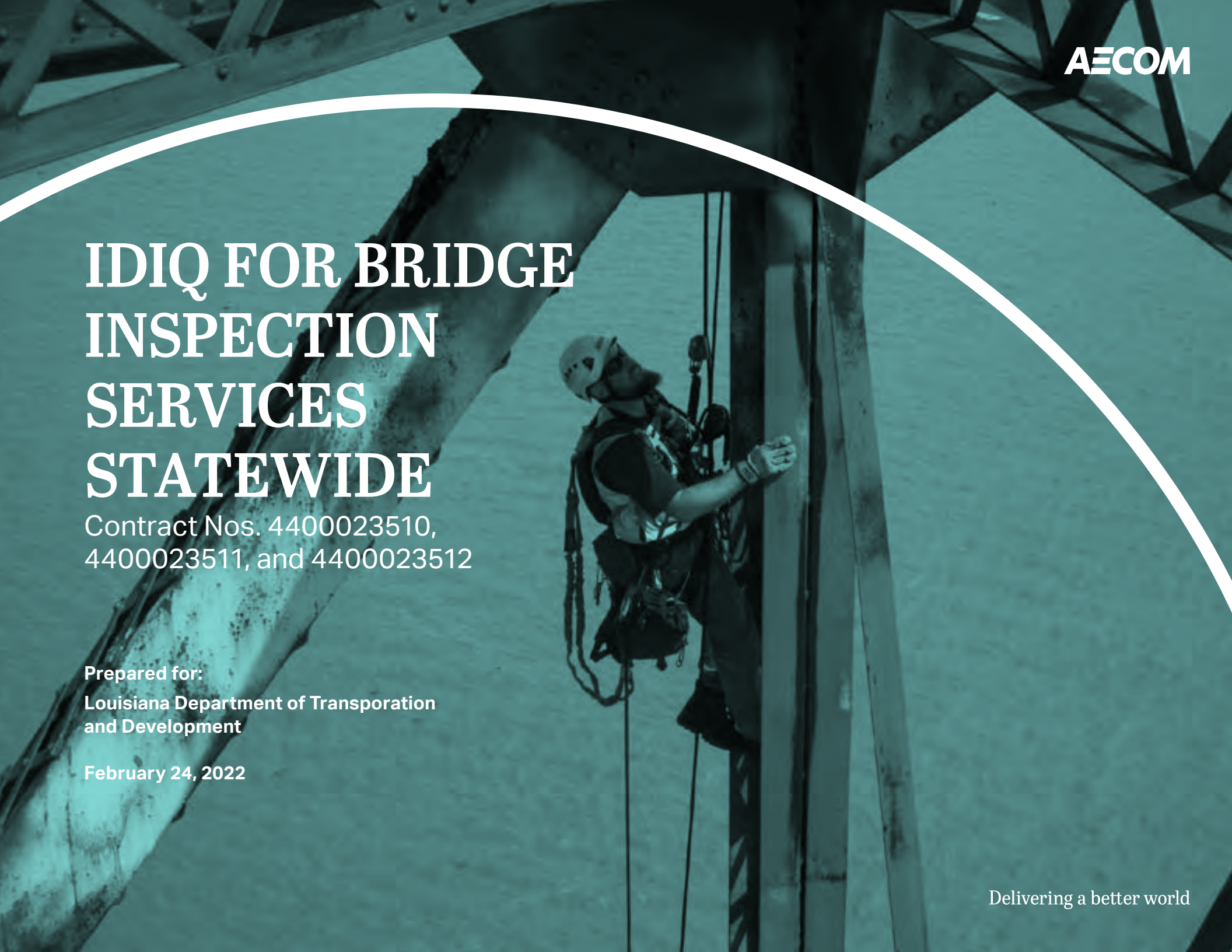


AECOM

IDIQ FOR BRIDGE INSPECTION SERVICES STATEWIDE

Contract Nos. 4400023510, 4400023511, and 4400023512

Prepared for:

Louisiana Department of Transporation and Development

February 24, 2022

Delivering a better world

AECOM

AECOM
8555 United Plaza Blvd.,
Suite 300
Baton Rouge, LA 70809
www.aecom.com

February 24, 2022

Louisiana Department of Transportation and Development (LADOTD)
Attn: Ms. Darhlene Major, Consultant Contract Services Administrator
1201 Capitol Access Road, Room 405-E
Baton Rouge, LA 70802

Re: **Contract Nos. 4400023510, 4400023511, and 4400023512; IDIQ for Bridge Inspection Services Statewide**

Dear Ms. Major and Members of the Project Evaluation Team:

The AECOM Team is ready to meet the challenges associated with providing quality NBIS bridge inspections services for the DOTD on their complex bridge inventory. Based on our successful execution of these services on a previous version of this IDIQ contract, we fully understand the significance and requirements associated with this program and have committed our best talent to ensure the DOTD is compliant with the FHWA 23 metrics. We pledge to apply the same energy, enthusiasm, focus on details, and attention to the schedule and budget as previously demonstrated.

THE AECOM TEAM: Following the success of our previously completed in-depth bridge inspection IDIQ retainer project with the DOTD, we are excited to continue to provide the same outstanding team to continue to serve and partner with the DOTD on this important project and their critical bridge assets. Each of these firms have been specifically selected for their unique experience and expertise with performing their services for not only the DOTD, but also throughout the United States performing in-depth bridge inspection services which allows our team to bring important best practices associated with the DOTD complex bridge inventory.

- **Modjeski and Masters, Inc.:** Bridge inspection, coating inspection, movable bridge inspection, nondestructive testing, load rating analysis, and rehabilitation design
- **Huval and Associates, Inc.:** Bridge inspection, load rating analysis and rehabilitation design
- **CONSOR Engineers, LLC:** Underwater inspection and imaging
- **KPFF, Inc.:** Cable stay bridge nondestructive testing
- **T. Baker Smith, LLC:** Surveying

In addition, we will continue to be supported by CEC, Inc., to assist with executing the on-site traffic control lane closures and safety boat services when needed.

STAFF EXPERIENCE: Our understanding of the unique demands associated with this IDIQ for Statewide Bridge Inspection Services resulted in our assignment of a core group of staff members beyond the required MPRs requested and provided in Section 15 who have the necessary certifications and experience to deliver the project scope of work. **The AECOM team has the properly trained and experienced bridge engineers and inspectors needed to deliver quality bridge inspections and detailed reports and recommendations.** Our Organizational Chart in Section 14 identifies our proposed staff of FHWA NBIS certified bridge inspectors and divers, protective coating inspectors, certified non-destructive evaluation professionals, and traffic control supervisors and technicians. Copies of their certifications are provided in Section 20.

The strength of the AECOM Team is our bridge inspection team leaders. All team leaders exceed the required credentials for NBIS and the DOTD, and they have current and relevant experience in routine, in-depth element level and fracture critical bridge inspections that are a necessity for this project. Additional credentials for each include a commitment to the NBIS training program including refresher courses and the FHWA's Fracture Critical Member Inspection Training Course. AECOM's bridge inspection program is comprised of **more than 100 certified bridge inspectors**. In addition, our organizational chart identifies bridge inspection professionals to meet all potential demands associated with the in-depth inspection of the DOTD's complex bridge inventory including nondestructive testing, mechanical and electrical inspection of movable bridges, SPRAT certified rope access inspections, load rating analysis and emergency rehabilitation/repair design services. To meet the DOTD's goals for this project, AECOM has committed a strong team of experienced professionals that bring a wealth of knowledge and expertise in the management and execution of complex bridge inspection projects.

THE AECOM ADVANTAGE: AECOM brings a history of successful project delivery to DOTD, along with proven sub-consultant partners. We are committed to providing unparalleled performance on this contract as we have done in the past. In reviewing our proposal, please consider these reasons why AECOM is ideally suited for this work:

UNIQUE FAMILIARITY: Having recently completed the retainer contract for in-depth bridge inspection services for the DOTD, the AECOM team is familiar with the necessary inspection, inventory and element level data required to be updated and collected during the inspection, and brings a thorough understanding of the DOTD's inspection policies and requirements. We have assembled the same team of firms and key staff that has delivered for the DOTD on past assignments. With NO LEARNING CURVE, we are positioned for efficient project delivery.

QUALIFIED STAFF: Our qualified staff of knowledgeable professionals specializes in long-span, complex bridge inspection projects. In addition to our successful completion of in-depth inspections of the DOTD's complex bridges, we have performed similar projects for clients throughout the United States. We will apply our wealth of knowledge and experience to LADOTD's asset management needs.

UNPARALLELED QUALITY AND SAFETY MANAGEMENT: AECOM's proven quality and safety management programs provide safe, quality bridge inspection services on time and within budget. Our ISO 9001-2015 certified Quality Management System exceeds the requirements of the DOTD Bridge QC/QA policy.

As the Project Manager, I will be the point of contact for this contract. I currently serve as AECOM's North America Practice Leader for Bridge Inspections and I am a Certified Bridge Inspector with more than 29 years of bridge experience. I am a licensed professional engineer, I have extensive experience that is primarily focused on performing and managing bridge inspection projects, including our previous DOTD IDIQ for statewide bridge inspection services where we successfully delivered in-depth inspection of ten complex bridges, deck condition evaluations of two bridges, and bridge rehabilitation of one bridge. I pledge to continue to partner with DOTD, and specifically with DOTD project manager Stephanie Doolittle.

AECOM is committed to serve the LADOTD on this project and is confident our expertise will successfully meet the contract challenges. Our team is very pleased to deliver quality bridge inspection reporting once again, while exceeding the requirements of DOTD and NBIS for DOTD's complex bridges. If you have any questions or require additional information, please do not hesitate to contact me by telephone at 267.718.1023 or by email at brett.canimore@aecom.com.

Yours sincerely,
AECOM Technical Services, Inc.

Brett Canimore, PE, Vice President
Practice Leader/Bridge Inspections

Michael Patorno, PE, Vice President
Business Unit Leader

2016 In-Depth Inspection of the Miller's Bluff Bridge

The AECOM Team performing a hands-on inspection of the fracture critical truss bottom chord member and floor system.

SECTIONS

1-15

(Revised June 1, 2021)

DOTD FORM: 24-102

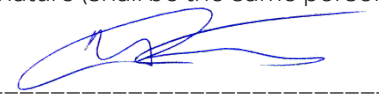
PROPOSAL TO PROVIDE CONSULTANT SERVICES

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 title as shown in the advertisement	IDIQ For Bridge Inspection Services Statewide
2. Contract number(s) as shown in the advertisement	Contract Nos. 4400023510, 4400023511, and 4400023512
3. State Project Number(s), if shown in the advertisement	N/A
4. Prime consultant name (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	Brett Canimore, PE, Vice President 625 West Ridge Pike, Suite E-100 Conshohocken, PA 19428 610.234.0390, Brett.Canimore@aecom.com
9. Name, title, phone number, and email address of the official with signing authority for this proposal	Michael D. Patorno, PE, Vice President, Business Unit Leader 1555 Poydras Street, Suite 2700 New Orleans, LA 70112 504.218.0865, Mike.Patorno@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 (shall be the same person as #9):  _____ Date: February 24, 2022
11. If a Disadvantaged Business Enterprise (DBE) goal has been set for this advertisement, indicate which firm(s) will be used to meet the DBE goal and each firm(s)' percentage.	Firm(s): Firm(s)' %: N/A - No DBE Goal

12. Past Performance Evaluation Discipline Table

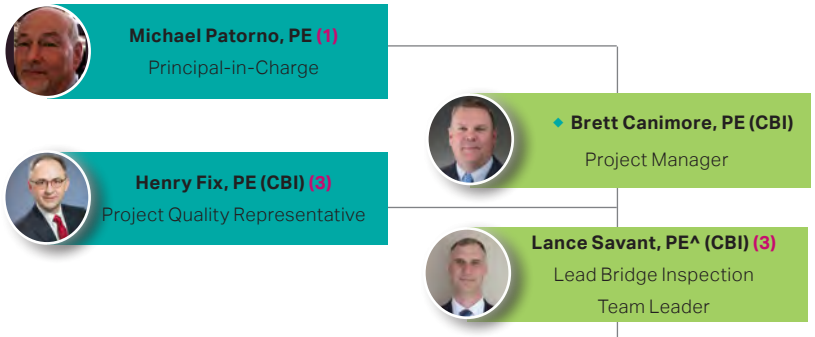
Evaluation Discipline(s)	% of Overall Contract	AECOM	Modjeski and Masters, Inc.	Huval and Associates, Inc.	CONSOR Engineers, LLC	KPFF, Inc.	T. Baker Smith, LLC	Each Discipline must total to 100%
Bridge	85%	60%	20%	10%	7%	3%	0%	100%
Traffic	5%	90%	0%	10%	0%	0%	0%	100%
Geotech	3%	100%	0%	0%	0%	0%	0%	100%
Survey	2%	0%	0%	0%	0%	0%	100%	100%
Other	5%	70%	20%	10%	0%	0%	0%	100%
Identify the percentage of work for the **overall contract** to be performed by the prime consultant and each subconsultant.								
Percent of Contract	100%	62%	18%	9.5%	5.9%	2.6%	2%	100%

13. Firm Size

Firm Name	DOTD Job Classification	Number of Personnel Committed to this Contract	Total number of personnel available in this DOTD Job Classification (if needed)
AECOM Technical Services, Inc.	Principal	2	4
	Supervisor - Eng	5	12
	Supervisor - Other	3	10
	Engineer	8	21
	Engineer - Other	5	25
	Engineer Intern	9	30
	Inspector - Bridge	3	20
	Senior Technician	4	8
	Administrative	2	5
CONSOR Engineers, LLC	Engineer - Other	6	14
	Inspector - Bridge	15	60
Huval and Associates, Inc.	Principal	1	3
	Engineer	4	21
	Engineer Intern	1	4
	CADD Drafter	1	3
	CADD-Operator	1	3
	Inspector - Bridge	4	6
KPFF, Inc.	Inspector - Bridge	2	6
	Engineer - Other	2	6
	Principal	1	2
	Inspector	2	4
Modjeski and Masters, Inc.	Principal	3	7
	Supervisor - Eng	7	15
	Supervisor - Other	0	11
	Engineer	1	6

Firm Name	DOTD Job Classification	Number of Personnel Committed to this Contract	Total number of personnel available in this DOTD Job Classification (if needed)
Modjeski and Masters, Inc.	Engineer - Other	0	21
	Engineer Intern	0	19
	Professional	0	1
	Senior Technician	2	3
	Technician	0	2
	CADD Technician	0	9
T. Baker Smith, LLC	Supervisor Eng	1	3
	Supervisor - Other	0	20
	Engineer	0	18
	Surveyor	0	12
	Senior Technician	1	13
	Party Chief	1	20

14. Organizational Chart



Legend:

M&M = Modjeski and Masters, Inc.
Huval = Huval & Associates, Inc.
KPFF = KPFF, Inc.
CONSOR = CONSOR Engineers, LLC
TBS = T. Baker Smith, LLC

(#) = denotes MPR No. that the individual fulfills

◆ Not a Licensed PE in Louisiana
^ Society of Professional Rope Access Technician (SPRAT)
(CBI): FHWA/NBIS Trained & Certified Bridge Inspector
ASNT: American Society of Non-Destructive Testing
NACE: National Association of Corrosion Engineers
SSPC: Society of Protective Coatings
ADCI: Association of Diving Contractors International
TCS: Traffic Control Supervisor
TCT: Traffic Control Technician

INSPECTION STAFF

Bridge Inspection Team Leaders
Jason Mathers, PE^ (CBI)
April Yorkonis, EI (CBI)
Dave Raffensperger (CBI)
Landon Whitton, PE^ (CBI)
Anthony Schoenecker, PE ^ (CBI), TCS/Flagger (M&M)
Matt Miller, PE (CBI), TCS/Flagger (M&M)
James Costigan, PE (CBI), TCS/Flagger (M&M)
Colby Guidry, PE (CBI) (Huval)
Patrick Broussard (CBI) (Huval)
Jason Zimpfer, PE (CBI)
◆ Travis Baker, PE^ (CBI)
◆ Craig Klusman, PE (CBI)
◆ Ian McElhone, PE ^ (CBI)
◆ Joe Whelan, PE ^ (CBI)
Joshua Moore, PE ^ (CBI) (M&M)

Bridge Inspection Assistant Team Leaders
Greg Bennett (CBI)
Kevin Curley, EI^ (CBI)
Alex Schaal, EI ^ (CBI)
Brian McCabe, EI ^ (CBI)
Tim Sensebe, EI (CBI), TCS/Flagger (M&M)
Andrew Comeaux, EI (CBI), TCS/Flagger (M&M)
Edward Smith (CBI) (Huval)
Mike Zavorski (CBI)
Brandon Kearns, EI (CBI)
Sean Quick, EI (CBI)
Riley LaRiviere, EI (CBI)

Protective Coating Inspection
Scott Gordon, SSPC, NACE Level III (CBI) (M&M)
Bryan Swartz, SSPC, NACE Level III (CBI) (M&M)

Movable Bridge Inspection
Brad Kopping, PE / Mechanical
Geoffrey Forest, PE / Mechanical (M&M)
◆ Al Trotta, PE / Electrical
Jon Gerhart, PE / Electrical (M&M)

Cable Stay Bridge Expertise
Ken Butler, PE
◆ Scott Wyatt, PE, SE (CBI) (KPFF)
◆ Chris Ligozio, PE, SE (CBI) (KPFF)

Bridge Load Rating & Analysis
Jason Zimpfer, PE (CBI)
Jason Mathers, PE (CBI)
Stacey Carr ,PE (M&M)
Jason Miles, PE (M&M)
Landon Whitton, PE^ (CBI)
Alex Schaal, EI ^ (CBI)
Brian McCabe, EI ^ (CBI)

SPECIALTY SERVICES

Underwater

Diver Team Leaders
Heath Pope, PE, ADCI Dive Supervisor, (CBI) (CONSOR)
◆ Dustin Noel, PE, ADCI Diver, (CBI) (CONSOR)
◆ Sebastien Templeton, PE, ADCI Diver, (CBI) (CONSOR)

Diver Assistant Team Leaders
Eric Bolek, ADCI Diver/Tender (CONSOR)
Grayson McDonald, EI, ADCI Diver/Tender (CONSOR)

Underwater Acoustic Imaging Lead
Michael Dukes, PE, ADCI Dive Supervisor (CONSOR) **(4)**

Bridge Rehabilitation Design
Jason Zimpfer, PE (CBI)
Daniel Boyd, PE
Zolan Prucz, PhD, PE (M&M)
Yu "Buck" Ouyang, PE (M&M)
Matt Herbert, PE (Huval)
Jason Mathers, PE ^ (CBI)
Chris McKnown, PE
Justin Peltier, PE (Huval)

Roadway / Traffic
Jonathan McDowell, PE, TCS/TCT/Flagger **(2)**
Daniel Helms, PE, PTOE, TCS/TCT

Non-Destructive Evaluation
Mark Powlison, ASNT Level II (KPFF)
Scott Gordon, ASNT Level II, (CBI) (M&M)

Land Surveyor
Rene Hebert, PLS, PMP (TBS) **(5)**
Jean Reulet, PLS (TBS)

Instrumentation and Testing
◆ Ed Zhou, PhD, PE

Unmanned Aerial Systems (UAS)
◆ Kevin Ahern, PE (CBI), FAA Certified UAS Pilot
John Delp, FAA Certified UAS Pilot

Geotechnical
John Volk, PE

15. Minimum Personnel Requirements

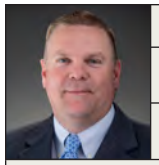
MPR No. Do not insert wording from ad	Personnel being used to meet the MPR (Individual(s) may not satisfy more than one MPR unless specifically allowed by Attachment B of the advertisement)	Firm employed by	Type of license / certification & number	State of license	License / certification expiration date
1.	Michael D. Patorno, PE	AECOM	Civil Engineer	LA	PE.0024197 09/30/2023
2.	Jonathan McDowell, PE	AECOM	Civil Engineer	LA	PE.0030508 03/31/2023
3.	Henry Fix, PE	AECOM	Civil Engineer	LA	PE.0038224 03/31/2024
	Lance Savant, PE	AECOM	Civil Engineer	LA	PE.0042950 03/31/2023
4.	Michael Dukes, PE	CONSOR Engineers, LLC	Civil Engineer	LA	PE.0040986 03/31/2023
5.	Rene Herbert, PLS, PMP	T. Baker Smith, LLC	Survey	LA	PLS.0005070 03/31/2022

2017 In-Depth Inspection of the Dularge Bridge

AECOM teaming partner, M&M, using a snooper to perform a hands-on inspection of the fracture critical bascule girders and floor system.

SECTION

16

	Firm	**AECOM Technical Services, Inc.**		
	Name	Brett Canimore, PE	Years of Relevant Experience with this Employer	22
	Title	Project Manager	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			PE053513E / PA / 9/30/2019 Additional active licenses; DE, GA, MD; MI, MT, NJ NY, PA, FL, AR, PR
Year Registered	1999	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			Brett has more than 29 years of experience in bridge inspection, rehabilitation and design and has been a Certified Bridge Safety Inspector since 1995. He has served as project manager, project engineer and lead structural engineer on a variety of projects. Brett has been involved in more than 10,000 routine and in-depth NBIS and underwater inspections. His activities in bridge inspections encompass field investigations, analysis and ratings, streambed evaluations, technical reports, studies and recommendations. Training: Bridge Safety Inspector Training Course; 1995, PA; Bridge Safety Inspection Training Refresher Courses; 1997 through 2020, 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 time specified in the applicable MPR(s).
12/12 – 06/18	**Contract No. 44-2687 State Project No. H.009730.5 Louisiana Department of Transportation and Development (LADOTD), 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) and the Greater New Orleans Bridge (2016). Assigned work also included the design to reset the rocker nest truss bearings of the US 190 WB Structure over the Atchafalaya River.
03/20-03/22	**Delaware River Port Authority (DRPA), Betsy Ross Bridge over Delaware River 2020 Biennial Inspection, PA and NJ.** Project Manager for the biennial inspection that included a close visual "hands-on" inspection of all fracture critical and fatigue sensitive details including the main truss bridge, the approach truss spans, the approach girder spans, and numerous approach structures. This project included an underwater inspection of the channel piers and inspection and mapping via an unmanned aerial vehicle (UAV). The results of the inspection were presented in a structural inspection report. Bridge data was updated for NJDOT and PennDOT reporting. An executive briefing was also prepared and delivered to DRPA.
03/18-03/19	**Delaware River Port Authority (DRPA), Commodore Barry Bridge Bridge over Delaware River 2018 Biennial Inspection, PA and NJ.** Project Manager for the biennial inspection that included a close visual "hands-on" inspection of all fracture critical and fatigue sensitive details including the three-span, cantilevered through truss main span, deck truss spans and steel stringer spans. This project included ultrasonic testing of the pins and electro-slag welds on the bridge. Inspectors also visually inspected a select number of vibration dampers. The results of the inspection were presented in a structural inspection report. Bridge data was updated for NJDOT and PennDOT reporting. An executive briefing was also prepared and delivered to DRPA

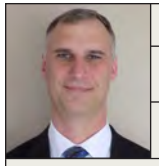
03/16-03/17	**Delaware River Port Authority (DRPA), Betsy Ross Bridge over Delaware River 2016 Biennial Inspection, PA and NJ.** Project Manager for the biennial inspection that included the main truss bridge, the approach truss spans, the approach girder spans, numerous overpass structures, and two culverts. A final report was prepared that included a description of the findings, recommendations for repairs, SI&A, Pontis and BMS updates.
03/14-03/15	**Delaware River Port Authority (DRPA), Commodore Barry Bridge Bridge over Delaware River 2014 Biennial Inspection, PA and NJ.** Project Director for the biennial inspection that included a close visual "hands-on" inspection of all fracture critical and fatigue sensitive details including the three-span, cantilevered through truss main span, deck truss spans and steel stringer spans. This project included ultrasonic testing of the pins and electro-slag welds on the bridge. Inspectors also visually inspected a select number of vibration dampers. A final report was prepared that included a description of the findings, recommendations for repairs, SI&A, Pontis and BMS updates.
8/18-7/19	**Mississippi Department of Transportation, Routine/Fracture Critical Biennial Inspection of the US 82 over Mississippi River, Greenville, MS.** Project Quality Representative for the 2018 biennial inspection of the US 82 cable-stay ed bridge spanning the Mississippi River Bridge connecting Mississippi and Arkansas. The bridge is 2.6 miles total in length from abutment to abutment. Responsibilities included performing a field audit of the inspection activities and technical review of the bridge inspection report. Inspection access included aerial boom lifts, under bridge inspection vehicles (UBIV), industrial rope access climbing and via an unmanned aerial vehicle (UAV). The UAV was a DJI Matrice 210 RTK which was utilized to perform a visual inspection of the cable sheathing.
4/12-12/21	**Inventory Inspection of the Charles W. Cullen Bridge at the Indian River Inlet, DelDOT, Rehoboth, DE.** Project Manager for the 2012 Inventory Inspection of the 2,600 ft. long precast, cast-in-place, post-tensioned concrete structure with cable-stayed main span crossing the Indian River Inlet. The bridge consists of a total of eight precast Bulb-T girder approach spans, each 106'-3" in length and a three span concrete cable-stayed structure with a main span of 950 feet and side spans of 400 feet. The inspection efforts included a close-up, hands-on inspection of all members of the structure to document the baseline conditions. The inventory inspection verified the safety of the bridge, in accordance with the NBIS and DelDOT standards. The inspection efforts culminated with the production of a full bridge inspection report including NBIS inspection forms and supporting documents. Responsibilities included the development of bridge specific access and safety plans; field coordination; scheduling of inspection teams, equipment; coordination with the contractor; and management of the budget and report development. Access for the inspection included industrial rope access climbing, aerial boom lifts and via the contractor's work platform.
10/18 - 10/19	**Dominion Energy Questar Pipeline, Historic Cameron Bridge In-Depth Inspection, Cameron, AZ.** Project Manager for the 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 a load rating analysis in accordance with the AASHTO Manual for Bridge Evaluation (MBE). The load rating analysis will consider three (3) 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 was 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.

	Firm	AECOM Technical Services, Inc.		
	Name	Henry Fix, PE	Years of Relevant Experience with this Employer	27
	Title	Project Quality Representative	Years of Relevant Experience with Other Employer(s)	7

Degree(s) / Years / Specialization			BSE / 1987 / Civil Engineering MCE / 1992 / Structural Engineering
Active Registration Number / State / Expiration Date			PE.0038224 / LA / 03/31/2024 Additional active licenses; PA, NJ, AZ, AK, DE, FL, MD, MT and Puerto Rico
Year Registered	1992/2020	Discipline	Civil Engineer
Contract Role(s) / Brief Description of Responsibilities			Henry will be the Project Quality Representative for this contract. He has substantial design experience on a wide range of bridge, bridge inspection, highway, railway and industrial facility projects. An NBIS certified bridge inspector since 1989, he has participated in a broad range of bridge inspection activities as an Inspection Team Leader. Henry has an extensive background in structural modeling and design, utilizing finite element software, including STAAD, GTSTRUDL, and ANSYS. Training: Bridge Safety Inspector Training, NJDOT, 1988; PennDOT BSITC Certification, 1989; Refresher course 2010-2020; OSHA Construction Safety Awareness Training, 2006; Permit-Required Confined Space Training Program, 2006, 2009; Fall Protection Training Program, 2006, 2009. **Henry meets MPR 3.**

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
12/12 - 06/18	**Louisiana Department of Transportation and Development (LADOTD), In-Depth Inspection of Complex Structures, Statewide, LA.** Project Quality Representative and Bridge Inspection Team Leader responsible for the 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 study of the LA 1 Port Alan Canal Bridge and I-10 Atchafalaya Basin Bridge. Responsibilities included development of the project work plan and safety plan, leading the inspection crews and overseeing the consistency of the field inspections and detailed inspection report.
04/20 - 03/22	**Delaware River Port Authority (DRPA), Betsy Ross Bridge over Delaware River 2020 Biennial Inspection, PA and NJ.** Quality Representative, Deputy Project Manager and Bridge Inspection Team Leader responsible for overseeing the biennial inspection that included a close visual "hands-on" inspection of all fracture critical and fatigue sensitive details including the main truss bridge, the approach truss spans, the approach girder spans, and numerous approach structures and development of the detailed inspection report. This project included an underwater inspection of the channel piers and inspection and mapping via an unmanned aerial vehicle (UAV). The results of the inspection were presented in a structural inspection report. Bridge data was updated for NJDOT and PennDOT reporting. An executive briefing was also prepared and delivered to DRPA.

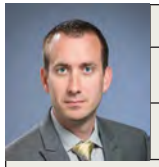
03/18 – 03/19	**Delaware River Port Authority (DRPA), Commodore Barry Bridge over Delaware River 2018 Biennial Inspection, PA and NJ.** Project Quality Representative, Deputy Project Manager and Bridge Inspection Team Leader responsible for overseeing the biennial inspection that included a close visual "hands-on" inspection of all fracture critical and fatigue sensitive details including the three-span, cantilevered through truss main span, deck truss spans and steel stringer spans, and development of the detailed inspection report. This project included ultrasonic testing of the pins and electro-slag welds on the bridge. Inspectors also visually inspected a select number of vibration dampers. The results of the inspection were presented in a structural inspection report. Bridge data was updated for NJDOT and PennDOT reporting. An executive briefing was also prepared and delivered to DRPA.
03/16-03/17	**Delaware River Port Authority (DRPA), Betsy Ross Bridge over Delaware River 2016 Biennial Inspection, PA and NJ.** Project Quality Representative, Deputy Project Manager, and Bridge Inspection Team Leader for the biennial inspection that included 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 a description of the findings, recommendations for repairs, SI&A, Pontis and BMS updates.
03/16 - 03/17	**Delaware River Port Authority (DRPA), Betsy Ross Bridge over Delaware River 2016 Biennial Inspection, PA and NJ.** Project Quality Representative and Bridge Inspection Team Leader responsible for overseeing the biennial inspection of the Betsy Ross Bridge Facility. The inspection included 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 a description of the findings, recommendations for repair, SI&A, PONTIS and BMS updates.
003/14 – 03/15	**Delaware River Port Authority (DRPA), Commodore Barry Bridge over Delaware River 2014 Biennial Inspection, PA and NJ.** Project Manager for the biennial inspection that included a close visual "hands-on" inspection of all fracture critical and fatigue sensitive details including the three-span, cantilevered through truss main span, deck truss spans and steel stringer spans. This project included ultrasonic testing of the pins and electro-slag welds on the bridge. Inspectors also visually inspected a select number of vibration dampers. A final report was prepared that included a description of the findings, recommendations for repairs, SI&A, Pontis and BMS updates.
07/21 - Present	**Delaware River Port Authority, Commodore Barry Bridge over Delaware River Top Chord Connection Evaluation, PA and NJ.** Project Manager for the investigation of cracks and bolt failures in the connection of a truss vertical member to the top chord on the eleven, 370-foot deck truss spans. This investigation included three phases: instrumentation, inspection, and structural modelling. The instrumentation work included the use of 49 wireless sensors consisting of strain gauges, triaxial accelerometers, surface temperature sensors, an anemometer, cameras, and displacement transducers. The monitoring was for one month of data collection and also with calibrated load tests. The access was provided with the use of a 135-foot straight boom lift, an under bridge unit and SPRAT certified inspectors. A comprehensive report was prepared with the findings from the investigation and recommendations for mitigation.
11/06 – 1/18	**Pennsylvania Department of Transportation - District 6-0, Inspection Support Services, PA.** Project Manager and in-house project supervisor for the management of bridge inspection contracts. Performed project manager functions such as reviewing bridge inspection reports and load rating analyses for compliance with FHWA and PennDOT requirements for approximately 900 locally owned bridges throughout the district. Administrative responsibilities included, overseeing the progress and execution of bridge inspection contracts, preparing local reimbursement agreements, coordinating the development of engineering agreements for local inspection contracts for Delaware, Chester, Philadelphia and Bucks counties, and processing reimbursement requests. This was three separate, consecutive contracts: E00938, E02214, and E03206.

	Firm	**AECOM Technical Services, Inc.**		
	Name	Lance Savant, PE	Years of Relevant Experience with this Employer	18
	Title	Lead Bridge Inspection Team Leader	Years of Relevant Experience with Other Employer(s)	7

Degree(s) / Years / Specialization			MS / 1997 / Civil and Structural Engineering BS / 1995 / Civil and Environmental Engineering
Active Registration Number / State / Expiration Date			PE.0042950 / LA / 03/31/2023 Additional active licenses: AZ, MD, NY, OH, PA, WV, MI, AK, NJ, IA, AR, PR, DE, FL
Year Registered	2002	Discipline	Civil Engineer
Contract Role(s) / Brief Description of Responsibilities			Lance will be the Lead Bridge Inspection Team Leader for this contract. He is experienced in design and inspection of railway and highway bridges. Bridge inspection experience ranges from simple span to cable stay and suspension bridges. Design experience has ranged from single-span bridge reconstruction projects to complex suspension bridge design. He also has experience with the management, planning and programming of bridges from his tenure with DCNR and PennDOT. Training: *Bridge Safety Inspector Training Course; 2001, PA; Bridge Safety Inspection Training Refresher Courses; 2003 through 2020, PA; NHI Course No. 130078 - Fracture Critical Insp. Techniques for Steel Bridges; 2014, Rope Access Training; 1999, Rope Access Refresher Course, 2004; SPRAT Certified Rope Access Training, 2012; SPRAT Certified Rope Access Refresher, 2015, 2018 & 2021.* **Lance meets MPR 3.**

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
12/12 - 06/18	**Contract No. 44-2687 State Project No. H.009730.5 Louisiana Department of Transportation and Development (LADOTD), In-Depth Inspection of Complex Structures, Statewide, LA.** Lead Bridge Inspection Team Leader responsible as the on-site engineer for the 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).
04/20 - 12/20	**Delaware River Port Authority (DRPA), Betsy Ross Bridge over Delaware River 2020 Biennial Inspection, PA and NJ.** Lead Inspection Team Leader responsible as the on-site engineer for the biennial inspection that included a close visual "hands-on" inspection of all fracture critical and fatigue sensitive details including the main truss bridge, the approach truss spans, the approach girder spans, and numerous approach structures and the development of the detailed inspection report. This project included an underwater inspection of the channel piers and inspection and mapping via an unmanned aerial vehicle (UAV). The results of the inspection were presented in a structural inspection report. Bridge data was updated for NJDOT and PennDOT reporting. An executive briefing was also prepared and delivered to DRPA.

04/18 - 12/18	**Delaware River Port Authority (DRPA), Commodore Barry Bridge over Delaware River 2018 Biennial Inspection, PA and NJ.** Bridge Inspection Team Leader for the biennial inspection that included a close visual "hands-on" inspection of all fracture critical and fatigue sensitive details including the three-span, cantilevered through truss main span, deck truss spans and steel stringer spans and the development of the detailed inspection report. This project included UT testing of the pins and electro-slag welds on the bridge. Inspectors also visually inspected a select number of vibration dampers. Bridge data was updated electronically for NJDOT and PennDOT reporting. An executive briefing was also prepared and delivered to DRPA.
04/16 - 12/16	**Delaware River Port Authority (DRPA), Betsy Ross Bridge over Delaware River 2016 Biennial Inspection, PA and NJ.** Bridge Inspection Team Leader for the inspection of the Betsy Ross Bridge Facility. The inspection included 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 a description of the findings, recommendations for repairs, SI&A, Pontis and BMS updates.
04/14 - 12/14	**Delaware River Port Authority (DRPA), Commodore Barry Bridge over Delaware River 2014 Biennial Inspection, PA and NJ.** Bridge Inspection Team Leader for the inspection of the Commodore Barry Bridge Facility. The inspection included a close visual "hands-on" inspection of all fracture critical and fatigue sensitive details including the three-span, cantilevered through truss main span, deck truss spans and steel stringer spans. The substructure units received a routine visual inspection with suspect areas highlighted for further evaluation. This project also included ultrasonic testing of the pins and electro-slag welds on the bridge. Inspectors also visually inspected a select number of vibration dampers. A final report was prepared that included a description of the findings, recommendations for repairs, SI&A, Pontis and BMS updates.
04/12 - 12/12	**Delaware Department of Transportation (DelDOT), Inventory Inspection of the Indian River Bridge, DE.** Bridge Inspection Team Leader for the 2012 Inventory Inspection of the 2,600-foot long post-tensioned concrete structure with cable-stayed main span crossing the Indian River Inlet. The inspection efforts included a close-up, hands-on inspection of all members of the structure to document the baseline conditions. The inventory inspection verified the safety of the bridge, in accordance with the NBIS and DelDOT standards. The inspection efforts culminated with the production of a full bridge inspection report including NBIS inspection forms and supporting documents.
8/18 – 7/19	**Mississippi Department of Transportation, Routine/Fracture Critical Biennial Inspection of the US 82 over Mississippi River, Greenville, MS.** Bridge Inspection Team Leader responsible for the 2018 biennial inspection of the US 82 cable-stayed bridge spanning the Mississippi River Bridge connecting Mississippi and Arkansas. The bridge is 2.6 miles total in length from abutment to abutment. Responsibilities included the on-site engineer in charge of the rope access inspection of the towers, the inspection of the cable stays through the use of unmanned aerial vehicle (UAV), and development of the detailed inspection report.
10/18 – 10/19	**Dominion Energy Questar Pipeline, Historic Cameron Bridge In-Depth Inspection, Cameron, AZ.** Lead Bridge Inspection Team Leader for the 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 a load rating analysis in accordance with the AASHTO Manual for Bridge Evaluation (MBE). Since construction plans are not available for the structure, field measurements and a site survey was 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.



Firm	**AECOM Technical Services, Inc.**		
Name	Jason Mathers, PE	Years of Relevant Experience with this Employer	15
Title	Bridge Inspection Team Leader/Structural Engineer	Years of Relevant Experience with Other Employer(s)	0

Degree(s) / Years / Specialization			BS / 2007 / Civil Engineering
Active Registration Number / State / Expiration Date			PE.0046129 / LA / 3/31/2024 Additional active licenses, DE, PR, PA, NJ, FL, MT
Year Registered	2014/2021	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			Jason is a professional engineer with 15 years of experience in the inspection, load rating, and analysis of bridge structures. Jason has been a Certified Bridge Safety Inspector since 2005 and SPRAT certified rope access worker since 2012. He has performed bridge inspection services for over 1100 structures in nine states, and in the province of Saskatchewan, Canada. Jason has completed over 700 bridge load ratings in 20 different states, for steel, timber, and concrete bridge types. He has utilized ASD, LFD, and LRFD analysis methodologies, is proficient in AASTHO BrR (previously Virtis), LARS, STAAD and Midas.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
12/12 – 06/18	**Contract No. 44-2687 State Project No. H.009730.5 Louisiana Department of Transportation and Development (LADOTD), In-Depth Inspection of Complex Structures, Statewide, LA.** Rope Access Bridge Inspector 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.
05/20 - 03/21	**Delaware River Port Authority (DRPA), Betsy Ross Bridge over Delaware River 2020 Biennial Inspection, PA and NJ.** Team Leader for the biennial inspection that included a close visual "hands-on" inspection of all fracture critical and fatigue sensitive details including the main truss bridge, the approach truss spans, the approach girder spans, and numerous approach structures. This project included an underwater inspection of the channel piers and inspection and mapping via an unmanned aerial vehicle (UAV). The results of the inspection were presented in a structural inspection report. Bridge data was updated for NJDOT and PennDOT reporting. An executive briefing was also prepared and delivered to DRPA.
05/18 - 03/19	**Delaware River Port Authority (DRPA), Commodore Barry Bridge over Delaware River 2018 Biennial Inspection, PA and NJ.** Inspection Team Leader for the biennial inspection that included a close visual "hands-on" inspection of all fracture critical and fatigue sensitive details including the three-span, cantilevered through truss main span, deck truss spans and steel stringer spans. This project included UT of the pins and electro-slag welds on the bridge. Inspectors also visually inspected a select number of vibration dampers. The results of the inspection were presented in a structural inspection report. Bridge data was updated for NJDOT and PennDOT reporting. An executive briefing was also prepared and delivered to DRPA.

04/14 - 12/14	**Delaware River Port Authority (DRPA), Commodore Barry Bridge over Delaware River 2014 Biennial Inspection, PA and NJ.** Inspection Team Leader for the biennial inspection that included a close visual "hands-on" inspection of all fracture critical and fatigue sensitive details including the three-span, cantilevered through truss main span, deck truss spans and steel stringer spans. This project included ultrasonic testing of the pins and electro-slag welds on the bridge. Inspectors also visually inspected a select number of vibration dampers. A final report was prepared that included a description of the findings, recommendations for repairs, SI&A, Pontis and BMS updates.
05/16 - 03/17	**Delaware River Port Authority (DRPA), Betsy Ross Bridge over Delaware River 2016 Biennial Inspection, PA and NJ.** Inspection Team Leader for the biennial inspection that included 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 a description of the findings, recommendations for repairs, SI&A, Pontis and BMS updates.
04/12 – 02/12	**Delaware Department of Transportation (DelDOT), Inventory Inspection of the Indian River Bridge, DE.** Bridge Inspector for the 2012 Inventory Inspection of the 2,600-foot long post-tensioned concrete structure with cable-stayed main span crossing the Indian River Inlet. The inspection efforts included a close-up, hands-on inspection of all members of the structure to document the baseline conditions. The inventory inspection verified the safety of the bridge, in accordance with the NBIS and DelDOT standards. The inspection efforts culminated with the production of a full bridge inspection report including NBIS inspection forms and supporting documents.
04/08 – 03/12	**US Army Corps of Engineers (USACE), Philadelphia District, Indefinite Delivery Contract for A/E Services to Support Civil Works, PA.** Bridge Inspector for the indefinite delivery contract to support the USACE – Philadelphia District. Work included the biennial inspection of the Reedy Pt., Summit, Chesapeake City, St. Georges and William V. Roth, Jr. (SR 1) Bridges spanning the C&D Canal. Additional assignments included technical design reviews and superstructure designs. Responsibilities included development of bridge specific access and safety plans; field coordination; scheduling of inspection teams, equipment and MPT; and management of the budget and report development including SI&A form update.
08/18-07/19	**Mississippi Department of Transportation, Routine/Fracture Critical Biennial Inspection of the US 82 over Mississippi River, Greenville, MS.** Bridge Inspection Team Leader for the 2018 biennial inspection of the US 82 cable-stay ed bridge spanning the Mississippi River Bridge connecting Mississippi and Arkansas. The bridge is 2.6 miles total in length from abutment to abutment. Responsibilities included performing a field audit of the inspection activities and technical review of the bridge inspection report. Inspection access included aerial boom lifts, under bridge inspection vehicles (UBIV), industrial rope access climbing and via an unmanned aerial vehicle (UAV). The UAV was a DJI Matrice 210 RTK which was utilized to perform a visual inspection of the cable sheathing.

	Firm	**AECOM Technical Services, Inc.**			
	Name	April Yorkonis, EI		Years of Relevant Experience with this Employer	21
	Title	Bridge Inspection Team Leader		Years of Relevant Experience with Other Employer(s)	21

Degree(s) / Years / Specialization			MSCE / 2005 / Civil Engineering BSCE / 2000 / Civil Engineering
Active Registration Number / State / Expiration Date			N/A
Year Registered	2004	Discipline	Civil Engineer Intern, DE
Contract Role(s) / Brief Description of Responsibilities			April will be one of AECOM's Bridge Inspection Assistant Team Leaders for this contract. She has been a Certified Bridge Safety Inspector since 2002 and has performed bridge inspection and load rating services for DOTs in PA, DE, MS, MT; the Army Corps of Engineers (USACE); the Pennsylvania Turnpike; SEPTA; Norfolk Southern and CSX Railroads; and rural municipalities in Saskatchewan, Canada. She has utilized ASD, LFD, and LRFD design methodologies in English and metric units and is proficient in numerous computer programs as well as structural design programs such as STAAD and BSDI. She has served as a Team Leader for bridge inspection which includes scheduling teams and equipment, developing maintenance needs and creating technical reports. Her experience also includes emergency response inspections for earthquakes, flood events, and bridge impact damage. This includes evaluation of damaged structures for revised load capacity analysis and posting. April has the following extensive training: *Bridge Safety Inspection Training and Certification, 2002, PA; Bridge Safety Inspection Training Program Refresher Courses thru 2016, PA; Bridge Scour Evaluation Training and Certification, 2005; Fracture Critical Inspection Techniques for Steel Bridges Training and Certification, 2005.*

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
05/12 - 05/19	**PennDOT District 5-0, Safety Inspections of State Owned Bridges, Monroe, Carbon and Schuylkill Counties, PA.** Bridge Inspection Team Leader for this three-cycle contract. Inspected all aspects of the bridge including safety features, roadway conditions, deck, superstructure, substructure and scourability. The inspections sometimes required the use of special equipment and traffic control. Performed post-flood emergency response inspections required after significant flooding events. In addition to inspection, also responsible for organizing and compiling all field notes, photographs and maintenance items for the preparation of the technical forms and reports and recommend load rating analysis where necessary. Handled all notifications and correspondence to the local owner regarding priority maintenance, sign installations, tracking the progress of repairs to the structure and updating the pertinent fields in BMS2.
05/17-05/22	**PennDOT District 6-0, Agreement E03796, NBIS Inspection of 436 State Owned Bridges in Montgomery County, PA.** Bridge Inspection Team Leader for the 2-cycle contract focusing on structures within the high ADT I-476, SR 422 and SR 309 corridors. Inspections were often restricted o a 9am to 3pm window to minimize impacts to traffic. Project included routine NBIS, interim, emergency on-call services, and CoRe element level inspections.

04/12-12/21	**Inventory Inspection of the Charles W. Cullen Bridge at the Indian River Inlet, DelDOT, Rehoboth, DE.** Bridge Inspection Team Leader for the 2012 Inventory Inspection of the 2,600 ft. long precast, cast-in-place, post-tensioned concrete structure with cable-stayed main span crossing the Indian River Inlet. The bridge consists of a total of eight precast Bulb-T girder approach spans, each 106'-3" in length and a three span concrete cable-stayed structure with a main span of 950 feet and side spans of 400 feet. The inspection efforts included a close-up, hands-on inspection of all members of the structure to document the baseline conditions. The inventory inspection verified the safety of the bridge, in accordance with the NBIS and DelDOT standards. The inspection efforts culminated with the production of a full bridge inspection report including NBIS inspection forms and supporting documents. Responsibilities included the development of bridge specific access and safety plans; field coordination; scheduling of inspection teams, equipment; coordination with the contractor; and management of the budget and report development. Access for the inspection included industrial rope access climbing, aerial boom lifts and via the contractor's work platform.
04/12 – 12/12	**Delaware Department of Transportation (DelDOT), Inventory Inspection of the Indian River Bridge, DE.** Bridge Inspection Team Leader for the 2012 Inventory Inspection of the Indian River Cable Stat Bridge. The inspection efforts included a close-up, hands-on inspection of all members of the structure to document the baseline conditions. The inventory inspection verified the safety of the bridge, in accordance with NBIS and DelDOT standards. It also serves to provide the required Bridge Inventory Data (BID) of the as-built structure and the inspection efforts culminated with the production of a full bridge inspection report including NBIS inspection forms and supporting documents.
04/08 – 03/12	**USACE, Philadelphia District, Indefinite Delivery Contract for A/E Services to Support Civil Works, PA.** Bridge Inspection Team Leader. Work included the biennial inspection of the Reedy Pt., Summit, Chesapeake City, St. Georges and William V. Roth, Jr. (SR 1) Bridges spanning the C&D Canal. Additional assignments included technical design reviews and superstructure designs. Biennial inspection responsibilities included development of bridge specific access and safety plans; field coordination; scheduling of inspection teams, equipment and MPT; and management of the budget and report development including SI&A form update.
03/06 – 11/11	**Pennsylvania Turnpike Commission (PTC), System-wide Biennial Inspection of Bridges, Sign Structures, Tunnels and High Mast Lighting Structures, PA.** Bridge Inspection Team Leader. Emergency On-Call responsibilities for all emergencies 24/7 throughout the turnpike system. The inspections were performed in accordance with the National Bridge Inspection Standards of the Federal Highway Administration and PennDOT's Bridge Management System. The inspections included close visual hands-on inspection requiring complex traffic control, daily time restrictions, access equipment, railroad permits and coordination with the PTC maintenance units and bridge crane operators.
12/07 – 01/09	**Delaware Department of Transportation (DelDOT), Agreement 1455, Bridge Safety Inspection Services, DE.** Bridge Inspection Team Leader for the 4-year open-end agreement; included the inspection of selected bridges along the I-95, I-495, and SR 1 corridors. Complex traffic control, access equipment and railroad permitting was required. Inspection work was completed in accordance with DelDOT's Bridge Inspection Procedures and Policies Manual, NBIS, FHWA, and AASHTO. The inspections were Pontis element based and utilized the electronic collection of data, generating electronic reports prepared in software provided by DelDOT. Work included several load rating and analyses, mechanical and electrical inspection of the movable bridges, and biennial inspections of the SR 1 Cable Stay Bridge.

	Firm	**AECOM Technical Services, Inc.**			
	Name	Dave Raffensperger		Years of Relevant Experience with this Employer	22
	Title	Bridge Inspection Team Leader		Years of Relevant Experience with Other Employer(s)	0

Degree(s) / Years / Specialization			N/A
Active Registration Number / State / Expiration Date			N/A
Year Registered	N/A	Discipline	N/A
Contract Role(s) / Brief Description of Responsibilities			Dave has more than 22 years of experience in the inspection of bridge structures. He has been a Certified Bridge Safety Inspector since 2002 and SPRAT-certified rope access worker since 2012. He has performed bridge inspection services for more than 1,000 structures in seven states, Puerto Rico, and in the province of Saskatchewan, Canada. Training: *Bridge Safety Inspector Training Course; 2002, PA; Bridge Safety Inspection Training Refresher Courses; 2004 through 2020, PA; SPRAT Certified Rope Access Training, 2012; SPRAT Certified Rope Access Refresher, 2018; NHI Course No. 130078 - Fracture Critical Insp. Techniques for Steel Bridges; 2005*

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
12/12-06/18	**Contract No. 44-2687 State Project No. H.009730.5 Louisiana Department of Transportation and Development (LADOTD), In-Depth Inspection of Complex Structures, Statewide, LA.** Inspection Team Leader 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), the 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.
04/20 - 12/21	**Delaware River Port Authority (DRPA), Betsy Ross Bridge over Delaware River 2020 Biennial Inspection, PA and NJ**. Inspection Team Leader for the biennial inspection that included a close visual "hands-on" inspection of all fracture critical and fatigue sensitive details including the main truss bridge, the approach truss spans, the approach girder spans, and numerous approach structures. This project included an underwater inspection of the channel piers and inspection and mapping via an unmanned aerial vehicle (UAV). The results of the inspection were presented in a structural inspection report. Bridge data was updated for NJDOT and PennDOT reporting. An executive briefing was also prepared and delivered to DRPA.
04/18 - 12/18	**Delaware River Port Authority (DRPA), Commodore Barry Bridge over Delaware River 2018 Biennial Inspection, PA and NJ**. Inspection Team Leader for the biennial inspection that included a close visual "hands-on" inspection of all fracture critical and fatigue sensitive details including the three-span, cantilevered through truss main span, deck truss spans and steel stringer spans. This project included UT of the pins and electro-slag welds on the bridge. Inspectors also visually inspected a select number of vibration dampers. The results of the inspection were presented in a structural inspection report. Bridge data was updated for NJDOT and PennDOT reporting. An executive briefing was also prepared and delivered to DRPA.

04/14 - 12/14	**Delaware River Port Authority (DRPA), Commodore Barry Bridge over Delaware River 2014 Biennial Inspection, PA and NJ.** Inspection Team Leader for the biennial inspection that included a close visual "hands-on" inspection of all fracture critical and fatigue sensitive details including the three-span, cantilevered through truss main span, deck truss spans and steel stringer spans. This project included ultrasonic testing of the pins and electro-slag welds on the bridge. Inspectors also visually inspected a select number of vibration dampers. A final report was prepared that included a description of the findings, recommendations for repairs, SI&A, Pontis and BMS updates.
08/18-07/19	**Mississippi Department of Transportation, Routine/Fracture Critical Biennial Inspection of the US 82 over Mississippi River, Greenville, MS.** Bridge Inspection Team Leader for the 2018 biennial inspection of the US 82 cable-stay ed bridge spanning the Mississippi River Bridge connecting Mississippi and Arkansas. The bridge is 2.6 miles total in length from abutment to abutment. Responsibilities included performing a field audit of the inspection activities and technical review of the bridge inspection report. Inspection access included aerial boom lifts, under bridge inspection vehicles (UBIV), industrial rope access climbing and via an unmanned aerial vehicle (UAV). The UAV was a DJI Matrice 210 RTK which was utilized to perform a visual inspection of the cable sheathing.
04/12-12/21	**Inventory Inspection of the Charles W. Cullen Bridge at the Indian River Inlet, DelDOT, Rehoboth, DE.** Bridge Inspector for the 2012 Inventory Inspection of the 2,600 ft. long precast, cast-in-place, post-tensioned concrete structure with cable-stayed main span crossing the Indian River Inlet. The bridge consists of a total of eight precast Bulb-T girder approach spans, each 106'-3" in length and a three span concrete cable-stayed structure with a main span of 950 feet and side spans of 400 feet. The inspection efforts included a close-up, hands-on inspection of all members of the structure to document the baseline conditions. The inventory inspection verified the safety of the bridge, in accordance with the NBIS and DelDOT standards. The inspection efforts culminated with the production of a full bridge inspection report including NBIS inspection forms and supporting documents. Responsibilities included the development of bridge specific access and safety plans; field coordination; scheduling of inspection teams, equipment; coordination with the contractor; and management of the budget and report development. Access for the inspection included industrial rope access climbing, aerial boom lifts and via the contractor's work platform.
10/18-10/19	**Dominion Energy Questar Pipeline, Historic Cameron Bridge In-Depth Inspection, Cameron, AZ.** Bridge Inspector for the 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 a load rating analysis in accordance with the AASHTO Manual for Bridge Evaluation (MBE). The load rating analysis will consider three (3) 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 was 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.

	Firm	**AECOM Technical Services, Inc.**		
	Name	Landon Whitton, PE	Years of Relevant Experience with this Employer	6
	Title	Bridge Inspection Team Leader/Structural Engineer	Years of Relevant Experience with Other Employer(s)	6

Degree(s) / Years / Specialization			BS / 2009 / Mechanical Engineering
Active Registration Number / State / Expiration Date			PE.0041523 / LA / 09/30/2023 Additional active licenses, MS
Year Registered	2015	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			Landon will be one of AECOMs Bridge Inspection Team Leaders and part of the Bridge Rehabilitation Design Team 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 time specified in the applicable MPR(s).
03/16 – 04/16	**Contract No. 44-2687 State Project No. H.009730.5 Louisiana Department of Transportation and Development, LA 2 over Red River Bridge In-Depth Inspection, LA.** Bridge Inspector for the in-depth inspection of LA 2 over Red River Bridge (a through truss with a total length of 3,059' in northwestern Louisiana).
07/17 – present	**Mississippi Office of State Aid Complex Inspections, MS.** Project Manager, Inspection Team Leader. Mississippi Office of State Aid hired AECOM to perform 168 inspections and load ratings of county bridges across the Northern part of the state. Landon manages the project as well as performing bridge inspection on the project.
07/18 –present	**Mississippi Department of Transportation (MDOT) US 82 Cable-Stayed over Mississippi River Bridges Fracture Critical and Element Inspections, MS.** Project Manager, Inspection Team Leader. MDOT hired AECOM to perform Fracture Critical and Routine Element Inspections of the cable-stayed bridge on US 82 over the Mississippi River. The scope of this inspection also includes the assistance of a UAV. Landon is the Project Manager, and will also perform rope access as an Inspection Team Leader.
07/16 – 01/17	**Mississippi Department of Transportation (MDOT) US 84 over Mississippi River Bridges Fracture Critical and Element Inspections, MS.** Inspection Team Leader. MDOT needed Fracture Critical and Routine Element Inspections of both the Eastbound and Westbound Bridges on US 84 over the Mississippi River. Landon acted as Deputy Project Manager and Inspection Team Leader on the project, and prepared the final inspection report.
07/16 – 01/17	**Mississippi Department of Transportation (MDOT), I-110 over Biloxi Back Bay Movable Bridge In-Depth Inspection, MS.** Inspection Team Leader. 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 an Inspection Team Leader on the project, and prepared the approach span portions of the report.

12/17– present	**Mississippi Department of Transportation (MDOT), Post-Tensioned Load Ratings, MS.** Project Manager and Load Ratings Engineer. MDOT hired AECOM to perform load ratings on 13 Post-tensioned bridges using CSI Bridge 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.
08/16 – present	**Mississippi Department of Transportation (MDOT), Phase-A Bridge Designs, Project Manager and Bridge Design Engineer, MS.** Project Manager. Landon serves as project manager and lead bridge designer of the Phase A projects for the following locations: SR 15 in Tippah County, MS, SR 145 in Clarke County, MS, Madison Avenue in Madison County, MS.
09/16 – 03/17	**Mississippi Department of Transportation (MDOT), Statewide Bridge Deck Scanning and Visual Surveys, MS**. Project Manager. Landon was responsible for both Project Management and performing Visual Surveys of the bridge deck undersides.
11/17 – present	**Mississippi Department of Transportation, (MDOT) Phase III and IV Scour Evaluations, MS.** Project Manager and Bridge Engineer. MDOT hired AECOM to perform Phase III and IV Scour Evaluations of I-59 over Tangipahoa River and I-55 over Black Creek and Little Black Creek. Landon is responsible for the management and bridge engineering on the project. I-55 over Tangipahoa River in Pike River County, MS, I-59 over Black Creek and Little Black Creek Lamar, MS.
05/15 – 05/16	**Mississippi Department of Transportation (MDOT) NBIS Compliance Field Review (while at MDOT) MS.** Review Team Member. Reviewed 20 inspections performed by MDOT bridge inspectors, by inspecting the subject bridges with the Local FHWA Bridge Engineer and MDOT's Inspection Program Manager. FHWA determined MDOT's compliance to the NBIS based on the results of this review.
08/12 - 06/15	**Mississippi Department of Transportation (MDOT) Tennessee-Tombigbee Waterway Routine Inspections (while at MDOT).** Inspection Team Leader on the inspection team for the yearly Fracture Critical inspections of five Bridges along the Tennessee-Tombigbee Waterway. Each Bridge contained a 1,000ft parabolic steel girder superstructure.
08/12 - 05/15	**Mississippi Department of Transportation (MDOT) US 82 Cable-Stayed over Mississippi River Bridges Fracture Critical (while at MDOT), MS.** Inspection Team Leader. In this project, MDOT needed a fracture critical inspection on the superstructure of the Cable-Stay Bridge in Greenville, MS over the Mississippi River. In this inspection, all fracture critical members on the underside of the deck were inspected. Landon helped with the inspection and report.

	Firm	**AECOM Technical Services, Inc.**		
	Name	Alex Schaal, EI	Years of Relevant Experience with this Employer	3
	Title	Bridge Inspection Assistant Team Leader	Years of Relevant Experience with Other Employer(s)	1

Degree(s) / Years / Specialization			BS / 2018 / Civil Engineering
Active Registration Number / State / Expiration Date			N/A
Year Registered	2019	Discipline	Civil Engineering Intern, DE
Contract Role(s) / Brief Description of Responsibilities			Alex will be one of AECOM's Bridge Inspection Assistant Team Leaders for this contract. He has been a Certified Bridge Safety Inspector since 2020 and SPRAT certified rope access worker since 2021. Alex has the following extensive training: *Bridge Safety Inspection Training Course, PennDOT, 2020; Bridge Safety Inspection Refreshers, PennDOT, Biennially through 2022; Confined Space Training for Bridge Inspection, SPRAT Certified Rope Access Training, 2021.*

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
05/21 - present	**PennDOT District 6-0, Agreement E05073, NBIS Inspection of 413 State Owned Bridges in Philadelphia County, PA.** Bridge Inspection Assistant Team Leader for the 2-cycle contract focusing on structures within the high ADT I-95, I-76, and SR 1 corridors. Inspections were often restricted to a 9am to 3pm window to minimize impacts to traffic. Included the biennial inspection of the double deck through truss – Girard Point Bridge – carrying I-95 over the Schuylkill River. Complex traffic control, access equipment and railroad permitting was required. Inspection work was completed in accordance with PennDOT's Bridge Inspection Procedures and Policies Manual, NBIS, FHWA, and AASHTO. Project included routine NBIS, interim, emergency on-call services, and CoRe element level inspections.
05/17-05/22	**PennDOT District 6-0, Agreement E03796, NBIS Inspection of 436 State Owned Bridges in Montgomery County, PA.** Bridge Inspection Assistant Team Leader for the 2-cycle contract focusing on structures within the high ADT I-476, SR 422 and SR 309 corridors. Inspections were often restricted o a 9am to 3pm window to minimize impacts to traffic. Project included routine NBIS, interim, emergency on-call services, and CoRe element level inspections.
04/20 - 12/21	**Delaware River Port Authority (DRPA), Betsy Ross Bridge over Delaware River 2020 Biennial Inspection, PA and NJ.** Bridge Inspection Assistant Team Leader for the biennial inspection that included a close visual "hands-on" inspection of all fracture critical and fatigue sensitive details including the main truss bridge, the approach truss spans, the approach girder spans, and numerous approach structures. This project included an underwater inspection of the channel piers and inspection and mapping via an unmanned aerial vehicle (UAV). The results of the inspection were presented in a structural inspection report. Bridge data was updated for NJDOT and PennDOT reporting. An executive briefing was also prepared and delivered to DRPA.

