

Proposal to provide Consultant Services

Contract Numbers

4400036211 | 4400036212 | 4400036213 | 4400036214

IDIQ Contracts for Bridge Load Rating Services Statewide

August 25, 2026

Prepared by Bridge Diagnostics, Inc.

DOTD FORM: 24-102

(Revised August 1, 2026)

PROPOSAL TO PROVIDE CONSULTANT SERVICES

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

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

1. Contract Name as shown in the advertisement	IDIQ Contracts for Bridge Load Rating Services Statewide
2. Contract Number(s) as shown in the advertisement	4400036211, 4400036212, 4400036213, AND 4400036214
3. State Project Number(s), if shown in the advertisement	N/A
4. Prime consultant name (name must match <u>exactly</u> as registered with the Louisiana Secretary of State (SOS) where such registration is required by law; including punctuation; <u>include screenshot from SOS at the end of Section 20</u>)	Bridge Diagnostics, Inc.
5. Prime consultant license number (as registered with the Louisiana Professional Engineering and Land Surveying Board (LAPELS) if registration is required under Louisiana law)	EF.0005036
6. Prime consultant mailing address	4300 South I-10 Service Road West, Suite 210 Metairie, Louisiana 70001
7. Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	4300 South I-10 Service Road West, Suite 210 Metairie, Louisiana 70001
8. Name, title, phone number, and email address of prime consultant's contract point of contact	Steven Fall, P.E., Senior Engineer, 504-874-1042, stevenf@bditest.com
9. Name, title, phone number, and email address of the official with signing authority for this proposal	Brian Pine, Senior Vice President, 724-713-5157, brianp@bditest.com

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

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



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

August 25, 2026

Date:

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

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

Firm(s):
N/A

Firm(s)' %:

12. Discipline Table:

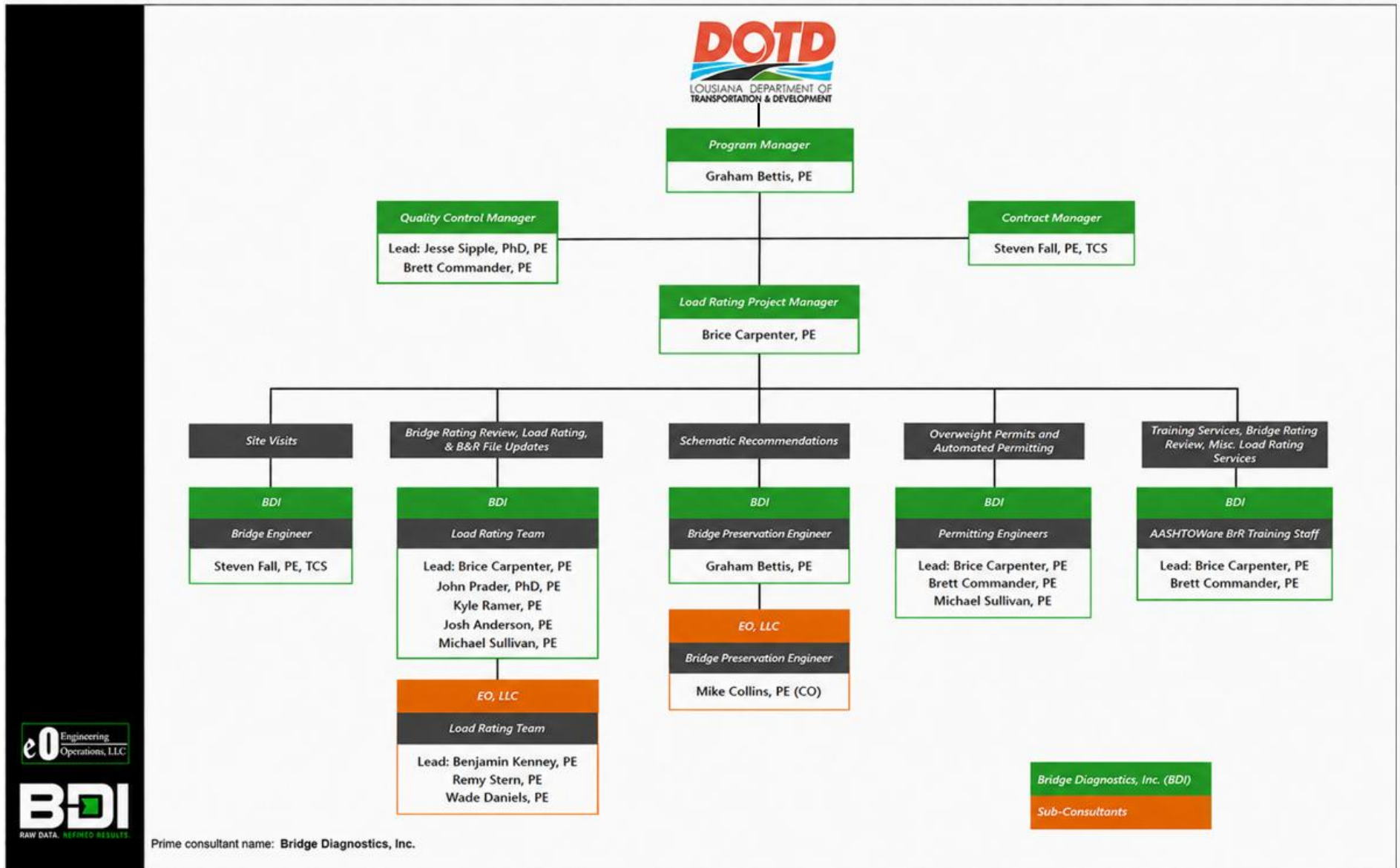
Discipline(s)	% of Overall Contract	Prime: Bridge Diagnostics, Inc. (BDI)	Firm B: Engineering Operations, LLC (eO)	Each Discipline must total to 100%
Bridge	100%	80%	20%	100%
Identify the percentage of work for the <u>overall contract</u> to be performed by the prime consultant and each sub-consultant.				
Percent of Contract	100%	80%	20%	100%

13. Team 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)
Bridge Diagnostics, Inc.	Principal	2	2
	Supervisor - Eng	2	2
	Supervisor - Other	3	5
	Engineer	6	10
	Engineer - Other	3	5
	Engineer Intern	6	8
	Engineer Aid	5	7
	Senior Technician	2	4
	Technician	2	7
	CAD Technician	3	7
	Accountant	1	3
	Administrative	1	2
	Clerical	1	3
Engineering Operations, LLC.	Supervisor - Eng	2	4
	Engineer	2	2
	Engineer Intern	7	22
	Engineer - Other	2	12
	Inspector - Bridge	3	10

***For evaluation purposes only**, and as referenced in the Scope of Services on page 2 of IDIQ advertisements only, the consultant shall assume the number of concurrently active task orders specified in the advertisement and shall identify the number of **committed** personnel accordingly.

14. Organizational Chart:



15. Minimum Personnel Requirements:

MPR No. Do not insert wording from ad	Personnel being used to meet the MPR (Individual(s) may not satisfy more than one MPR unless specifically allowed by Attachment B of the advertisement)	Firm employed by	Type of license and discipline meeting MPR/ certification & number (Ex: PE # - Civil)	State of license	License certification expiration date /
1	Graham Bettis, PE	Bridge Diagnostics, Inc.	PE # 0051019 – Civil	LA	Cert: 01/05/2026 Exp: 09/30/2028
	Brett Commander, PE	Bridge Diagnostics, Inc.	PE # 0035864 - Civil	LA	Cert: 11/17/2010 Exp: 03/31/2027
2	Graham Bettis, PE	Bridge Diagnostics, Inc.	PE # 0051019 - Civil	LA	Cert: 01/05/2026 Exp: 09/30/2028
	Brett Commander, PE	Bridge Diagnostics, Inc.	PE # 0035864 - Civil	LA	Cert: 11/17/2010 Exp: 03/31/2027
3	Brett Commander, PE	Bridge Diagnostics, Inc.	PE # 0035864 - Civil	LA	Cert: 11/17/2010 Exp: 03/31/2027
4	Brice Carpenter, PE	Bridge Diagnostics, Inc.	PE # 0039341 – Civil	LA	Cert: 11/10/2014 Exp: 03/31/2027
	Jesse Sipple, PhD, PE	Bridge Diagnostics, Inc.	PE # 0041028 - Civil	LA	Cert: 09/08/2016 Exp: 03/31/2027
	John Prader, PhD, PE	Bridge Diagnostics, Inc.	PE # 0051658 – Civil	LA	Cert: 06/16/2026 Exp: 09/30/2028
	Benjamin Kenney, PE	Engineering Operations, LLC	PE # 0041531 - Civil	LA	Cert: 03/23/2017 Exp: 09/30/2027
5	Brice Carpenter, PE	Bridge Diagnostics, Inc.	PE # 0039341 – Civil	LA	Cert: 11/10/2014 Exp: 03/31/2027
	Josh Anderson, PE	Bridge Diagnostics, Inc.	PE # 0051864 – Civil	LA	Cert: 8/21/2026 Exp: 03/31/2027
	Michael Sullivan, PE	Bridge Diagnostics, Inc.	PE # 0051384 - Civil	LA	Cert: 04/08/2026 Exp: 09/30/2028
	Remy Stern, PE	Engineering Operations, LLC	PE # 0050948 - Civil	LA	Cert: 11/25/2025 Exp: 03/31/2028
	Wade Daniels, PE	Engineering Operations, LLC	PE # 0050844 - Civil	LA	Cert: 10/24/2025 Exp: 03/31/2028

16. Staff Experience:

Firm employed by Bridge Diagnostics, Inc.			
Name	Graham Bettis, PE		Years of relevant experience with this employer
Title	Principal Engineer / Program Manager		Years of relevant experience with other employer(s)
Degree(s) / Years / Specialization		BS / 1999 / Architectural Engineering (Structures)	
Active registration number / state / expiration date		PE.0051019 / LA / 09/30/2028 Additional PEs: TX, CO, VA	
Year registered	2026 (LA, CO, VA) 2005 (TX)	Discipline	Civil/Structural Engineering
Contract role(s) / brief description of responsibilities		MPR 1, 2 – Principal engineer and program manager responsible for overall IDIQ/program leadership, DOTD coordination, executive and technical oversight, and direction of task managers.	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
09/25 - Present	General Experience – Mr. Bettis joined BDI in 2025 to support bridge owners nationwide with bridge inspection, structural evaluation, load rating, and bridge preservation programs. He is BDI’s principal engineer in charge of Louisiana operations, and he has worked extensively with DOTD engineers both before and after joining BDI. He brings decades of experience evaluating existing structures, and he has performed numerous engineering evaluations and bridge load ratings to determine capacity when conventional rating methods produce overly conservative results. Mr. Bettis applies his extensive background in bridge inspection, structural engineering, and bridge preservation to evaluate existing bridges and develop practical recommendations for continued service, rehabilitation, and strengthening. His experience includes evaluation of steel, reinforced concrete, prestressed concrete, and other bridge types using current AASHTO bridge evaluation methodologies. Having spent the majority of his career with the Texas Department of Transportation, Mr. Bettis is called upon regularly to offer a bridge owner’s perspective as part of BDI’s bridge evaluation and load rating projects.		
05/15 – 10/24	TxDOT State Bridge Engineer – In May 2015, Mr. Bettis was named TxDOT Bridge Division Director of Field Operations and in September 2018 was appointed TxDOT Bridge Division Director and TxDOT State Bridge Engineer, a role he served in for six years. Mr. Bettis directed the statewide bridge inspection and load rating program for more than 57,000 bridges, working directly with the Statewide Bridge Inspection Manager to ensure compliance with the National Bridge Inspection Standards (NBIS) and AASHTO Manual for Bridge Evaluation. He was responsible for statewide policy governing bridge load ratings, load postings, and implementation of Load and Resistance Factor Rating (LRFR) procedures. Mr. Bettis actively participated in TxDOT's statewide transition to AASHTOWare Bridge Rating (BrR) and implementation of FHWA requirements for (LRFR), specialized hauling vehicles (SHV’s), and emergency vehicles (EV’s). Throughout this transition, he worked closely with the FHWA to support implementation of updated bridge rating methodologies and statewide load rating practices. As State Bridge Engineer, he ultimately had signature authority for the TxDOT Bridge Inspection Manual, which established statewide policies governing bridge inspection, load ratings, and load postings. He collaborated directly with FHWA bridge engineers on statewide bridge evaluation policy, annual NBIS compliance reviews, and corrective action plans affecting bridge inspection and load rating practices.		

