Safety Inspection of In-Service Bridges

hosted by

LA DOTD/LTRC

Date: November 29 - December 10, 2021 Hours of Instruction: 67
Location: Baton Rouge, LA

William R. Rubin PE
Instructor
Richard A. E.
Instructor

Allison H. Landry
Local Coordinator
Thomas Harman
Thomas Harman, Director
National Highway Institute




National Highway Institute
Certificate of Training

Michael Brodnax, Jr.
has Successfully Completed

FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges
hosted by
Office State Aid Road Construction

Date: June 07-10, 2022 Hours of Instruction: 25
 Location: Ridgeland, MS

Instructor: *Tenille*
 Local Coordinator: *Mari Allenton*
 Instructor: *Thomas Harman*
 Thomas Harman, Director
 National Highway Institute




National Highway Institute
Certificate of Training

Stephen Torry, Jr.
has Successfully Completed

FHWA-NHI-130055 Safety Inspection of In-Service Bridges
hosted by
Office of State Aid Road Construction

Date: March 21-April 01, 2022 Hours of Instruction: 67
 Location: Ridgeland, MS

Instructor: *Will R. Shannon PE*
 Local Coordinator: *Mari Allenton*
 Instructor: *James a. Dandy Jr*
 Thomas Harman, Director
 National Highway Institute




National Highway Institute
Certificate of Training

Jacob Tisdale
has Successfully Completed

FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges
hosted by
Office of State Aid Road Construction

Date: February 07-10, 2023 Hours of Instruction: 25
 Location: Ridgeland, MS

Instructor: *Tenille*
 Local Coordinator: *Mari Allenton*
 Instructor: *J. P. Lee*
 Thomas Harman, Director
 National Highway Institute




National Highway Institute
Certificate of Training

Michael Brodnax, Jr.
has Successfully Completed

FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges
hosted by
Office State Aid Road Construction

Date: June 07-10, 2022 Hours of Instruction: 25
 Location: Ridgeland, MS

Instructor: *Tenille*
 Local Coordinator: *Mari Allenton*
 Instructor: *Thomas Harman*
 Thomas Harman, Director
 National Highway Institute




National Highway Institute
Certificate of Training

Stephen Torry, Jr.
has Successfully Completed

FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges
hosted by
Office of State Aid Road Construction

Date: February 07-10, 2023 Hours of Instruction: 25
 Location: Ridgeland, MS

Instructor: *Tenille*
 Local Coordinator: *Mari Allenton*
 Instructor: *J. P. Lee*
 Thomas Harman, Director
 National Highway Institute




National Highway Institute
Certificate of Training

Michael Brodnax
has participated in

FHWA-NHI-135047 Stream Stability and Scour at Highway Bridges for Bridge Inspectors
hosted by
Office of State Aid Road Construction

Date: March 21, 2023 Hours of Instruction: 6
 Location: Ridgeland, MS

Instructor: *Janet Kell*
 Local Coordinator: *Mari Allenton*
 Instructor: *Thomas Harman*
 Thomas Harman, Director
 National Highway Institute

21. QA/QC Plan:

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

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22. Sub-consultant information:

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

Firm Name (Name must match as registered with Louisiana's Secretary of State)	Address	Point of Contact and Email Address	Phone Number
Stantec Consulting Services Inc.	1200 Brickyard Lane, Suite 400 Baton Rouge, LA 70802	Brian Johnson, PE Brian.johnson2@stantec.com	225.215.5130

23. Location:

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

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About AECOM

AECOM is the world's trusted infrastructure consulting firm, delivering professional services throughout the project lifecycle – from planning, design and engineering to program and construction management. On projects spanning transportation, buildings, water, new energy and the environment, our public- and private-sector clients trust us to solve their most complex challenges. Our teams are driven by a common purpose to deliver a better world through our unrivaled technical expertise and innovation, a culture of equity, diversity and inclusion, and a commitment to environmental, social and governance priorities. AECOM is a Fortune 500 firm and its Professional Services business had revenue of \$13.1 billion in fiscal year 2022. See how we are delivering sustainable legacies for generations to come at aecom.com and [@AECOM](https://twitter.com/AECOM).