01/18 - present	**Montana Department of Transportation (MDT), Load Rating Bridges Term Contracts 2018-2021 & 2021-2024.** Bridge Load Rating Engineer responsible for completed load rating analyses. 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 700 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.
05/19 - present	**PennDOT Central Office, Agreement E04533, NBIS Inspection of assigned locally owned bridges, Statewide.** Bridge Inspection Assistant Team Leader for the for NBIS bridge inspections of locally owned bridges for DCNR (130 bridges) and first-time inspection and load ratings of newly discovered bridges in D4-0, D5-0 and D8-0 (254 bridges). 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.
01/21 - present	**PennDOT District 4-0, Agreement E04957, NBIS Inspection of Large/Complex Bridges, PA.** Bridge Inspection Assistant Team Leader for the 3-cycle contract focusing on large and complex structures throughout PennDOT District 4-0. Inspections were often restricted to a 9am to 3pm window to minimize impacts to traffic. Complex traffic control, access equipment and railroad permitting was required. Inspection work was completed in accordance with PennDOT's Bridge Inspection Procedures and Policies Manual, NBIS, FHWA, and AASHTO. Project included routine NBIS, interim, emergency on-call services, and CoRe element level inspections.

	Firm	**AECOM Technical Services, Inc.**			
	Name	Brian McCabe, EI		Years of Relevant Experience with this Employer	2
	Title	Bridge Inspection Assistant Team Leader		Years of Relevant Experience with Other Employer(s)	4
Degree(s) / Years / Specialization			BS / 2016 / Civil Engineering		
Active Registration Number / State / Expiration Date			N/A		
Year Registered	2016	Discipline	Civil Engineer Intern, DE		
Contract Role(s) / Brief Description of Responsibilities			Brian will be one of AECOM's Bridge Inspection Assistant Team Leaders for this contract. He has been a Certified Bridge Safety Inspector since 2018 and SPRAT certified rope access worker since 2019. Brian has the following extensive training: *Bridge Safety Inspection Training Course, PennDOT, 2018; Bridge Safety Inspection Refreshers, PennDOT, Biennially through 2022; SPRAT Certified Rope Access Training, 2019. SPRAT Certified Rope Access Refresher, 2022.*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
05/21 - present	**PennDOT District 6-0, Agreement E05073, NBIS Inspection of 413 State Owned Bridges in Philadelphia County, PA**. Bridge Inspection Assistant Team Leader for the 2-cycle contract focusing on structures within the high ADT I-95, I-76, and SR 1 corridors. Inspections were often restricted to a 9am to 3pm window to minimize impacts to traffic. Included the biennial inspection of the double deck through truss – Girard Point Bridge – carrying I-95 over the Schuylkill River. Complex traffic control, access equipment and railroad permitting was required. Inspection work was completed in accordance with PennDOT's Bridge Inspection Procedures and Policies Manual, NBIS, FHWA, and AASHTO. Project included routine NBIS, interim, emergency on-call services, and CoRe element level inspections.
05/17-05/22	**PennDOT District 6-0, Agreement E03796, NBIS Inspection of 436 State Owned Bridges in Montgomery County, PA.** Bridge Inspection Assistant Team Leader for the 2-cycle contract focusing on structures within the high ADT I-476, SR 422 and SR 309 corridors. Inspections were often restricted o a 9am to 3pm window to minimize impacts to traffic. Project included routine NBIS, interim, emergency on-call services, and CoRe element level inspections.
01/18 - present	**Montana Department of Transportation (MDT), Load Rating Bridges Term Contracts 2018-2021 & 2021-2024.** Bridge Load Rating Engineer responsible for completed load rating analyses. 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 700 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.

05/18 - 05/19	**Delaware River Port Authority (DRPA), Commodore Barry Bridge Bridge over Delaware River 2018 Biennial Inspection, PA and NJ.** Bridge Inspection Assistant Team Leader for the biennial inspection that included a close visual "hands-on" inspection of all fracture critical and fatigue sensitive details including the three-span, cantilevered through truss main span, deck truss spans and steel stringer spans. This project included ultrasonic testing of the pins and electro-slag welds on the bridge. Inspectors also visually inspected a select number of vibration dampers. The results of the inspection were presented in a structural inspection report. Bridge data was updated for NJDOT and PennDOT reporting. An executive briefing was also prepared and delivered to DRPA.
05/17 - 05/22	**PennDOT District 6-0, Agreement E03796, NBIS Inspection of 436 State Owned Bridges in Montgomery County, PA.** Bridge Inspection Assistant Team Leader for the 2-cycle contract focusing on structures within the high ADT I-476, SR 422 and SR 309 corridors. Inspections were often restricted to a 9am to 3pm window to minimize impacts to traffic. Project included routine NBIS, interim, emergency on-call services, and CoRe element level inspections.

	Firm	**AECOM Technical Services, Inc.**		
	Name	Mike Zavorski	Years of Relevant Experience with this Employer	20
	Title	Bridge Inspection Assistant Team Leader	Years of Relevant Experience with Other Employer(s)	12

Degree(s) / Years / Specialization			BS / 2006 / Civil - Construction Engineering Technology BS / 1983 / Marketing
Active Registration Number / State / Expiration Date			N/A
Year Registered	N/A	Discipline	N/A
Contract Role(s) / Brief Description of Responsibilities			Mike will be one of AECOM's Bridge Inspection Assistant Team Leaders for this contract. He has been a Certified Bridge Safety Inspector since 1991 and has performed bridge inspection of more that 3,000 structures for DOTs in PA, NJ, DE; the Army Corps of Engineers (USACE); the Pennsylvania Turnpike; the Delaware River Port Authority (DRPA); SEPTA; Norfolk Southern and CSX Railroads. He has served as a Team Leader for bridge inspection which includes scheduling teams and equipment, developing maintenance needs and creating technical reports. His experience also includes emergency response inspections for earthquakes, flood events, and bridge impact damage. Mike has the following extensive training: *Bridge Scour Evaluation Training Course; 2003, PennDOT; Bridge Safety Inspection Training Course, PennDOT, 1991; Bridge Safety Inspection Refreshers, PennDOT, Biennially through 2021; Confined Space Training for Bridge Inspection, 2006.*

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
05/12 - 05/19	**PennDOT District 5-0, Safety Inspections of State Owned Bridges, Monroe, Carbon and Schuylkill Counties, PA.** Bridge Inspection Team Leader for this three-cycle contract. Inspected all aspects of the bridge including safety features, roadway conditions, deck, superstructure, substructure and scourability. The inspections sometimes required the use of special equipment and traffic control. Performed post-flood emergency response inspections required after significant flooding events. In addition to inspection, also responsible for organizing and compiling all field notes, photographs and maintenance items for the preparation of the technical forms and reports and recommend load rating analysis where necessary. Handled all notifications and correspondence to the local owner regarding priority maintenance, sign installations, tracking the progress of repairs to the structure and updating the pertinent fields in BMS2.
05/17-05/22	**PennDOT District 6-0, Agreement E03796, NBIS Inspection of 436 State Owned Bridges in Montgomery County, PA.** Bridge Inspection Team Leader for the 2-cycle contract focusing on structures within the high ADT I-476, SR 422 and SR 309 corridors. Inspections were often restricted o a 9am to 3pm window to minimize impacts to traffic. Project included routine NBIS, interim, emergency on-call services, and CoRe element level inspections.

04/12-12/21	**Inventory Inspection of the Charles W. Cullen Bridge at the Indian River Inlet, DelDOT, Rehoboth, DE.** Bridge Inspection Team Leader for the 2012 Inventory Inspection of the 2,600 ft. long precast, cast-in-place, post-tensioned concrete structure with cable-stayed main span crossing the Indian River Inlet. The bridge consists of a total of eight precast Bulb-T girder approach spans, each 106'-3" in length and a three span concrete cable-stayed structure with a main span of 950 feet and side spans of 400 feet. The inspection efforts included a close-up, hands-on inspection of all members of the structure to document the baseline conditions. The inventory inspection verified the safety of the bridge, in accordance with the NBIS and DelDOT standards. The inspection efforts culminated with the production of a full bridge inspection report including NBIS inspection forms and supporting documents. Responsibilities included the development of bridge specific access and safety plans; field coordination; scheduling of inspection teams, equipment; coordination with the contractor; and management of the budget and report development. Access for the inspection included industrial rope access climbing, aerial boom lifts and via the contractor's work platform.
04/12 – 12/12	**Delaware Department of Transportation (DelDOT), Inventory Inspection of the Indian River Bridge, DE.** Bridge Inspection Team Leader for the 2012 Inventory Inspection of the Indian River Cable Stat Bridge. The inspection efforts included a close-up, hands-on inspection of all members of the structure to document the baseline conditions. The inventory inspection verified the safety of the bridge, in accordance with NBIS and DelDOT standards. It also serves to provide the required Bridge Inventory Data (BID) of the as-built structure and the inspection efforts culminated with the production of a full bridge inspection report including NBIS inspection forms and supporting documents.
04/08 – 03/12	**USACE, Philadelphia District, Indefinite Delivery Contract for A/E Services to Support Civil Works, PA.** Bridge Inspection Team Leader. Work included the biennial inspection of the Reedy Pt., Summit, Chesapeake City, St. Georges and William V. Roth, Jr. (SR 1) Bridges spanning the C&D Canal. Additional assignments included technical design reviews and superstructure designs. Biennial inspection responsibilities included development of bridge specific access and safety plans; field coordination; scheduling of inspection teams, equipment and MPT; and management of the budget and report development including SI&A form update.
03/06 – 11/11	**Pennsylvania Turnpike Commission (PTC), System-wide Biennial Inspection of Bridges, Sign Structures, Tunnels and High Mast Lighting Structures, PA.** Bridge Inspection Team Leader. Emergency On-Call responsibilities for all emergencies 24/7 throughout the turnpike system. The inspections were performed in accordance with the National Bridge Inspection Standards of the Federal Highway Administration and PennDOT's Bridge Management System. The inspections included close visual hands-on inspection requiring complex traffic control, daily time restrictions, access equipment, railroad permits and coordination with the PTC maintenance units and bridge crane operators.
12/07 – 01/09	**Delaware Department of Transportation (DelDOT), Agreement 1455, Bridge Safety Inspection Services, DE.** Bridge Inspection Team Leader for the 4-year open-end agreement; included the inspection of selected bridges along the I-95, I-495, and SR 1 corridors. Complex traffic control, access equipment and railroad permitting was required. Inspection work was completed in accordance with DelDOT's Bridge Inspection Procedures and Policies Manual, NBIS, FHWA, and AASHTO. The inspections were Pontis element based and utilized the electronic collection of data, generating electronic reports prepared in software provided by DelDOT. Work included several load rating and analyses, mechanical and electrical inspection of the movable bridges, and biennial inspections of the SR 1 Cable Stay Bridge.

Prime consultant firm name: **AECOM Technical Services, Inc. (AECOM)**

	Firm	**AECOM Technical Services, Inc.**		
	Name	Brendan Kearns	Years of Relevant Experience with this Employer	1
	Title	Bridge Inspection Assistant Team Leader	Years of Relevant Experience with Other Employer(s)	1

Degree(s) / Years / Specialization			BS / 2020 / Civil Engineering MS / 2021 / Civil Engineering
Active Registration Number / State / Expiration Date			N/A
Year Registered	N/A	Discipline	N/A
Contract Role(s) / Brief Description of Responsibilities			Brendan will be one of AECOM's Bridge Inspection Assistant Team Leaders for this contract. He has been a Certified Bridge Safety Inspector since 2021. Brendan has the following extensive training: *Bridge Safety Inspection Training Course, PennDOT, 2021*.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
05/21 - present	**PennDOT District 6-0, Agreement E05073, NBIS Inspection of 413 State Owned Bridges in Philadelphia County, PA.** Bridge Inspection Assistant Team Leader for the 2-cycle contract focusing on structures within the high ADT I-95, I-76, and SR 1 corridors. Inspections were often restricted to a 9am to 3pm window to minimize impacts to traffic. Included the biennial inspection of the double deck through truss – Girard Point Bridge – carrying I-95 over the Schuylkill River. Complex traffic control, access equipment and railroad permitting was required. Inspection work was completed in accordance with PennDOT's Bridge Inspection Procedures and Policies Manual, NBIS, FHWA, and AASHTO. Project included routine NBIS, interim, emergency on-call services, and CoRe element level inspections.
04/20 - 12/21	**Delaware River Port Authority (DRPA), Betsy Ross Bridge over Delaware River 2020 Biennial Inspection, PA and NJ.** Bridge Inspection Assistant Team Leader for the biennial inspection that included a close visual "hands-on" inspection of all fracture critical and fatigue sensitive details including the main truss bridge, the approach truss spans, the approach girder spans, and numerous approach structures. This project included an underwater inspection of the channel piers and inspection and mapping via an unmanned aerial vehicle (UAV). The results of the inspection were presented in a structural inspection report. Bridge data was updated for NJDOT and PennDOT reporting. An executive briefing was also prepared and delivered to DRPA.
05/19 - present	**PennDOT Central Office, Agreement E04533, NBIS Inspection of assigned locally owned bridges, Statewide.** Bridge Inspection Assistant Team Leader for the for NBIS bridge inspections of locally owned bridges for DCNR (130 bridges) and first-time inspection and load ratings of newly discovered bridges in D4-0, D5-0 and D8-0 (254 bridges). 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.

01/21 - present	**PennDOT District 4-0, Agreement E04957, NBIS Inspection of Large/Complex Bridges, PA.** Bridge Inspection Assistant Team Leader for the 3-cycle contract focusing on large and complex structures throughout PennDOT District 4-0. Inspections were often restricted to a 9am to 3pm window to minimize impacts to traffic. Complex traffic control, access equipment and railroad permitting was required. Inspection work was completed in accordance with PennDOT's Bridge Inspection Procedures and Policies Manual, NBIS, FHWA, and AASHTO. Project included routine NBIS, interim, emergency on-call services, and CoRe element level inspections.

	Firm	**AECOM Technical Services, Inc.**		
	Name	Sean Quick, EI	Years of Relevant Experience with this Employer	1
	Title	Bridge Inspection Assistant Team Leader	Years of Relevant Experience with Other Employer(s)	1

Degree(s) / Years / Specialization			BE / 2021 / Civil Engineering
Active Registration Number / State / Expiration Date			N/A
Year Registered	2021	Discipline	Civil Engineer Intern, NJ
Contract Role(s) / Brief Description of Responsibilities			Sean will be one of AECOM's Bridge Inspection Assistant Team Leaders for this contract. He has been a Certified Bridge Safety Inspector since 2021. Sean has the following extensive training: *Bridge Safety Inspection Training Course, PennDOT, 2021.*

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
05/21 - present	**PennDOT District 6-0, Agreement E05073, NBIS Inspection of 413 State Owned Bridges in Philadelphia County, PA.** Bridge Inspection Assistant Team Leader for the 2-cycle contract focusing on structures within the high ADT I-95, I-76, and SR 1 corridors. Inspections were often restricted to a 9am to 3pm window to minimize impacts to traffic. Included the biennial inspection of the double deck through truss – Girard Point Bridge – carrying I-95 over the Schuylkill River. Complex traffic control, access equipment and railroad permitting was required. Inspection work was completed in accordance with PennDOT's Bridge Inspection Procedures and Policies Manual, NBIS, FHWA, and AASHTO. Project included routine NBIS, interim, emergency on-call services, and CoRe element level inspections.
04/20 - 12/21	**Delaware River Port Authority (DRPA), Betsy Ross Bridge over Delaware River 2020 Biennial Inspection, PA and NJ.** Bridge Inspection Assistant Team Leader for the biennial inspection that included a close visual "hands-on" inspection of all fracture critical and fatigue sensitive details including the main truss bridge, the approach truss spans, the approach girder spans, and numerous approach structures. This project included an underwater inspection of the channel piers and inspection and mapping via an unmanned aerial vehicle (UAV). The results of the inspection were presented in a structural inspection report. Bridge data was updated for NJDOT and PennDOT reporting. An executive briefing was also prepared and delivered to DRPA.
05/19 - present	**PennDOT Central Office, Agreement E04533, NBIS Inspection of assigned locally owned bridges, Statewide.** Bridge Inspection Assistant Team Leader for the for NBIS bridge inspections of locally owned bridges for DCNR (130 bridges) and first-time inspection and load ratings of newly discovered bridges in D4-0, D5-0 and D8-0 (254 bridges). 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.
01/21 - present	**PennDOT District 4-0, Agreement E04957, NBIS Inspection of Large/Complex Bridges, PA.** Bridge Inspection Assistant Team Leader for the 3-cycle contract focusing on large and complex structures throughout PennDOT District 4-0. Inspections were often restricted to a 9am to 3pm window to minimize impacts to traffic. Complex traffic control, access equipment and railroad permitting was required. Inspection work was completed in accordance with PennDOT's Bridge Inspection Procedures and Policies Manual, NBIS, FHWA, and AASHTO. Project included routine NBIS, interim, emergency on-call services, and CoRe element level inspections.

	Firm	**AECOM Technical Services, Inc.**		
	Name	Riley LaRiviere, EI	Years of Relevant Experience with this Employer	1
	Title	Bridge Inspection Assistant Team Leader	Years of Relevant Experience with Other Employer(s)	1

Degree(s) / Years / Specialization			BS / 2021 / Civil Engineering
Active Registration Number / State / Expiration Date			N/A
Year Registered	2021	Discipline	Civil Engineering Intern, PA
Contract Role(s) / Brief Description of Responsibilities			Riley will be one of AECOM's Bridge Inspection Assistant Team Leaders for this contract. He has been a Certified Bridge Safety Inspector since 2021. Riley has the following extensive training: *Bridge Safety Inspection Training Course, PennDOT, 2021.*

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
05/21 - present	**PennDOT District 6-0, Agreement E05073, NBIS Inspection of 413 State Owned Bridges in Philadelphia County, PA.** Bridge Inspection Assistant Team Leader for the 2-cycle contract focusing on structures within the high ADT I-95, I-76, and SR 1 corridors. Inspections were often restricted to a 9am to 3pm window to minimize impacts to traffic. Included the biennial inspection of the double deck through truss – Girard Point Bridge – carrying I-95 over the Schuylkill River. Complex traffic control, access equipment and railroad permitting was required. Inspection work was completed in accordance with PennDOT's Bridge Inspection Procedures and Policies Manual, NBIS, FHWA, and AASHTO. Project included routine NBIS, interim, emergency on-call services, and CoRe element level inspections.
01/18 - present	**Montana Department of Transportation (MDT), Load Rating Bridges Term Contracts 2018-2021 & 2021-2024.** Bridge Load Rating Engineer responsible for completed load rating analyses. 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 700 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.
05/19 - present	**PennDOT Central Office, Agreement E04533, NBIS Inspection of assigned locally owned bridges, Statewide.** Bridge Inspection Assistant Team Leader for the for NBIS bridge inspections of locally owned bridges for DCNR (130 bridges) and first-time inspection and load ratings of newly discovered bridges in D4-0, D5-0 and D8-0 (254 bridges). 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.

01/21 - present	**PennDOT District 4-0, Agreement E04957, NBIS Inspection of Large/Complex Bridges, PA.** Bridge Inspection Assistant Team Leader for the 3-cycle contract focusing on large and complex structures throughout PennDOT District 4-0. Inspections were often restricted to a 9am to 3pm window to minimize impacts to traffic. Complex traffic control, access equipment and railroad permitting was required. Inspection work was completed in accordance with PennDOT's Bridge Inspection Procedures and Policies Manual, NBIS, FHWA, and AASHTO. Project included routine NBIS, interim, emergency on-call services, and CoRe element level inspections.

	Firm	**AECOM Technical Services, Inc.**		
	Name	Kevin Ahearn, PE	Years of Relevant Experience with this Employer	8
	Title	Unmanned Aerial Systems (UAS) Pilot	Years of Relevant Experience with Other Employer(s)	0

Degree(s) / Years / Specialization			BS / 2014 / Civil Engineering
Active Registration Number / State / Expiration Date			55336 / MA / 6/30/2022
Year Registered	2019	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			Kevin will be an Unmanned Aerial Systems (UAS) Pilot for this project. He is a Certified Bridge Inspector since 2014 and is a structural engineer with experience in inspection, load rating, and rehabilitation of highway and rail/transit bridge and tunnel structures. He has extensive experience in bridge and tunnel inspection, having inspected over 200 structures, the majority of which are considered complex. These structures include cable stayed, network arch, truss, post-tensioned segmental concrete box girder, timber covered bridges, vertical lift, swing, and bascule bridges. He is a FAA Part 107 commercially licensed remote pilot qualified in small, unmanned aircraft systems (sUAS) since 2018. He has performed UAS operations in support of various transportation projects for MassDOT, MBTA, NHDOT, MEDOT, RIDOT, and private companies. These operations have included aerial mapping, thermal imaging and analysis, inspection of critical infrastructure, and basic photography/videography. He has experience with multiple DJI systems, Parrot, and Skydio drones. Training: NHI Safety Inspection of In-Service Bridges (2014), NHI Bridge Inspection Refresher (2019), NHI Fracture Critical Inspection Techniques for Steel Bridges (2016).

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
06/19 - present	**MassDOT, Complex and Statewide Bridge Inspection, Statewide, MA.** Bridge Inspection Team Leader and UAS Pilot for the inspection of complex and statewide bridges throughout the Commonwealth. These structures have included truss, arch, cable stay, network arch, prestressed concrete segmental box girders, and movable bridges. Performed UAS flight operations to support bridge inspections throughout the Commonwealth using the DJI Matrice 210, DJI Phantom 4, and Skydio 2. UAS flights were utilized as a means of inspection access for hard-to-reach areas or to obtain supplemental visual imagery of bridge features and the adjacent area. The flights were performed for a variety of bridge structure types including steel girders, steel box girders, truss, bascule, and timber covered bridges. Several flights were performed in controlled airspace and required FAA airspace authorizations through the Low Altitude Authorization and Notification Capability (LAANC) or FAA Drone Zone web portal.

02/21 - present	**MaineDOT / New England Transportation Consortium, Investigating Thermal Imaging Technologies and UAV to Improve Bridge Inspections.** Principal Investigator and Project Manager for this research project. The research project includes evaluating thermal imaging sensors and drones to determine whether the technology is effective to determine the existence and extent of concrete delamination. The work includes evaluation of available technologies and field verification of the technologies, as well as development of inspection and analysis protocols. The field testing included both handheld thermal cameras (Seek Shot Pro, Flir C5, E8, E86, E96) and drone mounted thermal cameras (Matrice 210 with Zenmuse XT2, Skydio X2, Parrott Anafi USA). The field testing was performed at the I-291 Line K ramp bridge in Springfield, I-90 EB Exit 131 in Boston, Morrisey Boulevard bridge in Boston, Route 28 bridge in Somerville, and Washington Bridge Westbound in Providence. The work also included traditional hammer sounding using bucket trucks and an aerial lift to identify existing delamination along the bridges.
02/19 – 09/21	**MBTA, Railroad Bridge Inspection, Statewide, MA.** Bridge Inspection Team Leader and UAS Pilot for the in-depth inspection of commuter rail bridges throughout the Greater Boston Area. The bridges include various structure types including steel through girder and floorbeam systems, prestressed concrete box beam, and reinforced concrete deck arch bridges. The inspections were performed in accordance with the MBTA Railroad Operations Commuter Rail Design Standards Manual. Tasks included field preparation, inspection, and development of a technical report using 4D Client database. Performed UAS operations to capture aerial imagery of several bridges to be used for inventory purposes.
03/19 – 09/21	**MassDOT, Tunnel Inspections, Boston, MA.** UAS Pilot for drone flights of recreational and prosumer level drones in various tunnels and tunnel support facilities to determine the effectiveness of these drones in identifying deficiencies and overall efficiency. Additionally, coordinated with specialty confined space drone manufacturers including Digital Aerolus, Skycopter, and Endeavor Robotics to provide demonstrations to the client within the tunnel ventilation ducts.
12/21 – 02/22	**MBTA Tunnel Inspection, Orange Line Exhaust Shaft UAS Inspection, Boston, MA**. UAS Pilot to perform UAS operations to perform condition assessment of Orange Line tunnel exhaust shafts for multiple tunnels along the Southwest Corridor in Boston. The drones were used as an inspection access tool to document the condition of six exhaust shafts consisting of reinforced concrete and brick masonry construction. The flights were performed with a Skydio S2. The operations required authorization for Class B airspace from the FAA as the project site is near Logan International Airport.
11/19 – 01/20	**RIDOT, Washington Bridge Project, Providence, RI.** UAS Pilot to perform UAS flight operations for this bridge rehabilitation and widening project. The flights were performed at multiple points in Providence and East Providence in order to obtain traffic footage along I-195 westbound during the peak morning hours. Flights were also performed to obtain aerial imagery of the bridge structure and existing site. The UAS imagery was used to develop an ortho-mosaic photo of the west portion of the site using Pix4D.

	Firm	AECOM Technical Services, Inc.		
	Name	John Delp	Years of Relevant Experience with this Employer	27
	Title	Unmanned Aerial Systems (UAS) Pilot	Years of Relevant Experience with Other Employer(s)	3

Degree(s) / Years / Specialization			N/A
Active Registration Number / State / Expiration Date			N/A
Year Registered	N/A	Discipline	N/A
Contract Role(s) / Brief Description of Responsibilities			John will be an Unmanned Aerial Systems (UAS) Pilot for this project. He has extensive experience on both Government and Commercial UAS flight operations and is an expert in planning, operations, safety, maintenance logistics, engineering support, and command and control. Commercially, he has flown and led successful UAS projects for the inspection of critical infrastructure such as wastewater facilities, earthen dams, and bridges; highly accurate photogrammetric land surveys; thermal imaging; and videography. While trained and qualified to fly the DJI line of products, he has in-depth knowledge and experience with additional UAS Air Vehicles and systems. This also includes technology that supports data processing techniques used in UAS imaging services and product delivery. Mr. Delp has extensive experience in FAA waiver filing, airspace deconfliction, and has deployed extensively to lead and accomplish UAS projects across the United States for a wide range of AECOM clients.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
05/21- 08/21	**Albemarle Sound Bridge Inspection, Washington and Chowan Counties, North Carolina (2021).** This North Carolina Department of Transportation (NCDOT) project carries NC 32 over Albemarle Sound. As part of a comprehensive bridge inspection, the client requested thermal imagery of the bridge deck to evaluate the identification of concrete delamination faster on this 3.5-mile-long structure. Two areas of the structure were collected and analyzed by bridge inspectors and several areas were identified from the aerial imagery for further analysis. Utilizing traffic control to close portions of the bridge for short durations, the UAS was able to fly low and slow directly over the bridge structure to collect the required imagery. Senior Remote Pilot in Command (RPIC) responsible for safe operation of UAS to obtain the thermal imagery. Briefed field personnel on safe UAS operations and coordinated with project team daily.
05/21 – 08/21	**Lake Tillery ASR Bridge, Stanly and Montgomery Counties, North Carolina, (2021).** Lake Tillery ASR Bridge carries NC 24/27 over the Pee Dee River and Lake Tillery. Senior Remote Pilot in Command (RPIC) responsible for safe operation of UAS to capture high resolution imagery of five concrete piers that were recently retrofitted to correct the deterioration of the concrete. The imagery collected was combined into 3D models of each pier that can be compared to previous flights in 2018. Bridge engineers will utilize the data to determine the health of the bridge structure and determine if additional remediation measure are required. Ensured airspace was clear from required FAA waivers, coordinated with onsite field personnel, and coordinated with boat captain for flights from vessel.

01/21 - present	**Raymond E Baldwin Bridge Inspection, Old Saybrook, Connecticut and Old Lyme, Connecticut (2021).** This Connecticut Department of Transportation (CTDOT) project was a comprehensive bridge inspection that included multiple disciplines for an overall analysis on the health of the structure. Carrying 8-lanes of Interstate I-95 traffic across the Connecticut River, this structure is vitally important for commuters in the area. In coordination with certified bridge inspectors, high resolution imagery was collected for the entire substructure of the bridge including the concrete piers for crack detection analysis. Utilizing a Phase One Ultra High-Resolution sensor, additional imagery on the concrete piers and other vital bridge elements was collected for analysis. Lidar imagery for the substructure as well as the deck was collected to be included within a 3-D model of the entire project. Careful coordination with the Client, Bridge Owner, Local Law Enforcement, and businesses in the area was required each day of the inspection. Senior Remote Pilot in Command responsible for planning and executing complex flight operations including flights from a vessel on the river to collect the necessary imagery. Prior to lidar collection, coordinated with survey crew chief to confirm Ground Control Points (GCP's) were set and captured during flight. Multiple launch and recovery areas were utilized to ensure VLOS to obtain project goals. Briefed field personnel on safe operations and coordinated delivery of imagery to processing team.
06/20 – 10/20	**Abraham Lincoln Cable Stayed Bridge Inspection, Jefferson County, Kentucky (2020).** This Kentucky Transportation Cabinet (KYTC) project was a comprehensive routine and fracture critical inspection of the 6-lane Abraham Lincoln Bridge that carries Interstate 65 across the Ohio River, connecting Louisville, Kentucky, and Jeffersonville, Indiana. The bridge has a total length of 2,100 feet and a combined total of 88 cables. Remote Pilot in Command (RPIC) responsible for safe operation of UAS to inspect the stay cables and concrete support towers for deficiencies. Coordinated duties between inspection crew that consisted of a sensor operator and structural engineer. Multiple launch and recovery areas were utilized to ensure VLOS to obtain project goals. Ensured airspace was clear from required FAA waivers, coordinated with onsite project manager, and processed data each day for post report writing.
03/19 – 05/19	**I-95/I-495 over Cameron Run Bridge Inspection, Fairfax County, Virginia (2019).** This Virginia Department of Transportation project was part of a routine inspection of the I-95/I-495 bridge over Cameron Run. Remote Pilot in Command (RPIC) responsible for safe operation of UAS to inspect the pier caps of this 300' wide bridge. Coordinated duties between inspection crew that consisted of a camera operator and structural engineer. Multiple launch and recovery areas were utilized to ensure VLOS to obtain project goals. Flights occurred within the DC flight restricted zone so careful coordination with the TSA and FAA were required prior to approval to conduct flight operations. Coordination of on-site police presence was also required.
03/19 – 05/19	**I-695 Baltimore Beltway Inner Loop Bridge Inspection, Baltimore County, Maryland (2019).** Maryland Department of Transportation (MdTA) project to inspect multiple bridge piers for the I-695 Inner Loop Bridge over Bear Creek. Remote Pilot in Command (RPIC) responsible for safe operation of UAS to capture photos of concrete bridge piers. Ensured airspace was clear from required FAA waivers, coordinated with onsite field personnel, and coordinated with boat captain for flights off vessel.

Prime consultant firm name: **AECOM Technical Services, Inc. (AECOM)**

	Firm	**Modjeski and Masters, Inc.**		
	Name	Anthony Schoenecker, PE	Years of Relevant Experience with this Employer	13
	Title	Bridge Inspection Team Leader	Years of Relevant Experience with Other Employer(s)	4

Degree(s) / Years / Specialization			BS / 2005 / Civil Engineering
Active Registration Number / State / Expiration Date			PE.35786 / LA / 03/31/2023 NBIS Certified Inspector / SPRAT Level III Certified / Workzone Compliant
Year Registered	2010	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			Anthony is a Louisiana licensed Professional Engineer and will serve as Bridge Inspection Project Manager for this contract. He is the M&M New Orleans office Field Services Manager and is an NBIS Inspection Team Leader responsible for the coordination and execution of inspections and condition reporting. He is trained in Technical and Rope Access techniques and has numerous inspection certifications including: NHI 130055 - Safety Inspection of In-Service Bridges (and NHI 130053 Refresher Course), NHI 130078 - Fracture Critical Inspection Techniques for Steel Bridges; Level I and II Liquid Penetrant and Magnetic Particle Inspection; SPRAT Level III Rope Access Technician, and UAV Remote Pilot (Drone) Operator Permit.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
11/21-02/22	**TxDOT Fracture Critical Inspections | TxDOT.** This bridge is a two-lane, single-span, 94'-6" long structure built in 1890 and consists of one lenticular pony truss span and six floorbeams supported by reinforced concrete abutments. The fracture critical members include the north truss line (Truss 1), the south truss line (Truss 2) and six floorbeams. The structure is constructed of painted wrought iron of unknown strength. M&M performed a fracture critical inspection and used non-destructive testing techniques to perform inspections of non-fracture critical bridge pins. Anthony was the Project Manager.
12/19 – 12/20	**Alaska Bridges Inspections – Statewide, AK | Alaska Railroad.** Modjeski and Masters performed the in-depth inspection, pin ultrasonic testing, structural capacity assessment and rating, pin and gusset evaluations and fatigue analysis for three bridges in Alaska. The Hurricane Gulch Bridge is a 910' ft deck arch bridge over the Hurricane Creek carrying a single railroad track. The main arch span is 388 feet long and flanking deck truss is 120'. The approach includes DPG spans on steel towers. The Mears Bridge is a 1300 ft bridge over the Tanana River carrying a single railroad track. The main through truss span is 700 feet long and the approach includes 118' deck truss and several DPG span on steel towers. The Gold Creek Bridge is a 704 ft bridge over the Susitna River carrying a single railroad track. The main through truss span is 504 feet long and the approach includes several TPG span on concrete piers. Anthony was an inspection team leader for this project.

9/16 – 11/16 12/14 – 8/15 11/13 – 2/14	**44-2687 In-Depth Inspection of Complex Structures Retainer – Various Bridges, Statewide | LADOTD.** As a member of a multi-firm team, Modjeski and Masters was tasked to provide Structural, Mechanical, Electrical, and Coatings inspection services to perform multiple In-Depth Bridge Inspections for various bridges throughout the state of Louisiana, as a part of the ongoing statewide Complex Structures Inspection Retainer with the LADOTD. The list of bridges in this contract included the Gramercy Bridge over the Mississippi River, the I-210 Bridge over Prien Lake, Louisa Bridge over the Intracoastal Canal, and the LA 47 Bridge over the Mississippi River Gulf Outlet. The inspections were performed using technical rope access and rappelling, aerial work platforms, and standard climbing techniques. Bridge conditions, including specific defects, were documented and presented in an inspection report and PONTIS/Inspect-Tech forms, along with repair recommendations and a full coatings evaluation report. Anthony participated as Team Leader in the inspection of five bridges and was Project Manager for two bridges under this contract. He additionally served as office support for two bridges under this contract.
9/19 – 5/21 10/17 – 4/18 10/16 – 3/17 11/15 – 3/16 10/14 – 1/15 10/13 – 2/14	**Huey P. Long Bridge Annual Inspection | New Orleans Public Belt Railroad.** The Huey P. Long Bridge is a steel cantilever through-truss railroad and highway bridge across the Mississippi River, with a main bridge crossing of 3,525 feet and several miles of steel plate girder approaches. The main bridge features four deck truss spans, two anchor spans of 529 feet and 532 feet, two cantilever spans of 144 feet, a simple span of 531 feet, and a suspended span of 503 feet. Anthony was an inspection team member from 2009-2012 and inspection team leader from 2013-2018 for this annual inspection which included a 100% hands-on visual inspection of all structural elements, including fatigue-sensitive and fracture-critical members, comprising the main bridge structure and approaches, for both the railroad and highway.
6/13 – 9/13	**Crescent City Connection No. 1 & 2 Rating and Inspection. New Orleans, LA | LADOTD.** Anthony was the inspection team leader and rope access supervisor for this project and was responsible for the coordination of the inspection and with the rating analysis team. M&M performed an inspection and LRFR load rating of both of these 13,428-foot truss bridges with main spans of apx 1,575 feet. The in-depth inspection focused on each member and the gusset plates, using technical rope access methods for access.
2/17 – 7/18	**Nineteen Complex Bridges Load Rating and Evaluation, Statewide, LA | LADOTD.** Modjeski and Masters, Inc. performed plan and document retrieval, bridge inspection and analysis, and load and resistance factor rating of complex bridge structures, mainly movable bridges. Gusset, truss, floorsystem and substructure components were rated. Bridge inspections focused on gusset plates and existing member conditions for rating. AASHTOWare BrR was used for the ratings, which followed the AASHTO Manual for Bridge Evaluation, the LADOTD Policies and Guidelines for Bridge Rating and Evaluation, and LADOTD Bridge Design and Evaluation Manual. Anthony served as an inspection team leader for the Gramercy and Crescent City Connection #2 Bridges, both Mississippi River Crossings.
3/15 – 10/15 4/14 – 6/14 4/13 – 11/13 10/12 – 11/12 5/11 – 11/11	**NYSBA Multiple Bridge Inspections. Statewide, New York | New York State Bridge Authority.** Anthony participated as a Team Member and a Team Leader over multiple years for the inspection of seven bridges (Bear Mountain, Newburgh-Beacon North and South, Rip Van Winkle, Mid-Hudson, and Kingston-Rhinecliff, and Popoloped Creek) operated by the NYSBA over the Hudson River. Bridge types include suspension, deck truss, cantilevered through truss, and combinations thereof. (3 truss bridges and 2 suspension bridges).

	Firm	**Modjeski and Masters, Inc.**		
	Name	Matthew Miller, PE	Years of Relevant Experience with this Employer	11
	Title	Bridge Inspection Team Leader	Years of Relevant Experience with Other Employer(s)	0

Degree(s) / Years / Specialization			BS / 2005 / Civil Engineering
Active Registration Number / State / Expiration Date			PE.39534 / LA / 09/30/2023 NBIS Certified Inspector / Work Zone Training Compliant
Year Registered	2015	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			Matthew is a registered professional engineer with 10 years of experience in the Field Services Section in the New Orleans Office. During his time at M&M, he has been primarily involved with CE&I inspection services on bridge repair and construction projects, and with the detailed, interim and special inspections of numerous railroad bridges. He has been involved in numerous emergency inspections and troubleshooting. Matthew is certified in a variety of Bridge Inspection industry standard training, including FHWA-NHI Bridge Inspection Refresher and FHWA-NHI Safety of In-Service Bridges courses, e-Railsafe Safety Training, M&M's Technical and Rope Access program.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
8/19 – 4/20 12/18 – 2/19 11/15 - 1/16 10/14 – 1/15 10/13 – 11/13	**Huey P. Long Bridge Annual Inspection | New Orleans Public Belt Railroad, LA.** The Huey P. Long Bridge is a steel cantilever through-truss railroad and highway bridge across the Mississippi River, with a main bridge crossing of 3,525 feet and several miles of steel plate girder approaches. The main bridge features four deck truss spans, two anchor spans of 529 feet and 532 feet, two cantilever spans of 144 feet, a simple span of 531 feet, and a suspended span of 503 feet. Matthew served as a bridge inspector and team leader for the inspection of this bridge.
10/18 – 12/18	**Sunshine Bridge Emergency Inspection and Repairs. Donaldsonville, LA | LADOTD**. In 2018, a barge mounted crane was traveling upstream in the western most channel of the river. The crane's height exceeded the vertical clearance of the span, and the back-stay of the crane impacted the downstream bottom chord of the truss. The impact caused significant damage to a bottom chord member, tearing off the bottom plate of the box member and inducing severe out of plane distortion. The member in question was a primary load path compression member, designed to carry 1,700 kips of dead load. LADOTD closed the bridge immediately and began the task of investigation and repair. Modjeski and Masters, Inc. (M&M) was selected as the lead consultant for bridge repairs. After closing the bridge directly after the incident, LADOTD engaged M&M to perform an emergency hands-on inspection using technical rope access techniques. The inspection team documented the primary damaged member as well as a host of other damaged elements, including bottom laterals, stringer bearings, and gusset plates. Technical rope access was critical in locating and documenting all damaged bridge elements. M&M also provided construction engineering and inspection of the repair efforts. Matthew provided emergency inspection and CE&I services.

11/13 – 1/14	**44-2687 In-Depth Inspection of Complex Structures Retainer – Various Bridges, Statewide | LADOTD.** As a member of a multi-firm team, Modjeski and Masters was tasked to provide Structural, Mechanical, Electrical, and Coatings inspection services to perform multiple In-Depth Bridge Inspections for various bridges throughout the state of Louisiana, as a part of the ongoing statewide Complex Structures Inspection Retainer with the LADOTD. The list of bridges in this contract included the Gramercy Bridge over the Mississippi River, the I-210 Bridge over Prien Lake, Louisa Bridge over the Intracoastal Canal, and the LA 47 Bridge over the Mississippi River Gulf Outlet. The inspections were performed using technical rope access and rappelling, aerial work platforms, and standard climbing techniques. Bridge conditions, including specific defects, were documented and presented in an inspection report and PONTIS/Inspect-Tech forms, along with repair recommendations and a full coatings evaluation report. Matthew was an inspection team member for this project, responsible for coordination assistance with subconsultants, and preparing the inspection report.
04/16 – 01/18	**Union Pacific Railroad System Wide Inspections | UPRR Systemwide.** Modjeski and Masters performed a system-wide inspection of steel bridges for Union Pacific Railroad (UPRR). A total of 1,280 bridges were inspected. The types of bridges inspected include through trusses, deck trusses, through plate girders, and deck plate girders on steel towers. Also included were movable structures such as bascule, swing and vertical lift bridges. Modjeski and Masters provided uniformity throughout the entire system by identifying inconsistencies in describing levels of severity noted with deficiencies and assisted the UPRR inspectors in identifying problem areas and the causes associated with them. Matthew was the inspection team leader for this project.
7/14-9/14	**Belle Chasse Lift Bridge Inspection. Belle Chasse, Louisiana | New Orleans & Gulf Coast Railway.** The New Orleans & Gulf Coast Railway selected M&M to perform an in-depth structural, mechanical and electrical inspection of the Belle Chasse Bridge over the Intracoastal Waterway. All structural members were observed at close range along with a close visual inspection of the electrical and mechanical systems. The inspection team took measurements of metalwork losses that could possibly result in reduced load carrying capacity of the structure. Matthew served as inspection team leader for this bridge.

	Firm	**Modjeski and Masters, Inc.**		
	Name	James Costigan, PE	Years of Relevant Experience with this Employer	7
	Title	Bridge Inspection Team Leader	Years of Relevant Experience with Other Employer(s)	0

Degree(s) / Years / Specialization			BS / 2015 / Civil Engineering
Active Registration Number / State / Expiration Date			0044328/LA/2022 Work Zone Training Compliant / NBIS Certified Inspector
Year Registered	2020	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			James joined M&M in 2015 and is a Professional Engineer for the Field Service Section. His experience includes highway and railroad large river and movable bridge inspection, design and construction monitoring. He has been the resident engineer on a highway bascule bridge roadway grating replacement project, a railroad bascule bridge floor system replacement project, and a railroad bascule bridge link pin replacement project. James has assisted in the design of a new bridge fender system and many other repair designs following inspection findings. James is a FHWA Certified Bridge Inspector and is an Inspection Team Leader, actively participates in Modjeski and Master's Technical Access Program as a Worker. He is SPRAT Level II Certified.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
12/19-12/20	**Alaska Bridges Inspections – Statewide, AK | Alaska Railroad.** Modjeski and Masters performed the in-depth inspection, pin ultrasonic testing, structural capacity assessment and rating, pin and gusset evaluations and fatigue analysis for three bridges in Alaska. The Hurricane Gulch Bridge is a 910' ft deck arch bridge over the Hurricane Creek carrying a single railroad track. The main arch span is 388 feet long and flanking deck truss is 120'. The approach includes DPG spans on steel towers. The Mears Bridge is a 1300 ft bridge over the Tanana River carrying a single railroad track. The main through truss span is 700 feet long and the approach includes 118' deck truss and several DPG span on steel towers. The Gold Creek Bridge is a 704 ft bridge over the Susitna River carrying a single railroad track. The main through truss span is 504 feet long and the approach includes several TPG span on concrete piers. James assisted in the inspection of two large truss railroad bridges and was the team leader for a third railroad truss inspection. These inspections included technical access work, standard climbing, eyebar load sharing verification, and UAV drone flights. James was also responsible for authoring the 30 day and 90 day inspection reports for these three bridges.
10/18-03/19	**H.012343.6 Sunshine Bridge Collision – Emergency Response. Donaldsville, LA | LADOTD.** The Louisiana Route 70 Sunshine Bridge is a steel cantilever through truss bridge that carries four lanes of traffic over the Mississippi River near Donaldsonville, LA. The three main truss spans are each about 800 feet in length and provide up to 133 feet in vertical clearance above high water. On October 12, 2018, a barge mounted crane was traveling upstream in the western most channel of the river. There was insufficient clearance as the barge passed underneath the bridge, and the back-stay of the crane impacted the downstream bottom chord of the truss. The impact caused significant damage to a bottom chord member, tearing off the bottom plate of the box member and inducing severe out of plane distortion.

	The member in question was a primary load path compression member, designed to carry 1,700 kips of dead load. LADOTD closed the bridge to traffic directly after the incident and engaged Modjeski and Masters to perform an emergency hands-on inspection using technical rope access techniques. With the damage documented, work on repair concepts began. James was instrumental in the inspection of the damage as well as the construction engineering and inspection of the repair efforts.
2/17 – 6/17	**H.009859.5: Nineteen Complex Bridge Load Rating and Evaluation. Louisiana | LADOTD**. Modjeski and Masters, Inc. performed plan and document retrieval, bridge inspection and analysis, and load and resistance factor rating of complex bridge structures, mainly steel vertical lifts. Gusset, truss, floorsystem and substructure components were rated. Bridge inspections focused on gusset plates and existing member conditions for rating. AASHTOWare BrR was used for the ratings, which followed the AASHTO Manual for Bridge Evaluation, the LADOTD Policies and Guidelines for Bridge Rating and Evaluation, and LADOTD Bridge Design and Evaluation Manual. James was responsible for inspection services and was an Inspection Team Leader
3/16 – 7/16	**H.009859.5: Ten Truss Bridges Load Rating and Evaluation. Louisiana | LADOTD.** Modjeski and Masters, Inc. performed plan and document retrieval, bridge inspection and analysis, and load and resistance factor rating of complex bridge structures, including large cantilever trusses, vertical lifts and swing spans. Gusset, truss, floorsystem and substructure components were rated. Bridge inspections focused on gusset plates and existing member conditions for rating. AASHTOWare BrR was used for the ratings, which followed the AASHTO Manual for Bridge Evaluation, the LADOTD Bridge Design and Evaluation Manual and AASHTO LRFD Bridge Design Specifications. James was responsible for special inspections and inspection documentation.
11/15-2/16 10/17-4/18	**Huey P. Long Inspection. Jefferson Parish, LA.** Public Belt Railroad The Huey P. Long Bridge is a high-level, combination highway and railroad bridge which crosses the Mississippi River. Modjeski and Masters, Inc. provides the following services for this bridge: annual routine inspections, 1/3 indepth inspection each year, analysis of special railroad loading, emergency accident inspections repairs, engineering services for bridge maintenance, valuation (or Replacement Value). James was part of the inspection team.
5/16 -07/16	**H.010016: US 11 Bridge over Lake Pontchartrain, New Orleans, LA.** Within the US 11 Bridge, commonly known as the 5 mile bridge, are two double-leaf bascule spans (North Draw and South Draw). There was considerable damage to the bridge as a result of Hurricane Katrina. M&M was retained to determine the improvement needs structural, electrical and mechanical to extend the life by 20-30 years and to prepare rehabilitation plans. James was responsible for bridge inspection and repair/ replacement design and documentation.

	Firm	**Huval & Associates, Inc.**		
	Name	Colby Guidry, PE	Years of Relevant Experience with this Employer	15
	Title	Bridge Inspection Team Leader	Years of Relevant Experience with Other Employer(s)	7

Degree(s) / Years / Specialization			BS, University of Louisiana, Civil Engineering
Active Registration Number / State / Expiration Date			PE.31338/LA/09-30-22
Year Registered	2004	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			Huval Inspections, Ratings, Design. Colby came to Huval & Associates with 7 years' experience with the Federal Highway Administration (FHWA). His FHWA experience included all aspects of transportation related projects, where he was actively involved with environmental review, design, construction, and maintenance of bridges and roadways throughout Louisiana. Since joining Huval, he has been involved in bridge and structural design, plan preparation, bridge inspections, and construction support services. Completed the two-week FHWA approved comprehensive bridge training course for bridge inspectors, certified as a Bridge Inspection Team Leader, completed the NHI LRFR for Superstructures Course, the Work Zone Traffic Control Technician and Supervisor Courses, ATSSA Flagger Training, the NHI Design & Operation of Work Zone Traffic Control, Roadside Design Course, NHI Highway Hydraulics Course, NHI Urban Drainage Design Course, as well as many construction and environmental related courses. Very familiar with the LADOTD Bridge Design Manuals, 2002 AASHTO Bridge Specs, and the current AASHTO LRFD Bridge Specs.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
10/19-07/20	**SR 63 over Escatawpa River Girder and Weld Repairs – Pascagoula, MS.** Lead Inspection Engineer of the in-depth steel repair inspection. Responsible for coordination, inspections, project setup, QA/QC, bridge rehab design for the $3M construction contract.
1/19-Present	**Herman Dupuis Swing Span Bridge (Movable) – St. Martin Parish.** Project Manager for the design and plan development of a new swing span bridge over alligator bayou which will replace the Butte LaRose Pontoon bridge. Design elements include all aspects of the bridge including environmental clearance, surveying, structural design, mechanical design, electrical design, hydraulic design, roadway design, and all other design elements.
4/18 – Present	**Retainer for Engineering Services for Bridge Preservation - Statewide, Contract No. 4400011225.** Supervisor Engineer of Retainer Contract. Responsible for project management, coordination, project setup, QA/QC, and bridge rehab design for the $4M retainer.
09/12 – 12/17	**Retainer Contract for Bridge Repair and Rehabilitation Services - Statewide, Contract No. 4400002537.** Supervising Engineer of Retainer Contract. Responsible for coordination, inspections, project setup, QA/QC, bridge rehab design for the $6M retainer contract.
12/14 – 01/16	**US 84 Pin & Link Replacement Natchez, MDOT.** Lead design engineer for the development of construction means and methods to remove and replace pin and links on MS river bridge.

05/11 – 08/15	**Retainer for Engineering Services for Bridge Preventive Maintenance (BRPM) - Statewide, Contract No. 440001543** Lead Engineer of Retainer Contract. Led the Inspection and Design for 8 different Task Orders covering Preventive Maintenance Repairs for over 100 Bridges statewide in short timeframes.
08/09– 06/15	**Retainer Contract for Bridge Repair and Rehabilitation Services - Statewide, S.P. 700-99-0488.** Lead Engineer of Retainer Contract. Responsible for coordination, inspection team leader, project setup, bridge design, and QA/QC of Task Orders totaling approximately $8.75M over a 5-year period. Contract utilized multiple Subconsultants on all aspects of bridge design and inspection.
03/09 – 11/12	**I-49 Bridges (Various Segments), Under Retainer No. 4400000670.** Lead Engineer for LRFR load ratings for 18 bridges, design and final plans of over 10 bridge structures and 1 box culvert structure. Bridge types included steel girder, prestressed concrete, and slab spans. Managed several sub-consultants producing numerous bridge plans.
01/13-11/15	**Tappan Zee Bridge, NY Thruway Authority.** Project Manager/design engineer for design of precast tower and anchor pier slabs, pile templates, work platforms, and other systems. Also assisted in the design of temporary fender systems designed to protect the construction area from ice, wave, and ship impacts.
(10/14-03/15)	**St. Martin Parish Phase II Bridge Repairs, St. Martin Parish.** Project Engineer for the complete reconstruction of three concrete bridges. Construction consisted of new piles, concrete panel removal, new caps, new bulkheads, new wingwalls, new roadway approach work, new guardrail.
10/14-05/15	**St. Martin Parish Phase III Bridge Repairs, St. Martin Parish.** Project Engineer for the complete reconstruction of three concrete bridges. Construction consisted of new piles, concrete panel removal, new caps, new bulkheads, new wingwalls, new roadway approach work, new guardrail.
12/15-03/16	**Rusty Rd. Bridge Replacement, St. Martin Parish.** Assistant Project Engineer for the bridge replacement project on Rusty Rd. in St. Martin Parish. New bridge consisting of new concrete girders, new concrete caps, new concrete piles, new wingwalls, new backwalls, new approach slabs, new approach roadway, new asphalt, etc.
(11/17-07/18)	**Surrey St. Bridge Repairs, Lafayette Parish.** Assistant Project Engineer for the repair of the Surrey St. Bridge in Lafayette. Project consisted of bearing repair and replacement, concrete riser construction, deck overlay, joint repairs, painting of steel girders with full enclosure, and miscellaneous work.
04/14-09/20	**US 90 Albertsons Parkway Design Build.** Quality control/Quality Assurance for the design team for this design build project for the bridge plans at Albersons Parkway and for the bridge Plans at the BNSF Railroad crossing. Involved through construction.
01/09-04/09	**I-10 Calcasieu River Bridge Inspection, S.P. 700-10-0150.** Prepared final inspection report and performed QA/QC for this 6,617' bridge structure.
09/07 – 09/08	**Atchafalaya River Bridge Inspection, S.P. 700-51-0109.** Prepared final inspection report and performed QA/QC for the 3,746' LA-182 Atchafalaya River Bridge at Berwick Bay, Louisiana and the 1,839' US 90 Atchafalaya River Bridge at Morgan City, Louisiana.

	Firm	**Huval & Associates, Inc.**		
	Name	Patrick Broussard	Years of Relevant Experience with this Employer	5
	Title	Bridge Inspection Team Leader	Years of Relevant Experience with Other Employer(s)	38

Degree(s) / Years / Specialization			N/A
Active Registration Number / State / Expiration Date			N/A
Year Registered	N/A	Discipline	N/A
Contract Role(s) / Brief Description of Responsibilities			Bridge Inspections. Patrick began his career with the LADOTD in 1989 as an engineering technician. In 1992, he became a bridge inspector for the LADOTD and was responsible for planning and preparing for inspection of District 03's bridges, which consisted of approximately 800 stationary and 60 movable bridges. In 1996, Patrick was promoted to the position of Bridge Maintenance and Inspection Supervisor and he held this position until his retirement from the LADOTD in 2017. Patrick is an LADOTD Certified Bridge Inspector and has performed as Team Leader for the LADOTD on hundreds of bridge inspections. He is also current on the ATSSA Traffic Control Technician, Traffic Control Supervisor, and Flagger Courses.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
12/02-04/17	**Louisiana Department of Transportation and Development Engineering Tech. 5.** (Bridge Inspection Team Leader) Lead a two man inspection team in conducting in depth inspections on new and existing on-system and off- system bridges consisting of small simple timber structures to large complex fixed and moveable structures and entered all data and inspection findings in Inspect Tech, LADOTD inspection reporting program. Supervised and inspected major repairs and reconstruction performed by district and state wide repair crews.
11/90-11/02	**Louisiana Department of Transportation and Development Engineering Tech 4.** (Bridge Inspector) Conducted in depth inspections on new and existing on-system and off- system bridges consisting of small simple timber structures to large complex fixed and moveable structures and entered all data and inspection findings in Inspect Tech LADOTD inspection reporting program. Supervised and inspected major repairs and reconstruction of performed by district and state wide repair crew. Worked with local government officials, agencies, and private bridge owners to facilitate bridge inspections and closing and or opening of bridges. Conducted yearly compliance reviews of all parishes participating in the Federal Off-System Bridge Replacement Program as mandated by the Federal Highway Administration.
04/07 –Present	**Various Bridge Inspections**. Conducts bridge inspections on various types of bridges throughout the state of Louisiana and Mississippi. Inspections are performed on a wide range of bridge complexities from slab span to major river truss type structures including the Vicksburg RR bridge over the Mississippi.

	Firm	**AECOM Technical Services, Inc.**		
	Name	Jason Zimpfer, PE	Years of Relevant Experience with this Employer	13
	Title	Bridge Inspection Team Leader/Structural Engineer	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			PE.0045922 / LA / 3/31/2022 Additional active licenses; UT, PA, DE, TX, PR, NJ, CO, FL, MT
Year Registered	2013	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			Jason will be part of AECOM's Bridge Inspection Assistant Team Leaders, Bridge Load Rating and Analysis and Rehabilitation Design Team for this contract. He has 13 years of extensive and varied analysis, design, research, and bridge inspection experience. He has performed load rating analyses of more than 1,200 bridges and culverts in more than 15 states and coordinates a team of bridge load rating engineers. He is a certified bridge safety inspector and has performed inspections and load ratings of numerous bridges, including long-span, complex structures. Jason's other analysis experience includes coordinating load ratings of deteriorated and deficient structures and gusset plate analysis of truss structures. He has been involved with long-span truss inspection, analysis, and rehabilitation, and has performed structural research at a graduate level. He has experience with finite element modeling, various commercial bridge analysis software packages, as well as the development of proprietary tools and methods to perform bridge analysis calculations. He was given the George D. Nasser Award in 2012 for his co-authored paper in the PCI Journal on the effects of environmental conditions on the quality of field welding of precast concrete connections.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
08/14 – 09/17	**Contract No. 44-2687 State Project No. H.009730.5 Louisiana Department of Transportation and Development (LADOTD), 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.
01/18 – present	**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 nearly 700 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.

07/17– 01/20	**Mississippi Office of State Aid Road Construction, Bridge Load Rating, MS.** Lead structural engineer responsible for coordination, calculation checking, and quality control of load rating efforts for this assignment with approximately 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.
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 to date). 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.
07/12 – 07/18	**PennDOT District 5-0, Safety Inspections of State Owned Bridges, Monroe, Carbon and Schuylkill Counties, PA.** Inspection Team Leader and Load Rating Engineer for this three-cycle contract. Inspected all aspects of the bridge including safety features, roadway conditions, deck, superstructure, substructure and scourability. The inspections sometimes required the use of special equipment and traffic control. Performed post-flood emergency response inspections required after significant flooding events. In addition to inspection, also responsible for organizing and compiling all field notes, photographs and maintenance items for the preparation of the technical forms and reports and recommend load rating analysis where necessary. Handled all notifications and correspondence to the local owner regarding priority maintenance, sign installations, tracking the progress of repairs to the structure and updating the pertinent fields in BMS2.
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.**		
	Name	Travis Baker, PE	Years of Relevant Experience with this Employer	16
	Title	Bridge Inspection Team Leader	Years of Relevant Experience with Other Employer(s)	2

Degree(s) / Years / Specialization			BS / 2005 / Civil Engineering
Active Registration Number / State / Expiration Date			#27019 / KY / 06/30/2023 Additional active licenses; OH, OK
Year Registered	2009	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			Travis will be one of AECOMs Bridge Inspection Team Leaders for this contract. As a bridge engineer, Travis has a wide range of expertise with the design, inspection, and rehabilitation of many types of highway structures. He has completed design calculations, plan sets, and repair specifications for single, multi, and long-span bridges. He has worked on a number of bridge types and components including trusses, rolled beams, plate girders, prestressed concrete, deep foundations, spread footings, single column piers, multi-column piers, abutments, culverts, and retaining walls. He has also performed analyses and load ratings for steel bridges and other structural support systems. Travis has worked on projects for several DOTs, cities, and counties utilizing industry standard software such as STMD, MERLIN-DASH, CONSPAN, RC-PIER, and spColumn. He recently served as the lead structural engineer for two bridges on the $7.4M HAM/WAR-71-19.41 project.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
01/14-12/15	**Kentucky Transportation Cabinet, Fracture-Critical Inspection of Four Ohio River Bridges, KY**. Bridge Inspector Team Leader. An arms-length inspection of all fracture critical members and fatigue sensitive details was conducted for the following Ohio River Bridges and their approaches, I-71/1-75 Brent Spence Bridge at Covington, KY; US 25 Clay Wade Bailey Bridge at Covington, KY; KY 10S Carl D. Perkins Bridge at Greenup County, KY; and William H. Harsha Bridge at Maysville, KY.
01/10 – 2/11	**Kentucky Transportation Cabinet, Fracture-Critical Inspection of Four Ohio River Bridges, KY**. Inspection Team Leader. An arms-length inspection of all fracture critical members and fatigue sensitive details was conducted for the following Ohio River Bridges; US 25 Clay Wade Bailey Bridge @ Covington, KY, KY 17 John A. Roebling Bridge @ Covington, KY, KY 56 Earle C. Clements Bridge @ Shawneetown, IL, US 62 William H. Harsha Bridge @ Maysville, KY Structure types include through truss, deck trusses, a historic suspension bridge and a cable stayed bridge. The inspections were performed using man-lifts, snooper trucks, and climbing techniques with rope access rigging.
04/07 – 04/08	**Ohio Department of Transportation In-Depth Inspection and Load Rating of US 33 Pomeroy-Mason Bridge, OH**. Inspection Team Leader. An in-depth inspection was performed for this 1,185-foot cantilevered truss over the Ohio River. The bridge also includes twelve approach spans, consisting of five spans of built-up through girders and seven spans of simple span beams. The main truss members were measured for as-built dimensions and section loss to obtain data for use in load rating calculations.