01/11 – 04/15	TxDOT Bridge Condition Surveys & Load Ratings (Statewide) – Mr. Bettis performed detailed bridge inspections and load ratings on more than 100 bridge structures throughout Texas. Structures evaluated included steel truss bridges, structural steel girder bridges, prestressed concrete girder bridges, cast-in-place concrete bridges, timber bridges, and bridge-class culverts. His responsibilities included performing field investigations, verifying consultant NBIS inspection findings, evaluating structural deficiencies, and completing bridge load ratings to determine safe load-carrying capacity. He performed bridge load ratings using various procedures, including BAR7, RISA, TxDOT's bridge load rating tool, and hand calculations. His analyses frequently took into account deterioration, section loss, damaged members, and loss of prestressing strands following collision damage or material degradation. Mr. Bettis evaluated numerous complex steel truss bridges, including the US 190 Steinhagen Lake Bridge, BUS 71 Bridge in Columbus, US 90 Bridge over the Colorado River, US 281 Bridge over the Colorado River, and the US 183 Montopolis Bridge. Following many of these evaluations (20+), he served as design engineer-of-record for bridge repairs, rehabilitation, and/or strengthening.
03/12 – 10/24	Precast Segmental, Cable-Stayed Corpus Christi Harbor Bridge – Mr. Bettis served as one of TxDOT's principal engineers for the new Corpus Christi Harbor Bridge, the largest and most technically complex bridge project ever undertaken in Texas. The project consisted of a precast segmental, cable-stayed bridge, requiring advanced structural engineering and independent design verification. During development, he prepared structural technical provisions for the design-build procurement and remained actively involved throughout design and construction. During construction, he led the technical evaluation and resolution of thirty-two major structural design deficiencies identified during independent review. He coordinated engineering reviews among the developer, replacement engineer of record, owner's representative, independent review engineer, FHWA, and TxDOT leadership, ultimately obtaining approval for revised structural designs. During construction, Mr. Bettis participated in the NSTM inspection of the existing Corpus Christi Harbor steel truss bridge following consultant inspections that resulted in reductions of condition and load ratings. After conducting follow-up structural evaluations, he determined that deterioration was limited primarily to secondary members that did not significantly reduce structural capacity. His assessment supported restoration of the bridge's condition rating and elimination of unnecessary load restrictions.
09/25 – 04/26	IH 10 Bonnet Carre Spillway Bridges – The Bonnet Carre spillway bridges are a pair of 10-mile long structures carrying I-10 over Lake Pontchartrain and the Bonnet Carre Spillway in Kenner, LA. In 2025, the DOTD retained BDI to evaluate vertical cracks in the spun-cast concrete piles supporting bents along the structure. Given his expertise evaluating structural defects, determining cause, and establishing preservation strategies, Mr. Bettis helped to establish the likely cause of cracking, and also to determine evaluation techniques that eliminated the risk of any consequential damage to the piling during testing operations. Mr. Bettis concluded that the cracks, while posing a slight risk for increased corrosion potential, did not represent a significant impact to the piling longevity or serviceability as long as suitable preservation efforts were implemented. Mr. Bettis recommended a straightforward crack sealing approach, which when implemented will be orders of magnitude less expensive than an epoxy crack injection or piling jacketing project. Mr. Bettis presented those findings to the DOTD in April 2026

Firm employed by Bridge Diagnostics, Inc.			
Name	Brett Commander		Years of relevant experience with this employer
Title	Principal Engineer / QA/QC Lead		36
Degree(s) / Years / Specialization		Years of relevant experience with other employer(s)	
		1	
Degree(s) / Years / Specialization		BS / 1986 / Civil Engineering MS / 1989 / Structural Engineering	
Active registration number / state / expiration date		P.E. 35864 / LA / 3/31/27 Additional PEs: AR, AK, AL, AZ, CO, DE, FL, GA, IA, ID, KS, MT, NE, ND, NH, NM, NY, OR, PA, RI, SC, SD, TN, TX, VA, WA, WI, WY	
Year registered	2010 (LA)	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities		MPR 1, 2, 3 – Principal engineer and load rating subject matter expert; will lead the overall QA/QC effort and be available to the entire load rating team to provide guidance and expertise on practical rating solutions.	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
10/89 – Present	General Experience – As co-founder of BDI, Mr. Commander has led the engineering team for 36 years and continues to act as one of the firm’s principal engineers. He started his engineering career developing structural analysis methods and software to realistically assess structural performance. He developed live-load test and model calibration procedures to capture and identify load paths with the end goal of achieving field verified load ratings. Mr. Commander’s experience includes complex bridge load ratings, moveable bridge evaluations, bridge weigh-in-motion research, super-heavy load tests, and permit load ratings on hundreds of highway and railway bridges. Licensed as a Louisiana Professional Engineer in 2010, he brings over 15 years of experience conducting bridge load ratings for the DOTD. His expertise encompasses complex superheavy transport loading, deteriorated prestressed concrete bridges, CFRP-strengthened reinforced concrete, box and pipe culverts, and standard ratings utilizing AASHTOWare BrR software. He is familiar with national and state-specific codes, including AASHTO’s Manual for Bridge Evaluation, DOTD’s Bridge Design & Evaluation Manual, and the Louisiana Standard Specifications for Roads and Bridges. Mr. Commander has led load rating training sessions throughout his career, and the FHWA has invited him to teach as part of their Bridge Load Rating Webinar Series on multiple occasions.		
11/12-9/22 & 10/24 - Ongoing	Multi-Phase Evaluation of the Bayou Ramos Bridge – As principal engineer, Mr. Commander provided technical leadership for the evaluation, load rating, and long-term monitoring of the US-90 Bayou Ramos Bridge, a continuous multi-span prestressed concrete girder structure exhibiting crack development in its AASHTO girders for over 10-years. He directed the development of instrumentation concepts, field testing programs, and structural monitoring systems used to assess crack behavior and overall bridge performance under live-load and thermal effects. Mr. Commander oversaw the development and review of analytical models and refined load ratings in accordance with AASHTO and DOTD requirements, providing a more accurate assessment of the structure’s live-load carrying capacity. As part of a 2024 follow-up effort, he also guided the implementation of advanced analysis and testing methodologies, including refined shear capacity evaluations and strut-and-tie modeling (STM), to investigate potential posting removal. Load testing was performed to validate analytical results and support revised load ratings, leading to the removal of the structures’ load posting, while continued structural monitoring was implemented to verify the long-term performance of cracked regions of the structure under unrestricted legal traffic.		

10/21-05/22	Load Ratings of DOTD Structures, LA – As principal engineer , Mr. Commander provided technical leadership and oversight for the diagnostic load testing and refined load rating of ten DOTD structures. The structures included short span reinforced concrete slabs and a variety of culverts with minimal fill depths that required posting under initial conventional load rating analyses. Mr. Commander directed the overall technical approach, provided engineering guidance throughout testing and analysis activities, and performed PE review of load rating calculations, reports, and project deliverables. By leveraging structural response data and refined analysis techniques, the project enabled DOTD to more accurately assess load-carrying capacity, resulting in increased ratings and the reduction or elimination of posting requirements
01/17 – 1/22	Retainer Contract for Testing Unknown Foundations Statewide – Mr. Commander was the principal engineer for nondestructive evaluation (NDE) services to determine the unknown foundations of 1,857 piles in Louisiana. The project utilized multiple methods of NDT-E, including ultra-seismic testing, parallel seismic survey, sonic echo/impulse response, and guided wave. Thousands of piles have been tested to determine the embedded depth for subsequent NBIS 113 scour evaluation and reporting. BDI also assisted DOTD in FHWA reporting these items by uploading reports into AssetWise.
02/23 - Ongoing	Virginia DOT Statewide Bridge Evaluation and Monitoring On-Call – As subject matter expert in the areas of bridge load rating, instrumentation, structural testing, and monitoring for the duration of this VDOT IDIQ contract, Mr. Commander's role has been to develop structural evaluation and quality control plans to address specific structural concerns on bridges, tunnels, and ancillary systems. This includes developing evaluation scopes, provisioning instrumentation and data acquisition, and overseeing teams of engineers and technicians to install and maintain monitoring systems. Various monitoring methods and structural evaluation techniques have been implemented, from automated total stations to strain gage installation and load testing to geotechnical monitoring systems.
01/20 - Ongoing	Field-Verified Load Ratings of Off System Bridges with No Plans, ID – As principal engineer for Idaho Transportation Department's statewide off-system bridge evaluation contract, Mr. Commander provides technical leadership and oversight for numerous task orders involving bridge field investigation, load testing, and load rating of locally owned bridges throughout Idaho. The structures evaluated lack original design plans and consist of non-standard bridge types, requiring the development of customized investigation and analysis approaches. He oversees the application of diagnostic load testing and field-verified load rating methodologies to assess actual bridge behavior and load distribution characteristics, resulting in more reliable load-carrying capacity determinations. Mr. Commander has also provided review and quality control for the interpretation and implementation of collected field data into AASHTOWare BrR models, enabling the DOT to efficiently perform future load ratings and bridge management activities.

Firm employed by Bridge Diagnostics, Inc.			
Name	Brice Carpenter, P.E.		Years of relevant experience with this employer
Title	Load Rating Project Manager		17
		Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		B.S., Civil Engineering, May 2007 M.S., Civil Engineering, May 2009	
Active registration number / state / expiration date		PE.0039341 / LA / 03/31/2027 Additional PEs: CO, ID, TX, MT, NV, UT, VA, WA	
Year registered	2014 (LA)	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities		MPR 4, 5 – Load rating project manager and senior load rating engineer responsible for day-to-day management and technical execution of individual load-rating task orders.	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
07/09 – Present	General Experience – Mr. Carpenter has been with BDI since 2009 and serves as load rating lead, and as a subject matter expert specializing in routine and complex bridge load rating and evaluation. Throughout his 17-year career, including 15 years working on DOTD projects, he has performed and overseen hundreds of routine and complex bridge load ratings, including trusses, arches, horizontally curved structures, and segmental bridges, using AASHTO ASD, LFD, and LRFD methodologies. He has extensive experience developing load rating models, interpreting inspection and as-built information, applying engineering judgment to resolve incomplete or conflicting documentation, and delivering accurate, consistent rating results that support bridge management and operational decision-making. Mr. Carpenter has led and supported large-scale load rating programs for state transportation agencies. His rating experience includes routine and complex evaluation of existing structures, rehabilitation projects, construction staging conditions, permit loading, and other non-standard, complex evaluation scenarios. Mr. Carpenter has extensive experience utilizing the AASHTOWare BrR software, starting in spring of 2009 on an New Mexico State University load rating project where he evaluated 20 New Mexico DOT reinforced concrete structures as a graduate student using Virtis (the predecessor to BrR). Since then, Mr. Carpenter has been responsible for various BrR based projects, including routine load ratings, BrR updates, and projects involving specialized implementation of BrR models for client’s specific needs. He is experienced in load rating QA/QC procedures and has developed expertise in the application of agency-specific requirements, including the DOTD Bridge Design and Evaluation Manual (BDEM). In addition to his technical expertise, Mr. Carpenter has extensive experience mentoring engineers and delivering technical training to both internal and external staff. He regularly provides guidance on complex load rating methodologies, evaluation techniques, and engineering judgment decisions that arise during bridge assessment projects. Through training sessions, technical reviews, and project-based mentoring, he has helped engineers and agency personnel develop a practical understanding of advanced load rating principles and their application to complex bridge evaluation situations.		
10/24 - Ongoing	Multi-Phase Evaluation of the Bayou Ramos Bridges – Mr. Carpenter led the effort to develop a multi-phase load rating strategy for this bridge that was load posted due to deterioration along many of the prestressed concrete girder ends. He was responsible for evaluation plan development and implementation, analysis team management, and QA/QC of AASHTOWare BrR models and load ratings. Mr. Carpenter also directed refined shear capacity evaluations based on multiple strut-and-tie method applications, which were validated through load testing. Through development of a phased evaluation strategy,		

	integration of refined analytical methodologies, Mr. Carpenter helped establish safe and defensible load ratings while minimizing unnecessary restrictions.
09/24 - Ongoing	Colorado Off-System Routine Load Ratings Statewide – Since 2024, Mr. Carpenter has served as BDI’s project manager and load rating technical lead for a CDOT program that initially involved load ratings of 34 off-system bridges, primarily consisting of prestressed and post-tensioned concrete girder and box girder structures. The project required development of AASHTOWare BrR models using structural plans, inspection reports, and other available data to produce load ratings in accordance with CDOT standards. Mr. Carpenter was responsible for overall project management, technical oversight, and creation and QA/QC of load rating packages and BrR models. He also supported coordination with partner teams by providing BrR model review, troubleshooting, and correction during project delivery and closeout. Given the successful completion of the initial batch of load ratings performed under Mr. Carpenter’s leadership, CDOT awarded BDI an additional 210 bridges in 2025. Mr. Carpenter continues to serve as project manager and is responsible for staffing and successfully managing the scope, schedule and budget for this project. This project experience spans a wide range of bridge types, including complex reinforced concrete arches, slabs, rigid frames, culverts, and prestressed concrete systems.
11/24-Ongoing	Robert O. Norris, Jr. Bridge – Repair & Construction Load Rating – Mr. Carpenter serves as lead load rating engineer for the Robert O. Norris Jr. Bridge, a complex 1.9-mile multi-span structure which spans the Rappahannock River in eastern Virginia that is undergoing major rehabilitation. He has led evaluations through multiple project phases, including the as-designed repair evaluation and iterative construction-stage validation of the steel truss and dual-girder spans. Under his leadership, the team has systematically evaluated all primary and secondary load effects from the rehabilitation plan, including complex vertical load staging and detailed gusset plate assessment in BrR, and lateral wind effects on truss portals using 3D FEM methods. He is responsible for technical oversight, QA/QC of AASHTOWare BrR models and rating packages , and stakeholder coordination to address staging and loading considerations.
01/25-07/25	Refined Load Rating of Lord Delaware Post-Tensioned Segmental Girder Bridge – Mr. Carpenter served as lead load rating engineer and was responsible for developing the evaluation approach and performing refined load ratings for this highly complex segmental post-tensioned girder bridge that spans the Mattaponi River along the Virginia coast. Severe internal degradation discovered during an inspection led the Virginia DOT to perform an emergency in-depth evaluation of the structure. As part of the emergency response, Mr. Carpenter updated existing analytical models to account for observed deterioration, including strand loss within PT ducts, and led the assessment of load-carrying capacity using software designed for segmental evaluation (PGSplice). His work included refining evaluation parameters to improve rating results and coordination with the project team to integrate field-verified data into the analytical framework to deliver accurate and defensible load rating results that were used to conclude that the structure could remain in service.
09/11-03/26	US 61 Bonnet Carré Spillway Bridge Superload Transport Evaluations – Since 2011, Mr. Carpenter has provided permit load rating for superload transports on the US 61 Bonnet Carré Spillway bridge. In the original 2011 project, he was responsible for finite element modeling, model calibration, load rating calculations, and reporting. Since 2019, Mr. Carpenter has served as BDI’s project manager and technical lead responsible for project management, transport configuration optimization, load rating, QA/QC, technical reporting, and coordination with clients and DOTD stakeholders to develop safe, practical transport solutions while meeting permitting requirements. He performed highly complex, refined finite-element analyses, transport permit evaluations, and vehicle configuration optimization efforts for numerous superloads , including a 748-kip desalter transport in 2025/2026 and the original 1,754-kip transport in 2011.

Firm employed by Bridge Diagnostics, Inc.			
Name	Jesse Sipple, P.E.		Years of relevant experience with this employer
Title	Quality Control Manager		Years of relevant experience with other employer(s)
Degree(s) / Years / Specialization		PhD / 2013 / Civil Engineering MS / 2008 / Civil Engineering BS / 2007 / Civil Engineering	
Active registration number / state / expiration date		LA PE.0041028 / LA / 03/31/2027 Additional PEs: CO, MT, VA	
Year registered	2016 (LA)	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities		MPR 4 – Routine and complex load rating quality control manager responsible for standardized implementation of QA/QC practices across all submittals.	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
05/07-Present	General Experience – Dr. Sipple leads BDI’s Services Division, overseeing engineering teams focused on bridge load rating, structural analysis and investigation, and asset management for infrastructure assets nationwide. Drawing on nearly 20 years of experience solving complex engineering problems, Dr. Sipple provides senior-level QA/QC leadership for the division and has been actively involved in developing, implementing, and reviewing BDI’s quality control procedures throughout his career. In his QA/QC role, Dr. Sipple has independently reviewed load rating packages prepared by BDI engineers and outside consultants for accuracy, completeness, and conformance with AASHTO MBE and agency-specific requirements. His experience includes review of routine and complex load ratings, structural analyses, analytical assumptions, engineering judgment, and supporting calculations to ensure technically sound and defensible results. Dr. Sipple and his team provide load rating, condition assessment, and lifecycle management services for heavy civil infrastructure, leveraging advanced analytical techniques and engineering best practices to ensure consistent, high-quality deliverables. His group specializes in developing and delivering routine and complex load rating analyses and data-driven engineering solutions to support bridge owners in maintaining safe and compliant structures. Dr. Sipple has over 19 years of experience in bridge load rating and complex structural analysis and provides senior technical guidance when unique structural conditions or complex engineering issues require additional evaluation.		
10/21-05/22	Load Ratings of DOTD Structures, LA – Dr. Sipple oversaw the evaluation program and provided independent QA/QC of load rating analyses and submittals for ten DOTD structures, including short-span reinforced concrete slabs and culverts with minimal fill depths. He established quality standards, performed detailed QA/QC reviews to ensure the accuracy, consistency, and compliance of all calculations, reporting, and submittal packages, ultimately supporting reliable capacity assessments for structures that did not meet posting requirements under conventional methods. Dr. Sipple provided senior technical oversight throughout the program, supporting the project team when challenging structural behavior, analytical assumptions, or other engineering issues required additional evaluation and judgment to develop accurate and defensible load ratings. He also performed final report review and assurance of quality deliverables.		

02/20 – 11/20	Load Rating of 30 Bridges, VA – Dr. Sipple oversaw the statewide VDOT live load testing and load rating program involving 30 bridges across multiple VDOT districts and provided QA/QC for each structure. He provided technical oversight for instrumentation, controlled load testing, finite element model calibration, and load rating deliverables, while supporting the project team in maintaining scope, schedule, budget, and technical quality throughout execution. BDI performed diagnostic load testing, field instrumentation, finite element model calibration, and load rating evaluations for a variety of bridge structures in accordance with VDOT and AASHTO requirements to support refined load ratings and bridge asset management decisions. Dr. Sipple provided senior technical oversight throughout the program, supporting the project team when challenging structural behavior, analytical assumptions, or other engineering issues required additional evaluation and judgment to develop accurate and defensible load ratings. He also performed final report review and assurance of quality deliverables.
04/15-12/18	US84 Natchez Cantilever Truss Monitoring, LA – Dr. Sipple led the structural health monitoring effort during multiple pin replacement operations on the complex Natchez cantilever truss bridge over the Mississippi River. He oversaw project coordination, implementation of the monitoring program, interpretation of monitoring data, and communication of real-time structural response information during active construction operations involving replacement of critical bridge pins. Given the real-time nature and criticality of the monitoring, Dr. Sipple oversaw system setup, configuration, and QA/QC procedures to verify data accuracy and reliability prior to and throughout implementation. BDI monitored critical truss members, tension rods, and temporary load path systems before, during, and after construction to evaluate structural response and verify performance during the pin replacement operations. Dr. Sipple provided final technical and quality review of monitoring results and deliverables.
07/20-01/21	LA507 Over I-20 ABC Span Move Monitoring, LA – Dr. Sipple served as project manager for structural monitoring during the accelerated bridge construction (ABC) span moves for the LA 507 bridge replacement over I-20 in Louisiana . He oversaw instrumentation, monitoring implementation, and real-time interpretation of structural response data during the span transport operations, while coordinating results with the bridge move team to support safe execution of the moves. BDI provided instrumentation and real-time structural monitoring for transport and placement of four composite steel beam spans using self-propelled modular transporters (SPMTs), including evaluation of steel and concrete stresses to verify structural integrity during the ABC operations. Given the critical schedule and reliance on real-time data for engineering decisions, extensive QA/QC and system verification were performed prior to mobilization to ensure accurate, reliable data and minimize the potential for field delays. Dr. Sipple was onsite during the span moves, providing real-time technical review of the monitoring data and serving as BDI's primary technical interface with the bridge move team.
07/15-09/16	Load Testing and Rating of the Hillsborough Bridge – Prince Edward Island, Canada – Dr. Sipple supported development and calibration of a complex finite element model of the three-span deck truss structure with steel box girders of the 800-ft Hillsborough Bridge, including the comparison of measured field data with analytical results, iterative model refinement, and interpretation of structural behavior as it related to the load-rating analysis. He also provided QA/QC of the calibrated model, rating analysis, and final engineering report. BDI performed diagnostic load testing and modeling of the three-span deck truss bridge, using measured response to validate composite action, load distribution, deck stiffness, and support behavior. The calibrated model was subsequently used to evaluate CAN/CSA design loading and calculate updated member utilization factors, providing a measurement-based assessment of bridge capacity and future loading conditions.

Firm employed by Bridge Diagnostics, Inc.				
Name	John Prader, PhD, P.E.		Years of relevant experience with this employer	4
Title	Load Rating Engineer		Years of relevant experience with other employer(s)	18
Degree(s) / Years / Specialization		B.S., Civil Engineering, June 2004 M.S., Civil Engineering, August 2007 PhD, Civil Engineering, June 2012		
Active registration number / state / expiration date		PE.0051658/ LA / 09/30/2028 Additional PEs: DC, PA, VA		
Year registered	2026 (LA)	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		MPR 4 – Complex and routine load ratings, overweight permit reviews, consultant rating reviews, and miscellaneous rating work.		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
09/04 – Present	General Experience – Over the course of his career Dr. Prader has been responsible for leading and managing the technical components of numerous high-profile testing, monitoring, and engineering projects. He has 14 years of experience performing complex load ratings for a wide range of bridge types including tied arch, truss, segmental cast in place, highly skewed girder, curved girder, and movable bridges using AASHTO methodologies and various finite-element and load rating software, with a focus on developing accurate and consistent evaluations. Dr. Prader has led and supported load rating projects involving routine and complex structures, including evaluation for rehabilitation and construction conditions. His expertise includes QA/QC load rating calculations and models, engineering judgement decisions and application of AASHTO (ASD, LFD, LRFD) and agency-specific requirements to deliver reliable rating results.			
08/19 – 01/22	Replacement of the Burlington Bristol Bridge Tower Span Deck – Dr. Prader led the structural analysis effort for the refined evaluation of the Burlington-Bristol Bridge, a complex tower truss structure undergoing deck replacement . He developed and implemented detailed 3D finite-element models used to evaluate design load combinations, seismic effects, and staged construction loading throughout the replacement process. Working closely with the design team, Dr. Prader performed analyses to assess member demands, verify that proposed construction activities would not overstress existing bridge elements, and evaluate the constructability of the replacement sequence. His responsibilities included interpreting complex structural behavior, developing analysis methodologies for the truss system, and providing engineering analysis to support the safe design and execution of the rehabilitation project.			
08/20 – 01/21	Load Rating of the Tacony Palmyra Bridge Gusset Plates – Dr. Prader inspected, analyzed, and load rated the deteriorated gusset plates within the Tacony-Palmyra Bridge through-truss spans. His responsibilities included conducting field inspections to document section loss, developing detailed finite element models to evaluate load effects under design, seismic, and construction load combinations, and performing refined structural analyses of the truss system . Dr. Prader also developed project-specific load rating tools that combined finite element model results, measured section loss, and AASHTO Load Factor rating provisions to determine the capacity and load rating of critical gusset plate connections. His work supported the assessment and preservation of this complex long-span truss bridge.			