08/15 – 8/16	**Kentucky Transportation Cabinet Load Rating of Clay Wade Bailey Bridge over the Ohio River, OH.** Project Engineer for the load rating of primary member connections (gusset and splice plates of chords, diagonals and verticals) and the floor system for this three-span cantilever through truss. All components were load rated using LFR methodology for Inventory and Operating Ratings. The components were rated for posting using Kentucky Truck Types 1-4 and Special Hauling Vehicles SU4-SU7.
09/14 – 0/14	**Davenport Transportation & Rigging LLC, Load Rating of Southside Avenue Bridge over CSX Railroad, IL.** Project Engineer for the load rating of a two-span, curved steel girder bridge. The crossframes of the curved girder structure are considered main load carrying members and were therefore including in the rating analysis. The structure was modeled for superload vehicles using the load factor method.
08/06 – 4/09	**Kentucky Transportation Cabinet, Load Rating and Repairs for 1-275 Combs Hehl Twin Bridges over the Ohio River, KY**. Design Engineer. After finding out-of-spec steel in several locations on the bridge, the Kentucky Transportation Cabinet requested that the out-of-spec steel be repaired and a load rating be performed on the primary truss members and their connections. Our team partnered with another consultant to develop repair plans, as well as a structural model to be used for HS20 and superload load ratings. The ratings were completed in accordance with the LFD design methodology and the FHWA guidance on gusset plate ratings.
09/08 – 1/09	**Edwards Moving and Rigging, Load Rating of Access Bridge, KY.** Design Engineer. A load rating was performed on the single-span plate girder access bridge to the Eastern Kentucky Power Cooperative. Merlin Dash was used to analyze a 16 axle dual-tandem trailer used to deliver a 370,000 lb load to the Cooperative.
06/11 – 6/12	**City of Cincinnati, Western Hills Viaduct Repairs and Load Rating, OH.** Design Engineer. Upon finding heavily deteriorated areas in the support trough for a 36" water main on the viaduct, a detailed inspection and load rating was performed on the water main trough. Various repair and retrofit schemes were developed for the trough and a secondary support system was designed for the water main.

	Firm	**AECOM Technical Services, Inc.**		
	Name	Craig Klusman, PE	Years of Relevant Experience with this Employer	23
	Title	Bridge Inspection Team Leader	Years of Relevant Experience with Other Employer(s)	1

Degree(s) / Years / Specialization			MS / 1998 / Structural Engineering BS / 1997 / Civil Engineering
Active Registration Number / State / Expiration Date			#22558 / KY / 06/30/2023 Additional active licenses; IN, OK
Year Registered	2002	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			Craig will be one of AECOMs Bridge Inspection Team Leaders for this contract. He is responsible for the project management, analysis, design, details, rehabilitation, project reports, and seismic analysis for all types of highway structures, including complex and long span bridges. Craig has extensive experience with in-depth visual inspection and fracture critical member inspection of numerous long-span steel bridges and post-tensioned concrete bridges, including the use of non-destructive testing methods. He is a certified FHWA Bridge Inspection 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 time specified in the applicable MPR(s).
01/16 – 02/17	**Kentucky Transportation Cabinet, Fracture-Critical Inspection of five Ohio River Bridges, KY.** Project Manager. An arms-length inspection of all fracture critical members and fatigue sensitive details was conducted for the following Ohio River Bridges; US 41 Henderson SB Bridge at Henderson KY, US 41 Henderson NB Bridge at Henderson, KY, US 27 Taylor Southgate Bridge at Newport KY, US 23S Ashland 12th Street Bridge at Ashland. KY, US 23 Ashland 13th Street Bridge at Ashland, KY. Structure types include cantilevered and continuous through truss bridges. Steel multi-girder spans steel two-girder spans. Steel deck truss spans, and reinforced concrete beam spans. The inspections were performed using rope access, man-lifts, snooper trucks and climbing techniques. Inspection reports were prepared using KYTC's TC 71-118 form and repair recommendations and plans were given for the bridges.
08/16 – 07/18	**Kentucky Transportation Cabinet, Statewide NB/$ Safety Inspections, KY.** Project Manager. NBIS Safety Inspections including collection of element level data as defined by the National Bridge Inspection Standards and the AASHTO Manual for Bridge Element Inspection will be conducted as assigned by KYTC. Inspection reports will be prepared using AASHTOWARE Bridge Management software. Six assignments have been completed, including District 9- Lewis County, KY with twelve single or multi-span bridges and one multi-cell reinforced concrete box culvert.
01/10 – 02/11	**Kentucky Transportation Cabinet, Fracture-Critical Inspection of Four Ohio River Bridges, KY.** Project Manager. Project Manager for the following critical inspection projects; US 25 Clay Wade Bailey Bridge at Covington, KY (Truss), KY 17 John A. Roebling Bridge at Covington, KY (Suspension), KY 56 Earle C. Clements Bridge at Shawneetown, IL (Truss), US 62 William H. Harsha Bridge at Maysville, KY (Cable- Stayed).

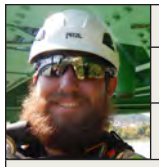
01/14 – 02/15	**Kentucky Transportation Cabinet, Statewide Fracture Critical Bridge Inspections, Statewide, KY.** Project Manager. AECOM was selected by the Kentucky Transportation Cabinet to provide NBI and fracture critical bridge inspections for four Ohio River Bridges; Brent Spence Bridge (1-71/1-75) in Kenton County, Clay Wade Bailey Bridge (US 25) in Kenton County, Carl Perkins (KY 10S) in Greenup County, and William Harsha Bridge (US 62) In Mason County. Three of the bridges consist of cantilever through trusses and the third s a two-tower three-span cable stayed structure. This project includes an arms-length inspection of all fracture critical members (steel tens on members whose fa lure will result in loss-of-span) and fatigue sensitive details (details with a tendency to fail at a stress level below yield stress when subjected to cyclical loading).
01/08 – 02/10	**Indiana Department of Transportation, Columbus Cable-Stayed Bridge Inspections, IN.** Inspection Team Leader performed inspection of two cable-stayed structures in Columbus, Indiana for INDOT. Project included an arms-length inspection of structural steel members, including the steel deck beams, the arch ribs. cable-stays, and stay cable welds. A non-contacting laser vibrometer to evaluate the distribution of forces along the cable. Project included the following two bridges; SR 46 over the East Fork of the White River (Traditional Cable-Stayed) and 1-65 Bridge over SR 46 (Basket-Handle Steel Arch).
01/99 – 02/09	**Indiana Department of Transportation, Fracture-Critical Inspection of Three Ohio River Bridges, IN**. Lead Inspector. An arms-length Inspection of all fracture critical members and fatigue sensitive details was conducted for the following Ohio River Bridges; 1-64 Sherman Minton Bridge at New Albany, IN; SR 237 Bob Cummings Lincoln Trail Bridge at Cannelton, IN, SR 135 Matthew Welsh Bridge at Mauckport, IN.

	Firm	**AECOM Technical Services, Inc.**			
	Name	Ian McElhone, PE		Years of Relevant Experience with this Employer	11
	Title	Bridge Inspection Team Leader		Years of Relevant Experience with Other Employer(s)	0

Degree(s) / Years / Specialization			BS / 2009 / Civil & Environmental Engineering MS / 2011 / Structural Engineering
Active Registration Number / State / Expiration Date			0402057586 / VA / 04/30/2023 Additional active licenses; KY
Year Registered	2015	Discipline	Structural Engineering
Contract Role(s) / Brief Description of Responsibilities			Ian is responsible for the analysis, design, details, rehabilitation, project reports, and seismic analysis for all types of highway structures, including complex and long-span bridges. Ian has experience with in-depth visual inspection and fracture critical member inspection of both long and short-span bridges, including the use of non-destructive testing methods. Ian is a certified FHWA Bridge Inspection Team Leader and Society of Professional Rope Access Technicians Level II Technician.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
06/20-07/21	**Bridge Inspector Team Leader, Fracture-Critical Inspection of Five Ohio River Bridges, Kentucky Transportation Cabinet:** An arms-length inspection of all fracture critical members and fatigue sensitive details was conducted for the following Ohio River Bridges and their approaches: • US 25 Clay Wade Bailey Bridge @ Covington, KY • I-65 John F. Kennedy Bridge @ Louisville, KY • I-65 Abraham Lincoln Bridge @ Louisville, KY • US 27 Taylor Southgate Bridge @ Newport, KY • US 421 Milton-Madison Bridge @ Milton, KY Structure types include cantilevered and continuous through truss bridges, cable-stayed bridges, steel multi-girder spans, and reinforced concrete beam spans. The inspections will be performed using snooper trucks and climbing techniques. Inspection reports will be prepared using KYTC's TC 71-118 form and repair recommendations and plans will be given for the bridges.

06/18-10/19	**Bridge Inspector Team Leader, Fracture-Critical Inspection of Five Ohio River Bridges, Kentucky Transportation Cabinet:** An arms-length inspection of all fracture critical members and fatigue sensitive details was conducted for the following Ohio River Bridges and their approaches: • US 25 Clay Wade Bailey Bridge @ Covington, KY • KY 17 John A. Roebling Bridge @ Covington, KY • US 27 Taylor Southgate Bridge @ Newport, KY • US 23S Ashland 12th Street Bridge @ Ashland, KY • US 23 Ashland 13th Street Bridge @ Ashland, KY Structure types include cantilevered and continuous through truss bridges, a historic suspension bridge, steel multi-girder spans, steel two-girder spans (deck and through girder), steel deck truss spans, and reinforced concrete beam spans. The inspections will be performed using snooper trucks and climbing techniques. Inspection reports will be prepared using KYTC's TC 71-118 form and repair recommendations and plans will be given for the bridges.
09/18-Ongoing	**Inspector in Charge, CPL Thomas Bennett Memorial Bridge Six Year Inspection Program, West Virginia Department of Transportation:** The 2018 inspection included an in-depth routine inspection of the structure, including hands on inspection of truss and all piers. Confined space inspections of the fracture critical truss members and cross box beams at both ends of the truss were also inspected. The existing CPL Thomas Bennett Memorial Bridge carries I-79 over the Monongahela River, Mon River Trails Conservancy Rail Trail, Norfolk Southern Railroad and two county routes. The bridge consists of nine spans, and three span continuous deck truss, three continuous deck girder spans and three continuous deck stringer spans with an overall length of 1,550 feet.
03/17-Ongoing	**Bridge Inspector Team Leader, Transportation Structures Inspection Program, City of Roanoke, Virginia:** AECOM has provided services to the City of Roanoke for inspection of bridges, culverts, and overhead sign structures in compliance with federal and state requirements for several previous annual cycles. In addition, AECOM is currently supporting the City's management of the structure inventory by preparing repair plans, rehabilitation plans, load rating analysis, and long-range planning for structure inventory management.
05/17-07/17	**Bridge Inspector Team Leader, Rope Access Inspection of 20 Railroad Bridges of the White Pass and Yukon Route Railroad, Skagway, Alaska and the Yukon Territory, Canada:** Provided detailed inspection and data collection for the annual safety and maintenance report detailing the condition of all structures on the WP&YR Railroad. The structures included steel bridges erected in 1906; as well as fracture critical and multi-span timber structures. Industrial rope access techniques were utilized to enable the collection of inspection data. Inspections were conducted in remote areas under live train traffic. The purpose of this inspection was to provide an assessment and inspection report of the bridges, determine any deficiencies, and to meet federal inspection requirements.
10/16-02/17	**Bridge Inspector Team Leader, Statewide NBIS Safety Inspections, Kentucky Transportation Cabinet:** NBIS Safety Inspections including collection of element level data as defined by the National Bridge Inspection Standards and the AASHTO Manual for Bridge Element Inspection will be conducted as assigned by KYTC. Inspection reports will be prepared using AASHTOWARE Bridge Management software. One assignment has been completed in KYTC District 9 – Lewis County, KY including twelve single or multi-span bridges and one multi-cell reinforced concrete box culvert.

	Firm	**AECOM Technical Services, Inc.**			
	Name	Joseph Whelan, PE		Years of Relevant Experience with this Employer	7
	Title	Bridge Inspection Team Leader		Years of Relevant Experience with Other Employer(s)	0

Degree(s) / Years / Specialization			BS / 2013 / Civil Engineering MS / 2014 / Civil Engineering
Active Registration Number / State / Expiration Date			0402057586 / VA / 04/30/2023 Additional active licenses; KY
Year Registered	2019	Discipline	Professional Engineer
Contract Role(s) / Brief Description of Responsibilities			Joseph has experience with the inspection, rehabilitation, and design of many types of highway structures. His inspection experience includes NBI, element level, fracture critical, and in-depth inspections of both long and short-span bridges. He has completed inspections for structure types including culverts, single span bridges, multi span bridges, trusses, arches, suspension, post-tensioned, and cable-stayed bridges; including twelve different long-span Ohio River bridges. Joseph has experience with the use of of non-destructive testing methods including magnetic particle, dye penetrant and ultrasonic.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
01/15-Ongoing	**Fracture-Critical Inspection of five Ohio River Bridges, Kentucky Transportation Cabinet, Team Leader:** An arms-length inspection of all fracture critical members and fatigue sensitive details was conducted for the following Ohio River Bridges: • US 25 Clay Wade Bailey Bridge @ Covington, KY Included repair plans • I 65 SB John F. Kennedy Bridge @ Louisville, KY • I 65 NB Abraham Lincoln Bridge @ Louisville, KY • US 27 Taylor Southgate Bridge @ Newport, KY Included repair plans • US 421 Milton Madison Bridge @ Milton, KY Included repair plans Structure types include cantilevered and continuous through truss bridges, cable stayed bridge, steel multi-girder spans, and reinforced concrete beam spans. The inspections were performed using rope access, man-lifts, and climbing techniques. Inspection reports were prepared using KYTC's TC 71-118 form and repair recommendations and plans were given for the bridges.

01/17-present	**Statewide Fracture-Critical Inspections, Kentucky Transportation Cabinet, Team Leader.** An arms-length inspection of all fracture critical members and fatigue sensitive details was conducted for the following bridges: • I 64 EB Bridge over Little Sandy River • I 64 WB Bridge over Little Sandy River • I 24 EB Bridge over Tennessee River • I 24 WB Bridge over Tennessee River • BG 9002 EB over Kentucky River • BG 9002 WB over Kentucky River Structure types include steel deck truss bridges, steel tied arch bridges, steel multi-girder bridges, and steel two-girder bridges. The inspections were performed using rope access, climbing techniques, man lifts, and snooper trucks. Inspection reports were prepared using KYTC's TC 71-118 form and repair recommendations were given for the bridges.
12/20-present	**MDOT Bridge Inspection SR 63 over Escatawpa River, Mississippi Department of Transportation, Team Leader:** Bridge Engineer/Inspection Team Leader, providing arm's-length inspection of bearing assemblies including steel rocker, steel fixed and neoprene bearing pads on the 53 span steel and concrete bridge.
05/20-present	**NDDOT Bridge Inspection & Load rating for LPA & Private Owned Bridges, North Dakota Department of Transportation, Team Leader:** Bridge Engineer/Inspection Team Leader, providing biannual bridge inspection and load rating services in 2020 and 2021 for privately owned bridges including both routine and fracture critical inspections and load rating data collection of steel trusses and multi-girder bridges. Inspections were completed in accordance with the latest edition of the AASHTO Manual for Bridge Evaluation, NDDOT Bridge Inspection Manual and reports completed using InspectX software.
01/16-present	**Statewide NBIS Safety Inspections, Kentucky Transportation Cabinet, Bridge Inspector:** NBIS Safety Inspections including collection of element level data as defined by the National Bridge Inspection Standards and the AASHTO Manual for Bridge Element Inspection have been conducted as assigned by KYTC. Inspection reports were prepared using AASHTOWARE Bridge Management software. AECOM and Palmer Engineering teamed together to complete over 500 routine bridge inspections in KYTC districts including single or multi-span bridges and reinforced concrete box culverts.
03/15–08/15	**OTIC Inspection, Ohio Turnpike and Infrastructure Commission, Bridge Inspector:** A visual inspection of approximately 100 bridges on the Ohio Turnpike was performed per the ODOT Manual of Bridge Inspection. Three complex and/or fracture critical inspections were completed with the use of a snooper.

	Firm	**Modjeski and Masters, Inc.**		
	Name	Joshua Moore, PE	Years of Relevant Experience with this Employer	15
	Title	Bridge Inspection Team Leader	Years of Relevant Experience with Other Employer(s)	0

Degree(s) / Years / Specialization			BS / 2006 / Civil
Active Registration Number / State / Expiration Date			36342/LA/09/30/2023 NBIS Certified Inspector / Sprat Level III Certified
Year Registered	2011	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			Joshua has been employed as a Design Engineer in the New Orleans office of Modjeski and Masters, Inc. since 2007 after having interned with the firm. He is assigned to the firm's Structural Design Section and has been involved in a variety of bridge projects with a focus on evaluation, analysis, and rehabilitation of complex structures. Joshua is also a trained and xperienced bridge inspector and specializes in inspections of bridges and other structures requiring Technical Access. He is currently the firm's Technical Access Assistant Program Coordinator.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
11/19 – 05/21	**H.009859.1: Load Rating of Fourteen Complex Bridges | LADOTD.** Modjeski and Masters, Inc. is performing plan and document retrieval, bridge inspection (as needed), analysis and load rating, sampling/instrumentation and non-destructive testing (as needed), and plan production (as needed) for 14 complex bridges. The bridge types include swing spans, bascule spans, truss spans and curved steel spans. For the analysis and load rating task, M&M is generating a system structural model and performing an analysis of each bridge to determine dead and live load forces in the members. For the bridge superstructures, AASHTOWare BrR software is being used. All load rating analysis will follow current AASHTO Manual for Bridge Evaluation, LADOTD Bridge Design and Evaluation Manual and AASHTO LRFD Bridge Design Specifications. Joshua assisted in the management of the project and provided guidance to the rating team. Joshua performed structural analysis, evaluation, and quality control.
07/19 – 05/21	**H.012485.1: Load Rating of 354 Off System Bridges | LADOTD.** Modjeski and Masters, Inc. is performing plan and document retrieval, bridge inspection (as needed), analysis and load rating, sampling/instrumentation and non-destructive testing (as needed), and plan production (as needed) for 354 off system bridges including prestressed concrete, reinforced concrete and steel plate girder bridges. For the analysis and load rating task, M&M is generating a system structural model and performing an analysis of each bridge to determine dead and live load forces in the members. For the bridge superstructures, AASHTOWare BrR software is being used. For the complex bridges, a three-dimensional structural model is needed. All load rating analysis will follow current AASHTO Manual for Bridge Evaluation, LADOTD Bridge Design and Evaluation Manual and AASHTO LRFD Bridge Design Specifications. Joshua assisted in the management of the project and provided guidance to the rating team. Joshua performed structural analysis, evaluation, and quality control.

11/18-11/20	**Luling–Destrehan Bridge Latent Defects Review. Luling, Louisiana | LADOTD.** Joshua served as an Inspection Team Leader for this investigation of latent defects in the Luling–Destrehan BridgeStay Cable system. Specific tasks included review and evaluate existing project documentation, performance of an on-siteinvestigation of the stay cables and anchorages and developing a report of the findings and associated recommendations.
10/17-08/18	**H.009859.5: Nineteen Complex Bridge Load Rating and Evaluation. Louisiana | LADOTD.** Modjeski and Masters, Inc. performed plan and document retrieval, bridge inspection and analysis, and load and resistance factor rating of complex bridge structures, mainly movable bridges. Gusset, truss, floorsystem and substructure components were rated. Bridge inspections focused on gusset plates and existing member conditions for rating. AASHTOWare BrR was used for the ratings, which followed the AASHTO Manual for Bridge Evaluation, LADOTD Bridge Design and Evaluation Manual and AASHTO LRFD Bridge Design Specifications. Joshua assisted in the management of the project and provided guidance to the rating team. Joshua performed structural analysis, evaluation, and quality control. Joshua also participated in several of the bridge inspections
02/16-10/17	**H.009859.5: Ten Truss Bridges Load Rating and Evaluation. Louisiana | LADOTD.** Modjeski and Masters, Inc. is performing plan and document retrieval, bridge inspection and analysis, and load and resistance factor rating of complex bridge structures, including large cantilever trusses, vertical lifts and swing spans. Gusset, truss, floorsystem and substructure components are being rated. Bridge inspections are focusing on gusset plates and existing member conditions for rating. AASHTOWare BrR is being used for the ratings, which follow current AASHTO Manual for Bridge Evaluation, the LADOTD Policies and Guidelines for Bridge Rating and Evaluation, and LADOTD Bridge Design and Evaluation Manual. Joshua assisted in the management of the project and provided guidance to the rating team. Joshua performed structural analysis, evaluation, and quality control. Joshua also participated in several of the bridge inspections.
09/14-12/16	**H.009859.5 (A): Rating and Posting of On-System State Bridges. Louisiana | LADOTD.** M&M performed load rating analyses for 110 existing bridge structures using the Load and Resistance Factor Rating Method. Elements to be rated include superstructure and substructure components. Provisions in the AASHTO Manual for Bridge Evaluation as well as LADOTD Policies and Guidelines for Bridge Rating and Evaluation were followed. Joshua participated in the load rating of the bridges and performed structural analysis, evaluation, and quality control.
04/13 - 2/14	**H.009859: Crescent City Connection, Bridge No. 1, New Orleans, LA.** This Task Order consists of inspection and LRFR load rating for the Greater New Orleans Bridge No. 1 – a complex steel cantilever through truss bridge. The rating is to include the superstructure, (including gusset plates and deck), selected substructure elements and piers. Joshua developed and carried out photogrammetric methods to verify gusset plate geometry as part of the gusset plate evaluation. Joshua also led the technical access inspection team.

	Firm	**AECOM Technical Services, Inc.**			
	Name	Greg Bennett		Years of Relevant Experience with this Employer	8
	Title	Bridge Inspection Assistant Team Leader		Years of Relevant Experience with Other Employer(s)	4

Degree(s) / Years / Specialization			BS / 2008 / Civil Engineering
Active Registration Number / State / Expiration Date			N/A
Year Registered	N/A	Discipline	N/A
Contract Role(s) / Brief Description of Responsibilities			Greg will be part of AECOM's Bridge Inspection Assistant Team Leaders for this contract. He has been performing bridge inspections for over 10 years and a bridge inspection team leader close to five years. As a bridge inspector, Greg has contributed to the completions of over 2800 inspections all performed in accordance with the FHWA National Bridge Inspection Standards. The types of bridges inspected include deck truss, through truss, cantilevered through truss, suspension, reinforced concrete, prestressed, post-tensioned concrete, steel girder, plate girder and reinforced concrete open spandrel arch bridges. In addition to routine inspection techniques, I am familiar with the inspection of fracture critical bridges including the review and implementation of a fracture critical plan and 100% hands-on inspection for the full length of the fracture critical member. Greg is proficient with the use of non-destructive inspection equipment such as magnetic particle kits and dye penetrant. I have experience with confined space entry, flood inspections and emergency inspections. Greg also brings experience in the operation of lift trucks (30' to 95'), self-propelled man lifts (60' to 135') and under-bridge inspection cranes (Aspen Arial A-30, A-62, A-75).

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
04/18- 06/18	**Delaware River Port Authority, 2018 Commodore Barry Bridge over Delaware River Biennial Inspection, Chester, NJ.** Served as an assistant team leader during the 2014 biennial inspection of the Commodore Barry Bridge. This bridge spans the Delaware River from New Jersey to Pennsylvania. The three main spans consist of an electroslag welded cantilevered through truss measuring 3,288' and 77' wide. I assisted with the inspection of the through truss according to National Bridge Inspection Standards. Total bridge length is 13,912' long.
04/16 - 07/16	**Delaware River Port Authority, Betsy Ross Bridge over Delaware River 2016 Biennial Bridge Inspections, Philadelphia, PA.** Served as an assistant team leader during the 2016 biennial inspection of the Betsy Ross Bridge. This bridge spans the Delaware River from New Jersey to Pennsylvania. The main span consists of a cantilevered three span, bolted through truss measuring 103' wide between trusses and consisting of a 729' main span and two 445' end spans. Total bridge length is 8481' long. I assisted with the inspection of the approach spans, deck trusses, through truss, and substructure units.

12/12-06/18	**Contract No. 44-2687 State Project No. H.009730.5 Louisiana Department of Transportation and Development (LADOTD), In-Depth Inspection of Complex Structures, Statewide, LA.** Inspection Team Leader 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), the 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.
05/14 - 07/14	**Delaware River Port Authority, 2014 Commodore Barry Bridge over Delaware River Biennial Inspection, Chester, NJ.** Served as an assistant team leader during the 2014 biennial inspection of the Commodore Barry Bridge. This bridge spans the Delaware River from New Jersey to Pennsylvania. The three main spans consist of an electroslag welded cantilevered through truss measuring 3,288' and 77' wide. I assisted with the inspection of the substructure units, approach spans, and through truss according to National Bridge Inspection Standards. Total bridge length is 13,912' long.
06/20 - present	**Pennsylvania Department of Transportation - District 6-0, Philadelphia County National Bridge Inspections Standards, Philadelphia, PA.** Performed routine level inspections of 412 state-owned bridges throughout Philadelphia County. The inspections were performed in accordance with the FHWA National Bridge Inspection Standards. Field inspection data collected during these inspections were entered into the Department's Bridge Management System – 2 (BMS2). All inspections include the collection of Pontis Element Level data. The types of bridges inspected under this assignment include deck truss, thru truss, reinforced concrete, prestressed, post-tensioned concrete, steel girder, plate girder and reinforced concrete open spandrel arch bridges. All inspections of fracture critical bridges included the review and implementation of a fracture critical plan and 100% hands-on inspection for the full length of the fracture critical member.
09/17 - 06/20	**Pennsylvania Department of Transportation - District 6-0, Montgomery County National Bridge Inspections Standards, Montgomery County, PA.** Performed routine level inspections of 438 state-owned bridges throughout Montgomery County. The inspections were performed in accordance with the FHWA National Bridge Inspection Standards. Field inspection data collected during these inspections were entered into the Department's Bridge Management System – 2 (BMS2). All inspections include the collection of Pontis Element Level data. The types of bridges inspected under this assignment include deck truss, thru truss, reinforced concrete, prestressed, post-tensioned concrete, steel girder, plate girder and reinforced concrete open spandrel arch bridges. All inspections of fracture critical bridges included the review and implementation of a fracture critical plan and 100% hands-on inspection for the full length of the fracture critical member.
10/15 - 10/19	**Pennsylvania Department of Transportation Central Office, Bucks County National Bridge Inspection Standards, Philadelphia, PA.** Served as a team leader while performing interim and biennial inspections for 443 Bucks County bridges My responsibilities included planning mobilization for field work, inputting inspection data into the Department's Bridge Management System – 2 (BMS2), writing reports and writing repair recommendations according to PennDOT and the National Bridge Inspection Standards. The types of bridges inspected under this assignment include through truss, reinforced concrete, prestressed, post-tensioned concrete, steel girder, plate girder and reinforced concrete open spandrel arch bridges. All inspections of fracture critical bridges included the review and implementation of a fracture critical plan and 100% hands-on inspection for the full length of the fracture critical member.

	Firm	**AECOM Technical Services, Inc.**			
	Name	Kevin Curley, EI		Years of Relevant Experience with this Employer	7
	Title	Bridge Inspection Assistant Team Leader		Years of Relevant Experience with Other Employer(s)	0

Degree(s) / Years / Specialization			BS / 2015 / Civil Engineering
Active Registration Number / State / Expiration Date			#276661 / MS / NA EI
Year Registered	2016	Discipline	Civil Engineer Intern
Contract Role(s) / Brief Description of Responsibilities			Kevin will be one of AECOMs Bridge Inspection Assistant Team Leaders for this contract. He currently serves AECOM as a water resources engineer and has experience in hydrologic and hydraulic modeling. He has experience in various software including Autodesk, ArcGIS, HEC-HMS, and HEC-RAS.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
07/16 – 01/17	**Mississippi Department of Transportation (MDOT), US 84 over Mississippi River Bridges Fracture Critical and Element Inspections, Mississippi. Inspector.** Kevin assisted the Team leaders in the inspection of the project. His duties included preparation of inspection materials as well as direct assistance to inspectors on site during the inspection.
07/17 - present	**Mississippi Department of Transportation (MDOT) State Aid Complex Bridge Inspections, MS**. Inspector. Kevin participated in the inspection of county bridges throughout the state of Mississippi including preparation of inspection materials, onsite inspections, and completion of deliverables to the Mississippi Office of State Aid and Road Construction.
06/18-12/20	**Mississippi Department of Transportation (MDOT), US 82 over Mississippi River Bridge Routine Inspection, MS**. Inspector. MDOT hired AECOM to perform Fracture Critical and Routine Element Inspections of the cable-stayed bridge on US 82 over the Mississippi River. The scope of this inspection also included the assistance of a UAV. Kevin served as a Bridge Inspector on the project and was responsible for the inspection of the West approach spans. Kevin also participated in report preparation, and pre-inspection drafting and materials.
06/16-03/17	**Mississippi Department of Transportation (MDOT) Statewide Bridge Deck Scanning and Visual Surveys, MS.** Inspector. MDOT hired AECOM to perform Deck Scanning and Visual surveys for 34 bridges in Mississippi spread across 2 projects. Kevin was responsible for performing Visual Surveys of the bridge deck undersides and drafting the defects. The information collected during these projects is used for deck rehabilitation estimates for planning purposes and resource allocation.
11/17 - present	**Mississippi Department of Transportation (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. Kevin assisted in the inspection of the substructure, as well as assisting in determining substructure penetration depths for future scour events. • I-55 over Tangipahoa River in Pike River County, MS • I-59 over Black Creek and Little Black Creek Lamar, MS

09/20 - present	**KYTC Abraham Lincoln Bridge Bridges (I65 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 I65 over the Ohio River. Kevin served as a Bridge Inspector on the project and participated in rope access inspection of the bridge towers and cables.
05/20-present	**North Dakota County Bridge Inspections.** Inspection Team Leader. North Dakota Department of Transportation hired AECOM to perform 760 inspections and load ratings of county bridges across the northeastern part of the state. Kevin is an inspection team leader on the project. 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.
01/19 - 03/19	**Phillips 66 Beaumont Terminal Bridge Inspections.** Inspector. Phillips 66 hired AECOM to perform inspections and structural evaluations on 10 bridges at their terminal in Beaumont, TX. The structures varied in super and substructure type and required field measurements for analysis. Kevin was a bridge inspector on this project and assisted in report preparation and pre-inspection materials.

	Firm	**Modjeski and Masters, Inc.**		
	Name	Timothy Sensebe, EI	Years of Relevant Experience with this Employer	6
	Title	Bridge Inspection Assistant Team Leader	Years of Relevant Experience with Other Employer(s)	0

Degree(s) / Years / Specialization			BS / 2015 / Civil Engineering
Active Registration Number / State / Expiration Date			EI.33006 / LA / 3/31/23
Year Registered	2016	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			Timothy joined M&M in 2016 and engineering intern in the Field Services Section. His experience includes highway and railroad fixed and movable bridge inspection and construction monitoring. Timothy is a FHWA Certified Bridge Inspector and is an Inspection 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 time specified in the applicable MPR(s).
6/20-9/21	**Cline Avenue Bridge Review, Analysis and Construction Support | United Bridge Partners.** The Cline Avenue Bridge is 6,236-foot long precast segmental bridge that spans over several rail lines, Riley Road, and the Indiana Harbor Canal in East Chicago, IN. The new structure will consist of 29 cast-in-place concrete columns that support 685 post-tensioned concrete single cell box girders segments which form the bridge's deck. Completion of this project will restore entrance into the Northwest Indiana area. Modjeski and Masters, Inc. was contacted by United Bridge Partners to perform a fully independent review on the design, review of construction documents, and provide an on-site presence for completion of construction of the 1.7 mile long segmental bridge. Design and construction work is ongoing. Mr. Sensebe assisted with construction engineering and inspection services for this project.
6/16-7/20	**Lapalco Double Leaf Bascule Bridge Rehabilitation | Jefferson Parish Dept of Engineering.** The Lapalco Boulevard Bridge over the Harvey Canal is a four-lane highway bridge. The main bridge portion of the Lapalco Boulevard Bridge is a welded plate girder, double leaf, trunnion type bascule with an open grid deck. The approach spans are comprised of steel girder spans and concrete girder spans with concrete decks, and concrete slab spans with curtain walls. Modjeski and Masters performed an in-depth inspection of structural, mechanical and electrical components and approach spans including a coatings inspection of the steel metalwork. M&M also performed a load capacity rating analysis of the structure and developed a written condition report detailing findings and recommendations. M&M performed UT investigations of the girder hanger pins, assessed the different brake systems for the bridge and developed mechanical and electrical contract documents for various repairs as well as provided construction monitoring services. Mr. Sensebe provided construction monitoring services for this project.

3/19-6/20	**Bonnet Carre Trestle Bridge Replacement- CE&I Laplace, Louisiana | Canadian National Railway.** The existing bridge was one of three railroad crossings and a highway crossing that were built in 1934 to accommodate the construction of the Bonnet Carre Spillway. The trestle is 11,753 feet long and was opened to rail traffic in 1934. The superstructure is ballast deck timber trestle with the exception of 13 concrete fire breaks, five (5) concrete DVB spans, one (1) steel beam span and five (5) steel TPG spans. The replacement structure was designed on an offset alignment for an overall new length of 11,711' with a horizontal offset of approximately 50' east, with an exception near each end of the bridge where the alignment will transition back close to the existing track in order to utilize the old approach embankments. The new construction is precast concrete design with the superstructure composed of PPC DVB spans and the substructure consists of 1,139 24" square precast prestressed concrete piles supporting two (2) precast abutment caps with precast backwalls and 299 precast pier caps for 3, 4 and 6-pile piers. Modjeski and Masters provided professional CE&I services for the bridge replacement. These services included providing an on-site resident engineer with responsibility for daily construction inspection. Other specialized personnel was provided as needed to manage, inspect, test and otherwise oversee tasks involved with this project. Mr. Sensebe assisted with the construction engineering and inspection services.
5/14-6/16	**US 190 Mississippi River Bridge - Construction Engineering and Inspection (Repairs). Baton Rouge, Louisiana | Louisiana Department of Transportation and Development.** M&M was retained by the LADOTD to provide construction contract administration and construction engineering and inspection services required during the repairs to the US 190 Mississippi River Bridge in Baton Rouge, Louisiana. Included in the project are assorted repairs and replacement of elements in the steel approach spans and main span, navigation light repair, construction of retaining walls, guard rail placement and miscellaneous pavement repair. Mr. Sensebe assisted with the construction engineering and inspection services for this project.
10/16 – 02/17	**Huey P. Long Bridge Inspection. New Orleans, Louisiana | New Orleans Public Belt Railroad.** The Huey P. Long Bridge is a steel cantilever through-truss railroad and highway bridge across the Mississippi River, with a main bridge crossing of 3,525 feet and several miles of steel plate girder approaches. The main bridge features four deck truss spans, two anchor spans of 529 feet and 532 feet, two cantilever spans of 144 feet, a simple span of 531 feet, and a suspended span of 503 feet. Mr. Sensebe was part of the inspection team.

	Firm	**Modjeski and Masters, Inc.**		
	Name	Andrew Comeaux, EI	Years of Relevant Experience with this Employer	3
	Title	Bridge Inspection Assistant Team Leader	Years of Relevant Experience with Other Employer(s)	0

Degree(s) / Years / Specialization			BS / 2014 / Civil Engineering
Active Registration Number / State / Expiration Date			EI.33941 / LA / 3/31/23
Year Registered	2018	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			Andrew joined M&M in 2017 as a Junior Engineer in the Field Service Section. His experience includes seven years of project management and structural design in the Oil Field setting prior to joining M&M. As an inspector in the Field Service Section, his experience includes highway and railroad large river and movable bridge inspection. Andrew is a FHWA 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 time specified in the applicable MPR(s).
04/20 – 09/20	**St. Claude Strauss Trunnion Bascule Rehabilitation. New Orleans, Louisiana | Port of New Orleans.** This project includes mechanical and structural rehabilitation of the St. Claude Avenue Bridge over the IH-NC in New Orleans, LA. M&M is preparing bid documents and providing construction monitoring and inspection services for the repair of the 1st Link Joints, the Counterweight Links, and the Main Trunnions of the St. Claude Avenue Bridge. Mr. Comeaux assisted with the inspection and repair plans for this project.
08/19 – 07/20	**Sunshine Bridge Emergency Inspection and Repairs. Donaldsonville, LA | LADOTD.** In 2018, a barge mounted crane was traveling upstream in the western most channel of the river. The crane's height exceeded the vertical clearance of the span, and the back-stay of the crane impacted the downstream bottom chord of the truss. The impact caused significant damage to a bottom chord member, tearing off the bottom plate of the box member and inducing severe out of plane distortion. The member in question was a primary load path compression member, designed to carry 1,700 kips of dead load. LADOTD closed the bridge immediately and began the task of investigation and repair. Modjeski and Masters, Inc. (M&M) was selected as the lead consultant for bridge repairs. After closing the bridge directly after the incident, LADOTD engaged M&M to perform an emergency hands-on inspection using technical rope access techniques. The inspection team documented the primary damaged member as well as a host of other damaged elements, including bottom laterals, stringer bearings, and gusset plates. Technical rope access was critical in locating and documenting all damaged bridge elements. M&M also provided construction engineering and inspection of the repair efforts. Mr. Comeaux assisted with the permanent fender repair plans and specifications for this project.
10/21 – 02/22 10/20 – 02/21 10/19 – 02/20 10/18 – 02/19	**Huey P. Long Bridge Inspection. New Orleans, Louisiana | New Orleans Public Belt Railroad.** The Huey P. Long Bridge is a steel cantilever through-truss railroad and highway bridge across the Mississippi River, with a main bridge crossing of 3,525 feet and several miles of steel plate girder approaches. The main bridge features four deck truss spans, two anchor spans of 529 feet and 532 feet, two cantilever spans of 144 feet, a simple span of 531 feet, and a suspended span of 503 feet. Mr. Comeaux was part of the inspection team.

09/21 – 02/22 11/18 – 03/19	**Inner Harbor-Navigation Canal Bridge Inspections. New Orleans, Louisiana| Port Of New Orleans.** This project included the inspection of four bridges owned by the Port of New Orleans. There are three Strauss-Trunnion bascule bridges carrying highway and railway traffic across the Inner Harbor – Navigation Canal between the Mississippi River and Lake Pontchartrain. The Seabrook and Almonaster Avenue bridges feature a 117-foot steel trough-truss lift span, two 45-foot high tower trusses and a counterweight truss. The St. Claude Avenue Bridge features a 93 ½ -foot steel trough-truss lift span, two 45-foot high tower trusses and a counterweight truss. The fourth bridge,the Florida Avenue Bridge, is a newer bridge that replaced an existing 115 ft. span Strauss Trunnion Bascule Bridge with a 340 ft. span vertical lift bridge. The replacement bridge carries one railroad track and two roadway lanes with two sidewalks and provides 156 ft. of vertical clearance over a 300 ft. wide navigation channel. These inspections included a 100% hands-on visual inspection of all structural, electrical and mechanical elements above the water line, including fatigue-sensitive and fracture-critical members, comprising the bridges and approaches. Mr. Comeaux served on the inspection team.
08/17 – 06/18	**Nineteen Complex Bridges Load Rating and Evaluation, Statewide, LA	LADOTD.** Modjeski and Masters, Inc. is performing plan and document retrieval, bridge inspection and analysis, and load and resistance factor rating of complex bridge structures, mainly steel vertical lifts. Gusset, truss, floorsystem and substructure components are being rated. Bridge inspections are focusing on gusset plates and existing member conditions for rating. AASHTOWare BrR is being used for the ratings, which follow current AASHTO Manual for Bridge Evaluation, the LADOTD Policies and Guidelines for Bridge Rating and Evaluation, and LADOTD Bridge Design and Evaluation Manual. Mr. Comeaux served as a field inspector for this project.
09/17 – 06/18	**Mississippi River Wharf Inspection and Load Ratings. New Orleans, LA	Port of New Orleans.** Modjeski and Masters and its team performed structural inspection, underwater inspection, load rating and condition reporting of elevated railroad portions of the wharf structures Nashville Avenue “B”, Harmony Street, Seventh Street and First Street. Member conditions and measurements are recorded for use in load rating of the railroad-supporting structure. Mr. Comeaux was part of the inspection team.

	Firm	**Huval & Associates, Inc.**		
	Name	Eddie Smith	Years of Relevant Experience with this Employer	6
	Title	Bridge Inspection Assistant Team Leader	Years of Relevant Experience with Other Employer(s)	43

Degree(s) / Years / Specialization			N/A
Active Registration Number / State / Expiration Date			N/A
Year Registered	N/A	Discipline	N/A
Contract Role(s) / Brief Description of Responsibilities			Bridge inspections. Eddie began his career with the LADOTD in 1979 as an engineering aid. In 1989, he became a bridge inspector for the LADOTD and was responsible for planning and preparing for inspection of all District throughout the state. As a certified bridge inspector Eddie was part of a four (4) man inspection team responsible for conducting in-depth inspections of approximately 1600 bridges, both On and Off system structures. The types included flat deck, treated timber, high level, ferry, pontoon swing span, and lift span structures. Eddie assisted on in-depth inspections which involved sub professional engineering work and special training on technical data describing each bridge element in a narrative and numerical rating system including the Pontis rating system.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
05/79-08/16	**Louisiana Department of Transportation and Development:** • Coordinated and supervised the inspections performed by District 03 Lafayette, Louisiana bridge inspection teams. • Directed quality control for three inspection teams consisting of three team leaders and various engineering technicians, inspecting approximately 1,000 off-system bridges and 1,200 on-system bridges. • Directed quality assurance of bridge inspections that were to be done in accordance with the provisions of the federal surface transportation assistance act of 1978 and CFR 23, part 650 of the National Bridge Inspection Standards. • Reviewed inspection reports, sketches and ratings to for compliance with all DOTD/FHWA policies and procedures. • Developed a one and one-half day bridge inspection course for the Louisiana Transportation Assistance Program (LTAP), consisting of fundamental procedures for interim inspection of off-system bridges. • Coordinated annual review of off-system bridge owner participation for FHWA and DOTD compliance. • Recommend bridge closures for on-system and off-system bridges and notified DOTD Headquarters and local emergency services of such closures. • Provided twenty-four hour on-call services for all electrical or mechanical problems for district bridges, buildings and rest areas, as well as any damage caused by vehicular of marine accidents.

10/18-07/20	SR 63 over Escatawpa River Girder and Weld Repairs – Pascagoula, MS – Inspector for the in-depth steel repair inspection. Responsible for coordination, inspections, and reporting for the $3M construction contract.
09/16 –Present	Various Bridge Inspections– Conducts bridge inspections on various types of bridges throughout the state of Louisiana and Mississippi. Inspections are performed on a wide range of bridge complexities from slab span to major river truss type structures including the Vicksburg RR bridge over the Mississippi.

	Firm	**Modjeski and Masters, Inc.**		
	Name	Scott Gordon	Years of Relevant Experience with this Employer	21
	Title	Protective Coating Inspector/Non-Destructive Evaluation	Years of Relevant Experience with Other Employer(s)	5

Degree(s) / Years / Specialization			High School/1995 Various Training Courses
Active Registration Number / State / Expiration Date			NACE Certified Coating Inspector No. 8115 (Level 3 and Peer Review) NBIS Certified Work Zone Training Compliant ASNT Level II
Year Registered	N/A	Discipline	N/A
Contract Role(s) / Brief Description of Responsibilities			Team Leader, Structural Bridge Inspector and UT 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 time specified in the applicable MPR(s).
05/16 - Ongoing	**US 11 Bridge Rehabilitation Design, New Orleans, LA | Louisiana Department of Transportation.** M&M led a team providing tructural, mechanical, electrical, and architectural rehabilitation services to extend the service life of the US 11 North and South bascule spans. The North bascule span is the only routinely operated span. In addition to repairs and improving the structural capacity to eliminate the weight posting of the bridge, the operator's house will be enlarged, and the span converted to hydraulic operation. The South bascule span is only opened manually (with a crane) when access is needed to service electrical utility lines crossing the lake. The span toes will be replaced to improve the structural capacity to eliminate the weight posting of the bridge. The operator houses will be rehabilitated to retain their historic appearance. The bascule spans comprise the largest spans (149') of the overall 4.7-mile bridge over Lake Pontchartrain. Scott performed UT testing to map all cracks and determine the depths of each crack. He also provided CE&I services during the construction of the project.
11/13 – 11/18	**UT Pins & Hangers - Testing | Louisiana Department of Transportation.** This project provided a condition assessment of the pinned connections for approximately fifty bridges through the use of ultrasonic procedures as defined by FHWA publication FHWA- RT-04-042 "Guidelines for Ultrasonic Inspection of Hanger Pins". The ultrasonic inspection is conducted using both straight and angle beam transducers in a pattern that is capable of detecting any and all defects/flaws at critical locations. Scott was part of the inspection team.
08/12 – 06/18	**H.000343 US 190 Huey P. Long Bridge Construction Engineering & Inspection, Baton Rouge, LA**. This project provided construction engineering and inspection services for the through truss cantilever bridge that carries US 190, as well as one rail line over the Mississippi River in Baton Rouge, LA. The 12,000+ foot bridge was in need of several repairs such as replacing elements in the steel approach and main spans, repairing navigation lighting, constructing retaining walls, placing guard rail, and repairing pavement. M&M is also providing project administration, paint inspection, as well as environmental monitoring services during construction. The construction project consists of structural repair, cleaning and painting of the steel superstructure. Scott provided construction engineering and inspection services for the repainting of this bridge.

03/15-06/15	**Gramercy Mississippi River Bridge 2015 Inspection. Gramercy, Louisiana | Louisiana Department of Transportation.** M&M performed a structural inspection of selected areas on the 3,101-foot cantilevered truss bridge at Gramercy, LA. M&M was responsible for the inspection from PP 12 to PP 24 on the main bridge trusses and the associated bracing between the two points. M&M also performed a coating inspection and evaluation of the entire main span of the structure. Technical access was used to assist in the inspection of the top 83 feet of the structure. Scott was part of the inspection team.
02/14-03/14	**Delair Truss Pin Inspection & Testing. Philadelphia, Pennsylvania | Conrail Shared Assets.** M&M provided a hands-on visual inspection of each of the 208 pin connected truss joints of the main span of the Delair Bridge and provided recommendations for a non-destructive testing program for the pin-connected truss joints on the structure. Under phase II of the project, Ultrasonic Testing of 10% to 15% of the 208 pin connected truss joints was performed. Scott was part of the inspection team.
5/10-09/13	**Galveston Railroad Bridge - Construction Services, Galveston, TX.** This project provided for the replacement of the existing 115 ft. span Scherzer Rolling Lift Bascule bridge in the Galveston Bay Railroad Causeway with a 385 ft. simple truss vertical lift bridge. The replacement bridge is a single-track, open deck, simple through Warren Type truss span and provide 300 ft. of horizontal clearance and 73 ft. of vertical clearance over the Intracoastal Waterway.
10/01-12/01 10/02-12/02 10/03-12/03 10/04-12/04 10/05-12/05 10/06-12/06 10/07-12/07 10/08-12/08	**Huey P. Long Bridge Annual Inspections. Jefferson Parish, Louisiana | New Orleans Public Belt Railroad.** A high-level combination highway and railroad bridge which crosses the Mississippi River in New Orleans, Louisiana and is part of the complex urban freeway system in the area. The total structure length, including approaches, is approximately 23,000 feet. The main span unit is 3,524 feet long, consisting of a 750-foot cantilever through truss span, two 530-foot anchor truss spans, one 530-foot simple through truss span, and four deck truss spans. M&M has routinely performed yearly NBIS inspections since its opening. Scott was part of the inspection team.

	Firm	**Modjeski and Masters, Inc.**		
	Name	Bryan Swartz	Years of Relevant Experience with this Employer	15
	Title	Protective Coating Inspector	Years of Relevant Experience with Other Employer(s)	6

Degree(s) / Years / Specialization			High School Diploma/1999
Active Registration Number / State / Expiration Date			NACE Certified Coating Inspector No. 10929 NBIS Certified, Work Zone Training Compliant SSPC C-3
Year Registered	N/A	Discipline	N/A
Contract Role(s) / Brief Description of Responsibilities			Bryan will serve as a Team Leader and Bridge Coating 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 time specified in the applicable MPR(s).
08/12 – 04/18	**H.000343 US 190 Huey P. Long Bridge Construction Engineering & Inspection, Baton Rouge, LA**. This project provided construction engineering and inspection services for the through truss cantilever bridge that carries US 190, as well as one rail line over the Mississippi River in Baton Rouge, LA. Due to past emissions from nearby chemical plants, the bridge has experienced significant corrosion issues. The 12,000+ foot bridge was in need of several repairs such as replacing elements in the steel approach and main spans, repairing navigation lighting, constructing retaining walls, placing guard rail, and repairing pavement. M&M is also providing project administration, paint inspection, as well as environmental monitoring services during construction. The construction project consists of structural repair, cleaning and painting of the steel superstructure. Bryan provided construction engineering and inspection services for the repainting of this bridge.
11/15 – 05/17	**H.010636 US 90 Over Mississippi River (GNO 2) Structural Repairs and Spot-Painting, New Orleans, LA.** M&M prepared plans for the repair and repainting of the Greater New Orleans Bridge No. 2 main bridge unit. Plans were also prepared for the repair of the fender, loose, missing and deteriorated fasteners and roadway joints that had worn over time. Bryan provided construction engineering and inspection services for this project.
08/16 - 05/17	**H.011482 US 90 Huey P. Long Bridge Cleaning and Painting (Segment 7), Jefferson Parish, LA.** The project provided for the development of plans and specifications for the removal of lead paint and the recoating of the original bridge trusses and bracing above bridge deck level. CE&I services and a Level 4 Transportation Management Plan were provided. Bryan assisted in developing the plans and specifications for this project. Bryan also provided Quality Assurance for the cleaning and painting portion of the project. This included QA inspection of cleaning and painting activities, preparing daily and weekly reports, preparing monthly estimates for work completed by the contractor, and verifying contractor compliance with the contract plans and specification.

04/15-06/16	**H.009326.6 I-10/I-610 Bridge Repairs and Painting, Orleans, St. Charles and St. John Parishes.** The project provided for the complete cleaning and removal of existing coatings, application of new paint, and disposal of material in steel spans in the I-10/I-610 bridge near New Orleans, LA. Along with its sub-consultant KGC Environmental Services, Inc., M&M is providing CE&I services to perform all painting inspection and environmental monitoring services. Bryan is the Coating Inspector for this project.
04/04-02/05 02/05-06/06 08/06-02/08 08/16-05/17	**US 90 Huey P. Long Bridge (multiple segments 2, 3, 4, 5 and 7), Jefferson Parish, New Orleans Public Belt Railroad.** The cleaning and repainting of various features of the Huey P. Long Bridge. Bryan provided inspection of surface preparation and coating application for over two miles of elevated steel trestle.
02/10-04/12	**Illinois River Bridge No. 552 - Construction Services. Divine, Illinois| Canadian National Railway.** The Illinois River Bridge, No. 552, was originally built as four 154-foot fixed through truss spans and was converted to a vertical lift bridge 80 years ago. M&M designed the replacement vertical lift span of 348 feet with a maximum lift vertical clearance of 56 feet. M&M also collected relevant data, evaluated alternatives, established design criteria, cost estimates, prepared project report, and provided the final vertical lift bridge design. M&M is providing construction management services. Bryan provided CE&I services for this project.
05/12-08/12	**H.009328.5) Mississippi River Bridge (Cleaning and Spot Painting) I-10 Main Bridge.** The project involved the development of plans, specifications and construction services (Stage 5, Parts 1 & 2) for the cleaning and repainting of the main bridge of this I-10 Mississippi River crossing. Bryan assisted in developing the plans and specifications for this project.
9/19 – 5/21 10/17 – 4/18 10/16 – 3/17 11/15 – 3/16 10/14 – 1/15 10/13 – 2/14	**Huey P. Long Bridge Inspection. New Orleans, Louisiana | New Orleans Public Belt Railroad.** The Huey P. Long Bridge is a steel anti-lever through-truss railroad and highway bridge across the Mississippi River, with a main bridge crossing of 3,525 feet and several miles of steel plate girder approaches. The main bridge features four deck truss spans, two anchor spans of 529 feet and 532 feet, two cantilever spans of 144 feet, a simple span of 531 feet, and a suspended span of 503 feet. Bryan was an inspection team member and inspection team leader for this annual inspection which included a 100% hands-on visual inspection of all structural elements, including fatigue-sensitive and fracture-critical members, comprising the main bridge structure and approaches, for both the railroad and highway.

	Firm	**AECOM Technical Services, Inc.**			
	Name	Bradley Kopping, PE		Years of Relevant Experience with this Employer	6
	Title	Movable Bridge - Mechanical Engineer		Years of Relevant Experience with Other Employer(s)	28

Degree(s) / Years / Specialization			BS / 1989 / Mechanical Engineer
Active Registration Number / State / Expiration Date			PE.39581 / LA / 09.30.2021 Additional active licenses; WA, TX, OH, MS, CT, MD, CA, NJ, NY, MN, DE, WI, IN, VA, OR, FL
Year Registered	2015	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			Bradley is responsible for the design and inspection of mechanical systems for movable bridges, heavy movable structures, and other transportation facilities; including production of plans, technical specifications, and cost estimates for new and rehabilitation projects. In addition, he has performed peer review of other engineers work and produced cost estimates for inspection and design RFPs. He has been involved in the industry for over 20 years.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
06/2018-Present	**Wisconsin Department of Transportation (WisDOT), Racine Street Bascule Bridge over the Fox River, Menasha, WI.** Senior Mechanical Engineer responsible for the design of the complete mechanical system required for a rolling lift bridge span replacement including the rear locks. The design of the machinery room came with tight constraints for machinery fit. Overall access was improved by the inclusion of access stairs designed into the bearing weldments allowing access over the pinion shafts. Rack and pinion were sized such that only a single rotation of the pinion achieved span motion for reduced contact tooth wear. Produced stamped drawings, the Technical Special Provisions (TSP), schedule, and cost estimate.
04/15-12/21	**CalTrans, 3rd Street Bascule Bridge over Islais Creek, San Francisco, CA.** Senior Mechanical Engineer responsible for design of mechanical portion of the bridge rehabilitation. This includes the replacement of the span lock machinery with new lock bar assemblies. Responsibilities include developing plans, specifications, and a cost estimate for all mechanical work. Further responsibilities include post-design construction support which involves answering RFI's, reviewing contractor submittals, inspecting contractor's field work and reporting findings to CalTrans representatives.
11/14-Present	**FDOT District Four, Southern Blvd. (SR80) Bascule Bridge Replacement over Inter-Coastal Waterway, Palm Beach County, FL.** Senior Mechanical Engineer responsible for design of mechanical portion of the bridge replacement. This included the span drive machinery design and the writing of the FDOT Technical Special Provisions (TSP) 465 as well as the engineer's cost estimate and construction schedule.
08/15-Present	**San Joaquin County, Millers Ferry Swing Bridge over Mokelumne River, Walnut Grove, CA.** Senior Mechanical Engineer responsible for design of mechanical portion of the bridge rehabilitation. This included the end lifting machinery. Responsibilities include developing plans, specifications, and a cost estimate for all mechanical work. Further responsibilities include post-design construction support which involves answering RFI's, reviewing contractor submittals, and reporting findings to City representatives.

10/20-Present	**LADOTD, Lapalco Boulevard Bascule Bridge over the Harvey Canal, New Orleans LA**. Mechanical Engineer Reviewer for the State of Louisiana responsible for providing machinery review services of the new Lapalco bascule Draft Bridge Development Report including providing comments on the report and coordinating responses with the bridge designers.
04/21-Present	**City of Appleton, Bascule Bridges Inspections and Rehabilitations, Appleton, WI.** Mechanical Inspection for the City of Appleton Lawe St and Olde Oneida Bascule Bridges. The inspection included an on-site inspection of the power distribution system including main motor(s) insulation test, inspection of existing lighting, conduits, conductors, submarine cables, receptacles, power disconnects, main enclosure gears including internal components, power monitoring, control console, control conduits and wiring, control field end devices, navigational lighting, traffic gates, and existing bridge documentation. A report was provided to the owner with findings of the inspection including suggested repairs to the power and control systems.
04/13-12/18	**WisDOT, 1st Street Bridge Rehabilitation, Milwaukee, WI.** Senior Mechanical Engineer responsible for design of mechanical portion of the bridge rehabilitation. This included the span drive machinery, span lock machinery and the span support machinery. Responsibilities include developing plans, specifications, and a cost estimate for all mechanical work. Further responsibilities include post-design construction support which involves answering RFI's, reviewing contractor submittals, inspecting contractor's field work and reporting findings to WisDOT representatives.
01/15-5/17	**MissDoT, MissDoT Inspection Manuals, Statewide, MS.** Subject Matter Expert responsible for writing mechanical portions of MissDoT bridge inspection manuals for 3 movable bridges. These manuals were written for MissDoT personnel to help them with preventative maintenance and to properly determine the condition of the bridges.
10/17-Present	**Municipality of Chatham-Kent, Baseline Bridge, Wallaceburg, ON.** Senior Mechanical Engineer responsible for supervising machinery and electrical rehabilitation tender elements (e.g. plans, specifications and cost estimates) for Baseline Bridge in Wallaceburg, Ontario. The movable bridge rehabilitation included mechanical and electrical span control and span operation and support systems. Baseline Bridge is a swing bridge that uses hydraulic cylinders to provide rotational movement and to actuate the span support components. The electrical work consisted of replacement of the entire control systems including the control desk, PLC and other electrical components.
10/14-09/17	**MassDoT, Bridge Street Bridge Replacement, Chatham, MA.** Senior Mechanical Engineer responsible for design of mechanical portion of the bridge rehabilitation. This included the span drive, span support and span lock machinery design and the writing of the Technical Specifications as well as the engineer's cost estimate and construction schedule. Further responsibilities include postdesign construction support which involves answering RFI's, reviewing contractor submittals, inspecting contractor's field work and reporting findings to MassDoT representatives.
06/98-08/06	**NYCDOT, Third Avenue Swing over the Harlem River, New York, NY.** Mechanical Engineer responsible for performing calculations and design of bridge balance wheels, balance wheel track, gear rack, and hydraulic auxiliary motor and power unit for the $118.8 million on-line bridge replacement. The project included a temporary bridge and float-in of fully assembled, 350-foot through truss swing span. Total project length is 3,500 feet. The project included in-depth inspection, complete substructure, and superstructure replacement of ramps, 18 approach spans, swing span's mechanical and electrical systems, control house, seismic analysis and design, traffic studies, and complex staged construction. Also wrote specifications for bridge hydraulics.

	Firm	**Modjeski and Masters, Inc.**		
	Name	Geoffrey Forest, PE	Years of Relevant Experience with this Employer	20
	Title	Movable Bridge - Mechanical Engineer	Years of Relevant Experience with Other Employer(s)	0

Degree(s) / Years / Specialization			MS / 2001 / Mechanical Engineering BS / 2000 / Mechanical Engineering
Active Registration Number / State / Expiration Date			PE.45721 / LA / 9/30/2023 Additional active licenses; PA, SC
Year Registered	2007	Discipline	Mechanical Engineering
Contract Role(s) / Brief Description of Responsibilities			Geoffrey is a Project Manager in the Mechanical Engineering Section of the firm. He has participated in various inspections of both fixed and movable bridges. Geoffrey also has experience in bridge construction monitoring, inspection and condition reporting, detailing bridges for rating capacity, development of contract plans and specifications.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
01/14 – Ongoing	**US 11 Bridge Rehabilitation Design, New Orleans, LA | Louisiana Department of Transportation.** M&M led a team providing structural, mechanical, electrical, and architectural rehabilitation services to extend the service life of the US 11 North and South bascule spans. The North bascule span is the only routinely operated span. In addition to repairs and improving the structural capacity to eliminate the weight posting of the bridge, the operator's house will be enlarged, and the span converted to hydraulic operation. The South bascule span is only opened manually (with a crane) when access is needed to service electrical utility lines crossing the lake. The span toes will be replaced to improve the structural capacity to eliminate the weight posting of the bridge. The operator houses will be rehabilitated to retain their historic appearance. The bascule spans comprise the largest spans (149') of the overall 4.7-mile bridge over Lake Pontchartrain. Geoffrey led the mechanical design team for this unique bridge ehabilitation. The original machinery design included electric motors, open gearing, and a final rack and pinion set to move the bascule leaves. The span drive system was converted to hydraulic operation using linear hydraulic cylinders acting directly on the bascule girders. The bascule leaf superstructure and pier were modeled in 3D to aid in locating clearances and interferences with the new operating machinery
12/14 – 12/17	**In-Depth Inspection of Complex Structures Retainer – Various Bridges (Statewide) | LADOTD.** As a member of a multi-firm team, Modjeski and Masters was tasked to provide Structural, Mechanical, Electrical, and Coatings inspection services to perform multiple In-Depth Bridge Inspections for various bridges throughout the state of Louisiana, as a part of the ongoing statewide Complex Structures Inspection Retainer with the LADOTD. The inspections were performed using technical rope access and rappelling, aerial work platforms, and standard climbing techniques. Bridge conditions, including specific defects, were documented and presented in an inspection report and PONTIS/Inspect-Tech forms, along with repair recommendations and a full coatings evaluation report. Geoffrey performed an in-depth condition inspection of the operating machinery for the movable bridges and authored the mechanical section of the inspection report.

03/10 – 06/16	**Houma Navigation Canal Bridge Rehabilitation. Houma, LA | LADOTD.** The Houma Navigation Canal Bridge is a swing bridge operated by hydraulic slewing cylinders. M&M is providing engineering design services for the rehabilitation of the drive machinery of this bridge. Geoffrey performed field inspection and strain gage balancing of the existing operating machinery and design of the new machinery for the upgrade of the span drive system. Geoffrey performed shop drawing review and response to Contractor RFI's. He also performed on site machinery installation support and inspection during construction.
10/13 – 06/15	**4th Street Harvey Bridge over Harvey Canal. Harvey, LA | LADOTD.** Categorized as a high priority project for DOTD, M&M was engaged to develop a scope for the rehabilitation of the structural, electrical and mechanical systems for extending the life of the bridge 30-40 years. Plans include replacing the grid deck, new track and tread plates, replacing hydraulic system, new electrical control system, generator, and repainting the bridge. Geoffrey designed a new hydraulic span drive system to replace the existing hydraulic system. The new span drive was modeled after other LADOTD hydraulic span drives for consistency, but tailored specifically for this bridge. The design also included replacement of the center locks and tail locks with components that better retain the alignment of the spans. - Geoffrey performed mechanical design for the rehabilitation. The work consisted of replacing the hydraulic span drive system in its entirety, as well as the track and tread plates. A staggered gear tooth profile was using in the track and tread design, which was modeled in 3D to create and verify the complex shapes
02/09 – 10/11	**Electrical Rehabilitation of Louisville Street Bascule Bridge & East Pearl River Swing Bridges. Monroe and St. Tammany Parish, Louisiana | LADOTD.** M&M prepared the electrical plans with specificaton notes for the rehabilitation of the Louisville Street Bridge over the Ouachita River in Monore, LA and the East Pearl River Bridge over the Pearl River in LA. Both bridges were in need of an electrical rehabilitation including lighting, gears and generator replacement. M&M also provided construction support services.

	Firm	**AECOM Technical Services, Inc.**		
	Name	Al Trotta, PE	Years of Relevant Experience with this Employer	4
	Title	Movable Bridge - Electrical Engineer	Years of Relevant Experience with Other Employer(s)	45

Degree(s) / Years / Specialization			MBA / 1987 / Management BEE / 1972 / Electrical Engineering
Active Registration Number / State / Expiration Date			Active licenses; DE, MD, NJ, NY, PA, CT, MA, NH, VT, IN, RI
Year Registered	1999	Discipline	Civil Engineer
Contract Role(s) / Brief Description of Responsibilities			Al brings over 49 years of experience as an Electrical Engineer. His experience includes design, maintenance and construction of movable bridges and other heavy movable structures. He has an excellent track record for improving operations and delivering large, profitable multi-discipline capital projects, with a high level of client satisfaction. Prior to entering the consulting engineering business, he spent almost 5 years as an employee of the Florida Department of Transportation where he worked exclusively on the design, maintenance, inspection and construction of movable bridges in the State of Florida. Since leaving FDOT he has worked for several consulting engineering firms specializing in movable 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 time specified in the applicable MPR(s).
03/20-Present	**San Francisco MTA, 3rd Street Bascule Bridge over Islais Creek, San Francisco, C**A. Coordinating electrical engineer for all electrical design associated with the replacement of this two-leaf movable bridge over Islais Creek. The bridge carries highway traffic, train traffic and pedestrians. The electrical work for this project includes new electrical service, new main distribution panel, highway and pedestrian lighting, traction power for the trains, Catenary for the trains, railroad signals, telephone, public address, navigation lighting, traffic gates, traffic lights, bridge control system, interior lighting, power distribution, and submarine cables.
04/20-05/21	**City of Boston, Northern Avenue Bridge, Boston, MA.** Lead Electrical Engineer and MEP coordinator for all electrical, and mechanical work associated with this $100 million bridge rehabilitation. The existing movable bridge is being demolished and replaced with a new bridge with a promenade at the center of the bridge. Electrical work included new incoming service; all new lighting including dynamic lighting at numerous locations on the bridge; power distribution for all bridge electrical and mechanical equipment; and accent lighting in landscape planters.
01/20-11/20	**NYC Department of Transportation, 79th Street Rotunda Reconstruction, Manhattan, NY.** Electrical Engineer of Record for this $40 million reconstruction project for a three-level bridge structure within a park area on the upper west side of Manhattan. Included in the design was new service equipment, new power distribution, new LED lighting (street and building), new alarm systems, and power and controls for bridge and mechanical equipment.
2/17-02/17	**New Jersey Transit. Morgan Draw Bridge, NJ.** Performed third party review of electrical design of this movable bridge. As a result of Superstorm Sandy, the electrical systems of this draw bridge were damaged and required replacement. All incoming power systems required complete replacement on the bridge and equipment was designed at a higher elevation to be 2.5 feet above the 100-year flood plain.

02/00-06/01	**NYC Transit Authority, Jamaica Bay Swing Bridges, Queens, NY.** Project Manager and lead electrical engineer responsible for all design work for the rehabilitation of two double track railroad swing bridges over Jamaica Bay. The South Channel Bridge will be completely rehabilitated, and the North Channel Bridge was converted to a permanent stationery bridge. Work included new service drops, stand-by power system, railroad signal modifications, lighting, metering rooms, underground and above ground duct banks with redundant feeders for bridge service, motor control center and power distribution, submarine cables, lighting, motors, solid state drives, Programmable Logic Controllers for bridge operation, navigation lighting, communications, stand-by power, surge suppression, grounding, lightning protection and intrusion alarms. In addition, this project was a study to determine the best method of providing AC power to the South Channel Bridge. This study included coordinating the NYCTA requirements and needs with the utility company's capabilities. Consideration was given to initial cost, maintainability, reliability and impact on project schedule.
06/20-06/20	**Delaware Department of Transportation, BR 3-164 Cedar Beach Road over Cedar Creek Canal, Slaughter Beach, DE.** Performed third party review for the electrical design for a hydraulic powered Dutch style bascule bridge. Design review included new power distribution system, new bridge lighting, new PLC for bridge controls, traffic controls including signals, warning gates and barrier gates, navigation lights, and power for mechanical equipment.
05/02-12/03	**NYS Department of Transportation, Stutson Street Bridge Replacement, Rochester, NY.** Senior electrical engineer for this Phase V and VI project that replaces the Stutson Street Bridge with a new realigned double leaf Scherzer bascule. Project work included new highway lighting, façade lighting, pedestrian lighting, incoming service, MCC, power distribution, motors, sensing devices, submarine cables, traffic gates, traffic lights, intercom, bridge lighting and control console.
01/20-03/20	**Ohio Department of Transportation, Center Street Swing Bridge Rehabilitation, City of Cleveland, OH.** Performed 3rd party review for the electrical design for the rehabilitation of this swing bridge. Work included new motor control center, new power distribution system for the bridge, new navigation lights, new fire alarm system, new lighting for the control house and the roadway, new traffic gates.

	Firm	**Modjeski and Masters, Inc.**		
	Name	Jonathan Gerhart	Years of Relevant Experience with this Employer	12
	Title	Movable Bridge - Electrical Engineer	Years of Relevant Experience with Other Employer(s)	12

Degree(s) / Years / Specialization			BS / 1998 / Electrical Engineering
Active Registration Number / State / Expiration Date			43052/LA/3/31/2023
Year Registered	2018	Discipline	Electrical Engineering
Contract Role(s) / Brief Description of Responsibilities			Jonathanis a Project Manager in Modjeski and Masters' Electrical Engineering Section and has over 24 years of experience in the design of electrical distribution systems, control systems and safety systems for movable 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 time specified in the applicable MPR(s).
05/16 - Ongoing	**US 11 Bridge Rehabilitation Design, New Orleans, LA | Louisiana Department of Transportation.** M&M led a team providing structural, mechanical, electrical, and architectural rehabilitation services to extend the service life of the US 11 North and South bascule spans. The North bascule span is the only routinely operated span. In addition to repairs and improving the structural capacity to eliminate the weight posting of the bridge, the operator's house will be enlarged, and the span converted to hydraulic operation. The South bascule span is only opened manually (with a crane) when access is needed to service electrical utility lines crossing the lake. The span toes will be replaced to improve the structural capacity to eliminate the weight posting of the bridge. The operator houses will be rehabilitated to retain their historic appearance. The bascule spans comprise the largest spans (149') of the overall 4.7-mile bridge over Lake Pontchartrain. Jonathanwas the lead electrical engineer for the complete electrical rehab of the power distribution, control system, and roadway lighting on the bridge
06/12-07/16	**H.009479: LA 1 West Larose Vertical Lift Bridge over ICWW, Larose, LA | LADOTD.** M&M provided rehabilitation plans for the upgrade of the structural, electrical, mechanical system to extend the life of the bridge 30-40 years for this vertical lift bridge. Additionally a new fender system was designed, the operator house was significantly upgraded, and bridge repainted. A bridge inspection and development of scope of service preceded the preparation of plans. Jonathaninspected the current condition of the electrical system and recommended the necessary improvements. Jonathanalso participated in the design of the electrical system rehabilitation.
08/12 – 08/19	**Fore River Bridge, Quincy, MA | Mass DOT.** As part of the design/build team led by the joint venture of White-Skanska-Koch and Parsons, M&M provided the final mechanical and electrical design for the Fore River Bridge lift span. The replacement of the Fore River Bridge, carrying Route 3A, is a signature project in the Massachusetts Accelerated Bridge Program. The new proposed vertical lift bridge provides a horizontal navigable channel of 250' and a vertical clearance of 175' in the open position. Extensive rehabilitation was required for the approaches to the proposed structure in addition to demolition of the existing temporary bridge and associated fender system. In addition to the mechanical and electrical services for the lift bridge replacement, M&M was also tasked with the vessel collision analysis and fender protection design. Jonathanwas the lead electrical engineer for this project.

10/13 – 06/15	**4th Street Harvey Bridge over Harvey Canal. Harvey, LA | LADOTD.** Categorized as a high priority project for DOTD, M&M was engaged to develop a scope for the rehabilitation of the structural, electrical and mechanical systems for extending the life of the bridge 30-40 years. Plans include replacing the grid deck, new track and tread plates, replacing hydraulic system, new electrical control system, generator, and repainting the bridge. Jonathanwas the lead electrical engineer for this project.
01/11-09/15	**Jackson Street Bridge Rehabilitation, Alexandria, LA | LADOTD.** M&M prepared the preliminary and final plans for the Jackson Street Bridge rehabilitation over Red River in Alexandria, LA. The rehabilitation includes repairing abutment damage caused by pavement growth, damaged approach slab, providing a relief mechanism for future growth, rehabilitating the lift span steel grid deck, and replacing the bridge & operating house electrical components. Jonathanperformed an inspection of the existing condition of the electrical systems and provided recommendations for the necessary improvements. Jonathanalso participated in the rehabilitation design
12/10-08/16	**Houma Navigational Canal Bridge Rehabilitation, Houma, LA | LADOTD.** The Houma Navigational Canal Bridge is a swing bridge operated by hydraulic slewing cylinders. M&M is providing engineering design services for the rehabilitation of the drive machinery of this bridge. Jonathan was an Electrical Specialist on this project and was responsible for the design of the electrical system and provided construction support. Jonathanalso performed the electrical inspection for this project.

Firm	**AECOM Technical Services, Inc.**		
Name	Kenneth Butler, PE	Years of Relevant Experience with this Employer	15
Title	Structural Engineer - Complex Bridge	Years of Relevant Experience with Other Employer(s)	22

Degree(s) / Years / Specialization			BS / 1984 / Civil Engineering
Active Registration Number / State / Expiration Date			PE.31476 / LA / 3/31/2023 Additional licenses in VA, FL, MD, PA, SC, NC, CA, D.C., DE, NY, NJ
Year Registered	1991	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			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 $463M 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.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
06/14-present	**LADOTD I-49 Connector, Lafayette, LA.** Ken serves as Bridge Design 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-feet of retaining wall.
10/19-present	**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.

08/17-present	**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.
04/17- 08/17	**VDOT Rte 3 Robert Norris Bridge over Rappahannock River, Whitestone, VA.** Chief Bridge Engineer responsible for conceptual design and cost estimates for replacing this 10,200-foot-long bridge with a 400-ft channel span that provides 110-ft vertical and 300-ft horizontal navigational envelope. Deep water up to 60-ft and 200-ft deep foundations resulting from poor subsurface conditions estimate the project cost at $400 million.
01/14-12/20	**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.
03/11-08/14	**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.

	Firm	**KPFF, Inc.**		
	Name	Scott Wyatt, PE, SE	Years of Relevant Experience with this Employer	11
	Title	Structural Engineer - Complex Bridge	Years of Relevant Experience with Other Employer(s)	15

Degree(s) / Years / Specialization			BS / 1993/ CE, Masters of Structural Engineering/06, MBA/02
Active Registration Number / State / Expiration Date			Additional active licenses; NC
Year Registered	1998	Discipline	Professional Engineer
Contract Role(s) / Brief Description of Responsibilities			Scott has over 26 years experience as a consulting bridge engineer. His work has encompassed design, inspection, condition evaluation, and rehabilitation for virtually every bridge type. He has extensive experience employing numerous nondestructive testing technologies for diagnostic forensic evaluation of bridge structures spanning new construction to turn of the century historic structures. Condition evaluation projects have included stay cable, suspension, tied arch, and post-tensioned segmental structures.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
6/06 - Present	• Inspection/Evaluation/Repair/Rehabilitation of Long-span Bridges • Tension Measurement in Arch Hanger Cables of I-490 Bridge over Genessee River, Rochester, NY – 2006 • Luling Bridge, free length inspection, repairs cable replacement, Luling LA, 2007 • Cable Inspections and Force Measurements for I-65 Arch and White River Stay Cable, Columbus IN - 2008 • South 10th Street Suspension Bridge Rehabilitation Study, Including hanger Force Measurements and Suspension Cable Anchorage Condition Assessment using Force Measurement Technology, Pittsburgh PA - 2009 • I-39 Abe Lincoln Arch Hanger Force Measurements, Peru IL – 2009, 2013, Insp. 2016 • I-94 and US 24 tied arch span hanger force estimation, Detroit, MI - 2007 • I-255 Jefferson Barracks Tied Arch, Instrumentation and analysis of wire fractures; St. Louis MO - 2011 • IPFW Pedestrian Stay Cable Bridge Ft. Wayne IN - 2009 and 2011 • Cannelton Bridge Hanger force measurements, Cannelton, IN - 2011 • Sherman-Minton Bridge Hanger force measurements and length calculations; Louisville, KY -2011 • Bayonne Bridge Service life analysis of abutments and post-tensioned repair tendon evaluation; Bayonne, NJ - 2012 • Milwaukee Sixth St. Viaduct 10 year in-depth inspection, Milwaukee WI - 2012 • Natcher Bridge Ultrasonic evaluation of stay cable strands within the anchorages; Owensboro, KY – 2012 • Sitka Harbor, Force measurements, anchorage inspection, free-length inspection, Sitka AK - 2015 • Captain William Moore Force measurements, anchorage inspection, free-length inspection, Skagway AK - 2015 • La Plata Bridge, Ultrasonic evaluation of stay cable strands within the anchorages and force measurements Naranjito PR-2015

	Firm	**KPFF, Inc.**		
	Name	Christopher A. Ligozio, PE, SE	Years of Relevant Experience with this Employer	10
	Title	Structural Engineer - Cable Stay Bridge	Years of Relevant Experience with Other Employer(s)	16

Degree(s) / Years / Specialization			AS/Metals Technology
Active Registration Number / State / Expiration Date			Additional active licenses; NY, IL, AK
Year Registered	1998	Discipline	Professional Engineering
Contract Role(s) / Brief Description of Responsibilities			Over the last 20 years, Chris has been involved in the inspection and evaluation of many signature structures, requiring the effective application of specialized inspection techniques, including NDT methods and structural instrumentation, and an understanding of structural deterioration modes and service life evaluation. Chris is an NBIS certified inspection team leader in several states.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
09/21 – present	Inspection and testing of Stay Cables, Kosciusko Bridge, New York, NY
08/16 – 09/20	Inspection and testing of main suspension and hanger cables, Gateway Bridge, Fulton, IL
05/16 – 12/20	QA Inspection for Cable Erection, Kosciusko Bridge, New York, NY
02/16 – 08/20	QA Inspection for Cable Erection, Goethals Bridge, Elizabeth, NJ
10/18 – 07-19	Testing of Stay Cables, C and D Canal Bridge, New Castle County, Delaware
05/16 – 10/16	Inspection and testing of Stay Cables, Mississippi River Bridge, Greenville, MS
06/15 – 03/16	Inspection and testing of Stay Cables, LaPlata Bridge, Naranjito, PR
08/14 – 09/15	Inspection and testing of Stay Cables, Sitka Harbor Bridge, Sitka. AK
07/12 – 02/13	Inspection of testing of Stay Cables, Sixth St Bridge, Milwaukee, WI
06/12 – 11/12	Testing of Stay Cables, William Natcher Bridge, Owensboro, KY
04/06 – 11/08	Inspection and testing of Stay cables / Design of replacement stay cables, Hale Boggs Bridge, Luling, LA

	Firm	**Modjeski and Masters, Inc.**		
	Name	Stacey P. Carr, PE	Years of Relevant Experience with this Employer	30
	Title	Structural Engineer	Years of Relevant Experience with Other Employer(s)	0

Degree(s) / Years / Specialization			MS / 2004 / Structural BS / 1990/ Civil
Active Registration Number / State / Expiration Date			26796/LA/9/30/2022
Year Registered	1996	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			Stacey has extensive experience in the rating, strengthening and design of highway, railroad, and combined highway/railroad structures, including large cantilever spans and movable ridges. Stacey has overseen the gamut for rating bridges from small concrete slab spans to complex steel structures, movable bridges and gusset plates, as featured below. She is well xperienced with AASHTOWare Bridge Rate (BrR) and is knowledgeable of both LFR and LRFR ating requirements. Special Training: NHI Course No. 130092, Fundamentals of LRFR and Applications of LRFR for Bridge Superstructures

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
11/19 – 06/21	**H.009859.1: Load Rating of Fourteen Complex Bridges | LADOTD.** Modjeski and Masters, Inc. is performing plan and document retrieval, bridge inspection (as needed), analysis and load rating, sampling/instrumentation and non-destructive testing (as needed), and plan production (as needed) for 14 complex bridges. The bridge types include swing spans, bascule spans, truss spans and curved steel spans. For the analysis and load rating task, M&M is generating a system structural model and performing an analysis of each bridge to determine dead and live load forces in the members. For the bridge superstructures, AASHTOWare BrR software is being used. All load rating analysis will follow current AASHTO Manual for Bridge Evaluation, LADOTD Bridge Design and Evaluation Manual and AASHTO LRFD Bridge Design Specifications. Stacey is the Project Manager who oversees and performs primary QA/QC for the load rating of the bridges.
07/19 – 05/21	**H.012485.1: Load Rating of 354 Off System Bridges | LADOTD.** Modjeski and Masters, Inc. is performing plan and document retrieval, bridge inspection (as needed), analysis and load rating, sampling/instrumentation and non-destructive testing (as needed), and plan production (as needed) for 354 off system bridges including prestressed concrete, reinforced concrete and steel plate girder bridges. For the analysis and load rating task, M&M is generating a system structural model and performing an analysis of each bridge to determine dead and live load forces in the members. For the bridge superstructures, AASHTOWare BrR software is being used. For the complex bridges, a three-dimensional structural model is needed. All load rating analysis will follow current AASHTO Manual for Bridge Evaluation, LADOTD Bridge Design and Evaluation Manual and AASHTO LRFD Bridge Design Specifications. Stacey is the Project Manager who oversees and performs primary QA/QC for the load rating of the bridges.

07/19 – 06/21	**H.000303.6: Danziger Bridge Repair and Rating | LADOTD.** Modjeski and Masters, Inc. is performing repair and load rating services or the Danziger Bridge, a steel vertical lift structure with a steel girder superstructure supported by reinforced concrete piers, and the flanking prestressed concrete approach structures. AASHTOWare Bridge Rating BrR software will be used to perform load rating based on the present condition, capacity and loading of the bridge. All load rating analysis will follow current AASHTO Manual for Bridge Evaluation, LADOTD Bridge Design and Evaluation Manual and AASHTO LRFD Bridge Design Specifications. Stacey is the Project Manager who oversees and performs primary QA/QC for the load rating.
1/17-08/18	**H.009859.5: Nineteen Complex Bridge Load Rating and Evaluation. Louisiana | LADOTD.** Modjeski and Masters, Inc. performed plan and document retrieval, bridge inspection and analysis, and load and resistance factor rating of complex bridge structures, mainly movable bridges. Gusset, truss, floorsystem and substructure components were rated. Bridge inspections focused on gusset plates and existing member conditions for rating. AASHTOWare BrR is being used for the ratings, which follow current AASHTO Manual for Bridge Evaluation, the LADOTD Policies and Guidelines for Bridge Rating and Evaluation, and LADOTD Bridge Design and Evaluation Manual. Stacey was the Project Manager who oversees and performs primary QA/QC for the load rating of the bridges.
02/16-10/17	**H.009859.5: Ten Truss Bridges Load Rating and Evaluation. Louisiana | LADOTD.** Modjeski and Masters, Inc. performed plan and document retrieval, bridge inspection and analysis, and load and resistance factor rating of complex bridge structures, including large cantilever trusses, vertical lifts and swing spans. Gusset, truss, floorsystem and substructure components were rated. Bridge inspections focused on gusset plates and existing member conditions for rating. AASHTOWare BrR was used for the ratings, which follow the AASHTO Manual for Bridge Evaluation, the LADOTD Policies and Guidelines for Bridge Rating and Evaluation, and LADOTD Bridge Design and Evaluation Manual. Stacey was Project Manager who oversaw and performed primary QA/QC for the load rating of the bridges.
09/14-12/16	**H.009859.5 (A): Rating and Posting of On-System State Bridges. Louisiana | LADOTD.** M&M performed load rating analyses for 110 existing bridge structures using the Load and Resistance Factor Rating Method. Elements to be rated include superstructure and substructure components. Provisions in the AASHTO Manual for Bridge Evaluation as well as LADOTD Policies and Guidelines for Bridge Rating and Evaluation were followed. Stacey was group leader, oversaw, and performed primary QA/QC for the load rating of the structures which included reinforced concrete, prestressed concrete and steel plate girder bridges.
02/13-02/15	**H.009859.5: Crescent City Connection, Bridge No. 1, New Orleans, LA | LADOTD.** M&M performed an inspection and LRFR load rating of the Greater New Orleans Bridge #1, a 13,428 foot truss bridge with a main span of 1,575 feet. The rating included the superstructure, including gusset plates and deck, and selected substructure elements. Stacey oversaw and performed primary QA/QC for the load rating of the bridge.
04/10-12/12	**T.O. 701-65-1460 & H.005710: US 190 Miss. River Bridge, Baton Rouge, LA | LADOTD.** The US 190 Mississippi River Bridge carries one railroad track between the main bridge trusses and has two-lane highways brackets either side of the main cantilever truss bridge. This Task Order and Supplements were for the rating of the railroad portions per AREMA requirements and rating of the vehicular portions per AASHTO LRFR requirements. Stacey oversaw and participated in the rating of the bridge.

	Firm	**Modjeski and Masters, Inc.**		
	Name	Jason Miles, PE	Years of Relevant Experience with this Employer	13
	Title	Structural Engineer	Years of Relevant Experience with Other Employer(s)	0

Degree(s) / Years / Specialization			BS / 2008 / Civil
Active Registration Number / State / Expiration Date			37773/LA/09/30/2023
Year Registered	2013	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			Jason has been employed as a Design Engineer in the New Orleans office of Modjeski and Masters, Inc. since 2009. During this period, he has been engaged in multiple complex projects. The majority of his time has been spent in complex structural analysis, 3-D structural modeling, steel member shop drawing review, assessment of steel fabricator quality control reports, and in performing finite element analysis using both the LUSAS and Florida Pier programs. Jason attended the AASHTOWare Bridge Rate (BrR) meeting titled "AASHTOWare Bridge Design and Rating Software User Group Meeting" in August 2014, 2016 and 2020. He also completed NHI Course No. 130092, Fundamentals of LRFR and Applications of LRFR for Bridge Superstructures and NHI Course No. 130081, LRFD for Highway Bridge Superstructures. Jason also has experience with finite element analysis, in particular through the use of Lusas software to check AASHTOWare BrR results.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
06/20 - Ongoing	**H.010603.6 I-20 Mississippi River Bridge at Vicksburg Monitoring | LADOTD.** Piers E-2 and E-1 of the I-20 Bridge in Vicksburg have been experiencing movements and have been under a monitoring program since 2002. The objective of this project is to capture both longitudinal and transverse displacements and tilts of the piers and provide system redundancy through the installation of jointmeter/tiltmeters and GPS instrumentation systems. Replacement vibrating wire jointmeters will be installed at five locations to determine the magnitudes of displacement over time. Replacement biaxial tiltmeters will be installed at four locations to determine the changes in tilt occurring over time at the bridge piers. All measurements will be reported wirelessly to a data logger connected to a cellular modem. Jason serves as the project manager and will be analyzing and monitoring data to provide advance warning of pier and bridge longitudinal movement and pier tilt.
11/19 – 05/21	**H.009859.5: Load Rating of Fourteen Complex Bridges | LADOTD.** Modjeski and Masters, Inc. is performing plan and document retrieval, bridge inspection (as needed), analysis and load rating, sampling/instrumentation and non-destructive testing (as needed), and plan production (as needed) for 14 complex bridges. The bridge types include swing spans, bascule spans, truss spans and curved steel spans. For the analysis and load rating task, M&M is generating a system structural model and performing an analysis of each bridge to determine dead and live load forces in the members. For the bridge superstructures, AASHTOWare BrR software is being used. For the complex bridges, a three-dimensional structural model is needed. M&M is also developing influence lines and COMPSTIL2 input files for complex substructures including hammerheads and inverted-T pier caps. All load rating analysis will follow current AASHTO Manual for Bridge Evaluation, LADOTD Bridge Design and Evaluation Manual and ASHTO LRFD Bridge Design Specifications. Jason operated as a co-manager overseeing the technical aspects of the complex bridge ratings. Jason provided QA/QC, including calculation checking and report review.

07/19 – 05/21	**H.000303.6: Danziger Bridge Repair and Rating | LADOTD.** Modjeski and Masters, Inc. is performing repair and load rating services for the Danziger Bridge, a steel vertical lift structure with a steel girder superstructure supported by reinforced concrete piers, nd the flanking prestressed concrete approach structures. AASHTOWare Bridge Rating BrR software will be used to perform oad rating based on the present condition, capacity and loading of the bridge. All load rating analysis will follow current AASHTO Manual for Bridge Evaluation, LADOTD Bridge Design and Evaluation Manual and AASHTO LRFD Bridge Design Specifications. Jason performed analysis of the span using a 3D FEM model in LUSAS. Analysis included investigating thermal gradient effects, validating data from bridge monitoring systems, and an LRFR load rating.
07/19 – 04/21	**H.012485.1: Load Rating of 354 Off System Bridges | LADOTD.** Modjeski and Masters, Inc. is performing plan and document retrieval, bridge inspection (as needed), analysis and load rating, sampling/instrumentation and non-destructive testing (as needed), and plan production (as needed) for 354 off system bridges including prestressed concrete, reinforced concrete and steel plate girder bridges. For the analysis and load rating task, M&M is generating a system structural model and performing an analysis of each bridge to determine dead and live load forces in the members. For the bridge superstructures, AASHTOWare BrR software is being used. For the complex bridges, a three-dimensional structural model is needed. All load rating analysis will follow current AASHTO Manual for Bridge Evaluation, LADOTD Bridge Design and Evaluation Manual and AASHTO LRFD Bridge Design Specifications. Jason provided technical guidance to bridge raters involved in a variety of bridge types, including slab spans, prestressed girder spans, and grid deck on steel beam spans. Jason provided specific guidance on ratings of timber substructure elements. Ratings were performed using AASHTOWare BrR with refinements done in Excel when needed. Jason also performed general QA/QC and rating report review.
02/17-08/18	**H.009859.5: Nineteen Complex Bridge Load Rating and Evaluation. Louisiana | LADOTD.** Modjeski and Masters, Inc. performed plan and document retrieval, bridge inspection and analysis, and load and resistance factor rating of complex bridge structures, mainly movable bridges. Gusset, truss, floorsystem and substructure components were rated. Bridge inspections focused on gusset plates and existing member conditions for rating. AASHTOWare BrR was used for the ratings, which follow current AASHTO Manual for Bridge Evaluation, the LADOTD Policies and Guidelines for Bridge Rating and Evaluation, and LADOTD Bridge Design and Evaluation Manual. Jason participated in the load rating analysis and reporting for this project.
03/16-10/17	**H.009859.5: Ten Truss Bridges Load Rating and Evaluation. Louisiana | LADOTD**. Modjeski and Masters, Inc. performed plan and document retrieval, bridge inspection and analysis, and load and resistance factor rating of complex bridge structures, including large cantilever trusses, vertical lifts and swing spans. Gusset, truss, floorsystem and substructure components were rated. Bridge inspections focused on gusset plates and existing member conditions for rating. AASHTOWare BrR was used for the ratings, which followed the AASHTO Manual for Bridge Evaluation, the LADOTD Policies and Guidelines for Bridge Rating and Evaluation, and LADOTD Bridge Design and Evaluation Manual. Jason participated in the load rating analysis and reporting for this project.

	Firm	**CONSOR Engineers, LLC**		
	Name	Heath Pope, PE	Years of Relevant Experience with this Employer	5
	Title	Bridge Inspection Team Leader - Underwater / Diver	Years of Relevant Experience with Other Employer(s)	26

Degree(s) / Years / Specialization			BS/1992/Civil Engineering MBA/2004/Old Dominion University
Active Registration Number / State / Expiration Date			36946/LA/09.30.22
Year Registered	2012	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			Heath fulfills the minimum personnel requirement for an Inspection Team Leader Project Manager. He provides more than 27 years of experience with a wide range of inspection and repair/rehabilitation projects. As a professional engineer and commercial diver, he routinely performs above-water and underwater condition assessments and repair design inspections; his experience includes a wide range of structures, including bridges, piers, wharves, relieving platforms, dry docks, quay walls, bulkheads, caissons, pipelines, and fender and mooring systems. Typical clients include state departments of transportation (DOTs), the US Navy, major port authorities, US Coast Guard, and several other federal agencies, municipal, and private clients throughout the US, Canada, and the Pacific Rim. He also serves as a member and contributing author on the ASCE Ports and Harbors committee which developed the new ASCE Waterfront Facilities Inspection and Assessment Standard Practice Manual, published June 2015. Courses: • NHI 130055, "Safety Inspection of In-Service Bridges" – 02/04/2005 • NHI 130053, "Bridge Inspection Refresher Training" – 01/25/2018 • NHI 130078, "Fracture Critical Inspection Techniques for Steel Bridges" – 03/06/2009 • NHI 130091, "Underwater Bridge Inspection" – 09/01/2007 • NHI 130110, "Tunnel Safety Inspection" – 03/03/2017 • NHI 135047, "Stream Stability & Scour Highway Bridges for Bridge Inspection" – 02/21/2007 Certifications: • Surface-Supplied Air Diving Supervisor – ADCI #24803

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
1/17 – Ongoing	**Contract 4400009105: Statewide Underwater Bridge Inspections, Louisiana DOTD.** Project Manager/Team Leader Under seven task orders for two consecutive contracts, CONSOR has performed 1200+ underwater inspections of bridges in LADOTD Districts statewide. The project included Level I, II, and III inspections utilizing surface-supplied air and commercial SCUBA diving

	systems, for concrete, steel, and timber bridges and culverts and 2D and 2D Acoustic Imaging on select bridges. Inspections have included challenging aspects specifically related to wildlife, fast currents, difficult access as well as culvert structures requiring penetration dives through extensive silt and debris build up. CONSOR's most recently completed task order (2019) included 254 bridges in LADOTD District 2, which encompasses the parishes of Orleans, Jefferson, Lafourche, and Terrebonne. The bridges inspected have included I-10 Eastbound/Westbound bridges over Lake Pontchartrain, US 11 over Lake Pontchartrain, and I-10 Eastbound/Westbound over the Bonnet Carre Spillway. CONSOR's current task order, ending in June 2022, has completed 350+ inspections to date in LADOTD Districts 2, 4, 5, 7, 8, 58, and 62. Comprehensive engineering reports are prepared and submitted in LADOTD AssetWise Bridge Management System.
mm/2014 –mm/ 2016	**Underwater Bridge Inspection Statewide, Louisiana DOTD.** Project Manager/Team Leader At his previous firm, Mr. Pope performed on this five-year retainer contract to perform underwater bridge inspections throughout Louisiana, including 100% visual inspections of submerged elements in accordance with NBIS requirements. Task orders included: Task 1 (2014) in District Seven – underwater inspection of 277 concrete, steel, and timber bridges; Task 2 (2014) in District Three – underwater inspection of 96 concrete, steel, and timber bridges; Task 3 (2014-2015) in District 61 – underwater inspection of 69 concrete, steel, and timber bridges; and Task 5 (2016) in District Two – underwater inspection of 30 concrete, steel, and timber bridges.
1/17 - Ongoing	**Statewide Underwater Bridge Inspections, Iowa DOT.** Team Leader/Dive Supervisor CONSOR has performed four consecutive cycles of statewide underwater bridge inspections, totaling 200+ inspections. Bridges included timber, steel, and concrete construction crossing streams and rivers with swift currents, limited access, and zero visibility. Each inspection required an in-depth engineering report with photographs and CADD drawings illustrating defects.
1/17 – Ongoing	**Statewide Underwater Bridge Inspections, Mississippi DOT.** Team Leader/Dive Supervisor CONSOR has been selected for three contract cycles of NBIS underwater inspections for 200+ bridges throughout the state. Underwater acoustic imaging and hydrographic surveying was performed on six bridges on the Mississippi and Pearl Rivers. Diving conditions included fast flow with debris and limited visibility. Structural conditions were documented with underwater photography. Non-destructive testing was used to accurately determine section loss of steel piles, and timber piles were inspected using a resistograph instrument. Soundings were taken upstream and downstream of the bridge while full contours were developed for each bridge site. Reports included NBIS component ratings and Pontis Element Level inspections. Scour countermeasures were designed for the I-10 Bridge in Pascagoula when soundings indicated excessive scour had occurred.

	Firm	**CONSOR Engineers, LLC**		
	Name	Dustin Noel, PE	Years of Relevant Experience with this Employer	13
	Title	Bridge Inspection Team Leader - Underwater / Diver	Years of Relevant Experience with Other Employer(s)	6

Degree(s) / Years / Specialization			BS / 2003 / Civil Engineering
Active Registration Number / State / Expiration Date			26411 /OK / 10/31/2022
Year Registered	2003	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			Dustin fulfills the minimum personnel requirement for an Underwater Bridge Inspection Diver (Team Leader). Dustin is a structural engineer with more than 19 years of experience performing NBIS safety inspections of bridges using FHWA standards. His experience includes routine, fracture critical, and underwater bridge inspections. Dustin's client portfolio includes state departments of transportation nationwide, including Louisiana, as well as federal agencies. Dustin serves as a lead instructor for PennDOT's Basic Bridge Safety Inspection Course; Bridge Safety Inspection Refresher Training; and Load Rating Analysis of Highway Bridges. He is a SPRAT Level III-certified rope access technician. Courses: • PennDOT, "Bridge Safety Inspection Course" (FHWA/NHI-approved 130055 equivalent) – 2/2/2004 • NHI 130053, "Bridge Safety Inspection Refresher Course" – 3/27/2019 • NHI 130078, "Fracture Critical Inspection Techniques for Steel Bridges" – 6/07/2011 • NHI 130088, "Bridge Construction Inspection" – 1/08/2008 • NHI 130091, "Underwater Bridge Inspection" – 1/25/2019 Certifications: • Surface-Supplied Air Diving Supervisor– ACDI #58346 • SPRAT Level III Engineer Climber • FHWA-certified NHI Bridge Inspection Instructor (2019): NHI 130053, NHI 130078

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
03/13 - Ongoing	**Statewide Underwater Bridge Inspections, Pennsylvania DOT.** Project Manager/Team Leader: The PennDOT Bureau of Maintenance and Operations has selected CONSOR for a third consecutive five-year contract to perform underwater inspections on bridges and tunnels statewide. The project includes NBIS inspection, scour evaluation, and report preparation with photographs and drawings, as well as participation in bridge owner meetings.

08/12 – 05/18	**Statewide Underwater Bridge Inspections, Virginia DOT.** Team Leader: Under four contracts, CONSOR was selected to provide professional NBIS diving services for inspection and analysis on bridges throughout Virginia. CONSOR provided all personnel and equipment necessary to perform the underwater inspections that included recommendations of follow-up action and the preparation of inspection reports. In areas with salt water and/or brackish water, a minimum of 10% of each substructure element was cleaned of marine growth. Color photography was used and included as a part of each final inspection report.
04/15 – 05/15	**Statewide Underwater Bridge Inspections, West Virginia DOT.** Team Leader: CONSOR has been selected for two task order-based contracts to provide underwater inspection services statewide. The project included a visual/tactile underwater inspection of the I-77 North and South Bridge over the Little Kanawha River and Rail Trail. The inspection was performed utilizing a four-person dive team with constant, direct communication between the dive supervisor and the diver. CONSOR provided a comprehensive engineering report that included structural, scour and channel conditions, evaluation of previous corrective actions, repair recommendations, sounding data, photographs, and drawings.
7/09 - Ongoing	**Statewide Underwater Bridge Inspection – Alaska DOT and Public Facilities.** Deputy Project Manager/Team Leader: Since 2006, CONSOR has been selected for five 3-year term agreement contracts for the underwater inspection of marine and freshwater structures, including bridges and ferry terminals in locations ranging from the west end of the Aleutians, the Arctic Circle, and the southern Inside Passage in Alaska. The project includes the detection of damaged structure elements, section loss, timber decay or attack by marine borers, scour, and undermining of footings or concrete walls. Many of the bridges required dives to 95 ft. Therefore, a portable inflatable recompression bag system was brought to these remote sites as a precaution. In 2015, our contract was expanded to include fracture critical inspection of complex structures statewide
05/09 – Ongoing	**Statewide Underwater Bridge Inspections, South Carolina DOT.** Team Leader: Under four contracts, CONSOR has performed 550+ underwater bridge inspections throughout the state. Responsibilities included the investigation, evaluation, and recommendation of repairs to the bridges' substructure units (located in the water). Bridges ranged in size from small, completely submerged box culverts to large, river-crossing trusses and cable stays. After the inspection, a complete report was prepared for each bridge detailing the findings, rating the bridges in both NBIS and BMS, and stating recommended repairs. Acoustic imaging was used on bridges over the Cooper and Wando Rivers to document scour for repair recommendations.

	Firm	**CONSOR Engineers, LLC**		
	Name	Sebastien Templeton, PE	Years of Relevant Experience with this Employer	4
	Title	Bridge Inspection Team Leader - Underwater / Diver	Years of Relevant Experience with Other Employer(s)	11

Degree(s) / Years / Specialization			BS/2004/Mechanical Engineering
Active Registration Number / State / Expiration Date			73173 / FL / 02/28/2023
Year Registered	2011	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			Sebastien fulfills the minimum personnel requirement for an Underwater Bridge Inspection Diver (Team Leader). He has 13 years of experience managing and leading waterfront inspection and repair/ rehabilitation design projects. Specific expertise includes structural condition assessment, corrosion assessment and mitigation, cathodic protection evaluation and design, and construction management. He routinely performs above-water and underwater condition assessments and repair design inspections. His expertise includes a variety of waterfront structures, including piers, wharves, relieving platforms, dry docks, quay walls, bulkheads, caissons, bridges, pipelines, and fender and mooring systems. Typical clients include the US Navy, US Coast Guard, major port authorities, oil and gas companies, and several other federal agencies, state DOTs, and municipal and private entities throughout the US and abroad. *Courses:* • NHI 130055, "Safety Inspection of In-Service Bridges" – 04/19/2013 • NHI 130053, "Bridge Inspection Refresher Training" – 03/27/2019 • NHI 130091, "Underwater Bridge Inspection" – 07/02/2009 *Certifications:* • Surface-Supplied Air Diving Supervisor – ADCI #48653

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
07/17 – Ongoing	**Contract 4400009105: Statewide Underwater Bridge Inspections, Louisiana DOTD.** Project Team Leader Under seven task orders for two consecutive contracts, CONSOR has performed 1200+ underwater inspections of bridges in LADOTD Districts statewide. The project included Level I, II, and III inspections utilizing surface-supplied air and commercial SCUBA diving systems, for concrete, steel, and timber bridges and culverts and 2D and 2D Acoustic Imaging on select bridges. Inspections have included challenging aspects specifically related to wildlife, fast currents, difficult access as well as culvert structures requiring penetration dives through extensive silt and debris build up. CONSOR's most recently completed task order (2019) included 254 bridges in LADOTD District 2, which encompasses the parishes of Orleans, Jefferson, Lafourche, and Terrebonne.

	The bridges inspected have included I-10 Eastbound/Westbound bridges over Lake Pontchartrain, US 11 over Lake Pontchartrain, and I-10 Eastbound/Westbound over the Bonnet Carre Spillway. CONSOR's current task order, ending in June 2022, has completed 350+ inspections to date in LADOTD Districts 2, 4, 5, 7, 8, 58, and 62. Comprehensive engineering reports are prepared and submitted in LADOTD AssetWise Bridge Management System.
07/17 – Ongoing	**Statewide Underwater Bridge Inspections, South Carolina DOT.** Team Leader Under five contracts, CONSOR has performed 500+ underwater bridge inspections throughout the state. Responsibilities included the investigation, evaluation, and recommendation of repairs to the bridges' substructure units (located in the water). Bridges ranged in size from small, completely submerged box culverts to large, river-crossing trusses and cable stays. After the inspection, a complete report was prepared for each bridge detailing the findings, rating the bridges in both NBIS and BMS, and stating recommended repairs. Acoustic imaging was used on bridges over the Cooper and Wando Rivers to document scour for repair recommendations.
07/19 – Ongoing	**IDIQ Contract for Ocean Engineering Services Nationwide: US Coast Guard IDIQ Contract for Ocean Engineering Services Nationwide, CEU Miami, FY19 and FY20 Major ATON Inspections, Various 7th and 8th Districts Offshore and Inland Sites (USVI, PR, FL, SC, TX, and LA.** Project Manager/Team Leader CONSOR performed above and underwater structural inspections of 35 major aid-to-navigation (ATON) structures located throughout the southeastern United States, Puerto Rico, and the US Virgin Islands. The purpose of the inspection was to detect and report conditions requiring maintenance or repair before such conditions become safety, structural, or major maintenance problems for servicing Coast Guard personnel. The inspections were performed to assess physical integrity and ensure each ATON meets its functional requirements; identify the need for corrective action before advanced deterioration necessitates major repairs; and initiate action for repair or replacement. Additionally, OSHA-compliance audits were performed to verify compliance with current federal regulations and identify the need for modifications regarding ladders, fall protection, and other safety features. Project deliverables included comprehensive condition assessment reports with repair recommendations, associated construction repair estimates, remaining service life estimates, CAD figures, and photographs.
10/18 – 06/19	**Port Everglades Coring Inspection, Broward County, FL.** Project Manager/Team Leader: CONSOR performed an underwater special purpose inspection of the bulkhead composing Berths 9 through 11 within Port Everglades. The purpose of the inspection was to determine the presence and assess the condition of cementitious fill placed between the interior and exterior steel sheet pile retaining walls by means of destructive testing. This information was used to evaluate the bulkheads ability to support itself during upland excavation operations and to estimate concrete demolition quantities for the expansion of Slip 1, which supports petroleum offloading operations along Berths 9 and 10.

	Firm	**CONSOR Engineers, LLC**		
	Name	Eric Bolek	Years of Relevant Experience with this Employer	3
	Title	Bridge Inspection Assistant Team Leader - Underwater / Diver - Tender	Years of Relevant Experience with Other Employer(s)	0

Degree(s) / Years / Specialization			BS / 2013 / Plant and Soil Science
Active Registration Number / State / Expiration Date			N/A
Year Registered	N/A	Discipline	N/A
Contract Role(s) / Brief Description of Responsibilities			Eric fulfills the minimum personnel requirement for an Underwater Bridge Inspection Diver. *Courses:* • NHI 130091, "Underwater Bridge Inspection" – 01/25/2019 *Certifications*: • Entry Level Tender/Diver – ADCI #52991

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
12/18 - Ongoing	**Contract 4400003531 & 4400009105: Statewide Underwater Bridge Inspections, Louisiana DOTD – Underwater Bridge Inspector.** Under seven task orders for two consecutive contracts, CONSOR has performed 1,200+ underwater inspections of bridges in LADOTD Districts statewide. The project included Level I, II, and III inspections utilizing surface-supplied air and commercial SCUBA diving systems, for concrete, steel, and timber bridges and culverts and 2D and 2D Acoustic Imaging on select bridges. Inspections have included challenging aspects specifically related to wildlife, fast currents, difficult access as well as culvert structures requiring penetration dives through extensive silt and debris build up. CONSOR's most recently completed task order (2019) included 254 bridges in LADOTD District 2, which encompasses the parishes of Orleans, Jefferson, Lafourche, and Terrebonne. The bridges inspected have included I-10 Eastbound/Westbound bridges over Lake Pontchartrain, US 11 over Lake Pontchartrain, and I-10 Eastbound/Westbound over the Bonnet Carre Spillway. CONSOR's current task order, ending in June 2022, has completed 350+ inspections to date in LADOTD Districts 2, 4, 5, 7, 8, 58, and 62. Comprehensive engineering reports are prepared and submitted in LADOTD AssetWise Bridge Management System.
07/19 – 3/20	**IDIQ Contract for Ocean Engineering Services Nationwide: CEU Miami FY19 Major ATON Inspection – US Coast Guard – Dive Technician.** CONSOR performed above and underwater scheduled structural inspections of 37 major ATON structures located throughout the southeastern United States, including the Atlantic coast, Lower Mississippi River, and Gulf of Mexico. The purpose of the inspection was to detect and report conditions requiring maintenance or repair before such conditions become safety, structural, or major maintenance problems for servicing Coast Guard personnel. They were performed to assess physical integrity and ensure each ATON meets their functional requirements; identify the need for corrective action before advanced deterioration necessitates major repairs; and initiate action for repair or replacement. Additionally, OSHA-compliance audits were performed to verify compliance with current federal regulations and identify the need for modifications regarding ladders, fall protection, and other safety features.

04/19 – 1/20	**Underwater Bridge Inspections, Ohio DOT – District 9 – Underwater Bridge Inspector.** CONSOR provided NBIS underwater inspections for 41 bridges within District 9. Each inspection required an engineering report with photographs and CAD drawings illustrating any defects.
12/18 - Ongoing	**Routine, Fracture Critical, and Underwater Bridge Inspections, Nationwide, Bureau of Indian Affairs – Inspector/ Diver Since 2001.** CONSOR has been performing on three consecutive task order-based contracts to perform NBIS bridge inspections and prepare an inventory of Indian-owned bridges throughout the United States. Services included engineering analysis of existing conditions, reviewing and updating previous inspection reports and drawings, recommendations for follow-up actions, cost estimates, and documentation of findings in accordance with BIA, NBIS, and AASHTO reporting requirements. This project includes routine, fracture critical and underwater inspections. Load ratings are performed on new bridges and bridges with significant deterioration. Rope access techniques are also used as required to perform inspections. Under these contracts, CONSOR has provided bridge inspections and reports in every BIA region under 21+ task orders
12/18 - Ongoing	**Statewide Underwater Bridge Inspections, Texas DOT – Underwater Bridge Inspector.** CONSOR is providing underwater bridge inspection and acoustic imaging statewide under a task order-based contract. Each bridge is inspected from two feet above the mean high tide waterline to the mudline. Each inspection requires a detailed engineering report that includes client-specific forms, channel cross-section sketch, follow-up action worksheet, elemental data inspection record, and inventory and defect photographs. Task orders have included the underwater inspection and acoustic imaging of on- and off-system bridges in the Houston, Paris, and Atlanta Districts.
12/18 – 12/19	**Statewide Underwater Bridge Inspections, Colorado DOT-Underwater Bridge Inspector.** CONSOR performed a fourth consecutive cycle of underwater bridge inspections for 90+ bridges statewide, using both commercial SCUBA and surface-supplied air diving systems. Each cycle includes two bridges crossing the Blue Mesa Reservoir at depths exceeding 100 ft. (adjusted for altitude at an elevation of 7,500 ft.). The Blue Mesa inspections are conducted using a helium and oxygen breathing gas mixture and a recompression chamber, with the assistance of acoustic imaging. Hot water suits are used for dives due to extended decompression times and cold water. The remaining bridges include timber, steel, and concrete construction crossing rivers and streams with fast currents.

	Firm	**CONSOR Engineers, LLC**		
	Name	Grayson McDonald, EI	Years of Relevant Experience with this Employer	5
	Title	Bridge Inspection Assistant Team Leader - Underwater / Diver - Tender	Years of Relevant Experience with Other Employer(s)	0

Degree(s) / Years / Specialization			BS / 2016 / Mechanical Engineering
Active Registration Number / State / Expiration Date			ET / PA / 022616/PA
Year Registered	N/A	Discipline	N/A
Contract Role(s) / Brief Description of Responsibilities			Grayson fulfills the minimum personnel requirement for an Underwater Bridge Inspection Diver. He serves as structural inspector and ADCI-certified diver for NBIS inspections nationwide. He has performed both topside and underwater inspections and prepared detailed engineering reports for various state departments of transportation. Courses: • PennDOT, "Bridge Safety Inspector Certification Course" – 03/15/2017 • PennDOT, "Bridge Safety Inspector Refresher Course" – 10/1/2020 • NHI 130078, "Fracture Critical Inspection Techniques for Steel Bridges" – 05/10/2019 Certifications: • Entry Level Tender/Diver – ADCI #54989

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
12/16 - Ongoing	**Contract 4400003531 & 4400009105: Statewide Underwater Bridge Inspections, Louisiana DOTD.** Underwater Bridge Inspector Under seven task orders for two consecutive contracts, CONSOR has performed 1,200+ underwater inspections of bridges in LADOTD Districts statewide. The project included Level I, II, and III inspections utilizing surface-supplied air and commercial SCUBA diving systems, for concrete, steel, and timber bridges and culverts and 2D and 2D Acoustic Imaging on select bridges. Inspections have included challenging aspects specifically related to wildlife, fast currents, difficult access as well as culvert structures requiring penetration dives through extensive silt and debris build up. CONSOR's most recently completed task order (2019) included 254 bridges in LADOTD District 2, which encompasses the parishes of Orleans, Jefferson, Lafourche, and Terrebonne. The bridges inspected have included I-10 Eastbound/Westbound bridges over Lake Pontchartrain, US 11 over Lake Pontchartrain, and I-10 Eastbound/Westbound over the Bonnet Carre Spillway. CONSOR's current task order, ending in June 2022, has completed 350+ inspections to date in LADOTD Districts 2, 4, 5, 7, 8, 58, and 62. Comprehensive engineering reports are prepared and submitted in LADOTD AssetWise Bridge Management System.

12/16 – Ongoing	**Statewide Underwater Bridge Inspection, South Carolina DOT.** Bridge Inspector/Diver Under five consecutive contracts, CONSOR has performed 500+ underwater bridge inspections statewide. Responsibilities include the investigation, evaluation, and recommendation of repairs to the bridges' substructure units (located in the water). Bridges range in size from small, completely submerged box culverts to large, river-crossing trusses and cable stays. A complete report is prepared for each bridge detailing findings, rating the bridges in both NBIS and BMS, and stating recommended repairs. Acoustic imaging is used on bridges over the Cooper and Wando Rivers todocument scour for repair recommendations
12/16 - Ongoing	**Underwater Bridge Inspections, Mississippi DOT.** Inspector/Diver CONSOR has been selected for three contract cycles of NBIS underwater inspections for 200+ bridges throughout the state. Underwater acoustic imaging and hydrographic surveying was performed on six bridges on the Mississippi and Pearl Rivers. Diving conditions included fast flow with debris and limited visibility. Structural conditions were documented with underwater photography. Non-destructive testing was used to accurately determine section loss of steel piles, and timber piles were inspected using a resistograph instrument. Soundings were taken upstream and downstream of the bridge while full contours were developed for each bridge site. Reports included NBIS component ratings and Pontis Element Level inspections. Scour countermeasures were designed for the I-10 Bridge in Pascagoula when soundings indicated excessive scour had occurred.
2018 - Ongoing	**Underwater Bridge Inspections, West Virginia Division of Highways.** Inspector/Diver CONSOR is conducting NBIS statewide underwater inspections services in accordance with OSHA diving standards for a task order-based contract. Field work, performed by a three-person dive team at minimum, consists of performing a hands-on inspection of the structure's steel, concrete, and timber abutments, piers, and pilings; identifying scour patterns in the streambed adjacent to the foundation lements; documenting cracks and/or deterioration of concrete piers and abutments; measuring voids identified beneath footings and abutments; describing structural damage caused by barge collision or debris; notating exposed piling on all pile-supported structures; describing the condition of any pile protection; assessing each bent or pier from waterline to mudline; and executing a bottom inspection to uncover evidence of scour. Each inspection includes an engineering report with photographs and drawings, channel cross-sections to document significant stream changes, highlights of critical deficiencies and other significant findings, scour computations and/or substructure analysis as needed, and recommendations for repairs.
12/16 - Ongoing	**Underwater Bridge Inspections, Virginia DOT.** Inspector/Diver Under four consecutive contracts, CONSOR has provided NBIS underwater bridge inspections statewide. In areas with salt water and/or brackish water, a minimum of 10% of each substructure element is cleaned of marine growth. The project includes underwater inspection, analysis of existing conditions, engineering calculations, recommendations for follow-up action and documentation of findings. Each inspection requires an in-depth engineering report with CAD drawings. Color photography is used and included as a part of each inspection report.

	Firm	**CONSOR Engineers, LLC**		
	Name	Michael Dukes, PE	Years of Relevant Experience with this Employer	12
	Title	Underwater Acoustic Imaging Lead	Years of Relevant Experience with Other Employer(s)	2

Degree(s) / Years / Specialization			BS/2008/Civil Engineering, MS/2009/Civil Engineering MS/2019/Engineering Mgmt.
Active Registration Number / State / Expiration Date			40986 / LA / 3/31/23
Year Registered	2016	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			Michael fulfills the minimum personnel requirement for an Underwater Bridge Inspection Diver (Team Leader) and underwater acoustic imaging. Michael has 14 years of experience in underwater bridge inspections. He has performed underwater bridge inspections, acoustic imaging inspections, and hydrosurveys for state departments of transportation in Louisiana, Alaska, Arkansas, California, Florida, Kansas, Missouri, Mississippi, Montana, Nebraska, Oklahoma, South Carolina, South Dakota, Texas, and Virginia. Federal clients include the US Navy, US Coast Guard, and Bureau of Indiana Affairs. He has experience with special underwater diving equipment including a clear water box for underwater photography, underwater video equipment, underwater D-meter, and underwater hydraulic tools. He has made presentations on underwater bridge inspections and acoustic imaging at numerous conferences, including the Louisiana Transportation Conference. **Michael meets MPR4.** Courses: • NHI 130055, "Safety Inspection of In-Service Bridges" – 10/16/2015 • NHI 130053, "Bridge Inspection Refresher Training" – 03/12/2021 • NHI 130091, "Underwater Bridge Inspection" – 01/30/2015 • NHI 130078, "Fracture Critical Inspection," – 05/10/2013 • NHI 135085, "Plan of Action for Scour Critical Bridges" – 10/15/2020 Certifications: • Surface-Supplied Air Diving Supervisor – ADCI #58165 • FHWA-certified NHI Bridge Instructor (2015): NHI 130053, NHI 130091 • HYPACK Hydrographic Surveying Field to Finish Single Bean Training – 05/21/2018

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 time specified in the applicable MPR(s).
09/13 – Ongoing	**Contract 4400009105: Statewide Underwater Bridge Inspections, Louisiana DOTD.** Team Leader/Acoustic Imaging Under seven task orders for two consecutive contracts, CONSOR has performed 1200+ underwater inspections of bridges in LADOTD Districts statewide. The project included Level I, II, and III inspections utilizing surface-supplied air and commercial SCUBA diving systems, for concrete, steel, and timber bridges and culverts and 2D and 2D Acoustic Imaging on select bridges. Inspections have

	included challenging aspects specifically related to wildlife, fast currents, difficult access as well as culvert structures requiring penetration dives through extensive silt and debris build up. CONSOR's most recently completed task order (2019) included 254 bridges in LADOTD District 2, which encompasses the parishes of Orleans, Jefferson, Lafourche, and Terrebonne. The bridges inspected have included I-10 Eastbound/Westbound bridges over Lake Pontchartrain, US 11 over Lake Pontchartrain, and I-10 Eastbound/Westbound over the Bonnet Carre Spillway. CONSOR's current task order, ending in June 2022, has completed 350+ inspections to date in LADOTD Districts 2, 4, 5, 7, 8, 58, and 62. Comprehensive engineering reports are prepared and submitted in LADOTD AssetWise Bridge Management System.
02/12 - 03/13	**Contract H.005365.5: Underwater Acoustic Imaging for Bridge Inspection, Louisiana DOTD.** Project Manager/Team Leader As a subconsultant, CONSOR assisted in the performance of underwater acoustic imaging for the inspection of 100+ bridge piers throughout the state of Louisiana. CONSOR provided diver investigations of any anomalies that were found. The pier inspections included both sides of the piers and the upstream and downstream noses of the piers. The scans were performed to identify and locate any major damage or deterioration, such as corrosion, loss of section, or scour undermining. Equipment required for these scans included a multi axis, steered beam imaging and profiling remote sensing system. All surface-supplied air diving was performed by ADCI-certified divers. Detailed reports were generated and submitted to LADOTD
11/14 - Ongoing	**Statewide Underwater Bridge Inspections, Texas DOT.** Project Manager/Team Leader CONSOR is providing underwater bridge inspection and acoustic imaging statewide under a task order-based contract. Each bridge is inspected from two feet above the mean high tide waterline to the mudline. Each inspection requires a detailed engineering report that includes client-specific forms, channel cross-section sketch, follow-up action worksheet, elemental data inspection record, and inventory and defect photographs. Task orders have included the underwater inspection and acoustic imaging of on- and off-system bridges in the Houston, Paris, and Atlanta Districts.
1/10 - Ongoing	**Statewide Underwater Bridge Inspections, South Carolina DOT.** Team Leader Under four consecutive contracts, CONSOR has performed 550+ underwater bridge inspections throughout the state. Responsibilities included the investigation, evaluation, and recommendation of repairs to the bridges' substructure units (located in the water). Bridges ranged in size from small, completely submerged box culverts to large, river-crossing trusses and cable stays. After the inspection, a complete report was prepared for each bridge detailing the findings, rating the bridges in both NBIS and BMS, and stating recommended repairs. Acoustic imaging was used on bridges over the Cooper and Wando Rivers to document scour for repair recommendations, a project for which CONSOR an Engineering Excellence award from the American Council of Engineering Companies.