02/19 – 12/19	Tacony Palmyra Bridge Painting – Load Rating – Dr. Prader served as the lead structural engineer during protective coating rehabilitation activities. His responsibilities included developing detailed finite element models of multiple complex bridge types within the crossing, including multi-girder spans, a double-leaf bascule span, a tied-arch span, and two three-span through-truss spans. He quantified construction-related loads associated with containment systems, access platforms, and painting equipment, and incorporated these loads into the structural analyses and load rating evaluations. Dr. Prader updated bridge ratings to account for construction loading and wind effects, evaluated member demands throughout the structure, and identified potential overstress conditions to support the safe execution of the rehabilitation work. His analysis and recommendations were used to reconfigure the containment system, minimizing the need for traffic disruption and load restrictions.
01/15 – 12/15	Refined Analysis of Complex Structures Along the Pennsylvania Turnpike – Dr. Prader served as the lead structural engineer for the refined load rating evaluation of multiple complex bridge structures on the Pennsylvania Turnpike that exhibited unsatisfactory ratings using conventional methodologies. His responsibilities included developing detailed 3D finite element models of two deck truss bridges to evaluate structural response under construction sequencing and specialized permit vehicle loadings. Dr. Prader performed refined LRFR load rating analyses, developed rating calculations and technical documentation, and provided engineering recommendations to support permit load evaluations. He also served as an independent technical reviewer for finite element models and load rating calculations on four additional complex bridge structures, ensuring analytical accuracy and compliance with AASHTO requirements.
11/18 - 04/19	Bar7 Analysis of Trenton Morrisville Bridge Approach Structures – Dr. Prader performed the load rating evaluation of bridge structures requiring updates to address FAST Act emergency vehicle loading requirements. He led the refined load rating of a curved multi-girder bridge, including development of analytical models, rating calculations, and technical documentation in accordance with applicable AASHTO requirements. Dr. Prader also provided technical oversight and QA/QC review of load ratings performed by subcontractors for five additional bridge structures, ensuring analytical consistency, technical accuracy, and compliance with agency requirements. His responsibilities included project management, technical review, report development, and overall quality assurance for the bridge rating program.

Firm employed by Engineering Operations, LLC.				
Name	Benjamin Kenney, PE		Years of relevant experience with this employer	10
Title	Load Rating Engineer		Years of relevant experience with other employer(s)	9
Degree(s) / Years / Specialization		BS/ 2007 / Architectural Engineering (Structures)		
Active registration number / state / expiration date		PE# 41531 / LA / 9/30/27 Additional PEs: AZ, CO, FL, GA, IA, ID, KY, MD, MN, MO, MS, MT, ND, NE, NM, NV, OH, TX, UT, WY		
Year registered	2017 (LA)	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		MPR 4 – Senior load rating engineer and overall eO team lead. Responsible for eO team management, load rating package review, and QA/QC.		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
01/07 – Ongoing	General Experience – Benjamin Kenney, PE is a structural engineer, specializing in load rating, bridge inspection, and repair design. He has provided his services at all levels of government including local, state, and federal agencies worldwide; including load rating and inspection services on the NAVFAC Bridge Inspection and Assessment Worldwide contract. In addition, Mr. Kenney was involved with rewriting Louisiana’s Bridge Inspection Manual for all the bridges over major waterways throughout the state, underscoring his depth of understanding of the state’s structures. Mr. Kenney has over 15 years performing inspections and load ratings on complex bridges. For this project, he will lead the eO team’s efforts in load rating analysis.			
10/19-Ongoing	CDOT Statewide Bridge Inspections & Load Ratings – Mr. Kenney initially served as the Project Manager and has since advanced into the role of Project Principal. While the original scope focused exclusively on off-system structures, the project’s success led to an expanded role and eO now serves as a prime consultant for CDOT, conducting both on- and off-system bridge inspections statewide. Task orders have included load ratings, routine, in-depth, and NSTM inspections, scour analyses, and pilot testing of CDOT’s asset management system, SIMSA. Load ratings are performed for all initial inventory and structures are re-rated when changes in structural condition, geometry, or increases in asphalt are found. Depending on the age of construction, both LFR and LRFR rating methods are utilized through a variety of load rating and analysis programs, including BrR, CANDE, Plank, Winbeam, and Slab. eO has performed load ratings for double tee Girders, prestressed girders, built-up steel arch girders, box culverts, metal arch culverts, and corrugated metal deck structures, among others.			
04/25 –Ongoing	NAVFAC Worldwide Bridge Inspection & Load Rating – As Project Manager, Mr. Kenney oversees all phases of domestic and international bridge inspection task orders for NAVFAC, including overseeing and signing off on all load ratings. Ratings have had significant FHWA requirement changes in the last 10 years. This commonly affects short span structures, which is the majority of NAVFAC’s bridge inventory. As such, Mr. Kenney led his team in addressing rating changes or re- rating requirements as we perform the ratings and structural inspections throughout the inventory. Mr. Kenney and his team utilized RISA 3D modeling and supporting MathCAD documentation to analyze member forces and validate the structural capacity of aging systems, when lacking an existing load rating. Our load raters also utilize AASHTOWare BrR to assess load capacities and model structures.			

08/22-Ongoing	WYDOT On & Off-System Bridge Inspections – For the WYDOT On & Off-System Bridge Inspections, Mr. Kenney serves as Project Principal and oversees all structural analysis as well as safe and strategic inspections across 23 counties in Wyoming. He also administers the QA/QC process, specifically focusing on issues that could affect serviceability, and has ensured FHWA metrics were met for WYDOT. On this contract, Condition State 4 (CS4) defects in primary structural elements have been evaluated and assessed to determine whether observed deficiencies posed a risk to the controlling load rating. Detailed documentation in the CS4 logs often supported the reclassification of elements from CS4 to CS3 following structural review. In other cases, evaluations identified potential impacts to load ratings or postings, enabling WYDOT to focus on the most critical findings while distinguishing them from lower-priority issues that could be monitored over time. These efforts, supported by thorough calculations and defect drawings, were submitted by Mr. Kenney to WYDOT to demonstrate diligence and reduce the need for future reanalysis.
01/21-12/21	El Paso Bridge Deck Design and Rehabilitation – As Engineer of Record, Mr. Kenney led and reviewed the design and rehabilitation efforts and oversaw the new load rating for the finished design. During a routine bridge inspection, the eO team discovered a recurring defect that consisted of severe asphalt deterioration within the center span of a steel multi-girder structure. The structure’s deck was made up of asphalt-filled corrugated metal deck panels that had been welded to the girders. It was determined that due to the incompatibility of the section, deflections in the relatively flexible superstructure were causing crushing forces in the asphalt. Since other deterioration was present within the deck panels themselves, Mr. Kenney determined that replacement of the entire deck with a new reinforced concrete deck would provide the county with the best long-term maintenance solution. Additionally, to increase the stiffness of the system, headed stud anchors were designed to be installed on the existing steel girders to create a composite section with the new reinforced concrete deck.
1/19- Ongoing	CDOT C70 Inspection Services – Mr. Kenney was the Project Manager for eO’s prime role on the Central 70 Expansion Project. eO performed bridge, sign, and tunnel inspections throughout the busy corridor on I-70, just east of downtown Denver. The most unique aspect of this project was the newly constructed 1,000-ft. complex tunnel which includes state-of-the-art mechanical, electrical, fire, and life safety systems in addition to the typical structural and civil components. Mr. Kenney was responsible for the initial inspection of this asset and worked closely with subcontractors that were building the tunnel in order to combine tunnel commissioning activities with inspection requirements and system condition assessment in accordance with the SNTI, NTIS, TOMIE, and Colorado’s tunnel inspection manual (C-TIIM). The corridor is also home to some of Colorado’s busiest bridges with over 200,000 ADT. eO was responsible for the NBIS inspection of all the bridges within this segment of I-70, as well as the overhead signs. Inspection typically required night-time operations with static lane closures to avoid peak interstate travel times.
08/23- 12/26	DOTD Statewide Underwater Bridge Inspections – Mr. Kenney was the Project Principal and oversaw the heavy dive operations on the Mississippi River for eO’s sub-consultant role on this contract; his work on this contract gave him a deep familiarity with Louisiana’s environment and infrastructure. He also gained an understanding of DOTD’s processes. eO personnel performed as both dive supervisors and dive inspectors, providing the experience required to perform dive operations in the Mississippi River and helping ensure the safety of the inspection team. High flow and limited visibility were routinely encountered as the team safely performed Level I, II, and III underwater dive inspections while augmenting inspections with SONAR technology in accordance with the National Bridge Inspection Standards (NBIS).

Firm employed by Bridge Diagnostics, Inc.				
Name	Josh Anderson, P.E.		Years of relevant experience with this employer	5
Title	Load Rating Engineer		Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		B.S., Civil Engineering, May 2007 M.S., Civil Engineering, May 2009		
Active registration number / state / expiration date		PE# 51864 / LA / 03/31/2027 Additional PE's: CO		
Year registered	2026	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		MPR 5 – Load rating engineer responsible for plan and document retrieval and review, modeling and analysis, load rating, BrR file reviews and corrections, overweight permit reviews, consultant rating reviews, and miscellaneous rating work.		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
06/21 – Present	General Experience – Mr. Anderson has been with BDI since 2021, where he specializes in bridge load rating and structural analysis. Josh has over five years of experience with BDI performing routine and complex load ratings, including AASHTOWARE BrR load rating software , for a variety of bridge types, including steel, prestressed concrete, reinforced concrete, masonry arch, rigid frame, and culvert structures. His responsibilities include review of bridge documentation, development of load rating calculations and analytical models, finite element analysis, and preparation of rating documentation in accordance with AASHTO and agency-specific requirements. Mr. Anderson has supported bridge rating programs for transportation agencies across multiple states, including large-scale bridge inventory evaluations, permit load analyses, and assessments of structures with limited or incomplete documentation. Through his combined analytical and field experience, he provides practical, accurate, and efficient load rating solutions to support bridge management and infrastructure decision-making.			
03/25 - Ongoing	Colorado Off-System Routine Load Ratings Statewide – Mr. Anderson is currently working on a CDOT project involving routine load ratings of off-system bridges, primarily consisting of prestressed and traditionally reinforced concrete structures. The project required development of AASHTOWare BrR models using structural plans, inspection reports, and other available data to produce load ratings in accordance with CDOT standards. Mr. Anderson was responsible for load rating document retrieval and review, supplemental rating calculations, BrR model creation , load rating calculations and QA/QC, and rating package development. This task order rating work currently exceeds 200 assigned bridges—with a projected annual workload of approximately 350 structures. This project experience spans routine load rating of a range of bridge types, including reinforced concrete slabs, rigid frames, culverts, and prestressed concrete systems.			
09/24 – 12/24	Colorado Off-System Routine Load Ratings Statewide – Mr. Anderson performed load ratings as part of the evaluation of 34 off-system bridges throughout Colorado as part of a CDOT project. The project included a variety of prestressed concrete bridge types, including AASHTO girder, box girder, and post-tensioned concrete box girder structures. Josh reviewed available bridge documentation, including structural plans and inspection reports, and developed AASHTOWare BrR models to perform load ratings in accordance with CDOT requirements. His responsibilities included document review, model development, load rating calculations, quality control review, and preparation of final rating deliverables. The project supported CDOT's statewide bridge			

	management efforts by providing consistent, reliable load rating results and complete rating documentation for incorporation into the agency's bridge inventory and asset management programs.
08/24-12/25	Loudoun County Load Ratings of Three Bridges, VA – Mr. Anderson worked on the live load testing and rating of three bridge structures in Loudoun County. His responsibilities included development of instrumentation and safety plans, coordination of field mobilization activities, oversight of testing system installation, and execution of controlled live load testing. Following field activities, Josh performed data processing, finite element modeling, and structural analyses of the bridges, which included both concrete and masonry arch structures. His work supported assessment of in-service structural behavior and development of analytical models for bridge posting purposes.
11/24-Ongoing	Robert O. Norris, Jr. Bridge – Repair and Construction Load Rating – Mr. Anderson has supported the evaluation of the Robert O. Norris Jr. Bridge, a complex 1.9-mile multi-span structure undergoing major rehabilitation. The project involved detailed analysis of the bridge's structural system, including evaluation of primary and secondary truss members, connections, and load paths. As part of the load rating team, Mr. Anderson performed the review and update of AASHTO BrR models to assess the structure under as-built, existing, and anticipated as-repaired conditions. Josh computed gusset plate evaluation terms and took part in the application of current extensive deterioration profile present along this structure. The evaluation considered both highway and construction loading scenarios and supported VDOT's planning and decision-making efforts.
07/24-12/25	Montana Off-System Routine Load Ratings – Mr. Anderson supported the load rating of ten off-system bridges comprised of steel multi-beam superstructures with a variety of deck systems, including reinforced concrete, timber, and corrugated steel decks. He performed detailed reviews of bridge plans, inspection reports, and historical documentation to reconcile current field conditions with available records and ensure accurate representation of structural geometry, framing configurations, and deterioration within the analytical models. Mr. Anderson developed and refined AASHTOWare BrR models for each structure, implementing member, deck, and condition-specific parameters necessary to accurately characterize bridge behavior and load distribution. His responsibilities included model creation and validation, load rating calculations, evaluation of governing load-carrying capacities, and preparation of rating packages in accordance with MDT requirements. Through the development and quality control of BrR analyses, Mr. Anderson helped provide technically defensible load ratings to support Montana's off-system bridge management program.
01/22 - Present	Idaho Transportation Department Off-System Load Ratings – Mr. Anderson supported ITD's off-system bridge evaluation program for concrete bridges with unique structural configurations and limited or unavailable design documentation. Through BDI's ITD term agreement, eight off-system structures with missing plans, selected by ITD, have been evaluated using BDI's field-verified approach. Mr. Anderson developed and refined AASHTOWare BrR models by integrating as-built geometry, nondestructive evaluation results, and live load test data to accurately characterize structural behavior and load distribution. His responsibilities included analysis of load paths, distribution factor development, implementation of material and reinforcement properties derived from field investigations, and execution of refined load rating calculations in accordance with AASHTO and ITD requirements.

Firm employed by Bridge Diagnostics, Inc.			
Name	Michael Sullivan, P.E.		Years of relevant experience with this employer
Title	Load Rating Engineer		Years of relevant experience with other employer(s)
Degree(s) / Years / Specialization		B.S., Civil Engineering, May 2016	
Active registration number / state / expiration date		PE.0051384 / LA / 09/30/2028	
Year registered	2026	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities		MPR 5 – Load rating engineer responsible for plan and document retrieval and review, BrR modeling and analysis, load rating, BrR file reviews and corrections, overweight permit reviews, consultant rating reviews, and miscellaneous rating work.	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
02/19 – Present	General Experience – Mr. Sullivan has been with BDI since 2019, where he specializes in bridge evaluation and load rating. He has ten years of experience performing routine and complex load ratings, including the use of AASHTOWare BrR, encompassing a wide variety of bridge types, including structural steel, reinforced concrete, prestressed concrete, timber, and masonry structures. His work includes review and interpretation of bridge plans and inspection data, development of load rating calculations and analytical models, application of AASHTO and agency-specific rating requirements, and preparation of load rating documentation. Mr. Sullivan has contributed to bridge evaluation programs for transportation agencies across numerous states, supporting both individual bridge assessments and larger network-level rating efforts. His experience includes evaluation of existing bridge documentation, load rating calculations, load rating QA/QC, and application of sound engineering judgment to develop practical and consistent rating results. Through his strong analytical background and familiarity with AASHTO rating methodologies, Mr. Sullivan provides efficient, accurate, and high-quality routine load rating services to support bridge management and transportation agency programs.		
03/25 - Ongoing	Colorado Off-System Routine Load Ratings Statewide – Mr. Sullivan serves as load rating engineer for a CDOT program involving routine load ratings of off-system bridges, primarily consisting of prestressed and traditionally reinforced concrete structures. The project required development of AASHTOWare BrR models using structural plans, inspection reports, and other available data to produce load ratings in accordance with CDOT standards. Mike was responsible for load rating document retrieval and review, supplemental rating calculations, BrR model creation, load rating, and rating package development. This work currently exceeds 200 assigned bridges—with a projected annual workload of approximately 350 structures. This project experience spans routine load rating of a wide range of bridge types, including reinforced concrete slabs, rigid frames, culverts, and prestressed concrete systems.		
08/25-03/26	US 61 Bonnet Carré Spillway Bridge Superload Transport Evaluations – Mr. Sullivan served as field engineer for superload transport real-time monitoring on the US 61 Bonnet Carré Spillway Bridge. He directed field verification activities, coordinated monitoring operations, and managed real-time structural monitoring during crossing of a 748-kip desalter transport in 2026. His responsibilities included field logistics, instrumentation installation, and data collection to support permit requirements and confirm the safe performance of the bridge during transport operations.		
08/24-07/25	Falmouth Bridge Live Load Testing & Emergency Repair Load Ratings, VA – Mr. Sullivan served as load rating engineer for the emergency evaluation and rehabilitation of the Falmouth Bridge carrying US 1 over the Rappahannock River. The evaluation was initiated following the discovery of advanced corrosion and extensive section loss in critical steel members that		

	resulted in significant reductions in structural capacity. Mr. Sullivan played a key role in developing refined load ratings for the deteriorated structure, including implementation of an extensive deterioration profile within analytical models to accurately quantify capacity loss and identify governing load-carrying components. He developed and calibrated detailed finite-element models using measured live load test data to support rating assumptions and improve confidence in analytical results. His responsibilities included evaluation of member-level capacities, refinement of load rating parameters, execution of load rating calculations, and assessment of bridge performance under existing and post-repair conditions. Through the integration of field testing, advanced analysis, and deterioration-based load rating methodologies, Mr. Sullivan helped establish load ratings that guided emergency repair decisions, verified restoration of structural capacity, and supported the bridge's safe return to service..
10/23-05/24	I-355 Des Plaines River Bridge Live Load Testing & Analysis, MT – Mr. Sullivan performed load rating analysis and live load testing as part of the structural evaluation of the I-355 Des Plaines River Bridge, on which significant deterioration was identified along the continuity diaphragms. His field responsibilities included coordinating field operations, overseeing instrumentation installation, managing testing activities under active traffic conditions, and supporting the collection of high-quality structural response data. He contributed to the development and calibration of analytical models used to assess the deterioration effects on structural performance. His work helped quantify load distribution characteristics and overall system response, supporting updated load ratings based on an updated AASHTO BrR model for the client's future use.
05/25-08/25	Load Rating Of US-81 over Tattle Branch, VA – Mr. Sullivan served as load rating engineer for the analysis of the northbound and southbound I-81 bridges over Tattle Branch Road. Following completion of rehabilitation activities, a field verified evaluation was performed to quantify the structural contribution of a newly installed latex-modified concrete deck overlay. Mr. Sullivan developed and implemented refined finite-element models used to evaluate load distribution characteristics, composite behavior, and ultimately member demands in accordance with AASHTO LFR and VDOT requirements. By incorporating measured response data into the load rating process, he validated load distribution characteristics and bridge behavior assumptions, resulting in load ratings considering the structural contribution of the new deck overlay. His responsibilities included finite-element model creation and calibration, refinement of rating parameters, execution of load rating calculations, and assessment of the overlay's influence on structural capacity. Through the development of field-verified load ratings, Mr. Sullivan helped establish a basis for evaluating post-rehabilitation bridge performance and quantifying the capacity benefits provided by rehabilitation.
4/20 – 08/20	Load Rating of Richmond District Bridges, VA - Mr. Sullivan evaluated three reinforced concrete T-beam bridges within VDOT's Richmond District, which were identified as posting candidates based on conventional load rating analyses. He developed refined finite-element models and utilized measured bridge responses to calibrate critical structural parameters, including load distribution behavior and support conditions for refinement of existing BrR models. His responsibilities included execution of finite-element analysis and refinement of BrR model parameters to align the structure's performance and load rating. By integrating measured response data into the analytical process, Mr. Sullivan helped establish load ratings that more accurately reflected actual bridge performance and demonstrated reserve capacity beyond that predicted by conventional evaluation methods.

Firm employed by Engineering Operations, LLC.				
Name	Remy Stern, PE		Years of relevant experience with this employer	11
Title	Load Rating Engineer		Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		MS/ 2017 / Civil Engineering B Eng / 2014 / Civil Engineering		
Active registration number / state / expiration date		PE # 0050948 / LA / 3/31/28 Additional PEs: AK, CO, ID, MT, ND, TX, WA, WY		
Year registered	2025	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		MPR 5 – Senior load rating engineer and load rating package review.		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
06/16– Ongoing	General Experience – Remy Stern, PE is a structural engineer, load rating specialist, and NBIS Team Leader with extensive experience managing and delivering load rating programs for state DOT clients. He has performed load ratings on hundreds of structures using AASHTO LFD and LRFD methodologies, including steel multi-girder, steel truss, prestressed concrete, concrete box, and culvert systems, and routinely incorporates deterioration into refined analytical models. Software packages he is proficient in include BrR, Bar7, BRASS and RISA for FEA and more complex structural models. Mr. Stern pairs this technical expertise with strong project management capabilities, serving as project manager or deputy project manager on large, multi-asset inspection and analysis contracts where he oversees scheduling, budgeting, client coordination, quality control, and deliverable production. His background in the industry, combined with his hands-on experience and leadership of multidisciplinary teams, allows him to efficiently translate field findings into accurate load ratings and actionable recommendations for owners and their structural inventory. For this project, he will lead the team’s efforts in load rating analysis and inspections.			
10/19-Ongoing	CDOT Statewide Off-System Bridge Inspection based Load Ratings – Mr. Stern served as primary load rater/engineer of record, supporting the load ratings of all initial inventory and re-rating of structures when changes in structural condition, geometry, or increases in asphalt were found, performing over 100 load ratings. The contract encompasses inspection of off-system bridges and culverts throughout the state of Colorado. The structures include a variety of steel, concrete, and timber components with routine NBIS, initial, special, in-depth, and NSTM bridge inspections. Detailed inspection reports, including NBI and element-level data and coding, recommendations, sketches, and streambed profiles, are prepared for each inspection. CDOT load ratings were performed primarily in BrR. Mr. Stern is an expert BrR user and has depth of knowledge of the software’s capabilities, limitations, workarounds, and specification checking tools.			
08/22-Ongoing	WYDOT On & Off-System Bridge Inspections – For this project, which eO has held for two cycles, Mr. Stern is the project manager and a primary Team Leader. He leads teams in performing routine and NSTM inspections throughout the 23 statewide counties. Mr. Stern is deeply ingrained in all of WYDOT’s internal processes, preferences, standards, and has intimate knowledge of the bridge inventory from direct hands-on experience. He has been a part of the inspection of thousands of bridges across the state and has seen nearly all of WYDOT problem-structures at least once, leading the team in re-rating bridges with deficiencies.			

01/21-12/21	El Paso Bridge Deck Design and Rehabilitation – During a routine bridge inspection, the eO team discovered a recurring defect that consisted of severe asphalt deterioration within the center span of a steel multi-girder structure. The structure’s deck was made up of asphalt-filled corrugated metal deck panels that had been welded to the girders. It was determined that due to the compatibility of the section, deflections in the relatively flexible superstructure were causing crushing forces in the asphalt. Since other deterioration was present within the deck panels themselves, eO engineers determined that the best way to fix the issue was to replace the entire deck with a new reinforced concrete deck. As primary designer, Mr. Stern led the design efforts for the deck replacement, designing the reinforcement, headed stud anchors, and the new bridge rails that would go along with the rehabilitation. Since the previous deck was asphalt filled corrugated panels, Mr. Stern analyzed the superstructure to ensure the additional dead loads would be handled adequately. All calculations were performed by hand and checked with BrR. Mr. Stern also provided new load ratings utilizing BrR for the finished design to comply with CDOT standards. His proficiency with load rating and design using AASHTO provisions was crucial to the success of this project.
01/24- 12/25	North Dakota Design- Dickinson Structure Rehabilitation – Mr. Stern is the Project Manager and Engineer of Record for our role in performing full service structural repair design and preventative maintenance on several aging structures carrying I-94 traffic in western North Dakota, focusing on structural repairs and preservation treatments. He was directly responsible for field report review, evaluating prestressed concrete girder spall locations, abutment backwall and pier cap deterioration, overheight vehicle strike damage, and deck crack patterns. Using field measurements, photography, and engineering judgment, Mr. Stern characterized and quantified each condition. Based on those findings, he developed scope items for NDDOT including practical, constructable repair solutions for each structure, ranging from prestressed girder patching, reinforced concrete spall repairs at abutment backwalls and pier caps, drainage conveyance curb construction, penetrating water-repellent deck treatment, deck crack sealing, special surface finish for pier columns and caps, wingwall-to-endwall joint waterproofing, and silicone sealant installation at median pier joints. He directed a team of engineers to develop rehabilitation plan sets for each structure, including bridge layout sheets, repair details, contractor instruction notes, bid items, special provisions, and quantity calculations, all developed in strict conformance with NDDOT design standards and applicable AASHTO requirements. All deliverables underwent internal technical review for accuracy, completeness, and constructability prior to submittal.
06/25- Ongoing	MDT Bundled Bridge Inspection Contract – Mr. Stern serves as project manager for eO’s prime role under MDT’s Bundled Bridge Inspection Contract, a statewide program delivering a variety of different inspection types through monthly term assignments. Over the course of this project, he has managed multiple term assignments including underwater, NSTM, and routine bridge inspections across a diverse set of structure types consisting of timber, prestressed concrete, reinforced concrete, steel girder, and culverts. He was responsible for contract administration, monthly workload planning, staffing coordination, budget control, and direct communication with MDT project managers to ensure all inspections were completed within the assigned month and in accordance with NBIS requirements while preparing for the statewide transition to SNBI. Mr. Stern directed all phases of planning, field execution, data management, and deliverable production. He coordinated logistics for remote western Montana sites, and oversaw dive teams performing SCUBA and boat-based inspections supported by hydrographic sounding using a CEE-LINE echo sounder.