Firm	**AECOM Technical Services, Inc.**			
Name	Daniel Boyd, PE		Years of Relevant Experience with this Employer	2
Title	Structural Engineer		Years of Relevant Experience with Other Employer(s)	13

Degree(s) / Years / Specialization			BS / 2006 / Civil Engineering
Active Registration Number / State / Expiration Date			PE.36728 / LA / 03/31/22 Additional active licenses; TX
Year Registered	2011	Discipline	Civil Engineer
Contract Role(s) / Brief Description of Responsibilities			Daniel will serve in the role of Bridge Inspection Team Leader. He brings more than 15 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 also has field inspection experience before, during, and after construction.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
03/21 - Ongoing	**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.
09/19 – 10/19	**TxDOT, Loop 1604 From SH16 to IF-35, San Antonio, TX.** Prepared preliminary bridge layouts for two bridge overpasses and two creek crossings in a dense urban area with limited right of way. Preliminary design and layout were completed using TxDOT prestressed concrete girder standards. Performed QA/QC review for multiple bridges and crossings to ensure adequate vertical clearances were met.

01/20 - 09/21	**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. Provided construction support for sign structure task to answer RFI's, resolve 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 structure 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 girder spans, and multiple 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.
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	**Modjeski and Masters, Inc.**		
	Name	Zolan Prucz, PhD, PE	Years of Relevant Experience with this Employer	39
	Title	Structural Engineer	Years of Relevant Experience with Other Employer(s)	7

Degree(s) / Years / Specialization			PhD / 1984 / Civil, Structural MS / 1981 / Civil, Structural BS / 1976 / Civil
Active Registration Number / State / Expiration Date			24019/LA/3/31/2022
Year Registered	1988	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			Zolan is the principal-in-charge of the Design Section for the New Orleans office. As such he oversees the design and preparation of plans and specifications for all projects, studies and ratings of bridges. Zolan has worked on bridge related projects since joining Modjeski and Masters, Inc. in 1983. His assignments ranged from design, evaluation and retrofit of fixed and movable bridges to evaluations of effects of vessel impact, seismic loads on bridges, the effects of fatigue and corrosion on steel bridges and bridge hydraulic and scour analysis and evaluation. Zolan was the principal investigator for developing the "Criteria for Design of Bridge Piers Against Ship Collision in Louisiana Waterways", which was used for bridge design in Louisiana and other states from 1985 to 1991, and he co-authored NCHRP 333, "Guidelines for Evaluating Corrosion Effects in Existing Steel Bridges". One of his specialties is the design of bridge protection systems and investigation of ship collision accidents with 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 time specified in the applicable MPR(s).
09/17 - ongoing	**LA 16 over Tangipahoa River, Tangipahoa Parish, LA | LADOTD.** M&M developed all necessary topographic surveys, preliminary and final plans for this bridge replacement project on LA 16, between LA 51 and LA 1054, in Amite City, LA. This project included construction of the approach slabs and roadway on the east and west sides of the bridge. It was anticipated that traffic shall be maintained during construction with an on-site diversion roadway and bridge. The plans were prepared in accordance with AASHTO LRFD Bridge Design Specifications and the Bridge Design and Evaluation Manual (BDEM), DOTD 2017 Design Guidelines, DOTD 2016 Standard Specifications for Roads and Bridges, DOTD Road Design Manual, and DOTD Hydraulics Manual. QC/QA was provided in accordance with Part 1, Chapter 3 of BDEM. Construction Related Engineering Support was provided and is currently on-going. Zolan serves as the Principal-in-Charge for this project.
09/17 - ongoing	**US 61 at Thompson Creek, West Feliciana Parish, LA | LADOTD.** M&M provided all necessary preliminary and final plans for the rehabilitation of the northbound bridge and replacement of the southbound bridge on US 61 over Thompson Creek, between LA 10 and LA 964, near St. Francisville, LA. It was anticipated that traffic would be maintained during the construction of the new southbound bridge with temporary two-way traffic on the rehabilitated northbound bridge.

	The project also included the design and detailing of adding a helper bent to the northbound bridge. The plans were prepared in accordance with AASHTO LRFD Bridge Design Specifications and the Bridge Design and Evaluation Manual (BDEM), DOTD 2017 Design Guidelines, DOTD 2016 Standard Specifications for Roads and Bridges, DOTD Road Design Manual, and DOTD Hydraulics Manual. QC/QA was provided in accordance with Part 1, Chapter 3 of BDEM. Construction Related Engineering Support was provided and is currently on-going. Zolan serves as the Principal-in-Charge for this project.
09/17 – 02/20	**LA 1064 at Little Natalbany River, Livingston Parish, LA | LADOTD.** M&M developed all necessary topographic surveys, preliminary and final plans for this bridge replacement project on LA 1064, near LA 43 and Hoover Road, in Albany, LA. This project included reconstruction of the approach slabs and roadway on the east and west sides of the bridge. It was anticipated that the roadway would be closed during construction and a detour route was detailed. The plans were prepared in accordance with AASHTO LRFD Bridge Design Specifications and the Bridge Design and Evaluation Manual (BDEM), DOTD 2017 Design Guidelines, DOTD 2016 Standard Specifications for Roads and Bridges, DOTD Road Design Manual, DOTD Hydraulics Manual, and DOTD Location and Survey Manual. QC/QA was provided in accordance with Part 1, Chapter 3 of BDEM. Construction Related Engineering Support was also provided. Zolan serves as the Principal-in-Charge for this project.
03/17 - ongoing	**LA 1 – Port Allen Bridge Replacement, Port Allen, LA | LADOTD.** The ongoing project consists of replacing the existing northbound and southbound bridge structures on LA 1 over the Intracoastal Canal Waterway (ICWW). The proposed LA 1 SB Bridge will consist of 3 - 12' travel lanes and 2 - 10' shoulders and will be approximately 2,680' long. The proposed LA 1 NB Bridge will consist of 2 - 12' travel lanes and 2 - 10' shoulders (LA 1 NB roadway), a permanent 2' wide median barrier and 1 - 12' travel lane with 2 - 6' shoulders (I-10 EB Exit Ramp roadway). The Exit Ramp and LA 1 NB roadway will be separated by a permanent 2' wide median barrier until the LA 1 NB Bridge will bifurcate where the LA 1 NB roadway and I-10 EB Exit Ramp roadway will be carried on separate bridge structures. The LA 1 NB Bridge and I-10 EB Exit Ramp Bridge will be approximately 2,700' and 354' long, respectively. Both LA 1 NB and LA 1 SB Bridges will consist of a 870' long haunched three span continuous steel plate girder main span unit over the ICWW and prestressed concrete LG girder approach spans. Zolan serves as Principal-in-Charge of this project.
08/09-12/11	**S.P. 700-08-0109: LA 160 Bridges – Caney Creek and Bodcau Bayou | LADOTD.** M&M developed final plans, permit drawings, construction cost estimate and special provisions for a new integral bridge design and analysis developed for the LADOTD. The two subject bridge sites that cross Caney Creek and Bodcau Bayou in Bossier Parish, LA were the first two fully integral bridges in the state. Zolan served as Principal-in-Charge of this project.

	Firm	**Modjeski and Masters, Inc.**		
	Name	Yu Ouyang, PE	Years of Relevant Experience with this Employer	31
	Title	Structural Engineer	Years of Relevant Experience with Other Employer(s)	2

Degree(s) / Years / Specialization			MS / 1990 / Civil Engineering MS / 1985 / Structural Engineering BS / 1982 / Civil Engineering
Active Registration Number / State / Expiration Date			26117/LA/9/31/2023
Year Registered	1994	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			Yu has been with Modjeski and Masters, Inc. since 1991, and has vast bridge engineering experience, ranging from conventional designs to special projects of high complexity, and from feasibility studies to construction services. He specializes in the design of fixed and movable highway and railroad bridges, and the rating and rehabilitation of existing bridges. His expertise also extends to analysis of complex bridge structures, vessel collision risk assessment and protection systems, seismic design, analysis and retrofit, and fatigue evaluations. He brings extensive experience in managing engineering and design efforts of varying sizes and difficulties, and in leading, coordinating and managing technical teams and subconsultants.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
09/17 - ongoing	**LA 16 over Tangipahoa River, Tangipahoa Parish, LA | LADOTD.** M&M developed all necessary topographic surveys, preliminary and final plans for this bridge replacement project on LA 16, between LA 51 and LA 1054, in Amite City, LA. This project included reconstruction of the approach slabs and roadway on the east and west sides of the bridge. It was anticipated that traffic shall be maintained during construction with an on-site diversion roadway and bridge. The plans were prepared in accordance with AASHTO LRFD Bridge Design Specifications and the Bridge Design and Evaluation Manual (BDEM), DOTD 2017 Design Guidelines, DOTD 2016 Standard Specifications for Roads and Bridges, DOTD Road Design Manual, and DOTD Hydraulics Manual. QA/QC was provided in accordance with Part 1, Chapter 3 of BDEM. Construction Related Engineering Support was provided and is currently on-going. Yu served as the Project Manager for this project.
09/17 - ongoing	**US 61 at Thompson Creek, West Feliciana Parish, LA | LADOTD.** M&M provided all necessary preliminary and final plans for the rehabilitation of the northbound bridge and replacement of the southbound bridge on US 61 over Thompson Creek, between LA 10 and LA 964, near St. Francisville, LA. It was anticipated that traffic would be maintained during the construction of the new southbound bridge with temporary two-way traffic on the rehabilitated northbound bridge. The project also included the design and detailing of adding a helper bent to the northbound bridge. The plans were prepared in accordance with AASHTO LRFD Bridge Design Specifications and the Bridge Design and Evaluation Manual (BDEM), DOTD 2017 Design Guidelines, DOTD 2016 Standard Specifications for Roads and Bridges, DOTD Road Design Manual, and DOTD Hydraulics Manual. QA/QC was provided in accordance with Part 1, Chapter 3 of BDEM. Construction Related Engineering Support was provided and is currently on-going. Yu served as the Project Manager for this project.

09/17 – 02/20	**LA 1064 at Little Natalbany River, Livingston Parish, LA | LADOTD.** M&M developed all necessary topographic surveys, preliminary and final plans for this bridge replacement project on LA 1064, near LA 43 and Hoover Road, in Albany, LA. This project included reconstruction of the approach slabs and roadway on the east and west sides of the bridge. It was anticipated that the roadway would be closed during construction and a detour route was detailed. The plans were prepared in accordance with AASHTO LRFD Bridge Design Specifications and the Bridge Design and Evaluation Manual (BDEM), DOTD 2017 Design Guidelines, DOTD 2016 Standard Specifications for Roads and Bridges, DOTD Road Design Manual, DOTD Hydraulics Manual, and DOTD Location and Survey Manual. QA/QC was provided in accordance with Part 1, Chapter 3 of BDEM. Construction Related Engineering Support was also provided. Yu served as the Project Manager for this project.
03/17 - ongoing	**LA 1 – Port Allen Bridge Replacement, Port Allen, LA | LADOTD.** The ongoing project consists of replacing the existing northbound and southbound bridge structures on LA 1 over the Intracoastal Canal Waterway (ICWW). The proposed LA 1 SB Bridge will consist of 3 - 12' travel lanes and 2 - 10' shoulders and will be approximately 2,680' long. The proposed LA 1 NB Bridge will consist of 2 - 12' travel lanes and 2 - 10' shoulders (LA 1 NB roadway), a permanent 2' wide median barrier and 1 - 12' travel lane with 2 - 6' shoulders (I-10 EB Exit Ramp roadway). The Exit Ramp and LA 1 NB roadway will be separated by a permanent 2' wide median barrier until the LA 1 NB Bridge will bifurcate where the LA 1 NB roadway and I-10 EB Exit Ramp roadway will be carried on separate bridge structures. The LA 1 NB Bridge and I-10 EB Exit Ramp Bridge will be approximately 2,700' and 354' long, respectively. Both LA 1 NB and LA 1 SB Bridges will consist of a 870' long haunched three span continuous steel plate girder main span unit over the ICWW and prestressed concrete LG girder approach spans. Yu serves as Project Manager for this project.
08/09-12/11	**S.P. 700-08-0109: LA 160 Bridges – Caney Creek and Bodcau Bayou | LADOTD.** M&M developed final plans, permit drawings, construction cost estimate and special provisions for a new integral bridge design and analysis developed for the LADOTD. The two subject bridge sites that cross Caney Creek and Bodcau Bayou in Bossier Parish, LA were the first two fully integral bridges in the state. Strain gauge and other testing was conducted to follow the behavior of the bridge design over a period of time. The plans were prepared in accordance with AASHTO LRFD Bridge Design Specifications and the Bridge Design and Evaluation Manual (BDEM) and DOTD Standard Specifications for Roads and Bridges. QA/QC was provided in accordance with Part 1, Chapter 3 of BDEM. Yu served as the project manager and supervised a team of engineers that performed the LUSAS analysis, bridge design and detailing, and construction services.
02/01-08/14	**S.P. 700-18-0014 – Huey P. Long Bridge Widening, Jefferson Parish, LA | LADOTD.** The widening project for the H.P. Long Bridge included new vehicular approaches on both sides of the Mississippi River consisting of three lanes plus shoulders and ramps. The project entailed replacing existing approaches while maintaining traffic through the corridor. Included elements: existing foundations, pile and drill-shaft supported piers, prestressed concrete girder spans and multiple-span steel continuous units. The plans were prepared in accordance with AASHTO LRFD Bridge Design Specifications and the Bridge Design and Evaluation Manual (BDEM) and DOTD Standard Specifications for Roads and Bridges. Yu served as a lead design engineer and technical advisor for this project.

	Firm	**Huval & Associates, Inc.**		
	Name	Matthew Hebert, P.E.	Years of Relevant Experience with this Employer	9
	Title	Structural Engineer	Years of Relevant Experience with Other Employer(s)	6

Degree(s) / Years / Specialization			BS, 08/02-05/08 University of Louisiana, Civil Engineering
Active Registration Number / State / Expiration Date			PE.37713/LA/09/30/2023
Year Registered	2013	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			Ratings and Design Engineer. Matthew jjoined Huval & Associates, Inc. in 2013 with 5 years' experience in civil engineering. Previously employed with LADOTD, he was involved with the design, live load rating, plan development, and construction support of more than 20 bridge replacement projects. These consisted of various superstructure and substructure types including but not limited to: AASHTO precast prestressed concrete (P.P.C.) girders, quadbeams, cast-in-place slab spans, precast slab spans, concrete box culverts, P.P.C. pile bents, steel H-pile bents, and pipe pile bents. Additionally, Matthew was project manager for multiple bridge replacement projects. His responsibilities included coordinating all aspects of the plan development process including but not limited to road, bridge, hydraulic, and geotechnical engineering and determining the project scope, schedule, and budget. Matthew's training includes the NHI LRFR for Highway Bridge Superstructure Course, the NHI AASHTO LRFD for HWY Bridge Superstructure Course NHI AASHTO LRFD for Highway Bridge Substructure Course, and the NHI AASHTO Roadside Design Course.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
07/18-Present	**Belle Chasse Bridge & Tunnel Replacement (P3) 30% Design, S.P. No. H.004791.** Lead Engineer in the preparation of steel plate girder design, prestressed girder design, and plan development, as well as proposal documents for the RFP phase of the project. Assisted in the FB-Pier modeling and analyzing of piers in the Gulf Intracoastal Waterway (GIWW) for vessel collision. Developed alternative technical concepts, suggested sequences of construction, and miscellaneous construction details. Assisted in the coordination and organization of all project data with various members of the design team, including sub-consultants.
02/17-Present	**I-10 Widening-I-49 to LA 328, S.P. No. H.003003.** Lead Engineer for I-10 Widening Construction Services. Tasks include crane trestle design, cofferdam/sheeting design/calculations for bent footings, girder stability calcs., girder erection plans, cap/span formwork, overhang form design and temporary girder bracing, gantry crane analysis, closer pour elimination.
02/17-Present	**I-10 Design Build-LA 42 to LA 73, S.P. No. H.009250.** Lead Engineer for the LRFD design, plan preparation, and LRFR live load rating for the Highland Rd. overpass. Highland Rd. consisted of a full replacement of 2 existing structures utilizing a 3-span structure which included 2-60ft. prestressed girder spans and 1-190ft. steel plate girder span. The superstructure is support by column bents and pile bents and will be one structure at the end of the project. In order to maintain traffic, the bridge had to be constructed in 3 separate stages.

09/13 –12/14	**I-10: Ramah to West Baton Rouge Parish Line, H.010318.** Lead Engineer for the plan preparation of the replacement of 4 approach slabs on I-10.
04/14– 07/18	**I-40-Blackfish & Shell Lake STR. & Approaches S.P. No. BB0113 & BB0114.** Lead Engineer for steel girder erection. Tasks included cofferdam, trestle and formwork design. Mr. Hebert also performed analyses of the existing bridges, so crawler cranes could work off of the structures to build the new bridge.
08/13-07/18	**Off-System Live Load Bridge Ratings.** Lead engineer for the inspection and LRFR live load ratings of over 100 off-system bridges throughout the State of Louisiana. Bridge types include timber trestles, cast-in-place and precast slab spans, vertical lifts, steel pony truss swing spans, steel stringer spans, steel railroad cars, concrete box culverts and p.p.c. girders.
04/14-07/18	**I-49 South-US 90 Albertson Pkwy to Ambassador Design Build, H.010620.** Lead Engineer for LRFD Bridge design and plan preparation of the mainline bridge and the two frontage road bridges over BNSF Railway. The brides consisted of BT-72 girder spans with column bents and pile footings.
05/15 – 11/15	**Sasol North America, Inc., Heavy Haul Route.** Lead Engineer for the LRFD Bridge Design and plan preparation of an AASHTO Type 3 & BT-72 girder bridge with column bents and pile footings Over KCS Railway.
07/13-07/14	**Bayou Lafourche Bridge On U.S. 80, S.P. H.000174.** Assisted in the LFRD design and plan preparation for an AASHTO Type 3 girder bridge with full-depth precast concrete deck panels.
02/13-9/14	**Dolet Hill Lignite Company, Bayou Pierre Crossing (2013-2014).** Assisted in the LRFD design and plan preparation of a BT-72 girder bridge. In addition to the HL-93 design live load, the bridge was also designed to carry two (2) CAT 785D mining trucks with a GVW of 550 kips each.
05/16-04/17	**LA 70: Mississippi River Bridge-Phase III, S.P. No. H.012343.** Assisted Lead engineer for the rehabilitation of the approach spans super and substructure. Including finger joint replacements, girder splice repairs and trestle bent repairs.
06/08-07/13	**Project-Related Experience with LADOTD**: • LA 941 Over I-10 Girder Repair, S.P. 803-27-0007– Lead Engineer in the design and plan preparation for the replacement of two damaged AASHTO Type 4 girders. • Bayou Lacassine Bridge, S.P. H.002071 – Lead engineer for the LRFD design for an AASHTO Type 3 girder bridge. • Burney Branch– Lead Engineer for the LRFD design and plan preparation for an AASHTO Type 4 girder bridge.

Firm	**AECOM Technical Services, Inc.**			
Name	Chris McKown, PE		Years of Relevant Experience with this Employer	2
Title	Structural Engineer		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			PE.0041077 / LA / 03/31/2023 Additional active licenses; CO
Year Registered	2016	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			Chris will serve in the role of Bridge Inspection Team Leader. He brings 9 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.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
03/20-Ongoing	**LADOTD, I-49 Connector, Lafayette, LA.** Design engineer responsible for advancing preliminary conceptual design plans for the Mainline Viaduct. Performed review of the three Mainline Viaduct structure type options and the options presented for the Signature Bridge. Performed reviews of structural quantities and conceptual cost estimates. Recent submittals included two (2) conceptual design submittal packages for highway grade separations across BNSF and LDRR tracks.
02/21-Ongoing	**El 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. A key aspect of this project was coordinating with the BNSF railroad for all submittals in accordance with UPRR/BNSF RR Grade Separation Guidelines for the steel plate girder bridge.
02/20-03/21	**TxDOT, I-635 LBJ East, Dallas, TX.** Design Engineer for the Quality Control process 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.

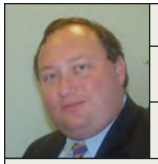
10/20 – 02/21	**LADOTD, H.003184: I-10: TX State Line East of Coone Gully, Calcasieu Parish, LA.** Design Engineer and Engineer of Record on the project to widen approximately 11 miles of I-10 from Vinton, LA to the Texas state line. The project called for the complete replacement of nine different structures 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.
07/16-01/20	**LADOTD, H.002446: LA 40: Tchefuncte River Bridge, Near Folsom, LA.** Engineer of Record and Bridge Design Task Lead to replace 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 also provided.
10/14-08/19	**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 of 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. The project is complete and open to traffic.
01/17-12/17	**LADOTD, H.010009: LA 507: Over I-20 Bridge Rehabilitation, Lincoln Parish, LA.** Design Engineer and Engineer of Record for the complete replacement of the bridge superstructure of the LA 507 overpass near Simsboro. The project called for accelerated bridge construction to replace the bridge superstructure and various structural repairs. The bridge was built on site and moved into place over the course or 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.
07/15-05/19	**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 girder spans, and multiple 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.

	Firm	**Huval & Associates, Inc.**		
	Name	Justin Peltier, PE	Years of Relevant Experience with this Employer	9
	Title	Structural Engineer	Years of Relevant Experience with Other Employer(s)	8

Degree(s) / Years / Specialization			BS, 08/01-05/05, University of Louisiana, Civil Engineering
Active Registration Number / State / Expiration Date			34765 / LA / 09/30/2023
Year Registered	2009	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			Load Rating Engineer. Justin joined Huval & Associates in 2013 with 8 years of experience in civil engineering. Previously employed with LADOTD, he was involved with the design, live load rating, plan development, and construction support of more than 20 bridge replacement projects. These consisted of various superstructure and substructure types including but not limited to: AASHTO p.p.c. girders, quadbeams, cast-in-place slab spans, precast slab spans, steel girders, concrete box culverts, p.p.c. pile bents, steel H-pile and pipe pile bents, timber pile bents and column bents supported by drilled shafts and/or p.p.c. pile footings. Justin assisted in developing and maintaining LADOTD's highway safety hardware details and specifications, including but not limited to guard rail, barrier rail, and crash cushion attenuators. He served as the Engineer of Record for the LADOTD concrete barrier rail and the detour bridge special details. Justin's training includes the NHI LRFR for Highway Bridge Superstructure Course, the NHI AASHTO LRFD for Highway Bridge Superstructure Course, the NHI AASHTO LRFD for Highway Bridge Substructure Course, the Roadside Design Course, ATSSA Traffic Control Technician and Supervisor Course.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
08/19-06/20	**I-10 and I-12 College Flyover Ramp Design Build Project RFP Phase 30% Design – S.P. H.013897.** Served as the lead bridge engineer for the preparation of bridge plans, construction cost estimates and proposal documents for the RFP phase of the project. The bridges included a new curved steel plate girder bridge over I-12 WB, a new p.p.c. girder bridge over Ward Creek and rehabilitation and widening of an existing steel plate girder bridge over I-12 EB. Assisted in development of alternative technical concepts, suggested sequence of construction, and other plan details. Assisted in the coordination and organization of all project data with the various members of the design team from numerous consulting firms.
01/19-05/19	**I-10 Loyola Design-Build Project RFP Phase 30% Design - S.P. H.011670.** Assisted in the preparation of steel tub girder design and details, concrete box girder design and plans, as well as plans and proposal documents for the RFP phase of the project. Assisted in development of alternative technical concepts, suggested sequence of construction, and miscellaneous bridge and other details. Assisted in the coordination and organization of all project data with the various members of the design team from numerous consulting firms.

06/14-04/19	**US 90 (I-49South), Albertson's Parkway to Ambassador Caffery.** Design-Build Project, Lafayette Parish, S.P. No. H.010620. Served as the lead bridge engineer for the new US 90 bridge over Albertson Parkway and provided Q.C. for the US 90 BNSF RR overpass bridge within the same footprint as the existing bridge while maintaining 4-lanes of US 90 traffic during construction. This presented unique design challenges and required a complex, three-phase, traffic control and construction sequencing plan to move traffic safely through the tight work zone. The bridges consisted of multi-continuous p.p.c. girders spans supported by concrete column bents and pile footings. The developed design concept saved millions of dollars and allowed the James Team to be 15% below the construction estimate of the nearest competitor.
7/17-Present	**I-10: Highland Road to LA 73, Design Build Project, East Baton Rouge & Ascension Parish, S.P. No. H.009250.** Served as the lead bridge engineer for the widening of the I-10 E.B. and W.B. slab span bridges over Manchac Bayou and provided Q.C. for the replacement of the I-10 E.B. and W.B. bridges over Highland Road with a new steel plate girder bridge with p.p.c girder approach spans. The existing I-10 mainline bridge at the Highland Road interchange needed to be reconstructed under the project to provide longer spans in addition to more lanes. An innovative sequence of construction scheme and bridge design enabled construction of this bridge while maintaining 74,000 ADT traffic. Huval's cost-effective designs enabled its design-build team to be the only competitor to fit within the Owner's budget of $72 million.
03/19-Present	**I-220/I-20 Interchange IMP & Barksdale Access Design-Build Project, Bossier Parish, LA DOTD S.P. No. H.003370.** Currently the bridge design manager and lead bridge design and load rating engineer for the I-220 bridges over I-20 and Barksdale Access Road bridges over the KCS Railroad and also responsible for implementing the QC/QA plan for the bridge design and plan development process. The I-220 structures over I-20 consist of twin bridges utilizing LG-54 p.p.c. girder spans supported by concrete column bents and drilled shafts. The Barksdale Access Road structures consist of twin bridges utilizing LG-54 p.p.c. girder approach spans supported by concrete pile bents and a main span over the KCS Railroad consisting of 170'-0", LG-78 p.p.c. girders supported by concrete column bents and drilled shafts. Some unique challenges that the project has presented is designing applicable I-220 bridge column bents for vehicular collision and completely spanning the KCS own right-of-way utilizing concrete p.p.c. girders.
07/13 – 07/14	**Bayou Lafourche Bridge on U.S. 80, Ouachita & Richland Parish, S.P. No. H.000174.** Served as the lead bridge engineer for the replacement of the existing bridge over Bayou Lafourche with a new p.p.c. girder bridge. This project was selected as research project to be part of FHWA's Everyday Counts Initiative to promote accelerated bridge construction (ABC) techniques. In lieu of using a cast-in-place concrete deck, full depth precast concrete deck panels were selected as the detail to promote ABC. As part of the Initiative, a proprietary post tensioning system, AccelBridge, was chosen as the method used to apply the required compression to the transverse deck panel joints before they were made composite with the p.p.c. girders.
10/16-12/17	**LA 443: Tangipahoa River Bridge Replacement, S.P. H.012728.** Lead engineer in the LRFD design, LRFR load rating, and plan preparation of a LG-25 and LG-36 p.p.c. girder bridge. This was an emergency replacement, due to the flood of 2016, and 100% final plans were completed in 8 weeks.

	Firm	**AECOM Technical Services, Inc.**		
	Name	Jonathan McDowell, PE	Years of Relevant Experience with this Employer	17
	Title	Roadway/Traffic Engineer	Years of Relevant Experience with Other Employer(s)	6

Degree(s) / Years / Specialization			BS / 1996 / Civil Engineering
Active Registration Number / State / Expiration Date			PE.0030508/ LA/ 03/31/2023 Additional active licenses: MS, AR, TX
Year Registered	2003	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities			Jonathan will be part of AECOM's Traffic Control Team for this contract. He has more than 17 years of experience as a Project Engineer and Project Manager for a wide variety of transportation and public infrastructure projects in Louisiana and Mississippi. His roles have included planning, design, contract administration, and construction engineering and inspection for numerous projects involving interstate highways, urban and rural roadways, streetcars, railroads, bridges, drainage canals and culverts, water and sewer facilities, commercial and government building site development, cellular communications installations, port security improvements, cruise ship terminals, and airports. Through his experience, he has gained an understanding of the process required to bring a transportation project from an idea to a built reality, including the NEPA process. His computer skills include AutoCAD Land Development Desktop, Civil3D, Microstation, Inroads, MS Office, MS Project, HEC-RAS, STAAD, ArcView, and various other design software platforms. **Jonathan meets MPR 2.**

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
06/15 - present	**State Project No. H.004367.5: Louisiana Department of Transportation & Development (LADOTD), Route LA 3139, Earhart Expressway Extension to US 61, Jefferson Parish, LA.** Task Manager and Lead Roadway Engineer for the extension of the Earhart Expressway (LA 3139) onto Airline Drive (US 61). Developed urban highway geometric alternatives to accept the expressway extension into the Airline Drive Corridor. Alternatives considered the lane configuration, location of direct and indirect median openings, location and potential phasing of traffic signals, pedestrian movement within the corridor, bus stop locations, utility impacts, access management, and ability to drop lanes along the corridor in order to transition back to the current lane configuration at the west end of the project. Reviewed traffic report and participation in the environmental and public involvement tasks.
06/17 - present	**Jefferson Parish Dept. of Public Works, Mounes Street Drainage Improvements (Phase I), Metairie, LA.** Task Manager and Project Engineer for the development of Maintenance of Traffic Plans for the widening of a 3-mile segment of a two lane rural highway to a five lane suburban highway.

03/15 - 06/16	**State Project No. H.009730.5: Louisiana Department of Transportation and Development (DOTD), Retainer Contract for In-Depth Bridge Inspection of Complex Structures, LA.** Lead Engineer as directed by task order to develop traffic control plans for inspection crews and repair plans. Specifically, developed a traffic detour plan to route traffic from US 190 to I-10 during a closure of the westbound US 190 bridge over the Atchafalaya River at Krotz Springs for bridge repairs (Task Order No. 1). Developed a traffic plan for the closure of the Tchoupitoulas Street onramp and travel lane to westbound US 90B over the Mississippi River for bridge inspection (Task Order No. 3).
10/12 - 12/16	**Regional Transit Authority, Rampart St. Rail Expansion Project, New Orleans, LA.** Project Manager and Infrastructure Task Leader to prepare final contract drawings and specifications for a 1.5 mi (3.0 track miles) of streetcar track within a 160-day contract period. Developed maintenance of traffic and construction sequence plan which included a specific detour plan along Canal Street and side streets for a 30-day closure of the intersection of Rampart Street and the northbound lanes of Canal Street to install the half-grand union special trackwork and associated utility installations.
10/11 - 03/13	**Regional Transit Authority, Canal Street to Union Passenger Terminal Rail Extension Project, New Orleans, LA.** Engineering Manager and Infrastructure Task Leader to prepare final contract drawings and specifications for a 0.8 mi (1.6 track miles) of streetcar track within a 100-day contract period. Prepared plans for erosion control and environmental protection and the initial version of the storm water pollution prevention plan; assisted in the preparation of the construction sequence and maintenance of traffic drawings and specifications; prepared the general and environmental specifications represented the team at client meetings; attended coordination meetings with utilities and city agencies, managed and supervised team members who prepared contract drawings and specifications for utility relocations, civil, traffic, architectural, and landscaping plans; hosted and managed weekly design coordination meetings; assisted with project management duties.

Firm	AECOM Technical Services, Inc.		
Name	Daniel Helms, PE, PTOE, RSP$_{21}$	Years of Relevant Experience with this Employer	2
Title	Roadway/Traffic Engineer	Years of Relevant Experience with Other Employer(s)	19

Degree(s) / Years / Specialization			BSCE / 1998 / Civil Engineering MSCE / 2003 / Civil Engineering (Transportation)
Active Registration Number / State / Expiration Date			PE.0042486 / LA / 9/30/2022
Year Registered	2018	Discipline	Civil Engineer
Contract Role(s) / Brief Description of Responsibilities			Traffic Control. Daniel's has spent much of his career working on traffic, roadway, and safety projects for both public agencies and consulting companies and is knowledgeable in the Louisiana Department of Transportation and Development's (LADOTD's) Traffic Engineering Process and Report (TEPR), the Highway Safety Manual, the AASHTO Green Book. He will use this expertise to Lead all Traffic related tasks, including the review of traffic and crash data, development of a Transportation Management Plan (TMP) and construction signing/maintenance of traffic plans.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
05/20 – Ongoing	**FM 518 Corridor Improvements; TxDOT, League City, TX.** Engineer of record for a signal design project for a series of traffic signals on a major urban corridor in League City, Texas. The project involved upgrading three traffic signals, including implementing a temporary signal. At one of the intersections, Daniel made design adjustments to eliminate the need for additional temporary signals. He is responsible for the design, development and summarization of quantities, general notes, traffic signal notes, and the engineer's estimate of probable cost. Daniel works with junior staff, along with staff of the prime consultant, to coordinate traffic signal improvements.
05/20 – 08/20	**FM 2090 at Tram Road; TxDOT, Splendora, TX.** As the Deputy Project Manager, Daniel worked with Junior Staff to develop traffic signal plans, for an isolated intersection near Metro Houston to install a traffic signal. Responsible for design of the traffic signal and striping plan, development and summarization of quantities, general notes, traffic signal notes, and signing and stamping of plans. He coordinated with the Prime Consultant to respond to comments from TxDOT.
02/20 – Ongoing	**MOVEBR Jones Creek Road Extension, Segments 1A and 1B, City-Parish of East Baton Rouge, LA.** Traffic Task Lead for a roadway project, extending a suburban arterial from its current terminus at Tiger Bend Road to Airline Highway. Daniel is responsibilities include developing the traffic analysis, looking alternatives, adding signalized intersections, roundabouts, and alternative intersections. This project includes following LADOTD's Traffic Engineering Process and Report, coordinating analysis work with the City-Parish and LADOTD. He also leads the development of Appendix C – Existing Safety Analysis, which utilizes the CATScan tool.
02/20 – 07/20	**Bechtel, Port Arthur Liquefaction Project Transportation Management Plan, Port Arthur, TX.** Lead Traffic Engineer for the update of a Transportation Management Plan for the development of a Liquified Natural Gas Plant, near Port Arthur, Texas. The TMP analyzed the impacts to the road network of plant, including the influx of construction of workers and overland material deliveries to build the facility, and mitigate any impact to local road users.

02/19 – 01/20	**LADOTD, Barksdale Interchange Design-Build, Bossier City, LA.** Senior Transportation Engineer for a project to construct a new controlled access roadway, connecting at the I-20, I-220 interchange in northwest Louisiana. Daniel was responsible for: the development of the signing plans, including overhead and ground mounted signs, detour plans development of and providing quality control for the project's IMR, the Transportation Management Plan. The project required coordination and collaboration with state, federal and military stakeholders.
02/18 – 01/20	**LADOTD, I-20 Transportation Management Plan and Travel Assessment Shreveport and Bossier City, LA.** Project Manager for the I-20 Transportation Management Plan and Travel Assessment study, which involved LADOTD's first mesoscopic model. Responsibilities include the development of a Level 4 Transportation Management Plan (TMP) of the I-20 corridor. The elements for the plan require the review of alternate routes through the development of a mesoscopic simulation model, public information strategies, stakeholder involvement, ITS implementation, queuing analysis, and crash analysis. The TMP will analyze the impacts to the road networks of Shreveport and Bossier City, Louisiana, where an interstate pavement rehabilitation project is planned.
06/19 – 01/20	**I-59 Rubblization Project MDOT. Mississippi DOT, Forrest and Jones Counties, MS.** As the Project Manager, Daniel provided a key link between the project design team and the staff with MDOT. He provided guidance into the design and plan requirements, along with assisting in the project management responsibilities (financial tracking, required deliverables). The project required the development of roadway plans, ITS plans, signing plans, pavement marking plans, and a complex maintenance of traffic and construction sequencing plan to keep two (2) lanes open in each direction for potential hurricane evacuation.
06/07 – 12/17	**Traffic Safety Engineering Manager. Mississippi Department of Transportation, Statewide.** Day to day manager of the traffic safety engineering program. He performed site review, crash data analysis, benefit-to-cost analysis, countermeasure development and selection, design contract scope development and contract review, and design project management, including design and plan review. He managed all HSIP design projects, which included the review of roadway geometry, signing plans (permanent and temporary – construction), maintenance of traffic and construction sequencing plans.
10/04 – 06/07	**MDOT, Design Engineer, Roadway Design Division, Various Locations, MS.** Design team member, and eventually a design team leader. Responsibilities included working on design projects, ranging from bridge replacements to major roadway widening, know and able to implement AASHTO and MDOT Design Guidelines, participating and Field Inspection and Office Review meetings, and developing, reviewing, and finalizing final right of way (Phase A) and construction (Phase B) plans. This included construction signing plans, construction sequencing, and maintenance of traffic plans.
	US 49 Myers Creek Bridge Replacement Project; Forrest County, MS. This project required the development of construction plans to replace two deficient bridges on US 49 south of Hattiesburg. Daniel developed vertical profiles for the new bridge alignments along with a complex traffic control and construction sequencing plan that allowed both northbound and southbound traffic to use the same temporary bridge without the need for reconstruction due to differences in vertical elevations. He calculated all necessary quantities for the roadway portion of the project.
	SR 182 Bridge Replacement Project; Lowndes County, MS. This project required the development of construction plans to replace a deficient bridge with a box culvert on SR 182, east of Columbus, MS. Daniel developed the profile and alignment for an on-site detour. He was responsible for the development of a maintenance of traffic, construction sequencing and construction signing plan, as well. He calculated all necessary quantities for the roadway portion of the project.

	Firm	**KPFF, Inc.**		
	Name	Mark Powlison	Years of Relevant Experience with this Employer	9
	Title	Non-Destrucitve Evaluation	Years of Relevant Experience with Other Employer(s)	17

Degree(s) / Years / Specialization			
Active Registration Number / State / Expiration Date			N/A
Year Registered	N/A	Discipline	N/A
Contract Role(s) / Brief Description of Responsibilities			Mark has more than 25 years of experience in the materials investigation and testing field. His Mark has extensive experience in the materials investigation and testing field. His career began in non-destructive testing and gradually grew to special inspections, from which he has refined his skills over the last 26 years. During this time, Mark has managed special inspection services for many healthcare, public and high-profile facilities.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
01/94- present	Insepcted/tested/evaluted: • Bureau of Overseas Buildings Operations (OBO), U.S. Embassy Structural Engineering Investigation & Repair Recommendations, Vientiane, Laos • OBO, FY19 Capital Project Selected Improvements, Vienna, Austria • OBO, New Embassy Compound, Asuncion, Paraguay • Chevron Business and Real Estate Services, Seismic and Structural Building Assessments, Worldwide • Port of Portland, PDXNext, Parking Addition & Consolidated Rental Car Facility, Portland, OR • Port of Vancouver, Terminal 2 Berth 7 Bulk Facilities Assessment, Vancouver, WA • Portland General Electric, Integrated Operations Center, Tualatin, OR • 250 Taylor Office Building (NW Natural Office), Portland, OR • Clackamas County, Holly Lane Bridge Inspection and Load Rating Assessment, Oregon City, OR • City of Gladstone, Gladstone Police Department Building Seismic Rehabilitation, Gladstone, OR • US Department of Veterans Affairs, Portland VA Medical Center Seismic Upgrade and Addition, Portland, OR (in design) • US General Services Administration, William Kenzo Nakamura US Courthouse Exterior Facade Evaluation Testing and Remediation, Seattle, WA • State of Oregon, Oregon Supreme Court Building Facade Restoration, Salem, OR • Salem Health, Salem Hospital Parking Garage Addition and Seismic Upgrade, Salem, OR (in construction) • Intel Corporation, Ronler Acres Fabrication and Office Building, Hillsboro, OR • Unico Properties LLC, The Weatherly Building Seismic Retrofit, Portland, OR (in design) • Urban Renaissance Group, 1320 Broadway Building Renovation Special Inspections, Portland, OR • Towne Storage Property, LLC, Towne Storage Building Adaptive Reuse, Portland, OR

	Firm	**T. Baker Smith, LLC**		
	Name	Rene Hebert, PLS, PMP	Years of Relevant Experience with this Employer	14
	Title	Land Surveyor	Years of Relevant Experience with Other Employer(s)	2

Degree(s) / Years / Specialization			BS / 2008 / Geomatics
Active Registration Number / State / Expiration Date			PLS.0005070 / LA / 3/31/2022
Year Registered	2011	Discipline	Survey
Contract Role(s) / Brief Description of Responsibilities			As Survey Lead Professional, Rene has 16 years of project experience. He has served as Lead Professional of numerous survey projects where he has been responsible for overseeing and executing the technical aspect of surveying projects including producing and revising drawings, sketches, plans, etc. for contract documents and QC/QA of surveying services. He coordinates work among project technicians, field crew coordinator, field survey personnel, and other required professionals working on the project. Rene has gained valuable experience surveying the environment of south Louisiana including topographic, boundary and GPR surveys and underwater acoustic hydrographic surveys including multibeam, single beam, side scan sonar, acoustical soundings, magnetometry and other bathymetric surveys for industrial, government and private client. **Rene meets MPR 5.**

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
10/14 - 02/15	**S.P. No. H.008149, Pier 1 Removal (Leeville Bridge), LA 1, Lafourche Parish (LADOTD).** Principal in Charge/Supervising Surveyor. Oversaw topographic control and underwater acoustic hydrographic surveys including multi beam bathymetric surveys to locate remaining pile structure and deliver sonar images of structure to LADOTD for US Coast Guard coordination of the pier removal at the Leeville Bridgey.
09/14 - 06/15	**S.P. No. H.001271, Cane River Bridge at Church Street, Route LA 1, Natchitoches Parish (LADOTD).** Principal in Charge/ Supervising Surveyor. QAQC and supervising surveyor for topographic and underwater acoustic hydrographic surveys including multi beam, sub bottom profiler and magnetometer surveys of the existing swing span bridge and location of piers for the previous swing span bridge including data processing and deliverable preparation for the movable bridge replacement in downtown Natchitoches, LA. (2014)
09/11 - 10/11	**Canal Street Ferry Hydrographic Survey – Survey Lead Professional.** TBS Performed a hydrographic/bathymetric survey for the Canal Street Ferry Terminal Project.
07/18 - 08/19	**Port of New Orleans Napoleon & Nashville Wharves - Hydrographic Survey.** Lead Professional. Rene provided QA/QC services. TBS collected topographic survey data within the designated survey area. The designated survey area for phase 1A began 100' east of the existing loading ramp, then proceeded west to the eastern face of the Nashville B warehouse and from the riverside edge of the existing wharf to the centerline of the railroad track that ran along the land side of the warehouse loading dock.

01/12 - 03/12	**St. Bernard Port, Harbor and Terminal District Chalmette Slip Surveys, St. Bernard Port, Harbor and Terminal District St. Bernard Parish, LA.** Hydrographic Survey Project Manager. Performed underwater acoustic hydrographic surveys including multi-beam, side scan, magnetometry, and sub-bottom surveys in the Mississippi River in order to obtain detailed bottom conditions near the Chalmette Slip docking facility to recover damage heel-post turning dolphins and conduct other inspections.

	Firm	**T. Baker Smith, LLC**		
	Name	Jean Reulet, PLS	Years of Relevant Experience with this Employer	<1
	Title	Land Surveyor	Years of Relevant Experience with Other Employer(s)	13

Degree(s) / Years / Specialization			BS / 2011 / Geomatics
Active Registration Number / State / Expiration Date			PLS.0005145 / LA / 03/31/2022
Year Registered	2015	Discipline	Survey
Contract Role(s) / Brief Description of Responsibilities			Jean has served in various roles as a professional land surveyor since 2015. His field experience for LADOTD projects began in 2012 where he has been involved in dozens of topographic surveys of varying sizes across southern Louisiana. He has participated in all stages of a topographic survey from field data collection to final deliverables preparation according to the LADOTD's Location and Survey Manual. Jean is experienced in the use of cutting edge technology such as terrestrial and mobile LIDAR methods for collecting topographic and structural data in an efficient and safe manner. Jean meets MPR 5.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
06/20 – 06/21	**Multiple S.P. Nos., Contract No. 4400017597, Rural Bridge Replacement Initiative, Southern LA.** Survey Dept. Assistant Manager. Performed data processing, project QAQC and management for Topographic Survey.
03/21 – 06/21	**H.010885: LA 91: Bayou Plaquemine Brule Br Replace, Estherwood, LA.** Survey Dept. Assistant Manager. Performed data processing, project QAQC and management for Topographic Survey.
04/20 – 11/20	**H.000688: US 11 Norfolk Southern RR Overpass (HBI), Slidell, LA.** Sr. Project Manager. Performed data processing and project QAQC for Topographic Survey
04/20-06/20	**H.000284: US 90: Pearl River Bridges (HBI), Orleans Parish, LA.** Sr. Project Manager. Performed data processing, project QAQC and management for Topographic Survey, Mobile LiDAR Scanning project.
01/20 – 08/20	**H.010652: LA 73: US 61 (Airline) – Essen Lane, Baton Rouge, LA.** Sr. Project Manager. Performed data processing, project QAQC and management for Topographic Survey, Mobile LiDAR Scanning project.
06/19 – 08/19	**H.004791: LA 23: Belle Chasse Bridge & Tunnel (HBI), Belle Chasse, LA.** Sr. Project Manager. Performed data processing, project QAQC and management for Topographic Survey
08/19 – 11/19	**H.011645: LA 3002 Access Management, Denham Springs, LA.** Sr. Project Manager. Performed data processing, project QAQC and management for Topographic Survey, Mobile LiDAR Scanning project.
04/19 – 04/19	**H.005121: I-10 to LA 1 Connector, W. Baton Rouge Parish, LA.** Sr. Project Manager. Performed data processing, project QAQC and management for Topographic Survey.
01/19 – 04/19	**H.012735: LA 182 Barrow St. Bridge, Houma, LA.** Sr. Project Manager. . Performed data processing, project QAQC and management for Topographic Survey.
10/18 – 04/19	**H.012591: I-10 Paris Road – Lake Pontchartrain, Orleans Parish, LA.** Sr. Project Manager. Performed data processing, project QAQC and management for Topographic Survey, Mobile LiDAR Scanning project.

	Firm	**AECOM Technical Services, Inc.**		
	Name	Y. Edward Zhou, PhD, PE	Years of Relevant Experience with this Employer	28
	Title	Structural Engineer - Instrumentation and Testing	Years of Relevant Experience with Other Employer(s)	8

Degree(s) / Years / Specialization			BS/1982/Civil Engineering MS/1990/Civil Engineering PhD/1994/Structural Engineering
Active Registration Number / State / Expiration Date			21330 / MD / Professional Engineer /09/02/2022 10086 / DE/ Professional Engineer / 06/30/2022 0402 033413 / VA / 04/30/2023
Year Registered	1995	Discipline	Professional Engineer
Contract Role(s) / Brief Description of Responsibilities			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 time specified in the applicable MPR(s).
12/19-02/20	**Colorado Department of Transportation (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-Ongoing	**Connecticut Department of Transportation (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, Connecticut:** 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.
04/19-Ongoing	**Windsor-Detroit Bridge Authority (WDBA): Bridge Health Monitoring Systems of Cable-Stayed Gordie Howe International Bridge, Ontario-Michigan:** Bridge Monitoring Lead of design-build-finance-maintain joint venture Bridging North America (BNA), responsible for development of construction drawings and project special provision for Bridge Monitoring Systems (BMS) consisting of: (1) an acoustic monitoring system (sensors, data acquisition units, communication devices, etc.) for below-ground post-tensioned footing tie at the base of both main towers, (2) displacement survey prisms along towers, piers, and bridge superstructure, (3) weather stations on top of both towers as part of Roadway Weather Information System (RWIS), (4) ice/snow monitoring stations for ice/snow buildup on towers and cables, and (5) monitoring data collection and transmission through the fiber optic backbone of Intelligent Transportation System (ITS). The special provision includes requirements for design and submission; system components, installation, calibration, acceptance testing, and commissioning; data collection, processing, and delivery; quality assurance and quality control (QA/QC); system maintenance for continuous functionality; as well as durability for 40 years.
08/12-Ongoing	**Maryland State Highway Administration (MDSHA) and Virginia Department of Transportation (VADOT): Long-Term Monitoring of the Woodrow Wilson Memorial Bridge (I-95/I-495 over Potomac River) for Possible Wire Breaks in Post-Tensioned V-Piers, Washington, D.C.:** Technical Reviewer of the General Engineering Consultant (GEC) serving MDSHA and VADOT during development, installation, and commissioning between 2012 and 2015, of a long-term acoustic emission (AE) monitoring system for possible wire breaks in P-T tendons in all V-piers of the landmark structure, due to concerns over contaminated grout used inside the P-T tendon ducts during original construction. Duties included review of instrumentation plans and technical specifications proposed by the contractor (Mistras Group), review of V-Pier Tendon Loss Evaluation Guideline by the bridge designer (Parsons Transportation Group), attending review meetings, oversight during field installation, demonstration tests and system commissioning, as well as review of quarterly monitoring reports upon request.
07/18-09/20	**Virginia Department of Transportation (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.

	Firm	AECOM Technical Services, Inc.		
	Name	John Volk, PE	Years of Relevant Experience with this Employer	35
	Title	Geotechnical Engineer	Years of Relevant Experience with Other Employer(s)	0

Degree(s) / Years / Specialization			MS / 1984 / Civil (Geotechnical) Engineering BS / 1983 / Civil Engineering
Active Registration Number / State / Expiration Date			PE.0038377 / LA / 03/31/2022 Additional active licenses; PA, NJ, DE, NY, VA, OH, WI, IN, MD, WV, CT, SC, NC
Year Registered	1990	Discipline	Civil (Geotechnical) Engineering
Contract Role(s) / Brief Description of Responsibilities			John has been managing the geotechnical engineering practice in the Philadelphia Office since 1998. He is responsible for business development, hiring, staff development, mentoring, and technical oversight of the practice. John is also involved regionally and nationally in major projects such as the Woodrow Wilson Bridge Project in the Washington D.C. area ($2.5 billion project) and the New Orleans Levee Reconstruction.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
03/90 - 11/08	**Forest City Landslide, Soft Soil Stabilization/Ground Improvement/Landslide Stabilization/ Dam and Levee Design:** John was the project manager for a team that stabilized a large landslide (Forest City Landslide) near Pierre, South Dakota. This mile-wide and half-mile long landslide in a bentonitic shale (Pierre Shale Formation) was slowly moving a 4600-foot long bridge (Route 212) into the Oahe reservoir. John's involvement included extensive slope stability analyses and evaluating the use of stone columns, drilled shafts as shear pins, and geosynthetic reinforcement to arrest movement in the bridge approach embankment. Shear pins (1 m by 3 m reinforced-concrete rectangular sections) were installed to depths of 90 to 140 ft with hydraulic grab clamshell technologies
08/06 - 12/12	**US Army Corps of Engineers, Soft Soil Stabilization/Ground Improvement/Landslide Stabilization/ Dam and Levee Design:** John was involved with several projects in the design and re-construction of levees of 25 miles in New Orleans East. John was the lead geotechnical engineer for 7.5 miles of levees utilizing wick drains, high-strength geotextiles, and deep mixing methods for ground improvement. LPV 109.02a is a 7.5 mile reach in New Orleans East that included using I-10 as a levee. The existing levees were raised approximately four to seven feet with a protected side raise on virgin ground. The new levee construction requires embankment construction in two stages to heights of 18 to 22 feet above existing grades of the tidal marsh. The raises were be accomplished with the use of stability berms, wick drains and high-strength geotextiles and geotechnical instrumentation. DMM (soil-cement mixing) was utilized under the drainage structures and pump stations.

03/97- 11/99	**Wasatch Constructors, I-15 Reconstruction Project, Salt Lake City, Utah:** This 16-mile highway was the largest design-build project ($1.6 billion) in the U.S. and provided access for the 2002 Winter Olympic Games. John was responsible for geosynthetic-reinforced embankment design. The highway is underlain by thick deposits of soft clays. High-strength geotextiles (as base reinforcement) and wick drains were designed to reduce staging of the embankments and MSE retaining walls (heights of 45 to 60 ft) and compress the construction schedule. Extensive instrumentation was used to minimize settlement times of the embankments and retaining walls. Lime-cement columns and geofoam were utilized to increase embankment stability.
01/00 - 06/12	**Virgina DOT, Woodrow Wilson Bridge Reconstruction in Alexandria, Virginia:** While representing Virginia DOT, Maryland State Highway and FHWA as the General Engineering Consultant, John is responsible for directing and overseeing the section designers in ground improvement on approximately 3 miles of soft ground construction on the Route 1 and Telegraph Road Interchanges in Alexandria, Virginia and the I-295 Interchange in Oxon Hill, Maryland. Ground stabilization techniques that have been evaluated and utilized include: wick drains and surcharging, high-strength geotextile as base reinforcement, deep soil mixing methods, and lime cement columns and lightweight fills (foam concrete and EPS geofoam). Two test embankments, with a construction cost of $1.5 million, were constructed to evaluate some of these techniques. Extensive deep soil-cement column mixing (approx. $15 million) was performed in Virginia to expedite construction of embankments over soft subsoils. The Route 1 abutment involved use of 23,000 cy of geofoam. Extensive instrumentation was utilized to monitor the performance of the soft soils.
08/18 - 12/21	**Virgina DOT, I-64 Reconstruction in Virginia Beach, Virginia:** As Principal Engineer involved with this $100 million project. John is responsible for ground improvement on approximately 2 miles of soft ground construction. Ground stabilization techniques that have been evaluated and utilized include: wick drains and surcharging, high-strength geotextile as base reinforcement, precast piled embankment., and lightweight fills (foam concrete and EPS geofoam). Extensive instrumentation will utilized to monitor the performance of the soft soils.
02/98 - 11/02	**New Jersey DOT, Two miles of highway for the Atlantic City/ Brigantine Connector Project in New Jersey:** John was responsible for geosynthetic-reinforced embankment design. This $190 million design-build project involved the construction of embankments and MSE retaining walls (25 to 40 ft in height) over interbedded soft clays and sand alluvial deposits in the coastal plain. High-strength geotextiles (as base reinforcement) and wick drains were designed to reduce staging of the embankments and retaining walls. Investigation with CPT and test borings and two test embankments were part of the design program. The test embankments helped gain insight into consolidation rates of the various clay strata and eliminate wick drains south of the tunnel. Instrumentation data was analyzed to determine when surcharges could be removed.
07/90 - 11/95	**Balfour Beatty Constructors, Route 147, Wildwood, New Jersey:** John performed a value engineering design for a highway contractor. The highway is 2-1/2 miles long with two major bridges, with about half of the length being built over very soft tidal marshes. URS's design involved placing two layers of high-strength geotextiles over the tidal marsh during the construction of the embankments in lieu of partial wet-excavation of the 20-foot thick organic clays. The 12-foot-high embankment was built up in five stages using wick drains and extensive instrumentation. This value engineering design performed for the Contractor resulted in a total cost savings of $2.8 million, which was split between the Contractor and the New Jersey Department of Transportation

Firm	**AECOM Technical Services, Inc.**		
Name	Michael Patorno, PE	Years of Relevant Experience with this Employer	27
Title	Principal-in-Charge	Years of Relevant Experience with Other Employer(s)	12

Degree(s) / Years / Specialization			MS / 1994 / Civil Engineering BS / 1983 / Civil Engineering
Active Registration Number / State / Expiration Date			#PE0024197 / LA / 09/30/2023 Additional active licenses: AL, AR, TX, MS
Year Registered	1991	Discipline	Civil Engineer
Contract Role(s) / Brief Description of Responsibilities			Mike will be the Principal-in-Charge for this contract. He is a professional engineer with 39 years of experience as a Program and Operations Manager overseeing the programs within the gulf coast, including both federal and non-federal programs. Programs and projects include planning, designs, program and construction management, and permitting. This work includes oversight and management of various departments in transportation, water resources, structural, geotechnical, general civil, program and construction management, as well as environmental permitting and regulatory. Mike has run major programs as large as $2B in size and spanning many years. These major programs required managing staff from over a dozen separate AECOM offices while providing coordination with numerous federal, state, and local stakeholder agencies, as well as with no-governmental organizations. **Mike meets MPR 1**.

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
01/07 - 01/17	**United States Army Corps of Engineers, Program Management and Engineering Support Services, USACE-Hurricane Protection Office (HPO), Jefferson Parish and New Orleans, LA.** Mike serves as Program Manager responsible for managing this 10-year program to initially repair and eventually upgrade the City of New Orleans Hurricane Protection System. This program included working with the USACE side by side as well as with contractors on design build delivery systems for this over $2B in improvements. In a follow-up contract to the Task Force Guardian program to make repairs after Hurricane Katrina, we marketed and were awarded a contract to assist the HPO with providing improvements to the levee system in New Orleans East. Includes design and construction of floodwalls, levees, and gates, and requires utility relocation, pump station remediation, bridges, roadways, and real estate coordination.
01/06 - 02/11	**State Project No. 742-07-0027: Louisiana Department of Transportation & Development (LADOTD), Earhart Boulevard Improvements (Hamilton Street to Magnolia Street), Orleans Parish, LA.** Principal for this City of New Orleans Program under the TIMED and Urban System funding programs. Responsible for maintaining coordination between the City of New Orleans Department of Public Works, the Sewerage and Water of New Orleans, LADOTD and the assigned consultants. Project Manager responsible for Program Management; coordination between the Sewerage & Water Board, the City, LADOTD, FHWA and the design consultants; client contact; review and evaluation of requests for extensions and additional compensation; coordination with the Regional Planning Commission on Urban Systems funding; program budget and projections; right-of-way acquisition

	coordination and plans; public information meetings; environmental public hearings; review comments on the plans submitted by the design consultants; and review and evaluation of consultants' invoices.
07/94 - 05/06	**United States Army Corps of Engineers, East of Harvey Floodwall, USACE New Orleans District, Jefferson Parish, LA.** Program Manager who led a team of engineers in the design of 8,000 feet of floodwall in a heavy industrial area with limited construction area. Provided support to the design team on a number of technical and coordination issues. Project required designs for the foundation, hydraulics, concrete, and steel as well as development of relocation and ROW needs and right-of-way. All design work was completed in a short time frame. Cost: $2M design; $136M construction.
06/98 - 04/05	**State Project No. 98-026-B: Louisiana Department of Transportation & Development (LADOTD) Program Management, 1998 Road Bond Improvement Program, Jefferson Parish, LA.** Principal for Jefferson Parish's $275M Program, which included 112 roadway and bridge projects throughout the Parish. The project included writing contracts and amendments for engineers' contracts; planning meetings; coordination of consultants, Parish departments, Parish's politicians, SELA, LDOTD (when necessary), railroad companies and public and private utilities; approving consultant invoices and construction cost estimates; oversight on design; review of plans and specifications submittals; scheduling; budget analysis; right-of-way acquisition support; construction oversight; review of contractor invoices and claims; and project closeout. As a part of this program, numerous intersections and signals were upgraded.
10/00 - 04/02	**State Project No. No. 450-15-0079: Louisiana Department of Transportation & Development (LADOTD), Interstate 10 Improvements (Clearview to Causeway), LA.** Principal for project including preliminary and final design of roadway improvements to Interstate 10 from Clearview Boulevard to Causeway Boulevard in Jefferson Parish. Improvements included an auxiliary lane addition connecting both interchange transition lanes. Widening included improvements to the bridge crossing over the Suburban Canal as well as transitioning near the Cleary Overpass.

2015 In-Depth Inspection of the Vicksburg Bridge

AECOM inspection crew inspecting the upper through truss members from a fully extended aerial boom lift. A single lane of traffic is maintained in the inner lane.

SECTION

17

17. Firm Experience

Firm Name	**AECOM Technical Services, Inc.**		Past Performance Evaluation Discipline(s)*	Bridge	
Project Name	LADOTD Contract No. 44-2687 (Project H.009730.5). In-depth Inspection of Complex Bridges, Statewide		Firm Responsibility (Prime or Sub?)	Prime	
Project Number	Contract No. 44-2687 Project No. H.009730.5	Owner's Name	Louisiana Department of Transportation and Development (LADOTD)		
Project Location	Louisiana Statewide	Owner's Project Manager	Haylye Brown, PE		
Owner's Address, Phone, Email	PO Box 94245, Baton Rouge, LA 70804-9245, 225.379.1500, haylye.brown@la.gov				
Services Commenced by This Firm (mm/yy)	12/12	Total Consultant Contract Cost ($1,000's)	$5,717		
Services Completed by This Firm (mm/yy)	06/18	Cost of Consultant Services Provided by This Firm ($1,000's)	N/A		

AECOM performed an in-depth inspection on several complex bridges throughout the state for the DOTD as part of the overall NBIS program. The bridge inspections include utilizing aerial boom lifts, Under Bridge Inspection (UBI/Snoopers) vehicles, and rope access as required for inspection access. The inspections include a hands-on inspection of all fracture critical bridge elements, bridge deck, and substructure inspections. In addition to the structural inspections, a paint condition assessment has been completed on most of the structures. Ultrasonic Testing (UT) of pin/hanger assemblies is performed as required. For the movable bridges, in-depth mechanical and electrical inspections have also been completed in accordance with the AASHTO requirements.

The assignment also included rehabilitation design of critical deficiencies found during our inspection and we performed deck condition studies utilizing infrared and ground penetrating radar technologies to evaluate the current condition of suspect concrete decks. All inspection activities required coordination with the LADOTD for lane closures and other stakeholders weeks ahead of the field work to ensure the inspections were completed safely, efficiently, on-time and within budget.

List of bridges: 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), LA 315 Dularge Bridge (2017)

AECOM Team: Brett Canimore, Henry Fix, Lance Savant, Jason Mathers, Landon Whitton, Greg Bennett, Jason Zimpfer, Dave Raffensperger

Relevance to LADOTD

- ✓ Complex Signature Bridges
- ✓ National Bridge Inspection Standards
- ✓ 100% hands-on inspection of all fracture critical members
- ✓ Ultrasonic testing of the bridge pins
- ✓ Paint condition assessment
- ✓ Deck condition studies
- ✓ Rehabilitation design
- ✓ Inspection access via rope access climbing, bucket trucks, snooper and aerial boom lifts
- ✓ Regular client communication and excellent client feedback for exemplary performance

Firm Name	**AECOM Technical Services, Inc.**		Past Performance Evaluation Discipline(s)*	Bridge	
Project Name	MDOT 2018 Routine / Fracture Critical Inspection of the Greenville Bridge (US 82 over Mississippi River)		Firm Responsibility (Prime or Sub?)	Prime	
Project Number		Owner's Name	Mississippi Department of Transportation (MDOT)		
Project Location	Lake Village, AR and Greenville, MS	Owner's Project Manager	Richard Withers		
Owner's Address, Phone, Email	PO Box 1850, Jackson, MS 39215-1850, 601.359.7200, rwithers@mdot.ms.gov				
Services Commenced by This Firm (mm/yy)	08/18	Total Consultant Contract Cost ($1,000's)	$612		
Services Completed by This Firm (mm/yy)	07/19	Cost of Consultant Services Provided by This Firm ($1,000's)	N/A		

The US 82 over Mississippi River Bridge is a cable-stayed structure connecting Mississippi and Arkansas. The West Abutment sits in Chicot County, AR and the East Abutment sits in Washington County, MS. The bridge is 2.6 miles total in length from Abutment to Abutment. The Mississippi River is spanned by three cable-stay girder units, leaving two piers in the navigable waterway. The main spans (Spans 36, 37, 38) are 596 feet, 1,378 feet, and 596 feet, respectively. Piers 37 and 38 are the primary support for the main spans.

AECOM was contracted to provide Routine (Element) and Fracture Critical Bridge Inspection services by the Mississippi Department of Transportation.

This inspection was performed October 6, 2018 to October 19, 2018. The inspection occurred daily from 8:00AM to 5:00PM. Single lane closures were used during this inspection, in both Eastbound and Westbound directions.

Main span pier and tower inspections were performed using rope-access as well as built-in access methods. Cable sheathing inspections were performed utilizing UAV (Unmanned Aerial Vehicle) assistance. The UAV was a DJI Matrice 210 RTK using TB55 batteries (12 sets total). An RTK ground station was utilized to send a signal to the UAV to stabilize it in high winds. The camera system was a DJI Z30 zoom camera.

A 120-ft lift-platform vehicle was used for cable and tower inspection. The below deck approach span inspections were accomplished by utilizing two under bridge inspection vehicles (UB 60). Below deck main span inspections were performed using the built-in inspection traveler.

Deck surveys and hydrographic surveys were performed by a sub-consultant.

AECOM Team: Brett Canimore, Landon Whitton, Lance Savant, Jason Mathers, Dave Raffensperger, Kevin Curley

Relevance to LADOTD

- ✓ Complex Signature bridges
- ✓ National Bridge Inspection Standards
- ✓ Element level inspections
- ✓ 100% hands-on inspection of fracture critical members
- ✓ Cable supported structures
- ✓ Non-destructive testing
- ✓ Access via rope access, snooper and aerial boom lifts
- ✓ Use of aerial drone to aid inspection

Firm Name	**Modjeski and Masters, Inc.**			Past Performance Evaluation Discipline(s)*	Bridge
Project Name	U.S. 90 - Huey P. Long Bridge – Annual Inspections			Firm Responsibility (Prime or Sub?)	Prime
Project Number	N/A	Owner's Name	New Orleans Public Belt Railroad		
Project Location	Jefferson Parish, LA	Owner's Project Manager	Mr. Carl Kocur		
Owner's Address, Phone, Email	4822 Tchoupitoulas St., New Orleans, LA 70115, 504.813.7423, carlk@nopb.com				
Services Commenced by This Firm (mm/yy)	10/21	Total Consultant Contract Cost ($1,000's)	$314		
Services Completed by This Firm (mm/yy)	02/22	Cost of Consultant Services Provided by This Firm ($1,000's)	$255		

The Huey P. Long Bridge is a high-level combination highway and railroad bridge which crosses the Mississippi River in New Orleans, Louisiana and is part of the complex urban freeway system in the area. The total structure length, including approaches, is approximately 23,000 feet. The main span unit is 3,524 feet long, consisting of a 750-foot cantilever through truss span, two 530-foot anchor truss spans, one 530-foot simple through truss span, and four deck truss spans. The main span truss units, deck trusses, and approach girder spans all consist of riveted steel construction.

M&M designed the original structure and the expansion of the main spans opened in 2013 and has provided engineering services since 1936. M&M has routinely performed yearly inspections since its opening.

M&M provides the following engineering services to NOPBRR:

- Annual routine inspections
- 1/3 of the railroad portion in-depth inspection each year
- Biennial Inspection of the highway portion
- Analysis of special railroad loading
- Emergency accident inspections repairs
- Engineering services for bridge maintenance
- Development of Bridge Management Plan

Modjeski and Masters Team: Ralph J. Eppehimer, Anthony E. Schoenecker, Amy. G. Robards, James W.H. Costigan, Michael J. Beitzel, Joshua J. Moore, Jason P. Broussard, Bryan E. Swartz, Larry P. Toups, Matthew J. Miller, Tim P. Sensebe, Scott C. Gordon

Firm Name	**Modjeski and Masters, Inc.**			Past Performance Evaluation Discipline(s)*	Bridge
Project Name	Port of New Orleans Movable Bridge Inspections			Firm Responsibility (Prime or Sub?)	Prime
Project Number	N/A	Owner's Name	Port of New Orleans		
Project Location	New Orleans, LA		Owner's Project Manager	Randy Songy, PE	
Owner's Address, Phone, Email	1350 Port of New Orleans Place, New Orleans LA 70130, 504.528.3308 randy.songy@portnola.com				
Services Commenced by This Firm (mm/yy)	11/21		Total Consultant Contract Cost ($1,000's)		$121
Services Completed by This Firm (mm/yy)	02/22		Cost of Consultant Services Provided by This Firm ($1,000's)		$104

The Port of New Orleans engaged M&M for multiple services on four movable bridges that cross the Inner Harbor – Navigation Canal between the Mississippi River and Lake Pontchartrain. There are three Strauss-Trunnion bascule bridges built circa 1919 and one vertical lift bridge. Three of the bridges carry highway traffic, with two of these carrying combined highway and railway traffic. Seabrook bridge carries only railway traffic.

M&M provided the following engineering services to the Port of New Orleans for the Florida Ave and St. Claude movable bridges:

- Bridge inspections and reports detailing bridge conditions and operations
- Bridge Management Plan
- Review maintenance records
- Prepare repair contracts
- Prioritize defects; assign costs and year for repair
- Assist in the development of capital outlay program
- Field monitor repairs
- Response to emergencies (marine accidents, component failures)
- Ultrasonic testing

Florida Ave. Bridge

St. Claude Bridge

Modjeski and Masters Team: Ralph J. Eppehimer, Anthony E. Schoenecker, Matthew J. Miller, Bryan E. Swartz, Michael J. Beitzel, Scott C. Gordon, James W.H. Costigan, Andrew G. Comeaux

Firm Name	**AECOM Technical Services, Inc.**			Past Performance Evaluation Discipline(s)*	Bridge
Project Name	DRPA 2020 Biennial Inspection of the Betsy Ross Bridge			Firm Responsibility (Prime or Sub?)	Prime
Project Number		Owner's Name	Delaware River Port Authority (DRPA)		
Project Location	Pennsauken, NJ & Philadelphia, PA		Owner's Project Manager	Brigitte Kordzian	
Owner's Address, Phone, Email	One Port Center – 2 Riverside Drive, Camden, New Jersey 08101, 856.968.2068, b_kordzian@drpa.org				
Services Commenced by This Firm (mm/yy)	03/20	Total Consultant Contract Cost ($1,000's)		$850	
Services Completed by This Firm (mm/yy)	03/22	Cost of Consultant Services Provided by This Firm ($1,000's)		N/A	

AECOM performed the 2020 routine and in-depth inspection of the Betsy Ross Bridge, which carries Route 90 over the Delaware River between Philadelphia, PA and Pennsauken, NJ. The inspection included a close visual "hands-on" inspection of all fracture critical and fatigue sensitive details. The substructure units received a routine visual inspection with suspect areas highlighted for further evaluation. The channel and piers received an underwater inspection including a high frequency side scan sonar and hydrographic survey.

In addition, the inspection included routine inspection of the PA and NJ approach structures, high-mast lights, sign structures, signal gantries, dolphins, and the toll facility structure. Inspection access routinely utilized under bridge inspection vehicles, bucket trucks, aerial boom lifts and ladders. The inspection effort also included the use of an unmanned aerial vehicle (UAV) drone to complement our traditional hands-on inspection and to demonstrate ways this technology can be utilized by the Authority for future biennial inspections. The inspection fieldwork required extensive coordination with on-going maintenance and contractor activities. All inspection work was performed with minimal disruption to vehicular and truck traffic on the corridor, as well as to the flow of marine, railroad and highway traffic under the structure.

The project also included a load rating analysis of the River Road approach structure and an EV load rating analysis of the US130 overpass as well as numerous off-cycle inspection tasks to monitor key components of the bridge. The discovery of fatigue cracks in numerous light poles required an expedited reporting of the critical findings and adjusting the work within the project schedule without impacting the overall project schedule or budget. AECOM also hosted monthly Quality Assurance meetings during the active months of the inspection and reporting tasks for the purpose of keeping the Authority updated with the progress of the project and any issues.

AECOM Team: Brett Canimore, Henry Fix, Jason Mathers, Lance Savant, Dave Raffensperger, Greg Bennett, Mike Zavorski, Alex Schaal, Sean Quick, Riley LaRiviere

Relevance to LADOTD

- ✓ Complex Signature Bridges
- ✓ National Bridge Inspection Standards
- ✓ 100% hands-on inspection of all fracture critical members
- ✓ Inspection access via bucket trucks, snooper and aerial boom lifts
- ✓ Underwater inspection of channel piers
- ✓ Use of aerial drone to aid inspection

Firm Name	**AECOM Technical Services, Inc.**			Past Performance Evaluation Discipline(s)*	Bridge
Project Name	DRPA 2018 Biennial Inspection of the Commodore Barry Bridge			Firm Responsibility (Prime or Sub?)	Prime
Project Number	N/A	Owner's Name		Delaware River Port Authority (DRPA)	
Project Location	Bridgeport, NJ & Chester, PA		Owner's Project Manager	Ed Montgomery	
Owner's Address, Phone, Email	One Port Center – 2 Riverside Drive, Camden, New Jersey 08101, 856.968.2091, ermontgomery@drpa.org				
Services Commenced by This Firm (mm/yy)	03/18	Total Consultant Contract Cost ($1,000's)		$625	
Services Completed by This Firm (mm/yy)	03/19	Cost of Consultant Services Provided by This Firm ($1,000's)		N/A	

AECOM performed the 2018 routine and in-depth inspection of the Commodore Barry Bridge, which carries Route 322 over the Delaware River between Chester, PA and Bridgeport, NJ. The inspection included a close visual "hands-on" inspection of all fracture critical and fatigue sensitive details. The main bridge includes a three-span, cantilever through truss, deck truss spans and steel stringer spans. The cantilever through truss with a main span of 1,644 feet, is the 4th longest cantilever bridge in the world and the longest in the US. The substructure units received a routine visual inspection with suspect areas highlighted for further evaluation.

In addition, the inspection included routine inspection of the two Route 130 overpass bridges, sign structures, signal gantries, high mast light towers, and the toll facility structure. The inspection utilized under bridge inspection vehicles, bucket trucks, man-lifts and ladders. SPRAT certified climbers were used to access the highest members of the truss. This project also included ultrasonic testing of the pins and electro-slag welds on the bridge. Inspectors also visually inspected a select number of vibration dampers on the bridge.

All inspection work was performed with minimal disruption to vehicular and truck traffic as well as to the flow of marine, railroad and highway traffic under the structure.

The results of the inspection have been presented in a structural inspection report noting all typical deficiencies and presenting the general condition of the bridge and any significant changes or new deficiencies and findings. Bridge data was updated for NJDOT and PennDOT reporting for the bridge condition and the inventory elements. An executive briefing was also prepared and delivered to DRPA.

AECOM Team: Brett Canimore, Henry Fix, Jason Mathers, Lance Savant, Dave Raffensperger, Greg Bennett, Mike Zavorski, Alex Schaal, Brian McCabe

Relevance to LADOTD

- ✓ Complex Signature Bridges
- ✓ National Bridge Inspection Standards
- ✓ 100% hands-on inspection of all fracture critical members
- ✓ Ultrasonic testing of the bridge pins
- ✓ Inspection access via rope access climbing, bucket trucks, snooper and aerial boom lifts
- ✓ Regular client communication and excellent client feedback for exemplary performance

Firm Name	**Modjeski and Masters, Inc.**			Past Performance Evaluation Discipline(s)*	Bridge
Project Name	LA 315 over Bayou Dularge Bascule Bridge			Firm Responsibility (Prime or Sub?)	Sub
Project Number	4400002687	Owner's Name		Louisiana Department of Transportation and Development	
Project Location	Terrebonne Parish, LA		Owner's Project Manager	Haylye Brown, PE	
Owner's Address, Phone, Email	1201 Capital Access Road, Baton Rouge, LA 70802 225.379.1401, Haylye.Brown@la.gov				
Services Commenced by This Firm (mm/yy)	12/17	Total Consultant Contract Cost ($1,000's)		N/A	
Services Completed by This Firm (mm/yy)	04/18	Cost of Consultant Services Provided by This Firm ($1,000's)		$131	

The LA315 Bridge over Bayou Dularge was built in 1977. The structure is 2,311 feet long, including the approach spans and the main spans. The structure carries LA Route 315 over the Bayou Dularge in Terrebonne Parish, Louisiana. The south concrete approach spans measure 980' in length and consist of seven slab spans and 12, pre-stressed concrete Type III beam spans. The north concrete approach spans measure 905'-3" in length and consist of 13, pre-stressed concrete Type III beam spans. The main structure is comprised of two 108'-0" long variable depth girder floorbeam- stringer spans, and a 150'-0" double-leaf bascule span with variable depth girders for a girder-floorbeam-stringer configuration. This bascule span is Span 21. It is supported by two piers each measuring 30' in length along the baseline. The main span provides for a navigable channel width of 125' through the dolphins and fenders protecting the bascule piers. The main channel has a vertical clearance of 40' over mean high water. Span 12 crosses over LA 315 (Bayou Dularge Road) with a minimum vertical clearance of 18'-2". Span 27 crosses over Concord Road/Country Club Lane with a minimum vertical clearance of 25'-9". The operable span (Span 21) of the Bayou Dularge Bridge is a double leaf trunnion bascule bridge which carries two lanes of Highway LA-315 over the Intracoastal Canal in Houma, LA. The bridge is generally oriented North-South. Each bascule pier contains drive machinery that allows independent operation of the two leaves.

The operating machinery for each leaf consists of machinery assemblies located below the roadway (Span 21) on Piers 21 and 22 (the bascule piers). The prime movers for each leaf drive assembly are two General Electric wound rotor motors. Modjeski and Masters was the Engineer of Record for the original bridge design in 1975 and also provide an in-depth inspection of the structural, mechanical and electrical components in 2017-2018 as a sub-consultant.

Modjeski and Masters Team: Ralph Eppehimer, Anthony Schoenecker, Jon Gerhart, Bryan Swartz, Geoffrey Forest

Firm Name	**KPFF, Inc.**		Past Performance Evaluation Discipline(s)*	Bridge	
Project Name	In-Depth Inspection of Hale-Boggs Bridge, Luling, LA, 2008		Firm Responsibility (Prime or Sub?)	Prime	
Project Number		Owner's Name	LADOTD		
Project Location	Luling, LA		Owner's Project Manager	Paul Fossier	
Owner's Address, Phone, Email	1201 Capitol Access Rd., 6th floor; Baton Rouge, LA 70802; 225.379.1438 Paul.fossier@la.gov				
Services Commenced by This Firm (mm/yy)	03/06	Total Consultant Contract Cost ($1,000's)		$1,000	
Services Completed by This Firm (mm/yy)	02/09	Cost of Consultant Services Provided by This Firm ($1,000's)		$500	

KPFF professionals led a team and successfully completed the in-depth inspection effort for a 1,230-foot-span cable-stayed bridge across the Mississippi River. The inspection included hands-on inspection of main span superstructure encompassing twin trapezoidal steel box girders, orthotropic steel deck, supporting steel towers, and the stay cable array. Work included development of approach, including inspection methods and scope, access methods, maintenance of traffic, and an extensive NDT program for steel superstructure and stay cables.

Detailed inspection and nondestructive testing revealed that the condition of 39 out of the bridge's 72 cables was questionable, with multiple cables requiring substantial repair or replacement. The stay cables were comprised of a cement-grouted, ¼-in diameter parallel wire system. Several strategies involving a range of repair and replacement options were evaluated, using life cycle cost analysis. It was concluded that replacing all cables presented the best value among evaluated alternatives. The design of the complete 72-cable array replacement is the first occasion on which this process was attempted in North America. The final design of the replacement cables was heavily influenced by the geometric restrictions of the existing anchorage locations. The replacement cables are designed for a 75-year design life and incorporate the advancements made in corrosion protection and vibration control since the original design of th4e bridge. Maintenance of traffic design was an essential part of the project, since I-310 is a critical regional link and hurricane evacuation route in the State of Louisiana. Traffic maintenance during cable replacement was designed to be as unobtrusive to the public and commerce as practical – the cable replacement was staged to occur with minimal lane closures. A stay cable replacement construction contract totaling $31,000,000 was awarded in 2009, and was completed in 2011.

KPFF Team: Chris Ligozio, Scott Wyatt

Firm Name	**Huval and Associates, Inc.**			Past Performance Evaluation Discipline(s)*	Bridge
Project Name	Terrebonne Inspection, Repair and Ratings			Firm Responsibility (Prime or Sub?)	Prime
Project Number	N/A	Owner's Name		Terrebonne Parish Government	
Project Location	Terrebonne Parish, LA		Owner's Project Manager	David Rome	
Owner's Address, Phone, Email	8026 W. Main St. #101 Houma, LA 70360, (985) 868-5050, drome@tpcg.org				
Services Commenced by This Firm (mm/yy)	01/17	Total Consultant Contract Cost ($1,000's)		$130 (annually)	
Services Completed by This Firm (mm/yy)	Ongoing	Cost of Consultant Services Provided by This Firm ($1,000's)		$130	

Huval was contracted to perform load ratings, inspections, and bridge documentation for over 58 bridges in the parish in order to bring the parish into full conformance with the NBIS and LADOTD requirements. During this inspection and rating process several bridges required preventative maintenance design, plans, and repair project development. The bridges inspected, load rated, and repaired included steel swing span bridges, steel lift bridges, timber bridges, concrete bridges, steel pipe culverts, cast in place concrete culverts, and a steel bascule bridge.

Huval prepared repair plans and maintained oversight over the construction of the repairs for several bridges that required timber cap repair or replacement and/or timber pile splices. Timber pile splices were performed using multiple techniques including steel pipe sleeve with concrete fill as well as aramid fiber wrap splices. Timber caps were repaired, strengthened as necessary, or replaced. Much of the pile repair work was performed while the bridge was still operating with traffic. Huval also prepared full rehabilitation plans for a steel bascule span bridge which included rehab to the steel girders, timber caps, timber piles, steel piles, machinery, and other miscellaneous items on the bridge.

Huval is performing 100% of the work for this project in the State of Louisiana.

Huval Team: David S. Huval, Sr., Colby Guidry, Justin Peltier, Nash Romero, Joseph Smith, Eddie Smith

Firm Name	**Huval and Associates, Inc.**			Past Performance Evaluation Discipline(s)*	Bridge
Project Name	Retainer Contract for Bridge Preservation			Firm Responsibility (Prime or Sub?)	Prime
Project Number	4400002537	Owner's Name	LADOTD		
Project Location	Louisiana (Statewide)	Owner's Project Manager	Kurt Brauner, P.E.		
Owner's Address, Phone, Email	1201Capitol Access Rd. Baton Rouge, LA, 225.379.1933, kurt.brauner@la.gov				
Services Commenced by This Firm (mm/yy)	01/12	Total Consultant Contract Cost ($1,000's)	$6,000		
Services Completed by This Firm (mm/yy)	12/17	Cost of Consultant Services Provided by This Firm ($1,000's)	$6,000		

As prime, Huval is responsible for Preliminary and Final Plans, Surveying Services, Bridge/Structural Inspection and Evaluation, Design Peer Review, Load Rating of Bridges, and Construction Services. Projects performed using LRFD and LRFR design. Completed and On-going Task Orders include:

Bayou Tigre Rack and Pinion Dispute, T.O. H.002751.6: Independent Review of LADOTD's design, contract plans, specifications, construction-related services, field measurements of rack and gear installation, and related documents, as well as reviewing the contractor's fabrication and installation of the bridge machinery. Following review, a non-biased position statement regarding the dispute between LADOTD and contractor was issued.

LA 182 & LA 58 Movable Bridge Rehab, T. O. H.010006.5: Preliminary Plans for two movable bridges in Lafourche and Terrebonne Parishes including rehabilitation necessary for bridges to remain in service for 30-40 additional years. Includes structural, mechanical, electrical, architectural, and paint system and concrete surface improvement.

Jeanerette End Wedge Repair, T.O. 009467.5: Site Visit and Evaluation, Preliminary Plans and Final Plans for the rehabilitation of this swing span bridge on LA 671 in Iberia Parish. The intent of this Project is to correct any mechanical and electrical deficiencies of the bridge end wedge system, balance wheels, live load shoes, and center pivot bearing.

Bayou Lafourche Bridge, T.O. H.000174: Final Plans, Design Calculations and Structural Monitoring Instrumentation for this slab span bridge structure in Ouachita and Richland Parish. Structural Monitoring Instrumentation is being performed by a Sub-Consultant to Huval. The AccelBridge System was used as the post-tensioning method to achieve the required compression force between the transverse deck panel joints.

KCS Railroad Overpass near Ada, T.O. H.000126: Engineering Construction Services for the KCS Overpass Bridge as well as developing self-curing admixture (SCA) and underwater self-consolidating concrete (UWSCC) for the trial deck and drilled shafts and providing construction support of using these materials for the KCS overpass bridge.

I-10: Ramah – WBR P/L, T.O. H.010318: Final Plans for phased replacement of eight existing 20ft. approach slabs with new 40ft. reinforced concrete approach slabs along I-10 in Iberville Parish.

Huval Team: David S. Huval, Sr., Thomas Gattle, Colby Guidry, Reid Romero

Firm Name	**CONSOR Engineers, LLC**		Past Performance Evaluation Discipline(s)*	Bridge	
Project Name	Retainer Contract for Underwater Bridge Inspection Services, Statewide		Firm Responsibility (Prime or Sub?)	Prime	
Project Number	4400009105	Owner's Name	Louisiana Department of Transportation & Development		
Project Location	Louisiana, Statewide	Owner's Project Manager	Haylye Brown		
Owner's Address, Phone, Email	1201 Capitol Access Road, Baton Rouge, LA 70804 / 225.349.1200 / haylye.brown@la.gov				
Services Commenced by This Firm (mm/yy)	01/17	Total Consultant Contract Cost ($1,000's)	$4,492 (to date)		
Services Completed by This Firm (mm/yy)	Present	Cost of Consultant Services Provided by This Firm ($1,000's)	$4,492 (to date)		

Under a second consecutive contract, CONSOR has performed 800+ underwater inspections of bridges in LADOTD Districts statewide. The project included Level I, II, and III inspections utilizing surface-supplied air and commercial SCUBA diving systems, for concrete, steel, and timber bridges and culverts and 2D and 2D Acoustic Imaging on select bridges. Inspections have included challenging aspects specifically related to wildlife, fast currents, difficult access as well as culvert structures requiring penetration dives through extensive silt and debris build up. CONSOR's most recently completed task order (2019) included 254 bridges in District 2, which encompasses the parishes of Orleans, Jefferson, Lafourche, and Terrebonne.

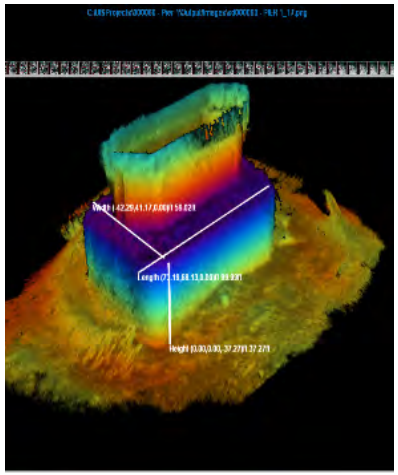
The bridges inspected included I-10 Eastbound/Westbound bridges over Lake Pontchartrain, US 11 over Lake Pontchartrain, and I-10 Eastbound/Westbound over the Bonnet Carre Spillway. CONSOR's current task order, ending in June 2022, includes 350+ inspections to date in LADOTD Districts 2, 4, 5, 7, 8, 58, and 62. Comprehensive engineering reports are prepared and submitted in LADOTD AssetWise Bridge Management System.

CONSOR Team: Heath Pope, Sebastien Templeton, Andrew Young, Andrew Cronin, Michael Dukes, Jayce Cook, James Talacek, Travis Becker, Greyson McDonald, Donald Roberts, Colton Powell, Adam Smith, Arthur LeForge, Eric Bolek, Wesley Trescott, Stephen Rowley, Jeffrey Lane, Jordan Ramirez

Firm Name	**CONSOR Engineers, LLC**			Past Performance Evaluation Discipline(s)*	Bridge
Project Name	Statewide Underwater Bridge Inspections			Firm Responsibility (Prime or Sub?)	Prime
Project Number	4400003531	Owner's Name		Louisiana Department of Transportation & Development	
Project Location	Louisiana, Districts 04, 05, 08, and 58		Owner's Project Manager	Haylye Brown	
Owner's Address, Phone, Email	1201 Capitol Access Road, Baton Rouge, LA 70804 / 225.349.1200 / haylye.brown@la.gov				
Services Commenced by This Firm (mm/yy)	09/13		Total Consultant Contract Cost ($1,000's)		$1,712
Services Completed by This Firm (mm/yy)	12/15		Cost of Consultant Services Provided by This Firm ($1,000's)		$1,712

CONSOR performed 300+ underwater inspections of bridges in LADOTD Districts 04, 05, 08 and 58 under a retainer contract. The project included Level I, II, and III inspections utilizing surface-supplied air and commercial SCUBA diving systems, as well as acoustic imaging. Comprehensive engineering reports were prepared in electronic and hard copy formats.

CONSOR Team: Andrew Young, PE; Greyson McDonald, EIT; Donald Roberts; Jeffrey Lane; Colton Powell.



Firm Name	**CONSOR Engineers, LLC**		Past Performance Evaluation Discipline(s)*	Bridge	
Project Name	Underwater Acoustic Imaging for Bridge Inspection		Firm Responsibility (Prime or Sub?)	Sub	
Project Number	H.005365.5	Owner's Name	Louisiana Department of Transportation & Development		
Project Location	Louisiana, Statewide	Owner's Project Manager	Haylye Brown		
Owner's Address, Phone, Email	1201 Capitol Access Road, Baton Rouge, LA 70804 / 225.349.1200 / haylye.brown@la.gov				
Services Commenced by This Firm (mm/yy)	11/11	Total Consultant Contract Cost ($1,000's)	N/A		
Services Completed by This Firm (mm/yy)	09/14	Cost of Consultant Services Provided by This Firm ($1,000's)	$1,414		

As a sub-consultant, CONSOR assisted in the performance of underwater acoustic imaging and underwater inspection for the inspection of 100+ bridge piers throughout the state of Louisiana. CONSOR provided diver investigations of any anomalies that were found. The pier inspections included both sides of the piers and the upstream and downstream noses of the piers. The scans were performed to identify and locate any major damage or deterioration, such as corrosion, loss of section, or scour undermining. Equipment required for the scans included a multi axis, steered beam imaging and profiling remote sensing system. All surface-supplied air diving was performed by ADCI-certified divers. Detailed reports were generated and submitted to LADOTD.

CONSOR Team: Michael Dukes, PE; Donald Roberts; Jeffrey Lane

Firm Name	**AECOM Technical Services, Inc.**			Past Performance Evaluation Discipline(s)*	Bridge
Project Name	KYTC 2014 Fracture Critical Bridge Inspections			Firm Responsibility (Prime or Sub?)	Prime
Project Number	Various	Owner's Name	Kentucky Transportation Cabinet (KYTC)		
Project Location	Statewide, Kentucky		Owner's Project Manager	Evan Dick, PE	
Owner's Address, Phone, Email	200 Mero Street, Frankfort, KY 40622, 502.223.9763, evan.dick@dot.gov				
Services Commenced by This Firm (mm/yy)	06/14		Total Consultant Contract Cost ($1,000's)		$633
Services Completed by This Firm (mm/yy)	Ongoing		Cost of Consultant Services Provided by This Firm ($1,000's)		N/A

AECOM was selected by the Kentucky Transportation Cabinet to provide NBI and fracture critical bridge inspections for four Ohio River Bridges: Brent Spence Bridge (I-71/I-75) in Kenton County; Clay Wade Bailey Bridge (US 25) in Kenton County; Carl Perkins (KY 10S) in Greenup County; and William Harsha Bridge (US 62) in Mason County. Three of the bridges consist of cantilever through trusses and the third is a two-tower three-span cable stayed structure.

This project includes an arms-length inspection of all fracture critical members (steel tension members whose failure will result in loss-of-span) and fatigue sensitive details (details with a tendency to fail at a stress level below yield stress when subjected to cyclical loading). The arm's length inspection includes floorbeam support connections, the structural steel below expansion joints, the bridge deck, and other miscellaneous items. Magnetic particle testing is being performed where new cracks are found or suspected, and to verify previously noted cracks. NBI level inspection is performed on all other bridge elements, including the deck, non-fracture critical members, substructure, lighting, etc.

To minimize impact to traffic and to access difficult to reach areas, AECOM is employing rope access techniques to inspect portions of these bridges. AECOM subcontracted with a specialized rope access company to provide Level III SPRAT (Society of Professional Rope Access Technicians) certified technicians onsite for rigging and rescue.

AECOM is performing element level inspections and will input the inspection findings in AASHTOware's BrM bridge management software package. AECOM will also prepare an inspection report, outlining inspection methods, significant findings, maintenance suggestions, and recommended repairs.

AECOM Team: Travis Baker, Craig Klusman, Ian McElhone, Joe Whelan

Relevance to LADOTD

- ✓ Complex Signature bridges
- ✓ National Bridge Inspection Standards
- ✓ Element level inspections
- ✓ 100% hands-on inspection of fracture critical members
- ✓ Cable supported structures
- ✓ Non-destructive testing
- ✓ Access via rope access and aerial boom lifts

Firm Name	**AECOM Technical Services, Inc.**			Past Performance Evaluation Discipline(s)*	Bridge
Project Name	ADOT 2014 Biennial Inspection of the Glen Canyon Dam			Firm Responsibility (Prime or Sub?)	Prime
Project Number	M502813X and M502818K	Owner's Name		Arizona Department of Transportation (ADOT)	
Project Location	Page, AZ		Owner's Project Manager	Peng Chen, PE	
Owner's Address, Phone, Email	205 S. 17th Ave., MD 635E, Phoenix, AZ 85007, 602.712.8605, pchen@azdot.gov				
Services Commenced by This Firm (mm/yy)	12/13	Total Consultant Contract Cost ($1,000's)		$2,080	
Services Completed by This Firm (mm/yy)	12/18	Cost of Consultant Services Provided by This Firm ($1,000's)		N/A	

AECOM is currently under contract to provide routine, in-depth and fracture critical bridge inspection services for the Arizona Department of Transportation (ADOT). In 2014, AECOM completed bridge inspections of various structure types including a deck arch, through arch, deck truss, and steel multi-beams. Under the 2014 task order, AECOM inspected the Glen Canyon Dam Bridge in Page, Arizona.

The 1,271' long steel deck arch sits 700 ft. above the Colorado River. To inspect the bridge hands-on, AECOM used rope access for the arches and the columns, and an under-bridge inspection vehicle was used for the floor system. The combination of access methods allowed our inspectors to efficiently inspect the bridge.

AECOM also inspected the Roosevelt Lake Bridge, which is a through arch bridge. AECOM inspected all portions of the bridge including the exterior and interior arches, the cable hangers, and the floor system with an under-bridge inspection vehicle, rope access and a man-lift. Upon completion of the inspections, AECOM developed a report for each bridge documenting the findings and changes since the previous inspection.

AECOM Team: Brett Canimore, Lance Savant, Jason Mathers, Dave Raffensperger

Relevance to LADOTD

- ✓ Complex signature bridge
- ✓ National Bridge Inspection Standards
- ✓ In-depth level inspection
- ✓ 100% hands-on inspection of fracture critical members
- ✓ Inspection access via rope access climbing and snooper

Firm Name	**AECOM Technical Services, Inc.**			Past Performance Evaluation Discipline(s)*	Bridge
Project Name	2018 In-Depth Inspection of the Cameron Suspension Bridge			Firm Responsibility (Prime or Sub?)	Prime
Project Number		Owner's Name		Dominion Energy Questar Pipeline Services, Inc.	
Project Location	Cameron, AZ		Owner's Project Manager	Lois Long	
Owner's Address, Phone, Email	1140 West 200 South, Salt Lake City, UT 84104, 801.324.3315, lois.long@dominionenergy.com				
Services Commenced by This Firm (mm/yy)	10/18		Total Consultant Contract Cost ($1,000's)	$76	
Services Completed by This Firm (mm/yy)	10/19		Cost of Consultant Services Provided by This Firm ($1,000's)		

AECOM performed the 2018 in-depth, fracture critical inspection and overall condition assessment of the 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.

The Cameron Suspension Bridge was constructed in 1911 and is listed on the National Register of Historic Places. The bridge consists of a single 660'-0" suspension span with a through truss that is the stiffening truss for the suspended span. The two suspension cables support the stiffening trusses at each panel point via hanger rods connected at the ends of each floorbeam. The suspension cables are supported by two steel towers and anchored in concrete. The bridge is closed to public traffic, but it carries a pipeline.

Due to the age and geometry of the bridge, AECOM used rope access methods to conduct the hands-on inspection on most of the bridge. AECOM's SPRAT certified bridge inspectors inspected the floor system and stiffening truss utilizing a variety of rope access methods. The two supporting towers were inspected using a 120' man-lift. It is unknown when the last hands-on inspection occurred. However, AECOM discovered and noted different types of defects for repair recommendations. AECOM's inspection findings and recommendations were documented in an in-depth report, along with CAD drawings for future use and reference.

AECOM Team: Brett Canimore, Lance Savant, Jason Mathers, Dave Raffensperger

Relevance to LADOTD

- ✓ Complex signature bridge
- ✓ National Bridge Inspection Standards
- ✓ In-depth level inspection
- ✓ 100% hands-on inspection of fracture critical members
- ✓ Inspection access via rope access climbing

Firm Name	**AECOM Technical Services, Inc.**			Past Performance Evaluation Discipline(s)*	Bridge
Project Name	DRPA 2016 Biennial Inspection of the Betsy Ross Bridge			Firm Responsibility (Prime or Sub?)	Prime
Project Number	N/A	Owner's Name	Delaware River Port Authority (DRPA)		
Project Location	Pennsauken, NJ & Philadelphia, PA	Owner's Project Manager	Ed Montgomery		
Owner's Address, Phone, Email	One Port Center – 2 Riverside Drive, Camden, New Jersey 08101, 856.968.2091, ermontgomery@drpa.org				
Services Commenced by This Firm (mm/yy)	03/16	Total Consultant Contract Cost ($1,000's)	$485K		
Services Completed by This Firm (mm/yy)	03/17	Cost of Consultant Services Provided by This Firm ($1,000's)	N/A		

AECOM performed the 2016 routine and in-depth inspection of the Betsy Ross Bridge, which carries Route 90 over the Delaware River between Philadelphia, PA and Pennsauken, NJ. The inspection included a close visual "hands-on" inspection of all fracture critical and fatigue sensitive details. The substructure units received a routine visual inspection with suspect areas highlighted for further evaluation. In addition, the channel piers received an underwater inspection and also include high frequency side scan sonar and hydrographic survey.

In addition, the inspection included routine inspection of the PA and NJ approach structures, high-mast lights, sign structures, and the toll facility structure. The inspection routinely utilized under bridge inspection vehicles, bucket trucks, man-lifts and ladders.

This inspection required extensive coordination of all fieldwork under an accelerated schedule. Our inspection fieldwork needed to be completed during the planned lane closures associated with the on-going bridge re-paving contract.

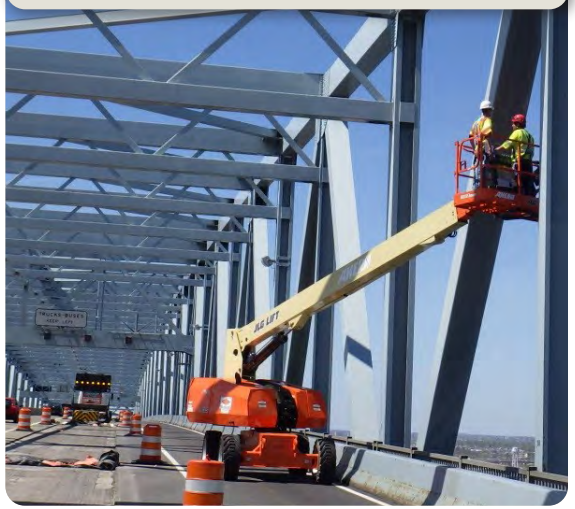
All inspection work was performed with minimal disruption to vehicular and truck traffic as well as to the flow of marine, railroad and highway traffic under the structure.

The results of the inspection have been presented in a structural inspection report noting all typical deficiencies and presenting the general condition of the bridge and any significant changes or new deficiencies and findings.

AECOM Team: Brett Canimore, Henry Fix, Jason Mathers, Greg Bennett, Lance Savant, Dave Raffensperger, Mike Zavorski

Relevance to LADOTD

- ✓ Complex Signature Bridges
- ✓ National Bridge Inspection Standards
- ✓ 100% hands-on inspection of all fracture critical members
- ✓ Inspection access via bucket trucks, snooper and aerial boom lifts
- ✓ Regular client communication and excellent client feedback for exemplary performance
- ✓ Underwater inspection of the channel piers



Firm Name	**AECOM Technical Services, Inc.**			Past Performance Evaluation Discipline(s)*	Bridge
Project Name	DRPA 2014 Biennial Inspection of the Commodore Barry Bridge			Firm Responsibility (Prime or Sub?)	Prime
Project Number	N/A	Owner's Name		Delaware River Port Authority (DRPA)	
Project Location	Delaware River between Chester, PA and Bridgeport, NJ		Owner's Project Manager	Ed Montgomery, PE	
Owner's Address, Phone, Email	One Port Center – 2 Riverside Drive, Camden, New Jersey 08101, 856.968.2079, ermontgomery@drpa.org				
Services Commenced by This Firm (mm/yy)	04/14		Total Consultant Contract Cost ($1,000's)		$523K
Services Completed by This Firm (mm/yy)	12/14		Cost of Consultant Services Provided by This Firm ($1,000's)		N/A

AECOM performed the 2014 routine and in-depth inspection of the Commodore Barry Bridge, which carries Route 322 over the Delaware River between Chester, PA and Bridgeport, NJ. The inspection included a close visual "hands-on" inspection of all fracture critical and fatigue sensitive details. The main bridge includes a three-span, cantilevered through truss, deck truss spans and steel stringer spans. The substructure units received a routine visual inspection with suspect areas highlighted for further evaluation.

In addition, the inspection included routine inspection of the two Route 130 overpass bridges, sign structures, signal gantries and the toll facility structure. The inspection routinely utilized under bridge inspection vehicles, bucket trucks, man-lifts and ladders. A skyclimber rigging system was used to access the highest members of the truss.

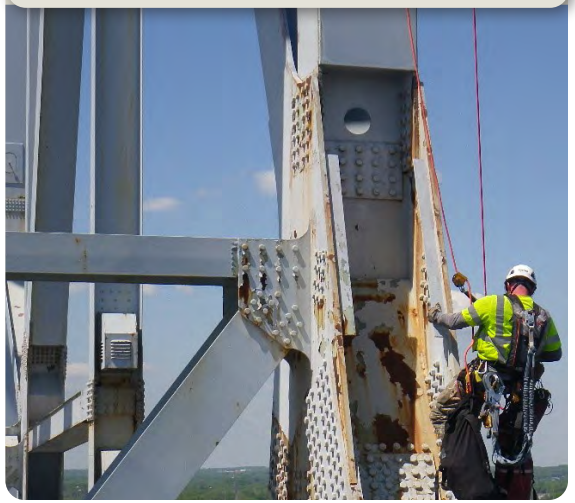
This project also included ultrasonic testing of the pins and electro-slag welds on the bridge. Inspectors also visually inspected a select number of vibration dampers on the bridge. All inspection work was performed with minimal disruption to vehicular and truck traffic as well as to the flow of marine, railroad and highway traffic under the structure.

The results of the inspection have been presented in a structural inspection report noting all typical deficiencies and presenting the general condition of the bridge and any significant changes or new deficiencies and findings.

AECOM Team: Brett Canimore, Henry Fix, Lance Savant, Jason Mathers, Dave Raffensperger, Greg Bennett, Mike Zavorski

Relevance to LADOTD

- ✓ Complex Signature Bridge
- ✓ National Bridge Inspection Standards
- ✓ Cantilever truss bridge
- ✓ 100% hands-on inspection of all fracture critical members
- ✓ Ultrasonic testing of the bridge pins and welds
- ✓ Inspection access via snooper, bucket trucks, suspended scaffolding and aerial boom lifts



Firm Name	**AECOM Technical Services, Inc.**			Past Performance Evaluation Discipline(s)*	Bridge
Project Name	Inventory Inspection of the Indian River Inlet Bridge			Firm Responsibility (Prime or Sub?)	Prime
Project Number	26-073-03	Owner's Name	Delaware Department of Transportation		
Project Location	Sussex County, DE		Owner's Project Manager	Jason Arndt	
Owner's Address, Phone, Email	930 Public Safety Building Dover, DE 19901, 302.760.2309, Jason.arndt@state.de.us				
Services Commenced by This Firm (mm/yy)	04/12	Total Consultant Contract Cost ($1,000's)		$291	
Services Completed by This Firm (mm/yy)	12/12	Cost of Consultant Services Provided by This Firm ($1,000's)		N/A	

AECOM performed the 2012 Inventory Inspection of the 2,600 foot long precast, cast-in-place, post-tensioned concrete structure with cable-stayed main span crossing the Indian River Inlet. The new bridge consists of a total of eight precast Bulb-T girder approach spans, each 106'-3" in length and a three span concrete cable-stayed structure with a main span of 950 feet and side spans of 400 feet. The inspection efforts included a close-up, hands-on inspection of all members of the structure to document the baseline conditions.

The inventory inspection was performed in accordance of the IRIB Owner's Manual, the National Bridge Inventory Standards (NBIS) and DelDOT's Bridge Inspection Policy and Procedures. The inventory inspection serves to provide the required Bridge Inventory Data (BID) of the as-built structure type, size, and location for DelDOT's Pontis Bridge Management System (BMS) and the National Bridge Inventory (NBI) and to document its structural and functional conditions.

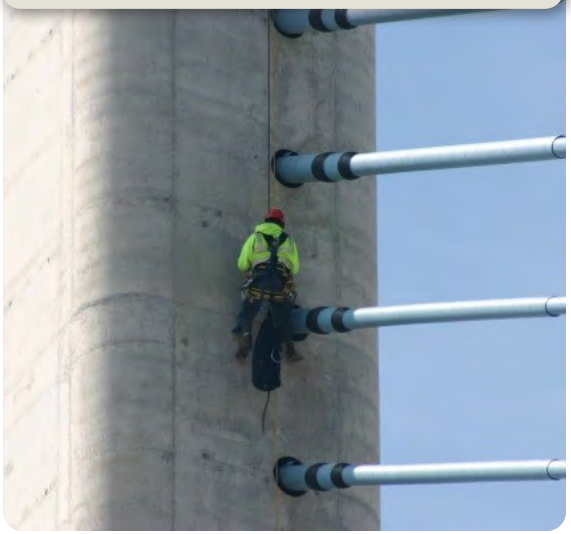
Inspection efforts included providing all structural inventory and appraisal data required by the federal regulations along with all other data required by DelDOT; determining the baseline structural condition of the bridge; noting the existence of elements or members requiring special attention, such as the stay cable system, stay cable deck and pylon anchorages, and internal post-tensioning system and their associated anchorages.

The inspection efforts culminated with the production of a full bridge inspection report including NBIS inspection forms and supporting documents, including but not limited to photographs, drawings (design, as-built, and shop drawings), scour analysis, foundation information, hydrologic, and hydraulic data and selected construction records (e.g. pile driving records, field changes, construction inspection forms, etc.). The inspection also included the hands-on inspection of the pylons via rope access climbing.

AECOM Team: Brett Canimore, Lance Savant, Jason Mathers, Dave Raffensperger, April Yorkonis

Relevance to LADOTD

- ✓ Complex signature bridge
- ✓ National Bridge Inspection Standards
- ✓ Cable supported structure
- ✓ Initial inventory inspection
- ✓ Element level inspection
- ✓ Inspection access via rope access and aerial boom lifts
- ✓ 100% hands-on inspection of stay cables



Firm Name	**Modjeski and Masters, Inc.**		Past Performance Evaluation Discipline(s)*	Bridge	
Project Name	TxDOT Fracture Critical Inspections		Firm Responsibility (Prime or Sub?)	Sub	
Project Number	N/A	Owner's Name	Texas Department of Transportation		
Project Location	San Antonio, TX	Owner's Project Manager	James Stevenson, PE		
Owner's Address, Phone, Email	125 East 11th Street, Dewitt C. Greer State Highway Building, Austin, TX 78701-2483, 512.416.3034 james.stevenson@txdot.gov				
Services Commenced by This Firm (mm/yy)	11/21	Total Consultant Contract Cost ($1,000's)	N/A		
Services Completed by This Firm (mm/yy)	02/22	Cost of Consultant Services Provided by This Firm ($1,000's)	$32		

This bridge is a two-lane, single-span, 94'-6" long structure built in 1890 and consists of one lenticular pony truss span and six floorbeams supported by reinforced concrete abutments. The fracture critical members include the north truss line (Truss 1), the south truss line (Truss 2) and six floorbeams. The upper chord and end post members are riveted built-up box sections comprised of flange angles, web plates, top cover plates, and bottom lacing bars. The vertical members are riveted built-up box sections comprised of flange angles with lacing bars. The lower chord members consist of two eyebars and the diagonals consist of single threaded forged loop bars. Floorbeams are I-shaped members with web plates and flange angles. Square U-bar hangers support the floorbeams at the lower panel points. The structure is constructed of painted wrought iron of unknown strength.

M&M performed a fracture critical inspection and used non-destructive testing techniques to perform inspections of non-fracture critical bridge pins.

Modjeski and Masters Team: Ralph J. Eppehimer, Anthony E. Schoenecker, Josh J. Moore, Scott C. Gordon

Firm Name	**Modjeski and Masters, Inc.**			Past Performance Evaluation Discipline(s)*	Bridge
Project Name	US 11 Bridge over Lake Pontchartrain			Firm Responsibility (Prime or Sub?)	Prime
Project Number	H.010016.5	Owner's Name		Louisiana Department of Transportation and Development	
Project Location	New Orleans, LA		Owner's Project Manager	Zheng Zheng Fu, PE	
Owner's Address, Phone, Email	1201 Capital Access Road, Baton Rouge, LA 70802, 225.379.1321, zhengzheng.fu@la.gov				
Services Commenced by This Firm (mm/yy)	04/13	Total Consultant Contract Cost ($1,000's)		$1,631	
Services Completed by This Firm (mm/yy)	Ongoing	Cost of Consultant Services Provided by This Firm ($1,000's)		$1,530	

Constructed in 1938, this structure contains two double-leaf bascule bridges that carries US 11 across Lake Pontchartrain at New Orleans, Louisiana. This project involved the performance of structural, mechanical, electrical and architectural rehabilitation services for the two bascule spans within this five mile bridge in order to extend its life for 30-40 additional years.

Tasks Performed:

- Evaluation of the conditions of structural, mechanical, electrical and architectural components of this bridge.
- Evaluation of existing paint system and recommendations.
- Development of Scope of Services for the rehabilitation of this bridge.
- Development of preliminary plans and final plans for rehabilitation
- Bridge Rating
- Construction Related Engineering Support Services
- Construction Engineering and Inspection for Bridge Coatings and Shop Inspection




Modjeski and Masters Team: Zolan Prucz, Ralph Eppehimer, Anthony Schoenecker, Dave A. Kanger, Cullen J. Ledet, Jeff W. Newman, Michael J. Beitzel, Jon Gerhart, Geoffrey Forest, Bryan Swartz, Scott Gordon

Firm Name	**Huval and Associates, Inc.**		Past Performance Evaluation Discipline(s)*	Bridge	
Project Name	Retainer Contract for In Depth Bridge Inspection		Firm Responsibility (Prime or Sub?)	Sub	
Project Number	4400002687	Owner's Name	LADOTD		
Project Location	Louisiana (Statewide)	Owner's Project Manager	Haylye Brown, P.E.		
Owner's Address, Phone, Email	1201 Capitol Access Road, Baton Rouge, LA 70804 / 225.349.1200 / haylye.brown@la.gov				
Services Commenced by This Firm (mm/yy)	01/13	Total Consultant Contract Cost ($1,000's)	$4,000		
Services Completed by This Firm (mm/yy)	12/16	Cost of Consultant Services Provided by This Firm ($1,000's)	$260		

As a sub-consultant to AECOM, Huval provided inspection assistance, traffic control, and QA/QC services on the retainer contract. Bridges inspected by Huval include the following:

Krotz Springs US 190 Bridge over Atchafalaya: Huval provided survey services, traffic control, field inspections of concrete girder approaches, PONTIS evaluations, Inspection Reports, and QA/QC.

LA 3213 Over Mississippi River (Gramercy): Huval provided field inspections of concrete girder approaches, steel girder approach spans, as well as deck topside elements. Huval also provided traffic control, PONTIS evaluations, inspection reports, and QA/QC.

I-20 Over Mississippi River (Vicksburg): Huval provided field inspections of the deck, steel girders, floorbeams, stringers, concrete abutments, reinforced concrete frame bents, piers, walkways, and access ladders. Huval also provided traffic control, PONTIS evaluations, inspection reports, and QA/QC.

LA 47 over MRGO: Huval provided field inspections of the deck, concrete slab spans, prestressed concrete girder spans, steel girder spans, abutments, concrete approach bents, and main piers. Huval also provided traffic control, PONTIS evaluations, inspection reports, and QA/QC.

LA 319 over Intracoastal Canal: Huval provided field inspections of the deck, concrete girder spans, bearings, abutments, and reinforced concrete approach piers. Huval also provided traffic control, PONTIS evaluations, inspection reports, and QA/QC.

GNO Bridge No. 1: Huval provided field inspections of the deck.

Huval Team: David S. Huval, Sr., Colby Guidry, Eddie Smith, Malcolm Huval, Raymond Provost

Firm Name	**Huval and Associates, Inc.**			Past Performance Evaluation Discipline(s)*	Bridge
Project Name	Bridge Girder Repair – SR 63 Over Escatawpa River			Firm Responsibility (Prime or Sub?)	Prime
Project Number	BR-002-01(049)	Owner's Name	Mississippi DOT		
Project Location	Jackson Co, MS	Owner's Project Manager	Jason Winders		
Owner's Address, Phone, Email	401 North West St., Jackson, MS 39201, 517.780.7540				
Services Commenced by This Firm (mm/yy)	10/19	Total Consultant Contract Cost ($1,000's)	$150		
Services Completed by This Firm (mm/yy)	07/20	Cost of Consultant Services Provided by This Firm ($1,000's)	$150		

Huval was contracted to CEC, Inc. as the Lead Engineer and Bridge Inspector for girder and weld repair contract. Colby Guidry, PE was the project lead being that he is a licensed MS PE as well as a CBI Team Leader. Huval performed a limited in-depth bridge inspection of the structural steel superstructure spans at all the diaphragm locations in accordance with NBIS fracture-critical inspection procedures. The inspection location spanned over a mile.

All findings were documented with notes and photos of all repair locations. Magnetic particle testing was utilized to confirm and locate crack tip on both sides of girder. Inspections for Spans 1-7 and Spans 51-53 were done utilizing a man lift. Spans 7 and 8 were over the MSE railroad. Coordinating with the railroad was a smooth process due to Huval's knowledge and experience with railroad crossings. All other locations (spans 8-9, 27-40, and 49-50) were inspected using a Hydra Platform with appropriate lane closures. Once inspections were complete, Huval generated and submitted a report to CEC, Inc. with their findings including recommended core hole sizes and locations for all crack repairs.

Huval Team: David S. Huval, Sr., Colby Guidry, Eddie Smith, Andrew Juneau

Firm Name	**Huval and Associates, Inc.**			Past Performance Evaluation Discipline(s)*	Bridge
Project Name	Old Mississippi River Railroad Bridge and Tunnel (Old U.S. 80)			Firm Responsibility (Prime or Sub?)	Prime
Project Number	N/A	Owner's Name		Vicksburg Bridge Commission of Warren County	
Project Location	Jackson Co, MS		Owner's Project Manager	Herman Smith	
Owner's Address, Phone, Email	4160 Washington Street Vicksburg, MS 39180, 601.636.0881, HermanS@co.warren.ms.us				
Services Commenced by This Firm (mm/yy)	11/18		Total Consultant Contract Cost ($1,000's)		$270
Services Completed by This Firm (mm/yy)	Ongoing		Cost of Consultant Services Provided by This Firm ($1,000's)		$270

Huval is under contract with the Vicksburg Bridge Commission to provide Bridge Engineering and Bridge Inspection services for the Old Mississippi River Bridge at Vicksburg. This historic combination railroad and highway bridge was opened to traffic in 1930 and is about 1.6 miles long. The bridge was designed for one line of American Railway Engineering and Maintenance-of-Way Association (AREMA) Cooper E60 railroad traffic and two lanes of American Association of State Highway and Transportation Officials (AASHTO) H15 highway traffic.

Huval provides an annual inspection for the entire bridge and tunnel structure within the Vicksburg Bridge Commission's right-of-way. The intent of this inspection is to indicate the bridge and tunnel structure's general structural condition and to recommend repairs, where applicable. A man lift is used to inspect some known deteriorations and fatigue category "E" truss members.

Special inspections are conducted when the bridge is involved in collisions or impacts from vessels. Control measurements at some joints and bearings of the structure and piers are made during these inspections and at different times of the year. These measurements are compared to previous measurements in order to detect unusual movements of the structure.

Huval produces bridge repair and structure maintenance plans for the existing combination highway and railway through truss, the approach deck girder bridge and the concrete tunnel structure. This includes bridge repair designs, plans, constructibility reviews and cost estimates for structural steel removal and replacement, girder strengthening, truss span vertical jacking, pier concrete removal and replacement.

Huval Team: David S. Huval, Sr., Rudy McLellan, Colby Guidry, Eddie Smith, Reid Romero

Firm Name	**KPFF, Inc.**		Past Performance Evaluation Discipline(s)*	Bridge	
Project Name	Laplata Bridge, Nranjito PR, 2015		Firm Responsibility (Prime or Sub?)	Sub	
Project Number		Owner's Name	Puerto Rico Highway and Transportation Authority		
Project Location	Naranjito, PR	Owner's Project Manager	Javier Arroyo Rosario		
Owner's Address, Phone, Email	PRHTA PO Box 42007, San Juan, PR 00940, 787.721.8787, javierrosario@dtop.pr.gov				
Services Commenced by This Firm (mm/yy)	06/15	Total Consultant Contract Cost ($1,000's)	$4,000		
Services Completed by This Firm (mm/yy)	02/16	Cost of Consultant Services Provided by This Firm ($1,000's)	$166		

KPFF conducted the stay cable array condition assessment and rating for the 992-foot-long, 496-foot main span cable-stayed bridge, completed in 2006. The overall goal of the project was to evaluate and recommend steps needed to ensure adequate bridge structural performance and attainment of service life goals, including verification that the stay cable array was free of fabrication and construction deficiencies. The stay cable free length and anchorage non-destructive evaluation approach was comprised first of hands-on visual inspection of the outer corrosion protection system comprised of welded HDPE sheathing pipe, joined to tower anchorage and deck level guide piped with fusion couplers and neoprene boots.

KPFF Team: Chris Ligozio, Scott Wyatt

Firm Name	**KPFF, Inc.**		Past Performance Evaluation Discipline(s)*	Bridge	
Project Name	US 82 Bridge, Greenville MS, 2016		Firm Responsibility (Prime or Sub?)	Prime	
Project Number		Owner's Name	MSDOT		
Project Location	Greenville, MS		Owner's Project Manager	Richard Withers	
Owner's Address, Phone, Email	401 North West Street Jackson MS 39201 601.359.7004 rwithers@mdot.ms.gov				
Services Commenced by This Firm (mm/yy)	05/16		Total Consultant Contract Cost ($1,000's)	$285	
Services Completed by This Firm (mm/yy)	10/16		Cost of Consultant Services Provided by This Firm ($1,000's)	$125	

Built in 2012, the US 82 Bridge spans the Mississippi River near Greenville MS. KPFF evaluation efforts included vibration-based force measurements of all 112 cables and detailed inspection of 12 representative anchorages, including removal of and re-greasing anchorage caps and grease and ultra-sonic testing of cable strand ends and visual inspection of upper anchorages.