Firm employed by Engineering Operations, LLC.			
Name	Wade Daniels, PE		Years of relevant experience with this employer
Title	Load Rating Engineer		6
		Years of relevant experience with other employer(s)	3
Degree(s) / Years / Specialization		BS / 2019 / Civil Engineering	
Active registration number / state / expiration date		PE#0050844 / LA / 3/31/28 Additional PEs: AR, FL, IA, KS, SC, TN, TX, WY	
Year registered	2025	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities		MPR 5 – Load rating engineer responsible for plan and document retrieval and review, modeling and analysis, load rating, BrR file reviews and corrections.	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
05/17 – Ongoing	General Experience – Wade Daniels, PE, is an NBIS Team Leader with experience on a variety of Department of Transportation projects, including state routine bridge, local government routine bridge, and underwater inspections and the Florida Turnpike inspections. Mr. Daniels has nine years of bridge load rating experience, including the use of AASHTOWare BrR. He specializes in load rating analyses, particularly for timber bridges that feature timber decks, beams, caps, and piles, and has performed hundreds of load ratings over the course of his career. He also has extensive expertise in spotting deficiencies that require re-postings. Mr. Daniels is a valuable resource for QA/QC, having often worked to ensure the accuracy and completeness of all inspection findings, contributing to structural assessments and safety evaluations. For this project, he will be responsible for load rating analysis and review of project deliverables.		
03/20-08/20	SCDOT Statewide Load Ratings- Mr. Daniels performed a large-scale load rating update, specifically focusing on District 6. Under the direction of Mr. Daniels, the team completed load ratings for over 400 structures, which primarily consisted of precast prestressed flat slab bridges with timber substructures, as well as culverts. All work was conducted in accordance with the latest SCDOT load rating guidance documents and memos, including the use of AASHTOWare BrR software as our primary tool for performing the load ratings. This process involved reviewing field inspection reports and assessing structural deficiencies to determine accurate load capacities. When additional information was required, he coordinated with field personnel to revisit sites and gather the necessary data to complete the analyses thoroughly.		
01/20-03/23	FDOT District 3 Local Government Bridge Inspections- Mr. Daniels was an inspector actively involved in load rating analyses, primarily focusing on timber bridges that featured timber decks, beams, caps, and piles. Utilizing the TBAR program, he performed detailed evaluations to determine the structural capacities of these bridges. In addition to his work with timber structures, he conducted a load rating for a steel Bailey truss bridge and completed load ratings for reinforced concrete box culverts using the FDOT LRFD Box Culvert Program. His responsibilities included assessing reduced-capacity structures and recommending updated load postings to ensure public safety and regulatory compliance. As part of the inspection process, Mr. Daniels also played a critical role in post-inspection communication, helping prepare and send urgent deficiency letters to bridge owners within 24 hours of identifying that a bridge was posted for a higher capacity than it could safely support. This timely notification process was essential for initiating immediate safety measures and protecting the traveling public.		

08/23- Ongoing	DOTD Statewide Underwater Bridge Inspections- Mr. Daniels served as a diver and inspector for this contract, conducting inspections from both boats and shore-based access points. His responsibilities included performing underwater evaluations of culverts and a variety of bridge structures, with particular attention to load-posted bridges. These inspections were critical for monitoring the condition of aging or restricted-capacity infrastructure and ensuring continued public safety. Mr. Daniels' work contributed to the overall structural assessments that inform maintenance planning and load rating updates, demonstrating his proficiency in diverse inspection environments and his commitment to supporting safe transportation infrastructure across the state.
01/23-Ongoing	FDOT: District Five - Local Government Bridge Inspections- Mr. Daniels serves as a Team Leader for eO's sub-consultant role on this project which has involved inspecting over 600 local government on/off system bridges located on county roads, city streets, and other local government-managed routes in Brevard, Flagler, Lake, Marion, Orange, Osceola, Seminole, Sumter, and Volusia Counties, as well as the NBIS Greater Orlando Airport sites. This team performed a range of inspections, including routine, interim, initial, fracture critical, and special inspections. Routine inspections consist of regularly scheduled evaluations of bridge conditions, while interim inspections address specific issues that arise between routine assessments. Initial inspections are conducted on new or recently rehabilitated bridges to establish their condition, and NSTM inspections focus on detecting potential defects in crucial structural components. Throughout the project, our inspectors diligently documented bridge conditions, identified deficiencies, and prepared detailed BrM/BMS reports to guide maintenance and repair efforts. The team also handled dynamic scheduling for emergency inspections, such as those required after accidents. Mr. Daniels and his team have responded to multiple vehicle impact related ancillary inspections, utilizing NDT methods including the Dakota Flaw Detector to measure anchor bolt embedment and magnetic particle testing to verify the structural integrity. Additionally, they were responsible for visual inspections of all structure post hurricane to assess any storm damage that could be detrimental to the traveling public.
02/22-Ongoing	FDOT I-4 Ultimate Improvement Project- Mr. Daniels has acted as a Team Leader for eO's prime inspection role performing routine, NSTM, and underwater inspections throughout the 21-mile stretch of Central Florida's most vital transportation artery. The team is responsible for the structural inspection of every structure within the corridor, including complex and routine bridges, overhead signs, traffic signals, and high mast light towers. The inspectors have performed thorough inspections, produced detailed findings reports, updated structure inventory details, made repair recommendations, and produced Feasible Action Review Committee (FARC) agendas for FDOT District Five.
7/18-Ongoing	Florida Turnpike North: Bridge, Sign, LNQC, and HMLT Inspections- Mr. Daniels has acted as a Team Leader on this project, which includes both routine and underwater inspections throughout the Florida Turnpike's North Corridor (Turnpike Mainline, Beachline Expressway, Southern Connector Extension, Veteran's Expressway, Suncoast Parkway, Polk Parkway, Western Beltway, and the I-4 Connector). This contract consists of multiple structure types, including bridges, signs, LNQC's, HMLT's as well as several confined space inspections. The team was responsible for performing thorough inspections, producing detailed findings reports, updating structure inventory details, making repair recommendations, snoopers inspections, steel tub girder inspections, and producing Feasible Action Review Committee (FARC) agendas for the Turnpike.

Firm employed by Bridge Diagnostics, Inc.			
Name	Steven Fall, PE		Years of relevant experience with this employer
Title	Bridge Engineer / Contract Manager		Years of relevant experience with other employer(s)
Degree(s) / Years / Specialization		BS / 2019 / Civil Engineering	
Active registration number / state / expiration date		PE.0048637 / LA / 09/30/2028	
Year registered	2024 (LA)	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities		Contract administration, local staff management, bridge site visits.	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
05/19 - Present	General Experience – Mr. Fall joined BDI in May 2019 and currently serves as the office manager of BDI’s Louisiana office, overseeing daily operations, staff coordination, and project execution. His group of engineers, analysts, and technicians focus on nondestructive evaluation (NDE), routine and fracture critical inspection, structural health monitoring, live load testing, bridge preservation, and asset management in Louisiana and ensures constant communication with DOTD officials to ensure quality results. In addition to his role as office manager, he is also an expert in NDE and has managed projects in various technologies including automated deck sounding, ground penetrating radar, infrared thermography, ultrasonic testing, ultra-seismic testing, and parallel-seismic testing. He is a team leader for NBIS routine and NSTM inspections and has performed inspections across the state. Outside of Louisiana, he is responsible for managing numerous projects across the country including bridges, dams, and spillway preservation. He remains actively involved in Louisiana Professional Engineering Society, ASCE, and other groups.		
05/23 – Present	Retainer Contract for Nondestructive Evaluation of Statewide Structures – Mr. Fall serves as contract manager for DOTD’s statewide NDE IDIQ contract, leading the planning, coordination, and execution of inspection and evaluation activities for bridge assets across Louisiana. In this role, he is responsible for ensuring scope of work and budgetary requirements are met, developing and implementing testing and inspection plans, managing multidisciplinary field teams, and ensuring effective delivery of services ranging from routine and fracture-critical inspections to advanced NDE and emergency response. He oversees project scheduling, resource allocation, and client coordination while maintaining responsibility for QA/QC of technical work products, including data review, analysis, and reporting. His leadership ensures consistent, high-quality deliverables that support informed decision-making for the maintenance and evaluation of the state’s bridge inventory.		
11/23 – 12/23	Paris Road Emergency Bridge Inspection in Chalmette, LA– After noting a critical finding during a routine inspection on bridge recall 001621 by DOTD on Paris Rd., BDI was called to perform an emergency in-depth inspection on the underside of the structure, along with an NDE of the deck. The NDE and in-depth routine inspection results led to identifying exact locations of defects on the structure, allowing DOTD to identify prioritize what locations needed repairs to ultimately allow for reopening of the bridge. Mr. Fall was team lead and bridge engineer on this project for both the NBIS emergency inspection and the NDE of the structure, leading his team in performing an in-depth inspection and analysis on the areas of the structure that were compromised. He was responsible for project management, client coordination, report development, QA/QC, and submittal. He led the reporting efforts to ensure that the final scope project scope was delivered efficiently and with haste to ensure the safety of the public crossing the structure.		

05/19 – 05/23	Task Orders for Retainer Contract for Nondestructive Evaluation of Statewide Structures (DOTD Contract 4400017163) – Mr. Fall supported statewide bridge evaluation and inspection efforts, contributing to the planning and execution of field investigations and NDE activities. In his bridge engineer role, he assisted with the development and implementation of testing and inspection plans, coordinated with field teams, and performed hands-on bridge assessments. His responsibilities included application of various NDE techniques, data collection, routine inspection, and supporting analysis and reporting efforts. Through this work, he gained experience in routine and fracture-critical inspections, advanced evaluation methods, and collaborative field operations, contributing to the delivery of high-quality inspection and evaluation services.
06/22-06/22, 06/23-06/23	Operational Testing of the Seabrook Bascule Bridge (Port of New Orleans), New Orleans, LA – Mr. Fall supported the evaluation of operational performance for a double heel-trunnion bascule bridge as part of a specialized bridge assessment team. In his bridge engineer role, he performed field instrumentation and data collection to quantify forces, moments, and operational balance behavior of the movable span. His responsibilities included coordinating field activities, supporting test execution under varying operating conditions, and contributing to data processing and interpretation to assess span balance, friction, and mechanical performance to ensure the bascule bridge spans were in balance with the counterweight. He played a key role in documenting pre- and post-repair conditions, helping to evaluate the effectiveness of corrective actions.
02/26 – 05/26	US -61 Bonnet Carre Spillway Bridge Superload Transport Evaluations, Norco, LA – Mr. Fall was the inspection team lead to evaluate the performance before, and after a super heavy load crossed the US-61 Spillway Bridge near Norco, LA. He was responsible for project management activities and he coordinated local field staff in leading inspections of the structure before and after the crossing to ensure the structure had not received any damage or worsened. His team performed in-depth, hands-on inspections of all elements of the structure. He reported on the findings of the inspection and crossing to DOTD. Ultimately, the structure received no damage due to the crossing, and no changes in inventory were necessary.
01/25 – 12/25	Unknown Foundation Investigation and Scour Analysis of 48 Structures, Texas Statewide – As part of Texas Department of Transportation's (TxDOT) effort to remove unknown foundation structures labeled as scour critical in their bridge inventory system, Mr. Fall served as the contract manager of 45 unknown foundation investigations and scour analyses of bridges in multiple districts. Along with regularly scheduled investigations for the 45 structures, Mr. Fall also coordinated mobilizations of three additional structures to determine foundation depths of newly found scour critical bridges during routine safety inspections. Mr. Fall developed the project and coordinated his teams across multiple mobilizations to ensure accurate data was collected to determine foundation depths via ultra-seismic testing. In his role as contract manager, he was responsible for ensuring scope of work was met with timely delivery on all submittals. He oversaw project scheduling, client coordination, QA/QC of technical work, data analysis, and reporting. His leadership ensured that high-quality deliverables were submitted to ensure foundation depths were accurate for scour ratings to be updated. Ultimately all original 45 structures were removed from the unknown foundations list in TxDOT's system. The emergency mobilizations of the three additional structures allowed TxDOT accurate and timely results of tip elevations of piles with extensive localized scour.

Firm employed by Bridge Diagnostics, Inc.			
Name	Kyle Ramer, P.E.		Years of relevant experience with this employer
Title	Load Rating Engineer		Years of relevant experience with other employer(s)
Degree(s) / Years / Specialization		B.S., Civil Engineering, 06/2010 M.S., Civil Engineering, 12/2011	
Active registration number / state / expiration date		PE. 0051580 / LA / 09/30/2028 Additional PEs: CO, VA, TX	
Year registered	2026 (LA)	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities		Complex and routine load ratings, overweight permit reviews, consultant rating reviews, and miscellaneous rating work.	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
05/10 – Present	General Experience – Since joining BDI in 2010, Mr. Ramer has served in progressively senior technical and project management roles and currently leads BDI’s structural testing group. He has over 15 years of experience managing and executing complex bridge evaluation projects involving load rating, diagnostic testing, and structural analysis. He has performed over 100 load ratings for a variety of bridge types using AASHTO and AREMA codes. His technical expertise includes finite element model creation and calibration, load rating calculations per AASHTO (ASD, LFD, LRFD), interpretation of field-measured structural responses, and QA/QC of load rating calculations and analytical models. Mr. Ramer combines structural evaluation experience with practical engineering judgment to deliver reliable load ratings that support DOTD programs and system-wide bridge evaluation needs.		
07/24-12/25	Montana Off-System Routine Load Ratings - Mr. Ramer served as Project Manager for the load rating of 10 off-system bridges comprising steel multi-beam superstructures with a variety of deck systems, including reinforced concrete, timber, and corrugated steel decks. He directed project execution from initiation through delivery, overseeing schedule management, technical coordination, client communication, and quality assurance efforts to ensure compliance with MDT requirements. Mr. Ramer coordinated the project team throughout documentation review, analytical model development, and load rating activities, facilitating timely resolution of technical issues and review comments. Through proactive project management and close coordination with MDT, he helped ensure the successful delivery of technically defensible load ratings that supported Montana's off-system bridge management program without requiring additional refinement or load posting.		
09/21-07/22	Hood River Bridge Live Load Testing & Load Rating, OR – Mr. Ramer served as project manager and load rating engineer for this historic steel truss bridge in Hood River, OR. He performed and managed finite element model based load rating for multiple span types to ensure the refined load ratings could inform the evaluation of the structure’s remaining service life and rehabilitation planning. Evaluated structure types included concrete t-beam, steel girder, and steel truss spans along this roughly mile long structure. Lastly, Mr. Ramer worked closely with the primary consultant to provide an iterative set of bridge response results for use in their rehabilitation plan, which ultimately resulted in a successful and informed rehabilitation of the structure.		

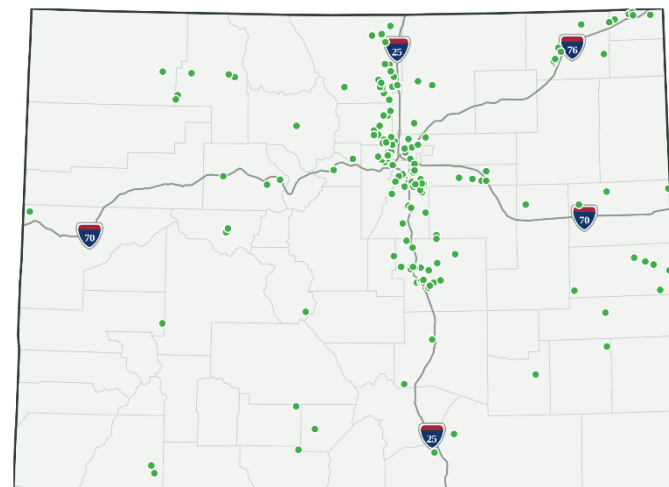
02/21-06/21	Terminal 5 Bridge Load Testing & Load Rating, WA – Mr. Ramer served as load rating engineer for the evaluation of the Terminal 5 Bridge, a critical freight corridor supporting heavy truck traffic serving the Port of Seattle and nearby trans-Pacific shipping facilities. He helped develop and implement the testing and evaluation strategy for prestressed concrete beam, curved steel girder, and straight steel girder spans to evaluate structural behavior and load distribution characteristics. Mr. Ramer also participated in data processing, finite element model calibration, refined load rating analyses, and preparation of technical reports in accordance with SDOT and WSDOT requirements. Mr. Ramer’s efforts helped improve the understanding of the bridge’s in-service performance, provided more accurate load ratings, and demonstrated that the structure could safely carry legal and permit loads without the need for posting restrictions.
02/20 – 11/21	Load Rating of 30 Bridges, VA – Mr. Ramer led the development of testing and evaluation plans and coordinated load testing efforts for 30 structures in VDOT districts that did not have sufficient rating factors with routine BrR analyses. He developed refined finite element models, calibrated analytical responses using measured response data, computed load ratings, and performed quality control reviews of load rating calculations and deliverables. The resulting ratings helped VDOT avoid unnecessary posting restrictions on key transportation corridors and detour routes while reducing the need for strengthening programs and operational limitations.
07/18 – 12/18	Admiral Way Bridge Load Rating, WA – Mr. Ramer served as load rating engineer for the evaluation of the Admiral Way Bridge, consisting of adjacent reinforced concrete truss and steel girder structures in West Seattle, Washington. He developed and calibrated refined analytical models using measured bridge responses to establish load ratings that more accurately reflected the bridge's structural behavior and load-carrying capacity. His responsibilities included field investigation, finite-element modeling, refinement of load distribution characteristics, validation of analytical assumptions, execution of load rating calculations, and technical evaluation of both structural systems under applicable legal and permit loading. Mr. Ramer also prepared the technical report documenting the analytical methodology, model calibration, and load rating results. Through the development of field-verified load ratings, he provided Seattle DOT with a technically defensible basis for evaluating bridge capacity, supporting informed maintenance and asset management decisions.
11/12-9/22 & 10/24 - Ongoing	Multi-Phase Evaluation of the Bayou Ramos Bridges – Mr. Ramer served as project engineer during the initial evaluations of the US-90 Bayou Ramos Bridge and has continued his involvement as project manager for the ongoing follow-up investigations. During the initial investigation phase, he played a key role in the development of refined analytical models and bridge load ratings, including finite element modeling, structural capacity calculations, and evaluation of load-carrying behavior for the prestressed concrete superstructure. He developed and calibrated analytical models using load testing data to accurately characterize bridge response and support refined load rating. In addition, he planned and coordinated field testing activities, oversaw instrumentation installation and data collection, and worked with the project team to monitor crack development in the prestressed concrete girders and correlate measured behavior with analytical predictions. In the current phase of work, Mr. Ramer serves as project manager, directing project execution, client coordination, and technical oversight for advanced evaluation and monitoring activities. He has managed the implementation of load testing, structural monitoring, refined analytical modeling, and advanced evaluation techniques, including shear capacity assessments and strut-and-tie modeling, to investigate potential posting removal. Through his coordination of project teams and collaboration with DOTD, Mr. Ramer has helped deliver evaluation results that support decisions regarding bridge load capacity, posting removal, and long-term performance.

Firm employed by Engineering Operations, LLC.			
Name	Michael Collins, PE		Years of relevant experience with this employer
Title	Bridge Preservation Engineer		Years of relevant experience with other employer(s)
Degree(s) / Years / Specialization		BS / 2007 / Architectural Engineering (Structures)	
Active registration number / state / expiration date		PE.0047623 / CO / 10/31/27 Additional PEs: FL, ID, MT, TX, UT, WY	
Year registered	2025	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities		Design team lead, responsible for bridge preservation efforts potentially involving schematics for posting improvement.	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
01/08 – Ongoing	General Experience – Mr. Collins brings 18 years of experience in design, load ratings, and in-service bridge inspections, along with proven leadership in emergency response, consultant management, and multistakeholder coordination. As the former Colorado State Bridge Engineer and Bridge Branch Manager at CDOT, he managed the state’s largest structural engineering program- including 200+ design and construction projects- along with 53 professionals across 11 units, a \$62M annual program budget, and 26,000+ structural assets statewide. For this project, he will direct the development of schematic recommendations to improve or eliminate load postings. Mr. Collins now oversees eO’s design division, with a focus on plan preparation for bridge repair, rehabilitation, and strengthening.		
12/18-05/25	State Bridge Engineer and Bridge Branch Manager – CDOT – Mr. Collins led the state’s largest structural engineering program, overseeing all aspects of design, load ratings, in-service inspections, construction and fabrication inspection, asset management, and hydraulics. He managed 53 employees across 11 specialized units, with eight direct reports and a \$3 million operational budget, responsible for hiring, promotions, disciplinary actions, and strategic direction. With an annual program budget of \$62 million, he directed 57 support projects, 32 consultant contracts, and 200 regional design and construction efforts, managing over 26,000 structural assets, including bridges, tunnels, and retaining walls. His role included technical oversight of all structural units and leading emergency response for high-profile incidents such as the 2019 Denver West truck fire, SH36 wall failure, Glenwood Canyon mudslides, Pueblo train derailment, and the 2024 Blue Mesa T1 steel bridge repair.		
01/16-12/18	Bridge Asset Management Engineer– CDOT – Mr. Collins was responsible for overseeing the inventory, evaluation, reporting, maintenance planning, and funding allocation for more than 26,000 state-owned structural assets, including bridges, culverts, tunnels, walls, signs, signals, and high-mast light towers. He led a team of technical experts and ensured CDOT’s compliance with all applicable federal regulations and policies. During this time, he envisioned and developed the System for Inspection and Management of Structural Assets (SIMSA), a mobile application designed to streamline data collection and reduce administrative burden, achieving an estimated 20% cost savings. Mr. Collins also played a key role in securing \$225 million through FHWA’s Competitive Highway Bridge Grant Program by proposing a bundled approach to bridge rehabilitation and replacement.		

17. Firm Experience:

Firm name	Bridge Diagnostics, Inc.		Discipline	Bridge	
Project name	CDOT routine load ratings for off-system bridges			Firm responsibility (prime or sub?)	Prime
Project number	26-HAA-XB-00007	Owner's name	Colorado Department of Transportation (CDOT)		
Project location	Statewide		Owner's Project Manager	Andrew Brown	
Owner's address, phone, email	2829 W. Howard Place	Denver, CO 80204	303-512-4172	Andrew.Brown@state.co.us	
Services commenced by this firm (mm/yy)	03/26	Total consultant contract cost (\$1,000's)			\$694 (NTE)
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm (\$1,000's)			\$340 (Ongoing)

BDI is performing load ratings for Colorado off-system bridges statewide. Our team has been assigned over 200 routine bridge and culvert AASHTOWare BrR evaluations and is performing ahead of schedule relative to each task order's delivery milestones (approximate locations are highlighted in green in the provided image). The work includes:



- **Retrieval and Review of Available Documentation** – Our team has systematically retrieved and reviewed all available documentation for assigned bridges within CDOT's SIMSA database to establish baseline data for load rating. For structures with incomplete documentation, we coordinated with CDOT and local bridge owners to identify and compile all available information sources. In cases where information gaps remained, our team developed documented engineering assumptions through comparison with standard plan sets and similar structure types, including the creation of structure and section-type libraries, to support consistent evaluation.
- **Load Rating Modeling, Analysis, and Reporting** – Once validated data sets were compiled, BDI's team developed load rating models, using approved AASHTOWare BrR, CANDE, and Slab software, to perform load ratings in accordance with CDOT specifications. Analysis scope included model development, multi-stage quality control, execution of CDOT specific rating procedures, preparation of detailed report packages, owner comment resolution, and entry into CDOT's SIMSA database.
- **Load Posting Resolution and Owner Coordination** – When initial load ratings identified the possibility of load posting, BDI proactively evaluated approved methods to refine load rating results prior to submission. Once a posting concern was confirmed, our team promptly coordinated with the bridge stakeholders to present solution-oriented alternatives rather than simply presenting the posting needs. Recognizing that standard load rating techniques can produce overly conservative ratings, our team systematically identified key drivers of low ratings and implemented authorized adjustments where appropriate. BDI has and continues to provide clear, actionable rating results and considerations that minimize unnecessary load restrictions while maintaining compliance with CDOT requirements and ensuring public safety.

Key Personnel Involved: Project manager **Brice Carpenter** is responsible for evaluation plan development and implementation, analysis team management, subconsultant and client coordination, load posting resolution, and QA/QC of various project tasks and all submittals. **Load rating engineers Michael Sullivan and Josh Anderson** are responsible for documentation review, model creation, load rating quality control for other load rating engineers, model revision, and load rating package development.