KPFF Team: Chris Ligozio, Scott Wyatt

Firm Name	**CONSOR Engineers, LLC**		Past Performance Evaluation Discipline(s)*	Bridge	
Project Name	Statewide Underwater Bridge Inspections and Acoustic Imaging		Firm Responsibility (Prime or Sub?)	Prime	
Project Number	2084 (2018 contract)	Owner's Name	South Carolina Department of Transportation		
Project Location	Statewide	Owner's Project Manager	Mark Hunter, PE		
Owner's Address, Phone, Email	955 Park Street/Columbia, SC 29202-0191 / 809.737.4111 / MWHunter@scdot.org				
Services Commenced by This Firm (mm/yy)	09/18	Total Consultant Contract Cost ($1,000's)	$366 (2018 contract)		
Services Completed by This Firm (mm/yy)	02/20	Cost of Consultant Services Provided by This Firm ($1,000's)	$366		

Since 2008 under five contracts, CONSOR has performed 550+ underwater bridge inspections throughout the state. Responsibilities included the investigation, evaluation, and recommendation of repairs to the bridges' substructure units (located in the water). Bridges ranged in size from small, completely submerged box culverts to large, river-crossing trusses, and cable stays. After the inspection, a complete report was prepared for each bridge detailing the findings, rating the bridges in both NBIS and BMS, and stating recommended repairs. 3D modeling was used on I-95 NBL over the Great Pee Dee River to assess the progress of channel migration and its encroachment on additional piers. Acoustic imaging was used on bridges over the Cooper and Wando Rivers to document scour for repair recommendations, a project for which CONSOR won an Engineering Excellence award from the American Council of Engineering Companies. CONSOR has received multiple perfect scores (500 out of 500) for our work on this contract.

CONSOR also provided emergency underwater inspections of 21 bridges affected by flooding in 2015. Fourteen of the bridges were located on I-95 and were inspected during the placement of concrete scour countermeasures. The concrete was pumped in from the bridge decks and was critical in preventing extreme scour during the flood. CONSOR performed underwater examinations of the concrete after it had been pumped in to determine its efficacy. CONSOR's assessment of the placement and quality of the concrete installation was the determining factor in reopening 70 miles of I-95 for the traveling public. Underwater acoustic imaging was also used during this process to assess substructure conditions when flow velocities prevented safe diving operations.

CONSOR Team: Michael Dukes, PE; Andrew Young, PE; Dustin Noel, PE; Sebastien Templeton, PE; Travis Becker, EIT; Greyson McDonald, EIT; Donald Roberts; Jeffrey Lane; Matthew Ratliff; James Talacek; William Cochran; Stephen Rowley; Colton Powell; Jayce Cook; Wesley Trescott; Jordan Ramirez; Adam Smith

Firm Name	**CONSOR Engineers, LLC**		Past Performance Evaluation Discipline(s)*	Bridge	
Project Name	Statewide Underwater Bridge Inspections		Firm Responsibility (Prime or Sub?)	Prime	
Project Number	BR-NBIS (101)/105324-109000 (2017 contract)	Owner's Name	Mississippi Department of Transportation		
Project Location	Statewide	Owner's Project Manager	Richard Withers		
Owner's Address, Phone, Email	P.O. Box 1850 Jackson, MS 39215 / 601.359.7200 / rwithers@mdot.state.ms.us				
Services Commenced by This Firm (mm/yy)	01/17	Total Consultant Contract Cost ($1,000's)	$858		
Services Completed by This Firm (mm/yy)	12/19	Cost of Consultant Services Provided by This Firm ($1,000's)	$858		

CONSOR has performed on four consecutive cycles of statewide underwater bridge inspections in accordance with the NBIS. The contracts have included 600+ inspections. Underwater acoustic imaging and hydrographic surveying was performed on six bridges on the Mississippi and Pearl Rivers. Diving conditions included fast flow with debris and limited visibility. Structural conditions were documented with underwater photography. Non-destructive testing was used to accurately determine section loss of steel piles, and timber piles were inspected using a resistograph instrument. Soundings were taken upstream and downstream of the bridge while full contours were developed for each bridge site. Reports included NBIS component ratings and Pontis Element Level inspections. Scour countermeasures were designed for the I-10 Bridge in Pascagoula when soundings indicated excessive scour had occurred.

CONSOR Team: Heath Pope, Michael Dukes, Andrew Young, Greyson McDonald, Donald Roberts, Jeffrey Lane, Matthew Ratliff, Colton Powell, Jayce Cook, James Talacek, Wesley Trescott, Stephen Rowley

Prime consultant firm name: **AECOM Technical Services, Inc. (AECOM)**

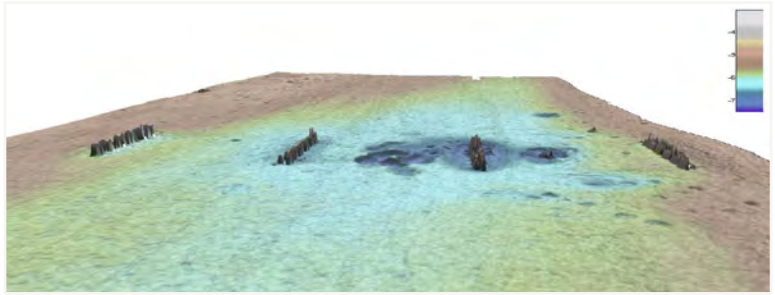
Firm Name	**T. Baker Smith, LLC**		Past Performance Evaluation Discipline(s)*	Survey	
Project Name	Cane River Bridge at Church Street - Survey Route LA 1-X		Firm Responsibility (Prime or Sub?)	Prime	
Project Number	N/A	Owner's Name	Louisiana DOTD		
Project Location	Natchitoches Parish, LA	Owner's Project Manager	Carl Hultgren, P.L.S., C.H.		
Owner's Address, Phone, Email	P.O. Box 94245, Baton Rouge, LA 70804, 225.379.1048, carl.hultgren@la.gov				
Services Commenced by This Firm (mm/yy)	09/14	Total Consultant Contract Cost ($1,000's)	$35		
Services Completed by This Firm (mm/yy)	06/15	Cost of Consultant Services Provided by This Firm ($1,000's)	$35		

As part of the ongoing process to replace the aging Cane River Bridge at Church Street in Natchitoches, LADOTD engaged T. Baker Smith, through a Retainer Contract for Professional Surveying Services – Statewide to perform survey services including hydrographic survey services within the river. The hydrographic survey was performed to locate any remaining structures within the river which were possibly previous supports of the original, swing span bridge in order to eliminate conflict with these features and the new bridge piles.

The scope of services for the project consisted of collecting survey data on the existing bridge structure, the channel near the bridge and the underwater scanning for any remnant of piles or debris from the original swing span bridge.

The existing bridge deck surface, sidewalks, railing, curbs, guardrails, bent caps and piles were collected with conventional and RTK GPS survey methods. TBS then utilized a combination of multi-beam echo sounder, side scan sonar, marine magnetometer and sub bottom profiler to conduct a detailed underwater survey from beneath the existing bridge to a distance of 200' downstream and upstream. The hydrographic survey also utilized RTK GPS for positioning such that all data sets could be meshed together to create a complete topographic/hydrographic survey deliverable.

All data collected was combined into a deliverable which positioned the relationship of the existing bridge to the channel section along with any underwater anomalies identified by the sub bottom profiler and the magnetometer. The resulting data also showed indications of scouring near the piers and other local scour locations present in the channel.



T. Baker Smith: Rene J. Hebert, P.L.S.

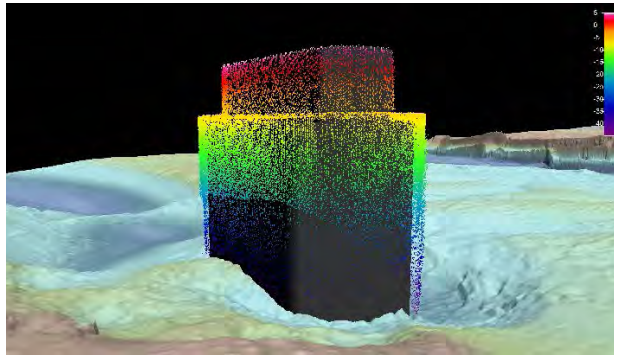
Firm Name	**T. Baker Smith, LLC**			Past Performance Evaluation Discipline(s)*	Survey
Project Name	Union Pacific Railroad Bridge Inspection/Atchafalaya River			Firm Responsibility (Prime or Sub?)	Sub
Project Number	N/A	Owner's Name	Modjeski and Masters, Inc.		
Project Location	Pointe Coupee/St. Landry Parishes, LA	Owner's Project Manager	Angela Day		
Owner's Address, Phone, Email	1055 St. Charles Ave., Suite 400, New Orleans, LA 70130, 504.524.4344, amday@modjeski.com				
Services Commenced by This Firm (mm/yy)	03/15	Total Consultant Contract Cost ($1,000's)	Unknown		
Services Completed by This Firm (mm/yy)	10/15	Cost of Consultant Services Provided by This Firm ($1,000's)	$15		

T. Baker Smith, as a sub-consultant to Modjeski and Masters performed professional services including underwater acoustic imaging for the inspection of the Union Pacific Railroad Bridge piers in the Atchafalaya River in Krotz Springs, LA. Bathymetric survey included performing underwater 3D imaging of the trestle bridge's concrete river piers.

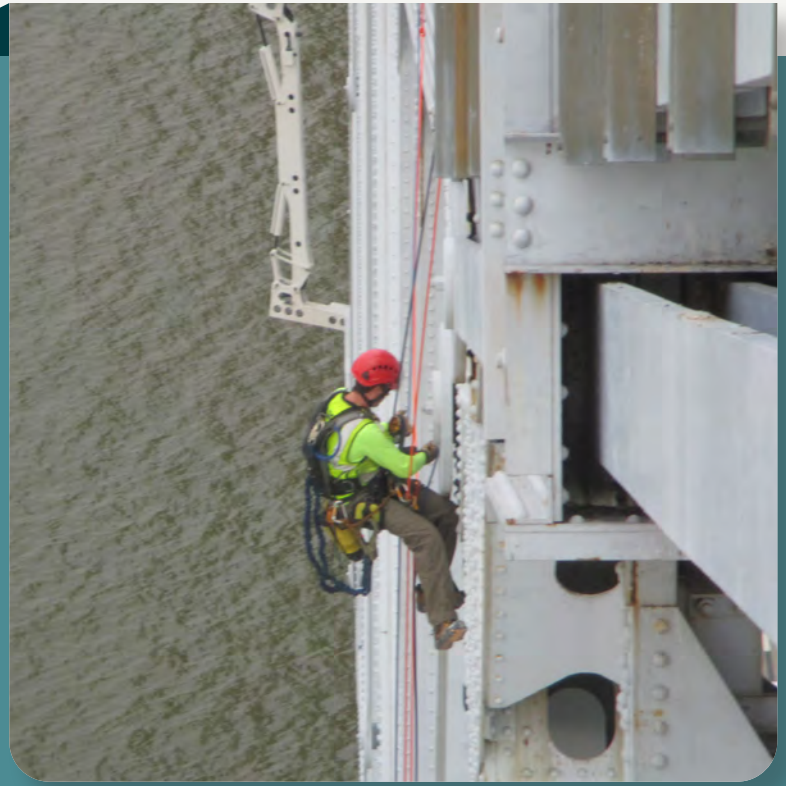
T. Baker Smith's 27' M/V Echotrac vessel was used along with a BlueView BV5000 sonar system to collect #D data on each pier and an R2 Sonic™ 2024 Multibeam Echo Sounder was used to collect river bottom data. This unit has selectable operating frequencies of 200 to 400 kHZ, 256 simultaneous beams across the entire swath and a focused beam width of 0.5°which allows for high resolution data. Positioning of the data was acquired with an Applanix POS MV Wavemaster GPS and motion unit, which is integrated into an on-board survey navigational computer system HYPACK® and HYSWEEP®.

Calibration and control was set utilizing a Trimble R8 RTK (Real Time Kinematic) receiver along with a Pacific Crest ADL radio set on a USACE benchmark. RTK data was then transmitted to the POS MV Wavemaster which receives RTK positions and tide levels that are recorded with the HYPACK navigation system.

The underwater survey inspection consisted of running multibeam sonar from bank to bank and upstream and downstream of the bridge structure for a distance of 200'. Once the multibeam data collection was completed, the BlueView BV5000 sonar was deployed and data collected at each bridge pier for a full 360 degrees around each pier. Indications of scouring, delamination, spalling or collision damage was noted in the high resolution photographs produced by the BlueView sonar equipment and incorporated into the bridge inspection report.



T. Baker Smith: Jonah Fusilier



2016 In-Depth Inspection of the Greater New Orleans #1 Bridge.

AECOM Bridge Inspection Team Leader, Jason Mathers, PE, performing a hands-on inspection of the fracture critical truss members via rope access while another inspection crew in the background inspects the truss floor system using a snooper.

SECTION

18

APPROACH AND METHODOLOGY

AECOM's bridge inspection practice is one of the most distinguished and complete programs in the United States with a deep commitment to the NBIS bridge inspection program. Our internal policies and procedures for bridge inspection and our quality program are built around our extensive experience and the guidelines established by the AASHTO and FHWA manuals. We pride ourselves on having a client-driven approach. Regardless of the client, we strive to understand the individual needs of our clients and to deliver the highest quality services to meet those needs. The ***benefit*** to the DOTD is that you have access to the expert services and experience of the AECOM Team.

Our bridge inspection staff only work on inspection and load rating projects. We do this because we understand the unique demands associated with NBIS bridge inspection services and believe that a full-time commitment to these requirements is a necessity to delivering the project goals. Our previous assignments with the DOTD, as shown on the adjacent bridge list, gives us a thorough knowledge and familiarity of DOTD's procedures and facilities. This enables the AECOM Team to efficiently deliver the project goals included in the scope of work. This includes executing these inspections within the DOTD's established safety parameters and partnering with the local district staff at each bridge facility to commit to open communication, to avoid traffic delays and ensure safe travel of the public.

PROJECT APPROACH

AECOM understands the importance of properly planning the inspection of the bridges included in the DOTD complex bridge inventory due to their size, design complexity, the amount of traffic they carry and the regional importance as a critical asset. Our attention to detail during the planning phase will help meet the project schedule, maximize efficiency of the fieldwork, and improve safety.

Project Management: A successfully delivered project is based upon the leadership of the Project Manager. AECOM's approach to Project Management emphasizes our understanding of the needs of DOTD, a commitment to quality bridge inspections and the experience and strength of AECOM's resources.

Upon notice of a new task order from the DOTD, our Project Manager, Brett Canimore, will meet with the DOTD PM, Ms. Stephanie Doolittle, to review the scope of services for each bridge to be inspected. He will then develop technical and cost proposals from reviewing available structure plans, previous inspection reports and the location of the bridge. We will manage the team of professionals, including sub-consultants and vendors for access equipment and traffic control, on each assignment with proven tools that have been successful for us for many years including on our previous DOTD complex bridge inspection assignments.

List of DOTD In-Depth Complex Bridge Inspections (Year Inspected):

- ***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)***
- ***LA 315 Dularge Bridge (2017)***

Upon receiving NTP, AECOM will immediately initiate work and develop a task specific work plan that describes how the scope of services will be accomplished to meet the expectations and objectives of the assignment. Based on the assignment, we will develop a staffing plan to ensure the best match and use of our highly qualified professionals to deliver the scope of work. This includes the assignment of our sub-consultant teams to work alongside of our bridge inspection professionals to deliver safe quality services efficiently. As we have shown on our past DOTD bridge inspection assignments, our sub-consultant teams work as a seamless extension of our staff. A detailed schedule will be prepared, and a project kick-off meeting will be held for the inspection teams to ensure a consistent and thorough inspection. Brett will always maintain communication with the DOTD throughout each inspection.

Planning: Subsequent to receiving notice to proceed from DOTD, the team will review all pertinent and available information in the bridge file including previous inspection reports, the fracture critical inspection procedure and plan, design plans, as-builts, rehabilitation / repair plans and any other necessary documents that will provide relevant information. AECOM will then develop an inspection procedure and access plan for the bridge to ensure that all fracture critical members and fatigue prone details are inspected "hands-on". The lead bridge inspection team leader and PM will then develop a clearly defined inspection schedule and submit to the DOTD for approval. For any bridges spanning over railroads, AECOM will immediately apply for right-of-entry permits and coordinate flagging to avoid any delays to the schedule. AECOM will also coordinate with the US Coast Guard for bridges that span over navigable waterways.

After approval of our inspection schedule, our inspection team will immediately begin making travel arrangements following the DOTD guidelines. Our team will also develop bridge specific inspection forms prior to mobilizing to the field. AECOM will utilize previous inspection forms and sketches as much as possible to be consistent with historical records.

AECOM will hold an internal kick-off meeting for all field personnel. This kick-off meeting will review all aspects of the inspection to ensure that everyone understands their roles and responsibilities for the inspection and to address any questions from the staff. AECOM will also hold a kick-off meeting with

DOTD staff prior to the start of the fieldwork to review the inspection schedule, communication protocols and safety concerns.

Inspection Access Plan: A significant project component is inspection access. AECOM will develop an inspection access plan to inspect the assigned structures thoroughly while maximizing efficient use of equipment, traffic control services, and safety boat protection. Our planned traffic control operations and procedures will be identified in our traffic control plan that will be coordinated with the DOTD District for approval. We will perform separate inspection tasks simultaneously within a single traffic control pattern to minimize lane closures. We have long-standing, working relationships with our vendors to provide inspection access equipment and support services. These strong relationships allow our selected vendors to provide efficient use of their equipment and services for AECOM. We aim to use the best inspection access tool for each job task. Our choice for implementation of a specific inspection access method will only be applied when they provide the best solution for a specific assignment.

One of the inspection access tools that we use is our rope access climbing team. AECOM's Rope Access Team was established in 1999. They apply industrial rope access techniques to bridge inspection and is one of the most established practices in the engineering profession. Over the years our team has evolved as the industry has been standardized. AECOM and M&M will provide rope access technicians certified by the Society for Professional Rope Access Technicians (SPRAT). We have safely completed numerous complex bridge inspections using this access method, including several of the DOTD bridges.

AECOM has been **implementing new and emerging technologies** with inspection access is the use of Unmanned Aerial Systems (UAS) to assist our staff with the inspection of complex bridges. AECOM has a group of licensed and certified pilots and a fleet of UAS that also work on several military contracts involving UAS, and they have strong relationships with the FAA and a complete understanding of the registration and flight plan process. Our fleet of UAS is equipped with the latest high-resolution cameras and thermographic tools.

The AECOM team is committed to meeting the DOTD's on-going commitment to work zone safety and the required work zone training requirements in advance of contract execution. All traffic control will be coordinated through the DOTD and any required traffic control plans will be developed by Jonathan McDowell, PE, who already has the ATSSA Traffic Control Supervisor training qualifications. Our traffic control vendor, CEC, already has their team of traffic control professionals trained as Traffic Control Supervisor, technician and flagger as shown on our organization chart. In addition, AECOM will always have a lead bridge inspection team leader on-site that has completed the required work zone training through ATSSA in advance of any fieldwork.

Safety: The safety of both the public and the inspection teams are of paramount concern to DOTD and AECOM. Our PM will have overall responsibility for ensuring that field work conforms to the safety requirements stipulated in the proposed Project Specific Safety Plan. This safety plan specifically addresses the applicable safety concerns such as personal protective equipment, 100% fall protection, confined space entry, safe inspection techniques over waterways, safe practices within traffic lane closures, and local emergency services. All inspection operations will be conducted in accordance with the applicable OSHA safety standards. Our on-site Lead Bridge Inspection Team Leader will direct a daily "toolbox" safety meeting with all on-site personnel. This daily tailgate meeting is intended to reinforce AECOM's safety program and to mitigate newly identified risks. As we continually strive to be more efficient, a discussion on the previous day's work activities will also take place to identify procedures that worked well and items that may need to be modified based on site conditions.

AECOM understands that bridge inspections may involve risk even when all of the proper preventive steps are taken before going to the field. Because bridges may be located in remote areas of state, inspectors and safety personnel may need to address injuries at the bridge site before transporting to an emergency facility. As such, all field personnel will have the appropriate first aid and CPR training prior to deploying to the field. Inspection teams will also identify the nearest emergency care facility for each bridge prior to inspection.

Finally, the past couple of years have also brought us a very specific challenge to our safety, we quickly adapted and incorporated all recommended guidelines for performing fieldwork.

Schedule: The representative schedule, shown on page 4, is for an in-depth complex bridge inspection assignment and indicates the critical tasks to be performed and key links between those tasks. This sample schedule includes the key elements as identified and implemented during our previous DOTD inspection assignments that resulted in the successful delivery of ten complex bridge inspection assignments on time and under the established budget. The schedule is monitored on a daily basis during the field inspection to verify that the work is progressing as planned. If deviations occur, this gives the team adequate time to adjust activities and resources to maintain the projected completion date. Also, our experience allows us to include into the schedule reasonable allowances for delays related to weather or other unexpected complications. AECOM has assembled a team capable of meeting the desired schedule of the DOTD, with a depth of resources that allows us to deliver on multiple projects concurrently if necessary.

Field Inspection: All inspection work will conform to the current DOTD Bridge Inspection Manual 2020 Edition, FHWA and AASHTO criteria. Our team is intimately familiar with all of the governing codes listed in the References section of the RFP. In addition, we are experienced in the completion and submission of the bridge inspection condition data and element level inspection items. The inspection will consist of a close visual hands-on inspection of all main components of the superstructure and substructure units. Our lead bridge

inspection team leader will be on-site at all times during the inspection and be responsible for the safety and inspection throughout the duration. In addition, he will provide daily updates to the PM on progress, equipment, weather, and future work to be performed. Our inspectors make use of modern technology to assist in performing bridge inspections. Team leaders have smartphones, which are used for tracking weather conditions, and taking and sending pictures immediately to the PM for review. Electronic data collectors can be used in the field to complete electronic inspection forms at the time of the inspection. Our processes are proven, well established, and continually refined to ensure inspections are completed on time and within budget.

Our inspectors will verify and document the locations and extent of damage or deterioration, such as corrosion, section loss, cracks, fractures, deformations, and collision damage. The inspectors will also detail and document the location of retrofits, including welded and bolted repair plates. Where section loss is suspected, the steel will be cleaned, and section loss dimensions will be measured using rulers, calipers, or ultrasonic thickness gages. Inspectors will examine connections, including gusset plates, for missing or loose fasteners, pack rust between plates, corrosion, and cracks. Sketches will be developed and D-meter readings will be recorded for areas that exhibit significant section loss. Photographs showing areas of significant distress (condition states 3 and 4) will be also taken to substantiate the condition ratings, as well as photographs of typical conditions and general bridge views. AECOM will update element level condition states for the members inspected and will describe the defects for condition states coded greater than "1".

Fracture Critical Inspections: The AECOM Team is experienced in identifying and performing the inspection of fracture critical members and we will give special attention to these during all phases of the inspection. As we discovered during our previous contract, the DOTD's complex bridge inventory is nearing the fatigue life for some members and our inspectors have experience with dye penetrant and magnetic particle testing to verify the existence and extent of a suspected crack. The field inspection procedures, scheduling and access methods will be formulated and conducted to recognize the critical status of these components and ensure a complete 100% hands-on inspection.

Underwater Inspections: AECOM has included CONSOR on our team to provide NBIS underwater inspection and acoustic imaging that may be required for the submerged elements. Our Team has the required NBIS and diver (ADCI) qualifications and capabilities, including substantial experience with LA bridges, in assessing and investigating the invisible repairs and challenges with underwater infrastructure.

Movable Bridges: The AECOM Team's approach to movable bridges will integrate the efforts of certified structural inspectors and the mechanical and the electrical specialists from AECOM and M&M. Our approach emphasizes communication between structural, mechanical, and electrical engineering disciplines. The electrical and mechanical inspection of movable bridges will follow the AASHTO Movable Bridge Manual and critical aspects of the operation of the bridges. All operational checks and tests will be included in the Inspection Report, accompanied with photographs of general and specific conditions and items for repair/replacement. AECOM and M&M successfully performed the in-depth structural, mechanical, and electrical inspection per the AASHTO guidelines of both the Dularge and Louisa Bridges under our previous DOTD contract.

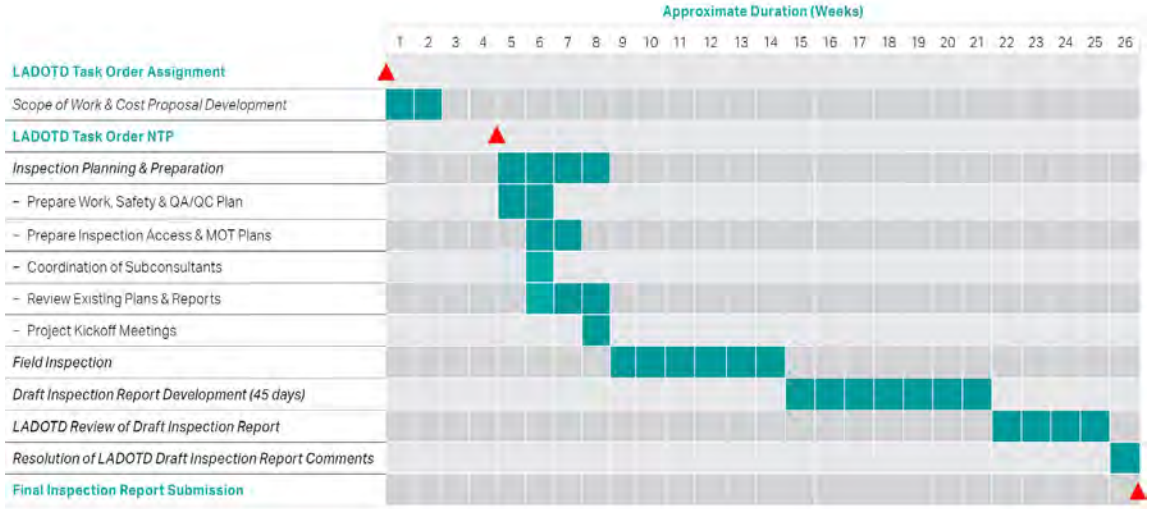
Emergency and Critical Findings: Due to our established bridge inspection practice, we have developed standard operating procedures for the response and communication of critical deficiencies identified during the inspection. If any critical findings are discovered during our inspections, our inspectors will immediately contact project leadership from the field via cell phone. Smartphone cameras will transmit photos of the deficiency in real-time. The PM will then notify Stephanie and the local District Bridge Engineer through a phone call to discuss the finding while the inspection crew is on-site. This allows for DOTD to plan a site visit, to view the deficiency while access is still available. A written notification will follow and include additional photos, detailed sketches, the exact location, and recommendations for repair. These procedures were effectively implemented during our inspection of the US 190 WB Bridge to communicate the fatigue cracking in the floorbeams at the connection to the truss.

Inspection Report Development: Upon completion of the inspection, the AECOM Team will develop the bridge inspection report as required by the scope of work, DOTD policies and the FHWA. All bridge inspection SI&A data will be entered in the DOTD asset management software, AssetWise, following the DOTD Recording and Coding Guide. Our team has significant experience with AssetWise with our other DOT clients. AECOM will provide an outline of the proposed report format that will be based on the approved format that we used during our previous agreement for DOTD approval prior to initiating the report. The report will include an executive summary that will concisely describe the scope, results, and repair recommendations of the bridge inspection. Photographs will include areas of distress, typical conditions, and general site conditions (portal views, elevation views, etc.). Our sub-consultants will provide their written reports, photos, and support elements to be included within the overall inspection report. Supporting plans, such as the fracture critical control plan and location of elements inspected, are anticipated to be in an appendix as reference. Recommendations for maintenance and repair will be summarized in a separate section and will have an assigned priority and quantity so that the DOTD can prioritize the need for repair.

The report will be reviewed for completeness, conformity, and consistency, and will be compared with the requirements of the Scope of Work prior to submitting to the DOTD for review. Our report will be delivered to the DOTD within 45 days of completing the field inspection. If any comments are provided by DOTD after their review, AECOM will quickly evaluate and address the comments and provide a revised final submission within two weeks.

Quality Assurance / Quality Control (QA/QC): AECOM understands that it is our responsibility to provide quality bridge inspection services for the DOTD on this assignment and we pledge to continue to meet the high standards that we have previously established with the DOTD. At the core of our technical expertise is our corporate commitment to provide our clients with a quality product. AECOM is an ISO 9001 company. Our quality program is one of the most demanding in our industry and has been developed to assure that all work is carried out in a planned, controlled, and correct manner. We will submit our QA/QC plan to Stephanie within 10 business days of award notification.

We recognize that one important aspect of our team is ensuring consistency and that is why we have identified a Project Quality Representative (PQR) for this assignment. AECOM's PQR acts as an independent monitor of production activities and administers the QA Plan. In addition, the PM and PQR will manage and oversee all work assigned to our sub-consultants. The PQR will perform periodic checks of the on-going work, including field activities to verify that the QA Plan is being followed. AECOM's coordination of work performed by our sub-consultants will have them working closely with AECOM as an extension of our staff by using the same report templates, format, and QA checklists. Their portion of the inspection reports will be submitted to AECOM for QA/QC review prior to incorporating it into the overall report. The draft report submission will be reviewed by an independent review team. The independent review team will be composed of members of AECOM's staff that have not been assigned to the project but have specific expertise in the inspection of long-span, complex structures. Over the course of our previous in-depth complex bridge inspection retainer contract we received an average score of 4.5 out of 5 on our seven consultant performance evaluations.



Load Rating Analysis: AECOM has performed thousands of load rating analyses on all types and sizes of bridges for bridge owners throughout the country. Our load rating engineers have analyzed structures ranging from simple, single span multi-beam bridges to long-span, complex structures. Through this experience our staff has gained a comprehensive understanding of AASHTO standards and specifications, such as AASHTO Manual for Bridge Evaluation (MBE), AASHTO Standard Specifications for Highway Bridges 17th Edition, and AASHTO LRFD Bridge Design Specifications. AECOM staff has used and are familiar with both the Load and Resistance Factor Rating (LRFR) and Load Factor Rating (LFR) methods for analyzing bridges. Our team has current and relevant experience performing load rating analyses using AASHTOware Bridge Rating Software (BrR), as well as other industry approved software including advanced finite element software.

Bridge Instrumentation and Testing: The AECOM Team has the required nondestructive testing and coating qualifications and capabilities needed to meet the testing required in the DOTD in-depth bridge inspection scope of work. In addition, AECOM also provides specialty services in non-destructive testing, bridge instrumentation and evaluation with complete "in-house" capabilities. This includes ultrasonic testing of pins and pin assemblies of fracture critical bridges. Also, if an issue is discovered during one of our inspections that requires further advanced investigation, then AECOM when requested by the DOTD will mobilize our in-house experts to further investigate the problem areas. Our team of experts is experienced in evaluating bridge structures through non-destructive evaluation (NDE), load testing, remote wireless monitoring/measurements, and comprehensive finite element analysis/modeling (FEA/FEM). Since 1994, AECOM has evaluated over 200 bridges of different structural types across the US. Our range of testing capabilities also includes bridge deck evaluations through the use of GPR and infrared technologies as we displayed on our previous DOTD IDIQ where we provided in-depth evaluation reports for the 18.2 mile long I-10 WB Bridge over Atchafalaya Basin in 2017.

Bridge Rehabilitation Design and Construction Support Services: The AECOM Team has the available expertise and resources to provide surveying, bridge rehabilitation design, shop drawing review, and construction support services for any repair of critical or high priority deficiencies identified during an assigned bridge inspection. Our experience on similar projects has taught us the importance of continuity between inspection, design, and construction staffing. This is best illustrated during the resetting of the truss bearings on the US 190 WB Krotz Springs Bridge based on the findings during our 2014 in-depth inspection. The AECOM Team provided design services, full plan set, shop drawing review, and construction support services to reset the over-extended truss bearings. All bridge plan submissions will be coordinated through the DOTD's ProjectWise application.

2014 In-Depth Inspection of the US 190 WB Bridge

AECOM Team photo of the critical inspection finding showing the overextended truss bearing at Pier 16. This finding resulted in the development of bridge rehabilitation plans and construction support services to reset the bearing.

SECTION

19

19. Workload

Firm(s)	Past Performance Evaluation Discipline(s) *	State Project Number	Project Name	Remaining Unpaid Balance**
AECOM Technical Services, Inc.	Bridge, Road	H.004367.5	Earhart Expressway to US 61	$215,483
	Traffic	H.004367.5	Earhart Traffic Evaluation	$27,990
	Road, Bridge, Environmental	H.001779.2	Red River Bridge SEA	$19,173
	CE&I/OV	H.003570	I-220 Barksdale Quality Manager (Sub)	$271,373
	Planning	H.004273.5	I-49 Connector (Sub) / Tasks 1, 5, 6, 12	$691,035
	Traffic	H.004273.5	I-49 Connector (Sub) / Task 2	$34,207
	Road	H.004273.5	I-49 Connector (Sub) / Task 4	$14,923
	Bridge	H.004273.5	I-49 Connector (Sub) / Task 8	$477,027
	Environmental	H.004273.5	I-49 Connector (Sub) / Task 10	$938,123
CONSOR Engineers, LLC	Bridge	H.009730.5	Underwater Bridge Inspection Statewide – Task Order No.4	$418,774

Huval and Associates	Bridge	S.P. H. 011235	I-49 South @ Verot School Road Lafayette Parish – Design Phase Supp. #1&2	$91,846.00
		S.P. H.004774.5	Kanas Lane-Garrett Road Connector – Supp #1	$33.015.00
		S.P. H.009497.6	LA 106: Bayou Bouef - Construction Services	$18,549.00
		S.P. H.011808.5	LA 10: Company Canal – Construction Services	$27,715.00
		S.P. H.010000.5-2	US 171 Over Calcasieu River – Construction Services	$49,490.00
		S.P. H.011485.6	LA 336-1 Bayou Teche Bridge @ Breaux Bridge Construction Services	$93,997.00
		S.P. H. 012650.6	Bridge Repair District 62 - Construction Services	$25,337.00
		S.P. H.012451.6	Dist. 04 Bridge Repairs - Construction Services	$20,456.00
		S.P. H.010006.5	LA 58 Petit Caillou Bridge Rehabilitation	$1,481.00
		S.P. H.002868.5	Ambassador/BNSF Frontage Road Bridges	$9,795.00
		S.P. H.003370	I-220/I-20 Interchange IMP & BAFB Access	$116,000.00
		S.P. H.008226	Cheniere Spillway & Bridge Replacement	$20,000.00
		S.P. H.004791	LA 23: Belle Chasse Bridge and Tunnel (HBI)	$1,590,789.00
		S.P. H.001352.5	Comite Diversion Bridge at LA 67 – Construction Services	$104,625.00
		S.P. H.002273.5	Comite Diversion Bridge at LA 19 & LA 19 Railroad – Const. Services	
		S.P. H.004100	I-10 CMAR – Segment 1 Design	$5,177,660.00
		S.P. H.014560.5	LA 94: Vermillion River Bridge Replacement	$139,126.00
		S.P. H.014747	Southern University Ravine Project	$314,910.00
KPFF, Inc.	N/A	N/A	N/A	N/A
Modjeski and Masters, Inc.	Bridge	H.009479	West Larose Vertical Lift Bridge Rehabilitation - Supplement No. 2	$15,252
		JN 3144	Expert witness services in bridge design, construction, repair and forensic analysis	$274,617
	Bridge	H.010882.5	LA 18: 4th Street Bridge Rehabilitation (Supplement No. 2) Construction Services Jefferson Parish	$52,284
	Bridge	H.010882.6	4th Street Bridge Rehabilitation Paint (Supplement No. 3) Route LA 18	$7,884
	Other	H.003014.6	I-10: LA 347 to Atchafalaya Fldwy Bridge (Const. Svcs.)	$15,094

	CE&I/OV	H.011705.6	US 11 Lake Pontchartrain Bridge Rehabilitation - Phase 2	$71,494
	CE&I/OV	H.011494.6	US 90 Atchafalaya River Bridge Rehabilitation	$473,468
	Bridge	H.009859.5	Ten Truss Bridges - Load Rating and Evaluation	$63,424
	Bridge	H.009859.5	Sunshine Bridge Load Rating after Collision Repair - Task Order 4	$13,605
	Bridge	H.012485.1	Load Rating of 354 Off-System Bridges - Task Order 6	$0
	Bridge	H.009859.5	Load Rating of 14 Complex Bridges	$364,034
	Bridge	H.001234.5	Port Allen Canal Bridge	$64,231
	Other	H.010601.6	I-10: LA 328 to LA 347 - CRES	$47,334
	Other	H.011137.5	I-12: LA 1077 to US 10 Roadway and Navigation Lighting	$38,177
	Bridge	H.011705.6	US 11: Lake Pontchartrain Bridge Rehab Phase 2 (HBI)	$3,015
	Bridge	H.012343.6-1	LA 70: Mississippi River Bridge Phase III	$25,598
	Bridge	H.013179.6	LA 1064: Little Natalbany River Bridge Replacement - Construction Svcs.	$14,727
	Bridge	H.013183.6	LA 16: Tangipahoa River Bridge Replacement - Construction Svcs.	$33,963
	Bridge	H.013193.6	US 61: Thompson Creek Bridge - Construction Svcs. Rehabilitation and Replacement	$804
	Bridge	H.013829.5	I-10 and LA 47: Overhead Sign Upgrade	$0
	Bridge	Task Order No. 2	LG Bridge Design Example and Parametric Studies	$74,644
	Bridge	H.012343.6	LA 70: Mississippi River Bridge Phase III - Legal	$13,956
	Bridge	H.012739.6	I-20 Mississippi River Brigde at Vicksburg Overlay and Rehabilitation - Const. Svcs.	$0
	Bridge	H.000303.6	Danzinger Bridge Rating and Repair	$54,343
	Bridge	H.006226.5	Point-A-LA-Hache Ferry Landing Replacement Plaquemines Parish	$366,612
	Bridge	H.009859.5	Strengthening of US 90 Bridge 201810	$16,182
	Bridge	H.003144.6/SPN 450-37-0022	Luling Bridge Cable Stay Replacement Project Supplement No. 3	$8,146
	Other	H.011235	Subconsultant: I-49 South at Verot School Road - Lighting	$32,989
		H.004791	Subconsultant: Belle Chasse B7T Replacement P3 - Electrical and Structural	$56,387
	Bridge	H.010603.6	I-20 Mississippi River Bridge at Vicksburg - Monitoring	$20,925

	Other	H.013866.6	I-12: LA 21 to US 190 Navigation Lighting & Roadway Lighting	$74,626
	Other	H.003184.6	I-10: Texas State Line - E. of Coone Gully - CRES	$74,916
	Bridge	H.011485.6	LA336-1: Bayou Teche Bridge Rehabiliation	$121,680
	Other	H.012889.5	I-20 Rehabilitation - Roadway Lighting (Pines Road to I-220)	$120,034
	Bridge	H.000263.5	Chef Menteur Pass Bridge & Approach	$27,466
	Bridge	H.014406.5	LA661: Houma Navigation MB Electrical Repair	$17,380
	Bridge	H.011965.5	LA 47: IWGO Bridge Rehabilitation (HBI) LA 47: Over the Intercoastal Waterway Gulf Outlet (IWGO)	$15
	Bridge	H.009859.5	Prien Lake Bridge Structural Rating	$18,730
	Bridge	H.004420.5	Barataria Preliminary Fender Design	$14,913
	Bridge	H.014280.5	Bayou Ramos Bridge Girder Study	$47,369
	Bridge	H.014673.5	I-49 US 165 Debonded PPC Girder Rehab	$301,900
	Bridge	H.014587	LA 302: Kerner Ferry Bridge Repairs PH 2 - Constr Support	$108,730
	Bridge	H.013946.6	Sunshine Bridge Fender Construction - 2021	$100,199
	Bridge	H.009859.5-2	Load Rating of two existing bridges	$354,659
	Bridge	H.004420.5	Bayou Barataria Bridge at Jean Lafitte - Supp 1	$60,168
	Bridge	H.014406.6	Houma Navigation Canal Swing Bridge - Electrical Repair CRED	$27,968
	Bridge	H.004100	Subconsultant: LA 415 to Essen Lane on I-10 and I-12 CMAR RCP Plans	$1,929,344
			Oaklawn Submarine Duct Assessment for contractor	$5,100
	Bridge	H.001234.6	LA 1: Port Allen Canal Bridge Replacement - Phase 1 CRES	$326,444
	Bridge	H.014212.6	I-10 Atchafalaya Bridge Navigational Lights Repl	$115,338

Firm(s)	Past Performance Evaluation Discipline(s) *	State project number	Project name	Remaining Unpaid Balance**
T. Baker Smith, LLC	CE&I/OV	H.004113	LA 3241: LA 435 to LA 40/41	$102,556
	CE&I/OV	H.011152	I-12: US 190 to LA 59	$70,805
	Road	H.001344	US 190: LA 437 - US 190 BUS (PH1)	$11,324
	Bridge	H.001344	US 190: LA 437 - US 190 BUS (PH1)	$6,069
	Road	H.012812	US 190 at Northshore and Camp Villere	$100,401
	Road	H.013942	LA 9: Middle Fork Bayou and Creek Bridges	$3,037
	Bridge	H.013942	LA 9: Middle Fork Bayou and Creek Bridges	$3,981
	Road	H.013979	LA 518, Local: Bridges Near Athens	$11,958
	Bridge	H.013979	LA 518, Local: Bridges Near Athens	$16,286
	Environmental	H.013979	LA 518, Local: Bridges Near Athens	$1,990
	Road	H.013988	LA 534: Bridges (LA 2 to Haynesville)	$45,300
	Bridge	H.013988	LA 534: Bridges (LA 2 to Haynesville)	$21,234
	Environmental	H.013988	LA 534: Bridges (LA 2 to Haynesville)	$3,488
	Survey	H.013988	LA 534: Bridges (LA 2 to Haynesville)	$6,166
	Road	H.013987	LA 521: Bridges Near Dykesville	$1,172
	Bridge	H.013987	LA 521: Bridges Near Dykesville	$377
	Road	H.013986	LA 155: Bridges Near Coushatta	$27,961
	Bridge	H.013986	LA 155: Bridges Near Coushatta	$18,148
	Survey	H.013986	LA 155: Bridges Near Coushatta	$5,167

	Environmental	H.013986	LA 155: Bridges Near Coushatta	$4,578
	Road	H.013995	LA 507, LA 514, Local: Bayou and CR BRS	$79,601
	Bridge	H.013995	LA 507, LA 514, Local: Bayou and CR BRS	$39,622
	Environmental	H.013995	LA 507, LA 514, Local: Bayou and CR BRS	$16,757
	Road	H.013990	LA 132: Bridges Near Mangham	$37,309
	Bridge	H.013990	LA 132: Bridges Near Mangham	$26,002
	Environmental	H.013990	LA 132: Bridges Near Mangham	$7,224
	Road	H.013992	LA 151: Creek and Relief Bridges	$21,044
	Bridge	H.013992	LA 151: Creek and Relief Bridges	$9,681
	Environmental	H.013992	LA 151: Creek and Relief Bridges	$5,065
	Road	H.013199	Country Estates Dr. Over St. Louis Bayou	$750
	Bridge	H.013199	Country Estates Dr. Over St. Louis Bayou	$799
	Road	H.013080	Pine Bluff Rd. & Tack Allen Road Bridges	$600
	Bridge	H.013080	Pine Bluff Rd. & Tack Allen Road Bridges	$678
	Road	H.014271	LA 537: Bridges Near Plain Dealing	$109,185
	Bridge	H.014271	LA 537: Bridges Near Plain Dealing	$59,620
	Environmental	H.014271	LA 537: Bridges Near Plain Dealing	$29,055
	Road	H.014218	LA 2A: Thorny Branch & Indian Creek Brs	$100,010
	Bridge	H.014218	LA 2A: Thorny Branch & Indian Creek Brs	$40,746
	Survey	H.014218	LA 2A: Thorny Branch & Indian Creek Brs	$36,386
	Environmental	H.014218	LA 2A: Thorny Branch & Indian Creek Brs	$27,633
	Road	H.014219	LA 507: Creek Bridges Near Simsboro	$112,762
	Bridge	H.014219	LA 507: Creek Bridges Near Simsboro	$70,031
	Environmental	H.014219	LA 507: Creek Bridges Near Simsboro	$31,340
	Road	H.014222	LA 516: Poland Branch Bridge	$42,533
	Bridge	H.014222	LA 516: Poland Branch Bridge	$17,051
	Environmental	H.014222	LA 516: Poland Branch Bridge	$8,416
	Road	H.014225	LA 528: Clark Bayou Bridge	$41,630
	Bridge	H.014225	LA 528: Clark Bayou Bridge	$37,601
	Survey	H.014225	LA 528: Clark Bayou Bridge	$8,696
	Environmental	H.014225	LA 528: Clark Bayou Bridge	$9,360
	Road	H.014228	LA 159: Bridges Near Shongaloo	$152,329
	Bridge	H.014228	LA 159: Bridges Near Shongaloo	$48,627
	Environmental	H.014228	LA 159: Bridges Near Shongaloo	$45,165
	Road	H.014231	LA 153: Topy Creek Relief & Drain Brs	$173,674

	Bridge	H.014231	LA 153: Topy Creek Relief & Drain Brs	$92,526
	Environmental	H.014231	LA 153: Topy Creek Relief & Drain Brs	$37,647
	Road	H.014233	LA 160: Cypress Bayou and Relief Bridges	$55,082
	Bridge	H.014233	LA 160: Cypress Bayou and Relief Bridges	$38,972
	Environmental	H.014233	LA 160: Cypress Bayou and Relief Bridges	$24,215
	Road	H.014236	LA 3008: Bridges Near Cotton Valley	$279,436
	Bridge	H.014236	LA 3008: Bridges Near Cotton Valley	$134,417
	Environmental	H.014236	LA 3008: Bridges Near Cotton Valley	$58,391
	Road	H.014238	LA 818: Barnet Springs & Creek Bridges	$97,944
	Bridge	H.014238	LA 818: Barnet Springs & Creek Bridges	$64,930
	Environmental	H.014238	LA 818: Barnet Springs & Creek Bridges	$25,811
	Road	H.014239	LA 589: Lyon Bayou Bridge	$70,789
	Bridge	H.014239	LA 589: Lyon Bayou Bridge	$30,472
	Survey	H.014239	LA 589: Lyon Bayou Bridge	$22,534
	Environmental	H.014239	LA 589: Lyon Bayou Bridge	$16,338
	Road	H.014264	LA 556: Bridges Near Choudrant	$279,386
	Bridge	H.014264	LA 556: Bridges Near Choudrant	$175,703
	Environmental	H.014264	LA 556: Bridges Near Choudrant	$1
	Other	H.003931	Calcasieu River Bridge	$530,440
	Other	H.014670	LA 1270: LA 77 to End of Control Section	$19,840
	Other	H.014747.5	Southern University Ravine Protection	$25,602

2014 In-Depth Inspection of the Lake Charles Bridge

AECOM lead bridge inspection team leader, Lance Savant, PE, using rope access climbing techniques to inspect the fracture critical floorbeams. Due to the depth of the girders, rope access was the only access method that provided the needed hands-on access.

SECTION

20

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

Commonwealth of Pennsylvania

DEPARTMENT OF TRANSPORTATION

CERTIFICATE OF TRAINING

BRETT E. CANIMORE

has satisfactorily completed the 78 hour Basic Course on Bridge Safety Inspection Training and meets the Department's requirements for certification as "Certified Bridge Safety Inspector".

Raymond A. Hartis
Course Director, Michael Baker, Jr., Inc.

March 22, 1995
Date

M.G. Patel
Chief, Bridge Engineer, M.G. Patel

Robert Stull
Chief, Training Division, Robert Stull

pennsylvania
DEPARTMENT OF TRANSPORTATION

Certificate of Training

Brett Canimore

On 10/8/2020 successfully completed the

Bridge Inspection Refresher Course

Sponsored by the Highway Administration Deputate

Presented by: Michael Baker International
With the score of: 85.83%
Continuing Education Credits: 20 PDHs

Daryl R. St. Clair
Highway Administration Deputate

Access the Technical Training and Development Section's Training Calendar for information on current program offerings http://www.dot.state.pa.us/tc

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

NATIONAL HIGHWAY INSTITUTE

Brett Canimore

has participated in

FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges

hosted by

New Jersey Department of Transportation

Date: *October 2-5, 2018*

Location: *Trenton, NJ*

Hours of Instruction: 25

Instructor

Local Coordinator

Instructor

Valerie Briggs, Director
National Highway Institute

LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 2/8/2022 the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:

Mr. Henry Jonathan Fix
756 Westwind Drive
Berwyn, Pennsylvania 19312

Cut Here

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

Mr. Henry Jonathan Fix

License/Certificate Type - Number: PE.0038224

Expiration Date: 03/31/2022

Status: Active

Fold Here

Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).

LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.

Print and keep the following information for your record or verification. The pocket card may also be printed on card stock or laminated to keep with you as license/certificate verification.

Disclaimer
All information provided by LAPELS on this web page, and on its other web pages and internet sites, is made available to provide immediate access for the convenience of interested persons. While LAPELS believes the information to be reliable, human or mechanical error remains a possibility, as does delay in the posting or updating of information. Therefore, LAPELS makes no guarantee as to the accuracy, completeness, timeliness, currency, or correct sequencing of the information. Neither LAPELS, nor any of the sources of the information, shall be responsible for any errors or omissions, or for the use or results obtained from the use of this information. Other specific cautionary notices may be included on other web pages maintained by LAPELS.

Commonwealth of Pennsylvania

DEPARTMENT OF TRANSPORTATION

CERTIFICATE OF TRAINING

Henry J. Fix

has satisfactorily completed the 75 hour course on Basic Bridge Safety Inspector's Training and meets the Department's requirements for certification as "Certified Bridge Safety Inspector."

Gary L Hoffman

Director, Bureau of Bridge & Roadway Technology

Robert H Stark

Chief, Training Division

Raymond A Hartt

Course Director, Michael Baker, Jr., INC.

October 26, 1989

Date

WILSON '70

pennsylvania
DEPARTMENT OF TRANSPORTATION

Certificate of Training

Henry Fix

On 10/8/2020 successfully completed the

Bridge Inspection Refresher Course

Sponsored by the Highway Administration Deputate

Presented by: Michael Baker International
With the score of: 80.27%
Continuing Education Credits: 20 PDHs

Daryl R. St. Clair
Highway Administration Deputate

Access the Technical Training and Development Section's Training Calendar for information on current program offerings http://www.dot.state.pa.us/tc

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

NATIONAL HIGHWAY INSTITUTE

Henry Fix

has participated in

FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges

hosted by

Whitman, Requardt and Associates, LLP

Date: *August 16 - 19, 2016*

Location: *Baltimore, Maryland*

Hours of Instruction: 25

Instructor

Instructor

Local Coordinator

Valerie Briggs, Director
National Highway Institute

LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 2/8/2022 the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:

Mr. Lance David Savant
2 Mayfield Road
Mechanicsburg, Pennsylvania 17055

Cut Here

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

Mr. Lance David Savant

License/Certificate Type - Number
PE.0042950

Expiration Date
03/31/2023

Status: Active

Fold Here

Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).

LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.

Print and keep the following information for your record or verification. The pocket card may also be printed on card stock or laminated to keep with you as license/certificate verification.

Disclaimer
All information provided by LAPELS on this web page, and on its other web pages and internet sites, is made available to provide immediate access for the convenience of interested persons. While LAPELS believes the information to be reliable, human or mechanical error remains a possibility, as does delay in the posting or updating of information. Therefore, LAPELS makes no guarantee as to the accuracy, completeness, timeliness, currency, or correct sequencing of the information. Neither LAPELS, nor any of the sources of the information, shall be responsible for any errors or omissions, or for the use or results obtained from the use of this information. Other specific cautionary notices may be included on other web pages maintained by LAPELS.

Commonwealth of Pennsylvania

DEPARTMENT OF TRANSPORTATION

CERTIFICATE OF TRAINING

Lance Savant, E.I.T.

has satisfactorily completed the 78-hour Basic Course on Bridge Safety Inspection Training and meets the Department's requirements for certification as "Certified Bridge Safety Inspector".

Raymond A. Hartle

Course Director, Michael Baker, Jr., Inc.
Raymond A. Hartle, P.E.

January 29 – February 14, 2001

Date

Scott Christie

Chief Bridge Engineer, Bridge Division
R. Scott Christie, P.E.

Chief, Training Division
Erin J. Freitag

pennsylvania
DEPARTMENT OF TRANSPORTATION

Certificate of Training

Lance Savant

On 5/14/2020 successfully completed the

Bridge Inspection Refresher Course

Sponsored by the Highway Administration Deputate

Presented by: Michael Baker International
With the score of: 98.05%
Continuing Education Credits: 20 PDHs

Daryl R. St. Clair
Highway Administration Deputate

Access the Technical Training and Development Section's Training Calendar for information on current program offerings http://www.dot.state.pa.us/tc

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

NATIONAL HIGHWAY INSTITUTE

Lance Savant

has participated in

FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges

hosted by

Modjeski and Masters, Inc.

Date: *October 28 – 31, 2014*

Location: *Mechanicsburg, PA*

Hours of Instruction: 25

Instructor

Local Coordinator

Instructor

Valerie Briggs, Director
National Highway Institute

SOCIETY OF PROFESSIONAL ROPE ACCESS TECHNICIANS

SPRAT®
Society of Professional Rope Access Technicians

Acknowledges that

LANCE SAVANT

has demonstrated through practical and written examinations,
attainment of SPRAT's
Certification Requirements for Rope Access Work,
and is therefore

CERTIFIED

Level 1 Rope Access Technician

SPRAT #120290

AWARDED: February 26, 2021

Expires: February 26, 2024

TROLL ., EVALUATIONS COMMITTEE CHAIR

TOM WOOD, SPRAT PRESIDENT

LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 2/15/2022 the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:

Mr. Jason Robert Mathers
3 Shepherds Way
Glenside, Pennsylvania 19038

Cut Here

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

Mr. Jason Robert Mathers

License/Certificate Type - Number	Expiration Date
PE.0046129	03/31/2024

Status: Active

Fold Here

Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).

LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.

Print and keep the following information for your record or verification. The pocket card may also be printed on card stock or laminated to keep with you as license/certificate verification.

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Pennsylvania Department of Transportation

Certificate of Training

Jason Mathers

has attended

Basic Course on Bridge Safety Inspection Training

Sponsored by the Bureau of Design

Presented By: Michael Baker Jr., Inc

Course Dates: 9/26/2005 to 10/13/2005

CEUs Earned 6.00

Harold C. Rogers, Jr., P.E.
Acting Chief Bridge Engineer

Steven A. Davis
Human Resources Development Manager

pennsylvania
DEPARTMENT OF TRANSPORTATION

Certificate of Training

Jason Mathers

On 10/7/2021 successfully completed the

Bridge Inspection Refresher Course

Sponsored by the Highway Administration Deputate

Presented by: Michael Baker International
With the score of: 93%
Continuing Education Credits: 20 PDHs

Daryl R. St. Clair
Highway Administration Deputate

Access the Technical Training and Development Section's Training Calendar for information on current program offerings http://www.dot.state.pa.us/tc

Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation

Airside Business Park
100 Airside Drive
Moon Township, PA 15108

(412) 269-6300
FAX (412) 375-3998

September 7, 2010

Jason Mathers, EIT
Structural Engineer, Transportation
AECOM
125 Rock Road
Horsham, PA 19044

Subject: National Highway Institute, Course No. 130078
"Fracture Critical Inspection Techniques for Steel Bridges"
June 23-26, 2009
Boston, MA
NHI Certificate Confirmation

Dear Mr. Mathers:

This letter provides confirmation that you attended and completed the subject course presented at the Boston, MA.

Our records indicate that an NHI certificate of completion was awarded June 26, 2009.

If I can be of further assistance, please call.

Sincerely yours,

MICHAEL BAKER JR., INC.

J. Eric Mann, P.E.
Course Director

JEM/cap

SPRAT

ROPE ACCESS TECHNICIAN

LEVEL: II

Jason Mathers

Glenside, PA
USA

SPRAT Cert. # 120287
Certification Date: 28 JAN 2022
Renewal Date: 28 JAN 2025

LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 2/8/2022 the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:

Mr. Jason Andrew Zimpfer
625 West Ridge Pike, Suite E-100
Conshohocken, Pennsylvania 19428

Cut Here

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

Mr. Jason Andrew Zimpfer

License/Certificate Type - Number: PE.0045922

Expiration Date: 03/31/2022

Status: Active

Fold Here

Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).

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U.S. Department
Of Transportation
Federal Highway
Administration

National Highway Institute

Certificate of Training

NATIONAL HIGHWAY INSTITUTE
Training Solutions for Transportation Excellence

Jason A. Zimpfer

has participated in

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

hosted by

Maryland State Highway Administration

Date: **March 9 thru 20, 2009**

Hours of Instruction: **60.0**

Location: **Office of Materials Technology**
Hanover, Maryland

Instructor

Instructor

Stephen J. Sandkuhler
Local Coordinator

Richard Barnaby, Director
National Highway Institute

pennsylvania
DEPARTMENT OF TRANSPORTATION

Certificate of Training

Jason Zimpfer

On 4/30/2020 successfully completed the

Bridge Inspection Refresher Course

Sponsored by the Highway Administration Deputate

Presented by: Michael Baker International
With the score of: 91.11%
Continuing Education Credits: 20 PDHs

Daryl R. St. Clair
Highway Administration Deputate

Access the Technical Training and Development Section's Training Calendar for information on current program offerings http://www.dot.state.pa.us/tc

Commonwealth of Pennsylvania

DEPARTMENT OF TRANSPORTATION

CERTIFICATE OF TRAINING

April Yorkonis

has satisfactorily completed the 78-hour Basic Course on Bridge Safety Inspection Training and meets the Department's requirements for certification as "Certified Bridge Safety Inspector".

Raymond A. Hartle

Course Director, Michael Baker, Jr., Inc.
Raymond A. Hartle, P.E.

February 4 – 21, 2002

Date

Scott Christie

Chief Bridge Engineer, Bridge Division
R. Scott Christie, P.E.

Chief, Training Division
Erin J. Freitag

pennsylvania
DEPARTMENT OF TRANSPORTATION

Certificate of Training

April Yorkonis

On 3/25/2021 successfully completed the

Bridge Inspection Refresher Course

Sponsored by the Highway Administration Deputate

Presented by: Michael Baker International
With the score of: 93.88%
Continuing Education Credits: 20 PDHs

Daryl R. St. Clair
Highway Administration Deputate

Access the Technical Training and Development Section's Training Calendar for information on current program offerings http://www.dot.state.pa.us/tc

U.S. Department
Of Transportation

Federal Highway Administration

NATIONAL HIGHWAY INSTITUTE

Training Solutions for Transportation Excellence

National Highway Institute

Certificate of Training

April Yorkonis

has participated in

Fracture Critical Inspection Techniques for Steel Bridges

hosted by

Pennsylvania Department of Transportation

Location: Montoursville PA

Date: Feb. 15-18, 2005

Hours of instruction: 21

CEUs: 2.1

Instructor

Director, National Highway Institute
Federal Highway Administration

Coordinator

Director, Office of Professional Development
Federal Highway Administration

Commonwealth of Pennsylvania

DEPARTMENT OF TRANSPORTATION

CERTIFICATE OF TRAINING

Dave Raffensperger

has satisfactorily completed the 78-hour Basic Course on Bridge Safety Inspection Training and meets the Department's requirements for certification as "Certified Bridge Safety Inspector".

Raymond A. Hartle

Course Director, Michael Baker, Jr., Inc.
Raymond A. Hartle, P.E.

February 4 – 21, 2002

Date

Scott Christie

Chief Bridge Engineer, Bridge Division
R. Scott Christie, P.E.

Chief, Training Division
Erin J. Freitag

pennsylvania
DEPARTMENT OF TRANSPORTATION

Certificate of Training

David Raffensperger

On 4/30/2020 successfully completed the

Bridge Inspection Refresher Course

Sponsored by the Highway Administration Deputate

Presented by: Michael Baker International
With the score of: 84.44%
Continuing Education Credits: 20 PDHs

Daryl R. St. Clair
Highway Administration Deputate

Access the Technical Training and Development Section's Training Calendar for information on current program offerings http://www.dot.state.pa.us/tc

U.S. Department
Of Transportation

Federal Highway Administration

NATIONAL HIGHWAY INSTITUTE

Training Solutions for Transportation Excellence

National Highway Institute

Certificate of Training

David L. Raffensperger

has participated in

Fracture Critical Inspection Techniques Steel Bridges

hosted by

New Jersey Department of Transportation

Location: *Trenton. NJ*

Date: *April 26-29, 2005*

Hours of instruction: *24*

Instructor

Director, National Highway Institute
Federal Highway Administration

Coordinator

Director, Office of Professional and Corporate Development
Federal Highway Administration

pennsylvania
DEPARTMENT OF TRANSPORTATION

Certificate of Training

Greg Bennett

Attended

Basic Course on Bridge Safety Inspection

Sponsored by the Highway Administration Deputate

DATE: September 29-October 16, 2014

LOCATION: Harrisburg, PA

TRAINING VENDOR: Michael Baker Jr., Inc.

INSTRUCTOR: Thomas Ryan, Michael Pichura, Dennis Baughman, Sr., Sumathi Ravindraraj, Harold Rogers, Jr.

TEST SCORE: 92%

CONT. ED. CREDITS*: 91 PDHs

Catherine T. Shoemaker
(Acting) Training Development Manager

Access the Technical Training and Development Section's Training Calendar for information on current program offerings http://www.dot.state.pa.us/tc. Students must receive a test score of 70% or higher to pass the course. Students who do not take the class test receive N/A in lieu of a test score and their training record is marked "Incomplete." Should you have any questions about this certificate or exam scores, please contact us at 717-705-2209.

*The inclusion of continuing education credits (PDH/CEU/CEH) on this certificate does not imply or guarantee that the training course is approved by the Pennsylvania State Registration Board of Professional Engineers, Geologists and Land Surveyors. According to Pennsylvania Act 25, "*Credit determination for activities...shall be the responsibility of the licensee.*"

Rev. August 2013

pennsylvania
DEPARTMENT OF TRANSPORTATION

Certificate of Training

Greg Bennett

On 3/25/2021 successfully completed the

Bridge Inspection Refresher Course

Sponsored by the Highway Administration Deputate

Presented by: Michael Baker International
With the score of: 97.77%
Continuing Education Credits: 20 PDHs

Daryl R. St. Clair
Highway Administration Deputate

Access the Technical Training and Development Section's Training Calendar for information on current program offerings http://www.dot.state.pa.us/tc

U.S. Department of Transportation

Federal Highway Administration

National Highway Institute

nhi national highway institute

Certificate of Training

Greg Bennett

has participated in

FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges

hosted by

MP Engineers, P.C.

Date: *November 09-12, 2021*

Location: *Princeton, NJ*

Hours of Instruction: *25*

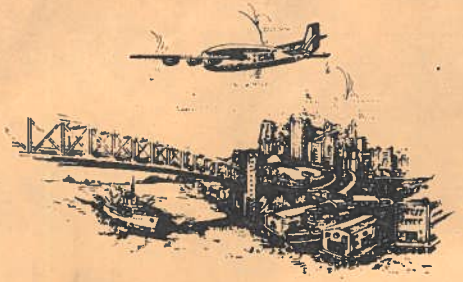
Instructor

Instructor

Local Coordinator *Mahendra Patel, P.E.*

Thomas Harman

Thomas Harman, Director
National Highway Institute



Commonwealth of Pennsylvania

DEPARTMENT OF TRANSPORTATION

CERTIFICATE OF TRAINING

Michael P. Zavorski

has attended the 75 hour course on Basic Bridge Safety Inspector's Training.

Gary L Hoffman

Director, Bureau of Bridge & Roadway Technology

Robert H Stull

Chief, Training Division

Course Director, Michael Baker, Jr., Inc.

March 28, 1991

Date

WILSON '70

pennsylvania
DEPARTMENT OF TRANSPORTATION

Certificate of Training

Michael Zavorski

On 12/16/2021 successfully completed the

Bridge Inspection Refresher Course

Sponsored by the Highway Administration Deputate

Presented by: Michael Baker International
With the score of: 91.11%
Continuing Education Credits: 20 PDHs

Daryl R. St. Clair
Highway Administration Deputate

Access the Technical Training and Development Section's Training Calendar for information on current program offerings http://www.dot.state.pa.us/tc

pennsylvania
DEPARTMENT OF TRANSPORTATION

Certificate of Training

Alex Schaal

On 2/13/2020 successfully completed the

PennDOTs Bridge Safety Inspector Certification

Sponsored by the Highway Administration Deputate

Presented by: Michael Baker International
With the score of: 89.04%
Continuing Education Credits: 96 PDHs

Daryl R. St. Clair
Highway Administration Deputate

Access the Technical Training and Development Section's Training Calendar for information on current program offerings http://www.dot.state.pa.us/tc

pennsylvania
DEPARTMENT OF TRANSPORTATION

Certificate of Training

Alex Schaal

On 1/7/2022 successfully completed the

Bridge Inspection Refresher Course

Sponsored by the Highway Administration Deputate

Presented by: Michael Baker International
With the score of: 84.44%
Continuing Education Credits: 20 PDHs

Daryl R. St. Clair
Highway Administration Deputate

Access the Technical Training and Development Section's Training Calendar for information on current program offerings http://www.dot.state.pa.us/tc

SOCIETY OF PROFESSIONAL ROPE ACCESS TECHNICIANS

SPRAT®
Society of Professional Rope Access Technicians

Acknowledges that

ALEX SCHAAL

has demonstrated through practical and written examinations,
attainment of SPRAT's
Certification Requirements for Rope Access Work,
and is therefore

CERTIFIED

Level 1 Rope Access Technician

SPRAT #2100129

AWARDED: January 29, 2021

Expires: January 29, 2024

TROLL ., EVALUATIONS COMMITTEE CHAIR

TOM WOOD, SPRAT PRESIDENT

pennsylvania
DEPARTMENT OF TRANSPORTATION

Certificate of Training

Brain McCabe

On 3/28/2018 successfully completed the

PennDOTs Bridge Safety Inspector Certification

Sponsored by the Highway Administration Deputate

Presented by: Michael Baker International
With the score of: 84%
Continuing Education Credits: 96 PDHs

Daryl R. St. Clair
Highway Administration Deputate

Access the Technical Training and Development Section's Training Calendar for information on current program offerings http://www.dot.state.pa.us/tc

pennsylvania
DEPARTMENT OF TRANSPORTATION

Certificate of Training

Brian McCabe

On 11/18/2021 successfully completed the

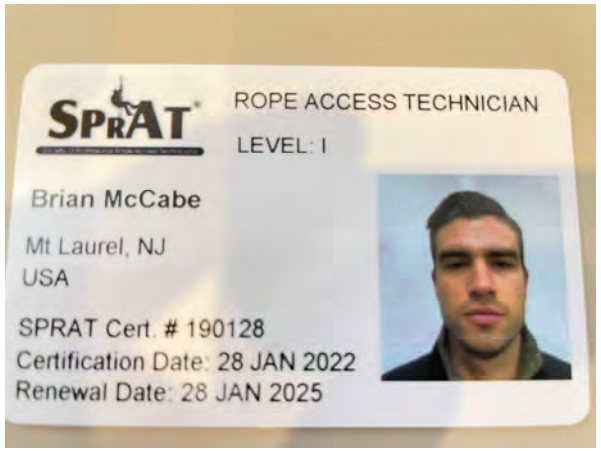
Bridge Inspection Refresher Course

Sponsored by the Highway Administration Deputate

Presented by: Michael Baker International
With the score of: 86.66%
Continuing Education Credits: 20 PDHs

Daryl R. St. Clair
Highway Administration Deputate

Access the Technical Training and Development Section's Training Calendar for information on current program offerings http://www.dot.state.pa.us/tc


SPRAT
ROPE ACCESS TECHNICIAN
LEVEL: I
Brian McCabe
Mt Laurel, NJ
USA
SPRAT Cert. # 190128
Certification Date: 28 JAN 2022
Renewal Date: 28 JAN 2025


Society of Professional Rope Access Technicians
The individual designated on the opposite side of the card has been certified to perform work associated with rope access at the level indicated in conformance with the SPRAT certification requirements.
994 Old Eagle School Road
Suite 1019
Wayne, PA 19087-1866
(610) 971-4850 Phone
(610) 971-4859 Fax
SPRAT
www.sprat.org

pennsylvania
DEPARTMENT OF TRANSPORTATION

Certificate of Training

Riley LaRiviere

On 11/4/2021 successfully completed the

PennDOTs Bridge Safety Inspector Certification

Sponsored by the Highway Administration Deputate

Presented by: Michael Baker International
With the score of: 85.06%
Continuing Education Credits: 96 PDHs

Daryl R. St. Clair
Highway Administration Deputate

Access the Technical Training and Development Section's Training Calendar for information on current program offerings http://www.dot.state.pa.us/tc

pennsylvania
DEPARTMENT OF TRANSPORTATION

Certificate of Training

Sean Quick

On 11/4/2021 successfully completed the

PennDOTs Bridge Safety Inspector Certification

Sponsored by the Highway Administration Deputate

Presented by: Michael Baker International
With the score of: 87.77%
Continuing Education Credits: 96 PDHs

Daryl R. St. Clair
Highway Administration Deputate

Access the Technical Training and Development Section's Training Calendar for information on current program offerings http://www.dot.state.pa.us/tc

pennsylvania
DEPARTMENT OF TRANSPORTATION

Certificate of Training

Brendan Kearns

On 11/4/2021 successfully completed the

PennDOTs Bridge Safety Inspector Certification

Sponsored by the Highway Administration Deputate

Presented by: Michael Baker International
With the score of: 74.32%
Continuing Education Credits: 96 PDHs

Daryl R. St. Clair
Highway Administration Deputate

Access the Technical Training and Development Section's Training Calendar for information on current program offerings http://www.dot.state.pa.us/tc

U.S. Department
Of Transportation
Federal Highway Administration

NATIONAL HIGHWAY INSTITUTE
Training Solutions for Transportation Excellence

National Highway Institute

Certificate of Training

TRAVIS BAKER

has participated in

NHI Course 130055

Safety Inspection of In-Service Bridges

hosted by

ACEC INDIANA

Location: **Indianapolis, IN**

Date: **June 5-16, 2006**

Hours of Instruction: **72hours**
6 CEU's

William L. Gedris
Instructor

Moges Ayele
Director, National Highway Institute
Federal Highway Administration

Coordinator

Associate Administrator, Office of Professional
and Corporate Development
Federal Highway Administration

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute
Training Solutions for Transportation Excellence

Participant Training History

Issued by National Highway Institute

FIRST NAME: Travis	LAST NAME: Baker	PARTICIPANT ID:
ADDRESS 36 East Seventh Street Suite 2300 Cincinnati, OH 45202		TELEPHONE

Session ID	Course#	Course Title	Start Date	End Date	State	CEU
20120117	130078	Fracture Critical Inspection Techniques for Steel Bridges	12/6/2011	12/9/2011	IN	2.5

AUTHORIZED IACET PROVIDER

One Continuing Education Unit (CEU) is ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction and qualified instruction.

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

NATIONAL HIGHWAY INSTITUTE

Landon Whitton

has participated in

FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges

hosted by

Rhode Island Department of Transportation

Date: December 8-11, 2015

Location: Warwick, RI

Hours of Instruction: ~~30~~ 25 Hours RAP

Instructor

Instructor

Local Coordinator

Valerie Briggs, Director
National Highway Institute

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

National Highway Institute

Certificate of Training

NATIONAL HIGHWAY INSTITUTE
Training Solutions for Transportation Excellence

Landon Whitton

has participated in

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

hosted by

Alabama Department of Transportation

Date: *June17-28, 2013*

Location: *Guntersville, AL*

Hours of Instruction:67

Guy R Lang PE
Instructor

J Cuilmann, RO
Instructor

Kerry C. NeSmith
Local Coordinator

Richard Barnaby, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

NATIONAL HIGHWAY INSTITUTE

Landon Whitton

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Office of State Aid Road Construction

Date: *May 14-16, 2019*

Location: *Ridgeland, MS*

Hours of Instruction: 18

Instructor

Instructor

Local Coordinator

Michael Davies, Director
National Highway Institute

SOCIETY OF PROFESSIONAL ROPE ACCESS TECHNICIANS

SPRAT®
Society of Professional Rope Access Technicians

Acknowledges that

LANDON WHITTON

has demonstrated through practical and written examinations, attainment of SPRAT's Certification Requirements for Rope Access Work, and is therefore

CERTIFIED

Level 1 Rope Access Technician

SPRAT #171085

AWARDED: August 14, 2020

Expires: August 14, 2023

TROLL ., EVALUATIONS COMMITTEE CHAIR

TOM WOOD, SPRAT PRESIDENT

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

NATIONAL HIGHWAY INSTITUTE

Kevin Curley, EIT

has participated in

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

hosted by

Office of State Aid Road Construction

Date: *June 19-30, 2017*

Location: *Ridgeland, MS*

Hours of Instruction: 67

Guy R Lang PE
Instructor

Marie Allerton
Local Coordinator

Patrick Martens, PE
Instructor

Valerie Briggs
Valerie Briggs, Director
National Highway Institute

U.S. Department of Transportation

Federal Highway Administration

National Highway Institute

NATIONAL HIGHWAY INSTITUTE

Certificate of Training

Kevin Curley

has participated in

FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges

hosted by

Office of State Aid Road Construction

Date: *January 21-24, 2020*

Location: *Ridgeland, MS*

Hours of Instruction: 25

Brian D. Dietrich

Instructor

Randall S Tobin

Instructor

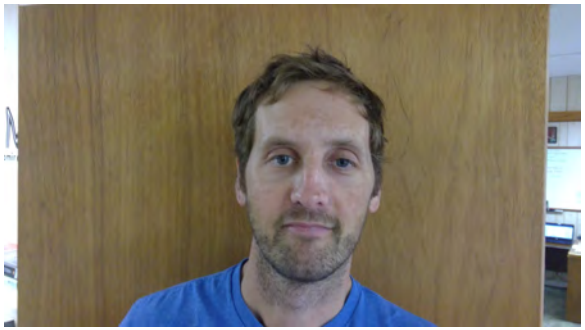
Marie Allbritton

Local Coordinator

Michael Davies

Michael Davies, P.E.

Director, National Highway Institute



SOCIETY OF PROFESSIONAL ROPE ACCESS TECHNICIANS

SPRAT®
Society of Professional Rope Access Technicians

Acknowledges that

KEVIN CURLEY

has demonstrated through practical and written examinations,
attainment of SPRAT's
Certification Requirements for Rope Access Work,
and is therefore

CERTIFIED

Level 1 Rope Access Technician

SPRAT #2001037

AWARDED: August 14, 2020

Expires: August 14, 2023

ROBERT DUNSHEA, EVALUATIONS COMMITTEE CHAIR

TROLL ., SPRAT PRESIDENT

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

NATIONAL HIGHWAY INSTITUTE

Joseph A. Whelan

has participated in

FHWA NHI 130055 Safety Inspection of In-Service Bridges

hosted by

Illinois Department of Transportation

Date: April 9-20,2018 ***Hours of Instruction:*** 67 hours

Location: Peoria, Illinois

Instructor

Local Coordinator

Instructor

Valerie Briggs, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

NATIONAL HIGHWAY INSTITU

Joe Whelan

has participated in

FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges

hosted by

Ohio Department of Transportation

Date: *November 6-9, 2018*

Location: *Columbus, OH*

Hours of Instruction: 25

Instructor

Local Coordinator

Instructor

Valerie Briggs, Director
National Highway Institute

SPRAT

ROPE ACCESS TECHNICIAN

LEVEL: II

Joseph Whelan

Taylorsville, KY
USA

SPRAT Cert. # 161040
Certification Date: 14 MAY 2021
Renewal Date: 14 MAY 2024

U.S. Department of Transportation
Federal Highway Administration

NATIONAL HIGHWAY INSTITUTE

National Highway Institute

Certificate of Training

Ian R. McElhone

has participated in

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

hosted by

BridgeValley Community and Technical College

Date: April 13-24, 2015

Location: South Charleston, WV

Hours of Instruction: 67

Dennis R. Boughner
Instructor

Thomas M. Ryan
Instructor

Melissa Thorp
Local Coordinator

Valerie Briggs
Valerie Briggs, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

NATIONAL HIGHWAY INSTITUT

Ian McElhone

has participated in

FHWA-NHI-130078 Fracture Critical Inspection Techniques for Steel Bridges

hosted by

MP Engineers, P.C.

Date: *May 7-10, 2018*

Location: *Kingston, NJ*

Hours of Instruction: *25*

Instructor

Local Coordinator

Instructor

Valerie Briggs, Director
National Highway Institute

U.S. Department
of Transportation

Federal Highway Administration

National Highway Institute

Certificate of Training

Ian R. McElhone

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Mattern & Craig

Date: November 17-19, 2020

Location: Virtual Delivery, VA

Hours of Instruction: 18

Instructor

Instructor

Chad M. Thomas

Local Coordinator

Thomas Harman

Thomas Harman, Director
National Highway Institute

SOCIETY OF PROFESSIONAL ROPE ACCESS TECHNICIANS

SPRAT®
Society of Professional Rope Access Technicians

Acknowledges that

IAN MCELHONE

has demonstrated through practical and written examinations,
attainment of SPRAT's
Certification Requirements for Rope Access Work,
and is therefore

CERTIFIED

Level 2 Rope Access Technician

SPRAT #140839

AWARDED: May 14, 2021

Expires: May 14, 2024

TROLL ., EVALUATIONS COMMITTEE CHAIR

TOM WOOD, SPRAT PRESIDENT

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

NATIONAL HIGHWAY INSTITUTE

Craig Klusman

has participated in

FHWA-NHI-130078 Fracture Critical Inspection for Steel Bridges

hosted by

Ohio Department of Transportation

Date: *October 18-21, 2016*

Location: *Garfield Heights, OH*

Hours of Instruction: 25

Instructor

Instructor

Local Coordinator

Valerie Briggs, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

NATIONAL HIGHWAY INSTITUTE
Training Solutions for Transportation Excellence

National Highway Institute

Certificate of Training

Craig Klusman

has satisfactorily completed training in

Safety Inspection of In-Service Bridges

conducted by

Federal Highway Administration

Location: ***Frankfort, Kentucky***

Date: ***April 21 – May 2, 2003***

Hours of instruction: ***70.0***

Continuing Education Units: ***6.0***

John Wackerly
Instructor

Moges Ayele
Director, National Highway Institute
Federal Highway Administration

Coordinator

Director, Office of Professional Development
Federal Highway Administration

U.S. Department of Transportation

Federal Highway Administration

National Highway Institute

NATIONAL HIGHWAY INSTITUTE

Certificate of Training

COLBY GUIDRY

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

LA DOTD/LTRC

Date: *January 21-23, 2020*

Location: *Baton Rouge, LA*

Hours of Instruction: 18

Instructor

Instructor

Local Coordinator

Michael Davies, P.E.
Director, National Highway Institute

U.S. Department of Transportation

Federal Highway Administration

National Highway Institute

Certificate of Training

NATIONAL HIGHWAY INSTITUTE

Raymond Provost

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Texas Department of Transportation

Date: *October 29-31, 2019*

Location: *Austin, TX*

Hours of Instruction: *18*

Instructor

Instructor

Local Coordinator

Michael Davies, P.E.
Director, National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

NATIONAL HIGHWAY INSTITUTE

National Highway Institute

Certificate of Training

PATRICK BROUSSARD

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

LA DOTD/LTRC

Date: *January 21-23, 2020*

Location: *Baton Rouge, LA*

Hours of Instruction: 18

Instructor

Instructor

Allison H. Landry
Local Coordinator

Michael Davies, P.E.
Director, National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

NATIONAL HIGHWAY INSTITUTE

Certificate of Training

Andrew Juneau, P.E.

has participated in

FHWA-NHI-130056 Safety Inspection of In-Service Bridges for Professional Engineers

hosted by

New Jersey Department of Transportation

Date: *June 11-15, 2018*

Location: *Trenton, NJ*

Hours of Instruction: 34

Dennis R. Baughman, P.E.

Instructor

Local Coordinator

Instructor

Valerie Briggs

Valerie Briggs, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

NATIONAL HIGHWAY INSTITUTE

Colby Guidry

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Office of State Aid Road Construction

Date: *April 21-23, 2015*

Location: *Jackson, MS*

Hours of Instruction: 18

Instructor

Instructor

Marie Allbritton
Local Coordinator

Valerie Briggs
Valerie Briggs, Director
National Highway Institute

U.S. Department
Of Transportation

Federal Highway Administration

NATIONAL HIGHWAY INSTITUTE

Training Solutions for Transportation Excellence

National Highway Institute

Certificate of Training

Colby Guidry

has participated in

Safety Inspection In-Service Bridges

hosted by

ALABAMA DEPARTMENT OF TRANSPORTATION

Location: ***Mobile, Alabama***

Date: ***May 14 – 25, 2007***

William L. Godwin

Instructor

Moges Ayele

Director, National Highway Institute
Federal Highway Administration

Hours of instruction: *72*

Coordinator

Director, Office of Professional Development
Federal Highway Administration

U.S. Department
Of Transportation
Federal Highway
Administration

National Highway Institute

Certificate of Training

NATIONAL HIGHWAY INSTITUTE
Training Solutions for Transportation Excellence

Colby Guidry

has participated in

Fracture Critical Inspection Techniques for Steel Bridges

hosted by

LA DOTD/LTRC

Date: **April 27-30, 2009**

Location: **Baton Rouge, LA**

Hours of Instruction: **21**

Instructor

Instructor

Local Coordinator

Richard Barnaby, Director
National Highway Institute

Department of Transportation and Development

STATE OF LOUISIANA

UNION · JUSTICE · CONFIDENCE

NEIL L. WAGONER, P. E.
SECRETARY

BUDDY ROEMER
GOVERNOR

LA TRANSPORTATION

GRANTS THIS CERTIFICATE
TO

Edward A. Smith

AS A CERTIFIED BRIDGE INSPECTOR

HAVING ATTAINED THE NECESSARY MINIMUM EXPERIENCE AND TRAINING
REQUIRED BY THE CODE OF FEDERAL REGULATIONS, 23CFR 650.307
"QUALIFICATIONS OF PERSONNEL"
TO BE A LOUISIANA DOTD CERTIFIED BRIDGE INSPECTOR

CERTIFICATE NUMBER: 91-005

DATE ISSUED: November 22, 1991

STRUCTURES AND FACILITIES
MAINTENANCE ENGINEER

DOTD MAINTENANCE
ENGINEERING ADMINISTRATOR

U.S. Department
Of Transportation
Federal Highway
Administration

National Highway Institute

NATIONAL HIGHWAY INSTITUTE
Training Solutions for Transportation Excellence

Certificate of Training

Edward Smith

has participated in

NHI Course No. 130053 –
Bridge Inspection Refresher Training

hosted by

LA DOTD/LTRC

Date: **March 22-24, 2011**

Location: **Alexandria, LA**

Hours of Instruction: **18**

Instructor

Instructor

Local Coordinator

Richard Barnaby, Director
National Highway Institute

U.S. Department
Of Transportation
Federal Highway
Administration

National Highway Institute

Certificate of Training

NATIONAL HIGHWAY INSTITUTE
Training Solutions for Transportation Excellence

Ray Provost

has participated in

Safety Inspection of In-Service Bridges

hosted by

LA DOTD/LTRC

Date: **March 31-April 11, 2008**

Hours of Instruction: **60**

Location: **Baton Rouge, Louisiana**

William R. Gedris
Instructor

Mitch D Crem
Instructor

Sandra Romero
Local Coordinator

Joseph S. Toole, Associate Administrator
Office of Professional and Corporate Development

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

NATIONAL HIGHWAY INSTITUTE

Edward A. Smith

has participated in

FHWA-NHI-130053
Bridge Inspection Refresher Training

hosted by

Indiana Department of Transportation

Date: August 23-25, 2016 ***Hours of Instruction:*** 18

Location: Indianapolis, Indiana

Instructor

Local Coordinator

Instructor

Valerie Briggs, Director
National Highway Institute

U.S. Department
Of Transportation
Federal Highway
Administration

National Highway Institute

NATIONAL HIGHWAY INSTITUTE
Training Solutions for Transportation Excellence

Certificate of Training

Edward Smith

has participated in

NHI Course No. 130053 –
Bridge Inspection Refresher Training

hosted by

LA DOTD/LTRC

Date: **March 22-24, 2011**

Location: **Alexandria, LA**

Hours of Instruction: **18**

Instructor

Instructor

Local Coordinator

Richard Barnaby, Director
National Highway Institute

Department of Transportation and Development

STATE OF LOUISIANA

UNION • JUSTICE • CONFIDENCE

NEIL L. WAGONER, P. E.
SECRETARY

BUDDY ROEMER
GOVERNOR

LA TRANSPORTATION

GRANTS THIS CERTIFICATE TO

Edward A. Smith

AS A CERTIFIED BRIDGE INSPECTOR

HAVING ATTAINED THE NECESSARY MINIMUM EXPERIENCE AND TRAINING
REQUIRED BY THE CODE OF FEDERAL REGULATIONS, 23CFR 650.307
"QUALIFICATIONS OF PERSONNEL"
TO BE A LOUISIANA DOTD CERTIFIED BRIDGE INSPECTOR

CERTIFICATE NUMBER: 91-005

DATE ISSUED: November 22, 1991

STRUCTURES AND FACILITIES
MAINTENANCE ENGINEER

DOTD MAINTENANCE
ENGINEERING ADMINISTRATOR

U.S. Department of Transportation
Federal Highway Administration

NATIONAL HIGHWAY INSTITUTE
Training Solutions for Transportation Excellence

National Highway Institute
Certificate of Training

Edward A. Smith

has satisfactorily completed training in

Fracture Critical Inspection Techniques for Steel Bridges

conducted by

National Highway Institute

Location: Alexandria, LA

Hours of instruction: 21

Date: November 4-7-2003

Continuing Education Units: 2.1

John Wockert
Instructor

Thelma M. Thurston
Coordinator

Moges Ayele
Director, National Highway Institute
Federal Highway Administration

Director, Office of Professional Development
Federal Highway Administration

TRAINING RECORDS

SMITH, EDWARD A
EMPL : SELF
NON-DEPT TEST DIST: 007

2 2264 A ADVANCED MS WORD - UNO
05-03-2007 COMPLETE: 05-03-2007 070 P

2 5506 A LOTUS NOTES - INTRODUCTION
01-20-2005 COMPLETE: 01-20-2005 090 P

3 3005 3 BRIDGE INSPECTION REFRESHER TRAINING
03-22-2011 COMPLETE: 03-24-2011 PASS
(01) 02-14-2006 COMPLETE: 02-16-2006 PASS

3 3007 8 FRACTURE CRITICAL INSPECTION TECHNIQUES FOR STEEL BRIDGES
11-04-2003 COMPLETE: 11-07-2003 NONE

3 3023 A NONDESTRUCTIVE TESTING METHODS FOR STEEL BRIDGES
11-16-1999 COMPLETE: 11-18-1999 NONE

3 3038 A BRIDGE PAINT INSPECTION
09-10-1985 COMPLETE: 09-12-1985 NONE

3 3047 A STREAM STABILITY AND SCOUR AT HWY BRIDGES FOR BRIDGE INSP.
08-21-1996 COMPLETE: 08-21-1996 NONE

3 3079 A BRIDGE COATINGS INSPECTION
12-06-1999 COMPLETE: 12-10-1999 NONE

3 3105 8 PAVEMENT PRESERVATION: SELECTING PVMTS. FOR PREV. MAINT.
03-06-2002 COMPLETE: 03-07-2002 NONE

4 4299 A GOVERNMENTAL EMPLOYEE ETHICS
08-03-2004 COMPLETE: 08-03-2004 NONE

4 4501 A CRANE MANAGEMENT AWARENESS
02-05-1995 COMPLETE: 02-05-1996 NONE

4 7113 A EVALUATION OF EMBANKMENT DAM STABILITY AND DEFORMATION
08-28-1991 COMPLETE: 08-28-1991 NONE

4 7114 A EVALUATION OF HYDRAULIC ADEQUACY
08-28-1991 COMPLETE: 08-28-1991 NONE

4 7201 A BASICS OF A GOOD ROAD
01-29-1998 COMPLETE: 01-29-1998 NONE

4 7202 A ROADS SCHOLAR #2 ASPHALT ROADS: COMMON MAINTENANCE PROBLEMS
09-20-2000 COMPLETE: 09-20-2000 NONE

330078

U.S. Department of Transportation
Federal Highway Administration

NATIONAL HIGHWAY INSTITUTE
Training Solutions for Transportation Excellence

National Highway Institute
Certificate of Training

Patrick Broussard

has satisfactorily completed training in

Fracture Critical Inspection Techniques for Steel Bridges

conducted by

National Highway Institute

Location: Baton Rouge, LA

Date: May 5-9, 2003

Hours of instruction: 21

Continuing Education Units: 2.1

Instructor

Director, National Highway Institute
Federal Highway Administration

Coordinator

Director, Office of Professional Development
Federal Highway Administration

U.S. Department
of Transportation

Federal Highway Administration

National Highway Institute
Certificate of Training
Patrick Broussard

has satisfactorily completed training in

NONDESTRUCTIVE TESTING METHODS FOR STEEL BRIDGES

conducted by

National Highway Institute

3333A ✓

Location: Baton Rouge, LA

Date: November 16-18, 1999

Hours of instruction: 18

Continuing Education Units: 1.8

D M Donovan
Instructor

Moges Hylle
Director
National Highway Institute

Coordinator

Federal Highway Administrator

Department of Transportation and Development

STATE OF LOUISIANA

UNION • JUSTICE • CONFIDENCE

EDWIN W. EDWARDS
GOVERNOR

JUDE W. P. PATIN
SECRETARY

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
DOTD

GRANTS THIS CERTIFICATE
TO

Patrick Broussard

AS A CERTIFIED BRIDGE INSPECTOR

HAVING ATTAINED THE NECESSARY MINIMUM EXPERIENCE AND TRAINING
REQUIRED BY THE CODE OF FEDERAL REGULATIONS, 23CFR 650.307
"QUALIFICATIONS OF PERSONNEL"
TO BE A LOUISIANA DOTD CERTIFIED BRIDGE INSPECTOR

CERTIFICATE NUMBER: 92-004

DATE ISSUED: May 15, 1992

Joseph T Smith
STRUCTURES AND FACILITIES
MAINTENANCE ENGINEER

C J Trahan
DOTD MAINTENANCE
ENGINEERING ADMINISTRATOR

U.S. Department
of Transportation

Federal Highway Administration

Certificate of Training

NATIONAL HIGHWAY INSTITUTE

Certifies that **PATRICK BROUSSARD**

has satisfactorily completed **36** hours of training in

ENGINEERING CONCEPTS FOR BRIDGE INSPECTORS

conducted by **Baker Engineers for the Federal Highway Administration**

February 4-8, 1991

Date

Thomas D. Larson

Federal Highway Administrator

George M. Shrieves

Director
National Highway Institute

Port Allen, Louisiana

Location

J. Air Mann

Instructor

Coordinator

STATE OF LOUISIANA

UNION • JUSTICE • CONFIDENCE

Department of Transportation and Development

M. J. "MIKE" FOSTER, JR.
GOVERNOR

FRANK M. DENTON
SECRETARY

DOTD

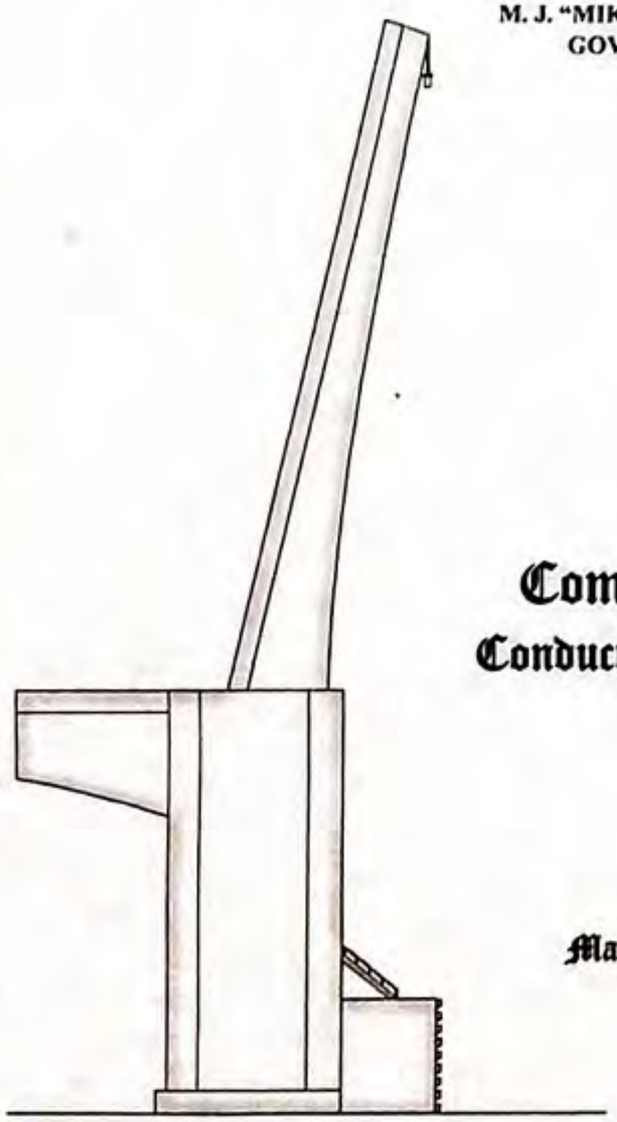
Awards This Certificate
to

Patrick Broussard

For Completion of a

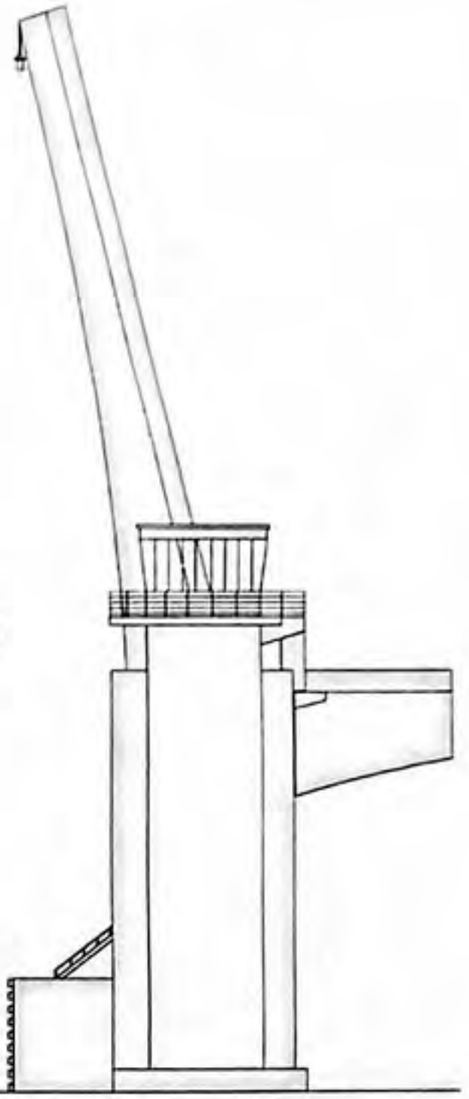
Comprehensive Movable Bridge Inspection Training Course

Conducted by the Louisiana Department of Transportation and Development
held in Houma, Louisiana
March 4 thru 8, 1996



March 8, 1996

Structures and Facilities
Maintenance Engineer



U.S. Department of Transportation
Federal Highway Administration

NATIONAL HIGHWAY INSTITUTE

National Highway Institute

Certificate of Training

Patrick Broussard

has participated in

FHWA - NHI Course No. 130053
Bridge Inspection Refresher Training (3 Days)

hosted by

LA DOTD/LTRC

Date: **September 22-24, 2015**

Location: **Baton Rouge, LA**

Hours of Instruction: **18**

Instructor

Instructor

Local Coordinator

Valerie Briggs, Director
National Highway Institute

U.S. Department
of Transportation

Federal Highway Administration

Certificate of Training

NATIONAL HIGHWAY INSTITUTE

Certifies that **Patrick Broussard**

has satisfactorily completed **80** hours of training in

SAFETY INSPECTION OF IN-SERVICE BRIDGES

conducted by **FEDERAL HIGHWAY ADMINISTRATION**

September 9-20, 1991	**Baton Rouge, Louisiana**
Date	Location
Thomas D. Larson	Dennis E. Burkhart
Federal Highway Administrator	Instructor
George M. Shrieves	Wilma Church
Director National Highway Institute	Coordinator

U.S. Department
Of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

NATIONAL HIGHWAY INSTITUTE
Training Solutions for Transportation Excellence

Scott Wyatt

has participated in

Safety Inspection of In-Service Bridges

hosted by
LA DOTD/LTRC

Date: **March 31-April 11, 2008**

Hours of Instruction: **60**

Location: **Baton Rouge, Louisiana**

William R. Gedris
Instructor

Sandra Romero
Local Coordinator

Mike D Orem
Instructor

Joseph S. Toole, Associate Administrator
Office of Professional and Corporate Development

U.S. Department
Of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Christopher A. Ligozio

has participated in

FHWA-NHI-130055

Safety Inspection of In-Service Bridges

hosted by

Illinois Department of Transportation

Date: March 3-14, 2014

Hours of Instruction: 67

Location: Schaumburg, Illinois

Instructor

Instructor

Local Coordinator

Richard Barnaby, Director
National Highway Institute

NATIONAL HIGHWAY INSTITUTE
Training Solutions for Transportation Excellence

U.S. Department of Transportation

Federal Highway Administration

National Highway Institute

Certificate of Training

Timothy Sensebe

NATIONAL HIGHWAY INSTITUTE

has participated in

FHWA-NHI-130055

Safety Inspection of In Service Bridges

hosted by

Nebraska LTAP

Date: *April 16-27 2018*

Location: *Lincoln, Nebraska*

Hours of Instruction: 67

William R. Glendon PE

Instructor

Phyllis Schwab

Local Coordinator

Dennis R. Burgbacher P.E.

Instructor

Valerie Briggs

Valerie Briggs, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Andrew Comeaux

NATIONAL HIGHWAY INSTITUTE

has participated in

FHWA-NHI-130055

Safety Inspection of In Service Bridges

hosted by

Nebraska LTAP

Date: *April 16-27 2018*

Location: *Lincoln, Nebraska*

Hours of Instruction: 67

William R Stephenson PE
Instructor

Chyllis Schwab
Local Coordinator

Dennis K. Baughman P.E.
Instructor

Valerie Briggs
Valerie Briggs, Director
National Highway Institute

The American Traffic Safety Services Association

Hereby recognizes that

Jonathan G McDowell

has attended

Traffic Control Supervisor Refresher-LA State Specific

Training Course

5/24/2019 to 5/24/2019
Date

Baton Rouge, LA
Location

ATSSA
SAFER ROADS SAVE LIVES

Training & Products Dept. Director

President, CEO

The American Traffic Safety Services Association

Hereby recognizes that

Daniel Helms

has attended

Traffic Control Supervisor-LA State Specific

Training Course

12/5/2018 to 12/6/2018
Date

Baton Rouge, LA
Location

ATSSA
SAFER ROADS SAVE LIVES

Training & Products Dept. Director

President, CEO

The American Traffic Safety Services Association

Hereby recognizes that

Daniel Helms

has attended

Traffic Control Technician-LA State Specific

Training Course

12/4/2018 to 12/4/2018
Date

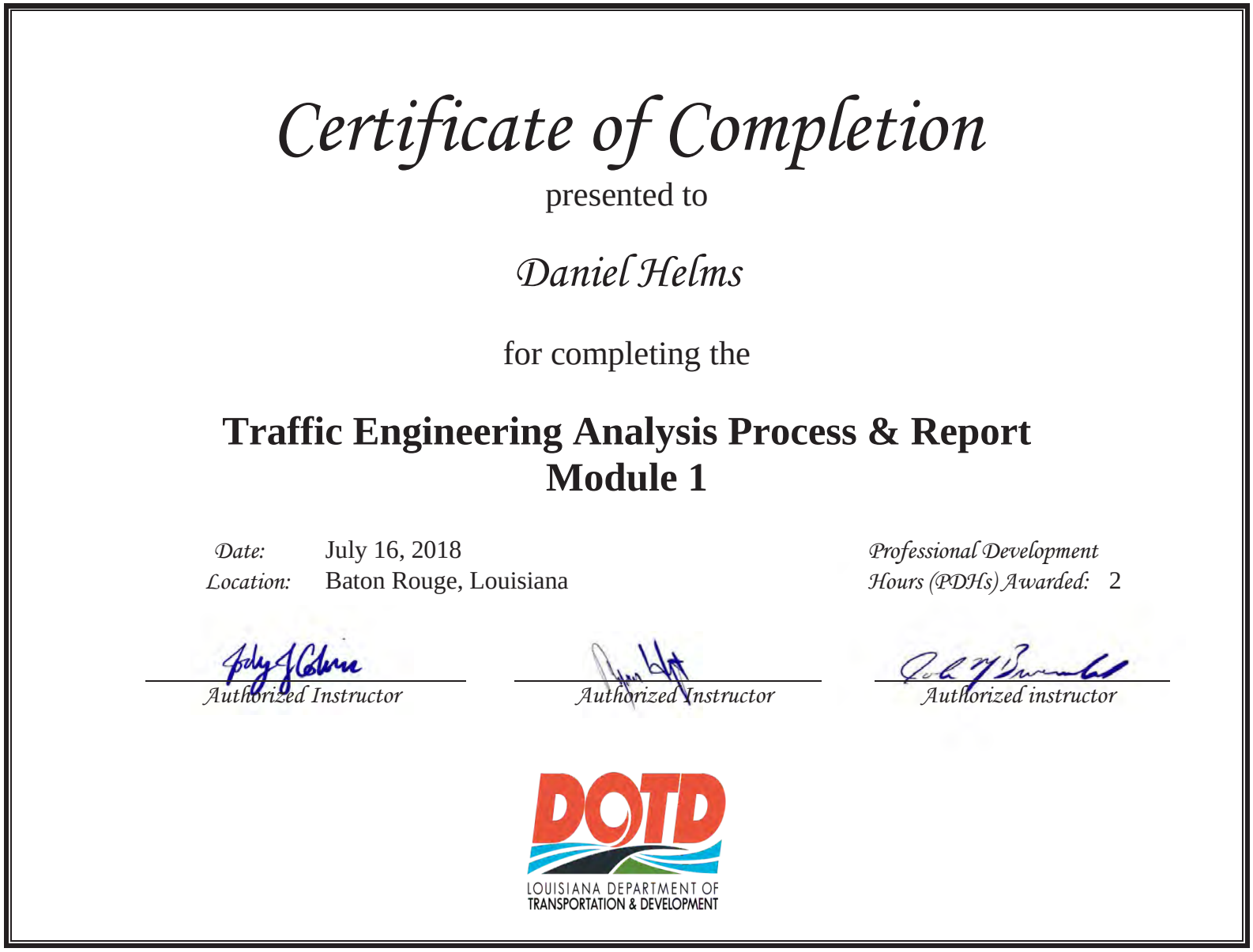
Baton Rouge, LA
Location

ATSSA
SAFER ROADS SAVE LIVES

Training & Products Dept. Director

President, CEO

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



Certificate of Completion

presented to

Daniel Helms

for completing the

Traffic Engineering Analysis Process & Report
Module 1

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

Professional Development Hours (PDHs) Awarded: 2

Authorized Instructor | *Authorized Instructor* | *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Daniel Helms

for completing the

Traffic Engineering Analysis Process & Report Module 2

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

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | *Authorized Instructor* | *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Daniel Helms

for completing the

Traffic Engineering Analysis Process & Report Module 3

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

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | *Authorized Instructor* | *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Jonathan McDowell

for completing the

Traffic Engineering Analysis Process & Report Module 1

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

Professional Development Hours (PDHs) Awarded: 2

Authorized Instructor | *Authorized Instructor* | *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Jonathan McDowell

for completing the

Traffic Engineering Analysis Process & Report Module 2

Date: September 17, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | *Authorized Instructor* | *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Jonathan McDowell

for completing the

Traffic Engineering Analysis Process & Report Module 3

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

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | *Authorized Instructor* | *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Christopher Pitre

has attended

Traffic Control Supervisor-LA State Specific

Training Course

4/7/2021 to 4/8/2025
Training Valid Through

Director of Training

Baton Rouge, LA
Location

President, CEO

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

ATSSA American Traffic Safety Services Association ATSSA.com

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Christopher Pitre

has attended

Traffic Control Technician-LA State Specific

Training Course

4/6/2021 to 4/6/2025
Training Valid Through

Director of Training

Baton Rouge, LA
Location

President, CEO

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

ATSSA American Traffic Safety Services Association ATSSA.com

The American Traffic Safety Services Association

Hereby recognizes that

James Thomas

has attended

Traffic Control Supervisor Refresher-LA State Specific

Training Course

2/6/16 to 2/6/16
Date

Baton Rouge, LA
Location

Donna M. Clarke
Training & Products Dept. Director

Ryan A. Wentz
President, CEO

ATSSA
SAFER ROADS SAVE LIVES

The American Traffic Safety Services Association

Hereby recognizes that

Edward Smith

has attended

Traffic Control Supervisor Refresher-LA State Specific Training Course

09/28/2018 to 09/28/2018
Date

Lafayette, LA
Location

ATSSA
SAFER ROADS SAVE LIVES

Training & Products Dept. Director

President, CEO

The American Traffic Safety Services Association

Hereby recognizes that

Colby Guidry

has attended

Traffic Control Supervisor Refresher-LA State Specific Training Course

09/28/2018 to 09/28/2018
Date

Lafayette, LA
Location

ATSSA
SAFER ROADS SAVE LIVES

Jessica Schuyler
Training & Products Dept. Director

Ryan A. Wentz
President, CEO

AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION

This is to affirm that

James Costigan

has satisfied the requirements to be designated as a

CERTIFIED FLAGGER

Expiration Date 5/6/25 *State Issued in* LA

Instructor Signature

Verification available by calling 1-877-642-4637 or at http://www.flagger.com

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

James Costigan

has attended

Traffic Control Supervisor Refresher-LA State Specific

Training Course

5/10/2021 to 5/10/2025
Training Valid Through

Director of Training

Baton Rouge, LA
Location

President, CEO

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

ATSSA American Traffic Safety Services Association ATSSA.com

AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION

This is to affirm that

Scott Gordon

has satisfied the requirements to be designated as a

CERTIFIED FLAGGER

Expiration Date 5/6/25 *State Issued in* LA

Instructor Signature

Verification available by calling 1-877-642-4637 or at http://www.flagger.com

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Scott Gordon

has attended

Traffic Control Supervisor Refresher-LA State Specific

Training Course

5/10/2021 to 5/10/2025
Training Valid Through

Director of Training

Baton Rouge, LA
Location

President, CEO

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

American Traffic Safety Services Association ATSSA.com

AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION

This is to affirm that

Matt Miller

has satisfied the requirements to be designated as a

CERTIFIED FLAGGER

Expiration Date 5/6/25 *State Issued in* LA

Instructor Signature

Verification available by calling 1-877-642-4637 or at http://www.flagger.com

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Matthew Miller

has attended

Traffic Control Supervisor Refresher-LA State Specific

Training Course

5/10/2021 to 5/10/2025
Training Valid Through

Director of Training

Baton Rouge, LA
Location

President, CEO

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

ATSSA American Traffic Safety Services Association ATSSA.com

AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION

This is to affirm that

Anthony Schoenecker

has satisfied the requirements to be designated as a

CERTIFIED FLAGGER

Expiration Date 5/6/25 *State Issued in* LA

Instructor Signature

Verification available by calling 1-877-642-4637 or at http://www.flagger.com

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Anthony Schoenecker

has attended

Traffic Control Supervisor Refresher-LA State Specific

Training Course

5/10/2021 to 5/10/2025
Training Valid Through

Director of Training

Baton Rouge, LA
Location

President, CEO

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

ATSSA

American Traffic Safety Services Association ATSSA.com

AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION

This is to affirm that

Bryan Swartz

has satisfied the requirements to be designated as a

CERTIFIED FLAGGER

Expiration Date 5/6/25 *State Issued in* LA

Instructor Signature

Verification available by calling 1-877-642-4637 or at http://www.flagger.com

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Bryan Swartz

has attended

Traffic Control Supervisor Refresher-LA State Specific

Training Course

5/10/2021 to 5/10/2025
Training Valid Through

Director of Training

Baton Rouge, LA
Location

President, CEO

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

ATSSA

American Traffic Safety Services Association ATSSA.com

GE'S INSPECTION ACADEMY

CERTIFICATE OF COMPLETION

IS HEREBY GRANTED TO:

Scott Gordon

TO CERTIFY SUCCESSFUL COMPLETION OF

ULTRASONIC TESTING LEVEL II

40-hour course

December 9-13, 2013

imagination at work

Mateene Mutia

Mutia Mateene

ASNT Level III, Certificate #99597

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Timothy Sensebe

has attended

Traffic Control Supervisor Refresher-LA State Specific

Training Course

5/10/2021 to 5/10/2025
Training Valid Through

Director of Training

Baton Rouge, LA
Location

President, CEO

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

ATSSA American Traffic Safety Services Association ATSSA.com

AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION

This is to affirm that

Tim Sensebe

has satisfied the requirements to be designated as a

CERTIFIED FLAGGER

Expiration Date 5/6/25 *State Issued in* LA

Instructor Signature

Verification available by calling 1-877-642-4637 or at http://www.flagger.com

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Andrew Comeaux

has attended

Traffic Control Supervisor-LA State Specific

Training Course

5/12/2021 to 5/13/2025
Training Valid Through

Director of Training

Baton Rouge, LA
Location

President, CEO

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

ATSSA

American Traffic Safety Services Association ATSSA.com

Certificate of Training

this certifies that

Andrew Comeaux

has successfully completed the training program requirements for

ATSSA Online Flagger Certification Training Course

Awarded on this **13th** *day of* **May 2021**

HEATH POPE, PE

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

Mr. Heath Kennedy Pope

License/Certificate Type - Number
PE.0036946

Expiration Date
09/30/2022

Status: Active

U.S. Department Of Transportation
Federal Highway Administration

National Highway Institute
Certificate of Training

Heath K. Pope

has participated in

Underwater Bridge Inspection
NHI Course 130091

hosted by

Collins Engineers, Inc.

Location: Holland, Michigan
Hours of Instruction: 20
Date: September, 2007

Instructor
Coordinator
Director, National Highway Institute
Federal Highway Administration
Director, Office of Professional Development
Federal Highway Administration

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute
Certificate of Training

Heath Pope

has participated in

Bridge Safety Inspection Refresher Training

hosted by

Oregon Department of Transportation

Date: January 23 through January 25, 2018
Hours of Instruction: 18
Location: Salem, Oregon

Instructor
Local Coordinator
Instructor
Valerie Briggs, Director
National Highway Institute

U.S. Department Of Transportation
Federal Highway Administration

National Highway Institute
Certificate of Training

Heath Pope

has participated in

Safety Inspection of In-Service Bridges

hosted by

Michigan Department of Transportation

Location: Lansing
Hours of Instruction: 30
Date: February 4, 2005

Director, National Highway Institute
Federal Highway Administration
Director, Office of Professional Development
Federal Highway Administration

MICHAEL DUKES, PE

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

Mr. Michael D. Dukes

License/Certificate Type - Number	Expiration Date
PE.0040986	03/31/2023

Status: Active

Association of Diving Contractors International

Cert. # 58165

Expires 07/27/2023

SURFACE-SUPPLIED AIR DIVING SUPERVISOR

MICHAEL DUKES I.D. 0181

Commercial Diver Certification Card

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Michael Dukes

has participated in

FHWA-NHI-130091 Underwater Bridge Inspection

hosted by

Boston Society of Civil Engineers Section/ASCE

Date: January 28-30, 2015
Location: Tauton, MA

Hours of Instruction: 27 = 2.7 CEUs

Instructor

Instructor

Local Coordinator

Valerie Briggs, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

nhi national highway institute

Certificate of Training

Michael D. Dukes

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Texas Department of Transportation

Date: March 9-12, 2021
Location: Virtual Delivery, TX

Hours of Instruction: 18

Digitally signed by Mark J Nyerges
Date: 2021.03.19 11:03:17 -04'00'

Instructor

Digitally signed by Mark Patrick Kane
DN: cn=Mark Patrick Kane, c=US, o=GPI, ou=Transportation, email=pkane@gpinet.com
Date: 2021.03.18 08:23:27 -04'00'

Instructor

Shandon Richardson

Local Coordinator

Thomas Harman

Thomas Harman, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Michael Dukes

has participated in

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

hosted by

Oklahoma Department of Transportation

Date: October 5 - 16, 2015
Location: Oklahoma City, OK

Hours of Instruction: 67 Hours

Instructor

Instructor

Local Coordinator

Valerie Briggs, Director
National Highway Institute

DUSTIN NOEL, PE

OKLAHOMA STATE BOARD OF LICENSURE FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS

PE 26411

Dustin William Noel

Is licensed as a Professional Engineer and is authorized to practice professional engineering in Oklahoma until

10/31/2022

Association of Diving Contractors International

Cert. # 58346

Expires 08/30/2023

SURFACE-SUPPLIED AIR DIVING SUPERVISOR

DUSTIN W. NOEL I.D. 496275835

Commercial Diver Certification Card

Pennsylvania Department of Transportation

Certificate of Training

Dustin W. Noel

has attended

Basic Course on Bridge Safety Inspection Training

Sponsored by the Bureau of Design

Presented by MICHAEL BAKER JR., INC.

Course Date 2/2/04 – 2/19/04

CEUs Earned 0.0

R. Scott Christie, P.E.
Chief Bridge Engineer

Steven A. Davis
Project Manager

FHWA-approved equivalent to NHI 130055, Safety Inspection of In-service Bridges

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Dustin W. Noel

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Colorado Department of Transportation

Date: March 25-27, 2019
Location: Denver, CO

Hours of Instruction: 18

Instructor

Instructor

Local Coordinator

Michael Davies, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Dustin Noel

has participated in

NHI 130091 Underwater Bridge Inspection Course

hosted by

Infrastructure Engineers, Inc.

Date: January 21 - 25, 2019
Location: Orlando, FL

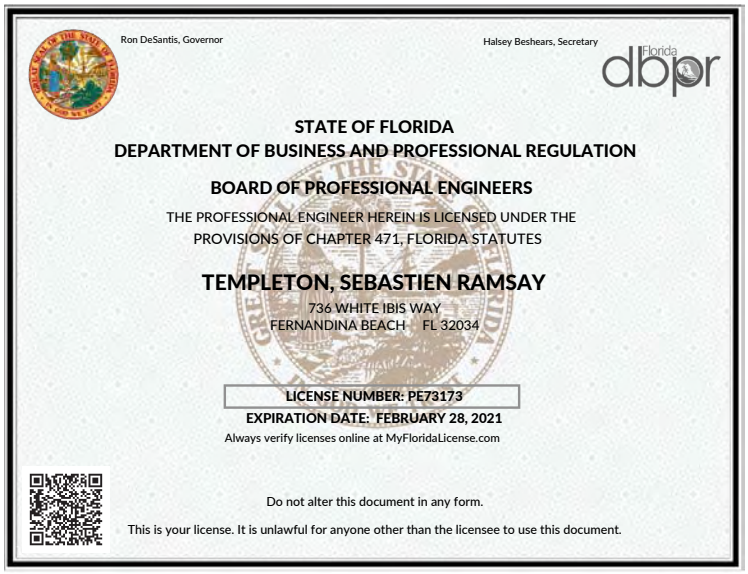
Hours of Instruction: 24

Instructor

Local Coordinator

Michael Davies, Director
National Highway Institute

SEBASTIEN TEMPLETON, PE



Ron DeSantis, Governor

Halsey Beshears, Secretary

Florida dbpr

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

TEMPLETON, SEBASTIEN RAMSAY

736 WHITE IBIS WAY
FERNANDINA BEACH FL 32034

LICENSE NUMBER: PE73173
EXPIRATION DATE: FEBRUARY 28, 2021
Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.

This is your license. It is unlawful for anyone other than the licensee to use this document.

Association of Diving Contractors International

Cert. # 48653

Expires 01/04/2024

ADCI

SURFACE-SUPPLIED AIR DIVING SUPERVISOR

SEBASTIEN R. TEMPLETON I.D. 460699080

Commercial Diver Certification Card

U.S. Department Of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

NHI NATIONAL HIGHWAY INSTITUTE

Sebastien Templeton

has participated in

FHWA-NHI-130091 Underwater Bridge Inspection

hosted by

Ayres Associates Inc

Date: June 30, 2009 – July 2, 2009 *Hours of Instruction:* 18 hours

Location: Tampa, FL

Instructor

Instructor

Local Coordinator

Richard Barnaby, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

NHI

Sebastian Templeton

has participated in

FHWA-NHI-130053 Bridge Inspection Refresher Training

hosted by

Colorado Department of Transportation

Date: March 25-27, 2019 *Hours of Instruction* 18

Location: Denver, CO

Instructor

Instructor

Local Coordinator

Michael Davies, Director
National Highway Institute

U.S. Department Of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

NHI NATIONAL HIGHWAY INSTITUTE

Sebastien Templeton

has participated in

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

hosted by

National Highway Institute

Date: April 8 - 19, 2013 *Hours of Instruction:* 67

Location: Arlington, VA

Instructor

Instructor

Local Coordinator

Richard Barnaby, Director
National Highway Institute

pennsylvania
DEPARTMENT OF TRANSPORTATION

Certificate of Training

Greyson McDonald

On 3/15/2017 successfully completed

PennDOTs Bridge Safety Inspector Certification Course

Sponsored by the Highway Administration Deputate

Presented by: Michael Baker International
With the score of: 75.5%
Continuing Education Credits: 96 PDHs

Randall Shull
Training Development Manager

Greyson McDonald

FHWA-approved equivalent to NHI 130055, Safety Inspection of In-service Bridges

ERIC BOLEK

Association of Diving Contractors International

Cert. # 52991

Expires 05/27/2023

ADCI

ENTRY LEVEL TENDER/DIVER

ERIC J. BOLEK I.D. 1987

Commercial Diver Certification Card

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

NHI
NATIONAL HIGHWAY INSTITUTE

Certificate of Training

Eric Bolek

has participated in

NHI 130091 Underwater Bridge Inspection Course

hosted by

Infrastructure Engineers, Inc.

Date: January 21 - 25, 2019

Hours of Instruction: 24

Location: Orlando, FL

David T Cook
Instructor

Local Coordinator

Instructor

Valerie Briggs
Valerie Briggs, Director
National Highway Institute

2013 In-Depth Inspection of the Gramercy Bridge

AECOM inspection team leader, Henry Fix, PE, using a snooper to perform a hands-on inspection of the fracture critical truss bottom chord and floor system.

SECTIONS

21-23

21. QA/QC Plan and/or Work Plan: If the advertisement requires submission of a QA/QC plan or Work plan, include them here. Otherwise, leave this section blank.

Section left intentionally blank.

22. Sub-consultant information

Firm Name (as registered with Louisiana's Secretary of State)	Address	Point of Contact and Email Address	Phone Number
CONSOR Engineers, LLC	15310 Park Row, Houston, TX 77084	Heath Pope hpope@consoreng.com	888.451.6822 ext. 7301
Huval and Associates, Inc.	922 W Pont Des Mouton Rd, Lafayette, LA 70507	Bob Schmidt bschmidt@huvalassoc.com	337.234.3798
KPFF, Inc.	501 Louisiana Avenue, Baton Rouge, LA 70802	Chris Ligozio Chris.ligozio@kpff.com	585.465.5092
Modjeski and Masters, Inc.	1055 St. Charles Ave., Suite 400, New Orleans, LA 70130	Ralph J. Eppehimer, PE rjeppehimer@modjeski.com	504.524.4344
T. Baker Smith, LLC	1100 South Acadia Rd, Thibodaux, LA 70301	Jean L. Reulet III Jean.Reulet@tbsmith.com	985.493.2953

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.

Section left intentionally blank.

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 $13.3 billion in fiscal year 2021.

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