Firm name	Bridge Diagnostics, Inc.		Discipline(s)*	Bridge	
Project name	Bayou Ramos Bridge Multi-Phase Evaluation			Firm responsibility (prime or sub?)	Prime
Project number	H.009730.5	Owner's name	Louisiana Department of Transportation and Development (DOTD)		
Project location	Morgan City, LA		Owner's Project Manager	Bradley Mistich	
Owner's address, phone, email	Office of Engineering	PO Box 94245	Baton Rouge, LA 70804-9245	225-379-1200	Bradley.Mistich@la.gov
Services commenced by this firm (mm/yy)	10/24	Total consultant contract cost (\$1,000's)			\$501 (NTE)
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm (\$1,000's)			\$213 (Ongoing)

The Bayou Ramos bridges were load posted due to cracking and deterioration along many of the prestressed girder ends. When this deterioration was first observed, DOTD engaged BDI to conduct diagnostic live-load testing and monitoring on these structures to identify the structure's response characteristics and determine potential causes for the observed distress. As part of Task Order 5 of BDI's NDT/E IDIQ 4400025002, BDI provided a multi-phase evaluation to reevaluate the structures' live-load capacity after multiple retrofit strategies were deployed. This evaluation included:



- Phase I:** BDI performed a comprehensive load rating evaluation in accordance with the current AASHTO MBE and DOTD BDEM requirements. The evaluation included review and refinement of existing AASHTOWare BrR analytical models, review of existing bridge records, assessment of current bridge conditions, and implementation of multiple strut-and-tie method (STM) models to evaluate shear capacity at the deteriorated girder ends. The project team systematically evaluated alternative modeling approaches, and load path and deterioration assumptions to establish realistic member capacities and identify governing rating conditions along these ~1.5-mile-long bridges. BDI developed complete load rating calculations, updated rating files, and prepared a comprehensive rating package in accordance with BDEM reporting requirements. The refined evaluation demonstrated that consideration of STM-based capacities could eliminate the need for bridge load posting while maintaining compliance with applicable rating requirements.
- Phase II/III:** After establishing that STM-based capacities could eliminate posting requirements, BDI conducted Phase II diagnostic load testing to validate the structure's behavior and STM capacity assumptions. Test results were incorporated into the rating evaluation to further refine analytical assumptions and support the defensible recommendation for posting removal. Phase III monitoring is scheduled in the Fall of 2026 and will assess the long-term performance of selected cracked regions under unrestricted legal and permit loads.

Key Personnel Involved: Principal engineer **Brett Commander** was responsible for guiding all aspects of this project, including evaluation plan development and execution. Load rating project manager **Brice Carpenter** was responsible for evaluation plan development and application, analysis team management, and QA/QC of various project tasks. Load rating engineer **Josh Anderson** was responsible for documentation review, existing BrR model review, correction, and update for the load rating calculations performed throughout this evaluation. Load rating engineer **Michael Sullivan** served as testing engineer responsible for instrumentation installation, load testing, and data processing. Contract manager **Steven Fall** served as local project manager responsible for DOTD coordination, field testing logistics, and field crew management.

Firm name	Bridge Diagnostics, Inc.	Discipline(s)*	Bridge
Project name	US61 Bonnet Carre Superload Evaluation, Bridge Inspection, & Monitoring	Firm responsibility (prime or sub?)	Sub
Project number	N/A	Owner's name	Louisiana Department of Transportation and Development (DOTD)
Project location	Norco, LA	Owner's Project Manager	William Metcalf
Owner's address, phone, email	Office of Engineering PO Box 94245 Baton Rouge, LA 70804-9245 225-379-1200 William.Metcalf@la.gov		
Services commenced by this firm (mm/yy)	08/25	Total consultant contract cost (\$1,000's)	\$136 (NTE)
Services completed by this firm (mm/yy)	03/26	Cost of consultant services provided by this firm (\$1,000's)	\$136 (NTE)

Since 2011, BDI has partnered with crane & rigging transport firms to support the transportation of numerous superloads across the US 61 Bonnet Carré Spillway Bridge near Norco, Louisiana. Services have included superload permit ratings, transport configuration optimization, field verification, and real-time structural monitoring. Most recently, in 2025/2026, BDI performed structural evaluation and field verification required to support permitting a concentrated superload transporting desalter equipment with a gross vehicle weight (GVW) of approximately 748 kips. The project was completed in three phases:

- **Phase I – Structural Evaluation:** BDI performed a load rating evaluation based on a refined 3D finite element model (FEM) of the structure and the proposed superload configuration in accordance with Louisiana DOTD requirements (general and structure specific). The initial analysis identified pile foundation overloads that exceeded limits set by DOTD's permitting group.
- **Phase II – Configuration Optimization:** BDI performed multiple transport configuration iterations to redistribute loads and achieve acceptable superstructure and substructure ratings while maintaining the client's transport objectives and meeting DOTD requirements.
- **Phase III – Field Verification and Monitoring:** BDI conducted pre- and post-move inspections, real-time monitoring, and post-move assessments to satisfy DOTD requirements and confirm acceptable bridge performance during transport.



Through a combination of structural analysis, engineering, and field verification, BDI has enabled the successful movement of exceptionally heavy superloads while maintaining the safety and integrity of a critical transportation asset.

Key Personnel Involved: Load rating project manager **Brice Carpenter** served as BDI's engineering lead for this transport permit evaluation, responsible for refined FEM based transport evaluations, transport optimization, reporting, and client/end client guidance and coordination. **Load rating engineer Mike Sullivan** served as Field Engineer/Team Lead for real-time monitoring. **Load rating engineer Josh Anderson** was responsible for analyzing the structure, including development of a finite element model and load rating computations. **Contract manager Steven Fall** served as local project manager responsible for field logistics and field crew management, visual inspections, and inspection reporting.

Firm name	Bridge Diagnostics, Inc.	Discipline(s)*	Bridge
Project name	Robert O. Norris, Jr. Bridge – Repair & Construction Load Rating	Firm responsibility (prime or sub?)	Prime
Project number	51161	Owner's name	Virginia Department of Transportation (VDOT)
Project location	Statewide	Owner's Project Manager	Gopi Sripathy
Owner's address, phone, email	87 Deacon Road, Fredericksburg VA 22405, 540-655-3352, gopi.sripathy@vdot.virginia.gov		
Services commenced by this firm (mm/yy)	9/24	Total consultant contract cost (\$1,000's)	\$611 (NTE)
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm (\$1,000's)	\$405 (Ongoing)

The Norris Bridge is a 1.9-mile-long steel structure that consists of multiple span types, including thru-truss, deck-truss, multi-girder, and dual-girder with in-span hinges. This structure is undergoing a significant steel repair to prolong its service life until a planned replacement is in place. As part of the construction preparation, VDOT needed to perform an updated baseline load rating of the structure as well as analyze multiple rating iterations associated with construction staging.

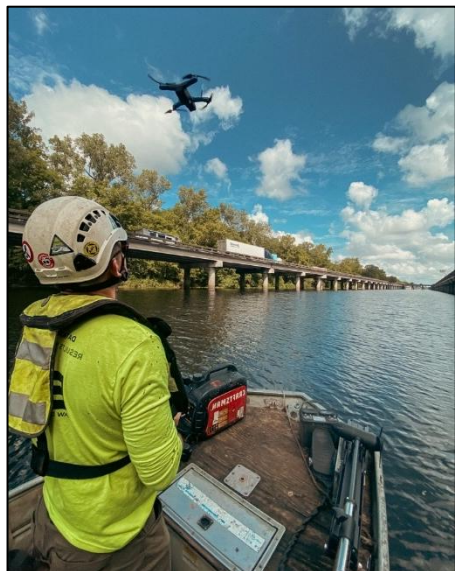
- Preliminary Feasibility Study** – BDI's team retrieved and reviewed all available documentation and existing AASHTOWare BrR models. BDI's feasibility study established the analytical approach by identifying tasks suitable for standard BrR software and those requiring 3D FEM. BDI also verified the successful conversion of legacy BrR models (Version 6.5) and resolved compatibility issues and errors to ensure compliance with VDOT's Version 7.4 standards. This study confirmed the existing BrR models could serve as a reliable basis for the vertical load analysis, identified portal members requiring refined wind evaluation using 3D FEM, and established a detailed plan for stakeholder review and approval.
- Repair & Construction Load Ratings** – BDI updated VDOT's legacy AASHTOWare BrR models to current VDOT standards, taking into account the extensive deterioration profiles along the 44-span structure. The BDI team developed independent MathCAD and Excel calculation files for complex details such as portal members and pin-and-hanger assemblies and implemented gusset plate evaluation within the BrR model itself. Comprehensive load-rating analyses were performed across all superstructure components through existing, staged, and final conditions. During the initial repair evaluation, BDI found that deterioration estimates from the most recent inspection report resulted in potential posting requirements not previously considered. Through coordination with stakeholders and local inspection crew, a targeted inspection supported deterioration profile refinement and resulted in the removal of the identified posting concerns. To support bridge management and permitting, VDOT-format rating summary sheets, load rating reports, and updated BrR models were produced while maintaining close coordination with VDOT and independent quality-control teams throughout the project.



Load rating project manager Brice Carpenter was responsible for project planning, coordination, implementation, team management, and preparation of project deliverables. He also led the analysis, overseeing development and execution of the analysis plan, coordination with subconsultants and the client, resolution of load posting concerns, and QA/QC of technical tasks and project submittals. **Load rating engineers Josh Anderson and Mike Sullivan** were responsible for documentation review, model verification and updates, load rating analyses, quality control of analytical models and calculations, and development of load rating packages and supporting deliverables.

Firm name	Bridge Diagnostics, Inc.	Discipline(s)*	Bridge
Project name	Louisiana Statewide Non-Destructive Testing and Evaluation IDIQ	Firm responsibility (prime or sub?)	Prime
Project number	H.009730	Owner's name	Louisiana Department of Transportation and Development (DOTD)
Project location	Louisiana Statewide	Owner's Project Manager	Bradley Mistich
Owner's address, phone, email	Office of Engineering PO Box 94245 Baton Rouge, LA 70804-9245 225-379-1200 Bradley.Mistich@la.gov		
Services commenced by this firm (mm/yy)	05/23	Total consultant contract cost (\$1,000's)	\$8,600
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm (\$1,000's)	\$5,500 (Ongoing)

As part of the DOTD's NDT-E IDIQ contract, BDI has coordinated multidisciplinary teams, deployed advanced testing technologies, managed complex field logistics, and delivered high-quality engineering evaluations for critical transportation infrastructure throughout the state. BDI has been prime for this statewide IDIQ since 2019, providing timely and accurate results while ensuring clear communication and recommendations to DOTD throughout each task order.



Task Orders III and VI Interstate 20 Deck Evaluation and Pin and Hanger Testing: As part of DOTD's statewide bridge preservation program, BDI performed NDT-E assessments on 273 structures along the Interstate 20 corridor. Services include SounDAR, GPR, HRI, and IR testing to evaluate reinforced concrete deck condition, determine reinforcement characteristics, and identify deterioration mechanisms such as voids and delaminations.

Task Order IX NBIS Routine Inspection and NSTM Inspection of the I-10 Bonnet Carre Spillway: BDI performed the routine and non-redundant steel tension member (NSTM) inspections of the I-10 bridges and emergency crossover structures over the Bonnet Carre Spillway. The routine inspections were performed via boat underneath and were supplemented with high-speed, high-resolution imaging to limit the impact on the traveling public. The NSTM inspection was performed via snoopers and consisted of a "hands on inspection" on all elements of the structures that are classified NSTM. BDI has performed the inspection of these bridges three of the past four cycles and is currently scheduled to complete the next round of inspections in November of 2026.

Task Order XI Bridge Preservation Assessment of TO3 and TO6 Structures – As part of the DOTD's bridge preservation program, BDI is contracted to provide bridge preservation strategies for the decks along the Interstate 20 corridor that BDI previously scanned with NDE methods. BDI will provide repair strategies and

recommendations (as needed) along with approximate costs of said repairs, following the FHWA's InfoBridge deck preservation tool and other national standards.

Key Personnel Involved: Services provided for this DOTD IDIQ demonstrate the firm's ability to successfully administer and execute a large, multi-task order program supporting bridge preservation and asset management initiatives across Louisiana. **Program manager Graham Bettis** serves as the subject matter expert and overall lead on bridge preservation strategies. **Contract manager Steven Fall** serves as the project manager of this contract, while **Load rating project manager Brice Carpenter** and **load rating engineer Kyle Ramer** serve as senior engineers on this contract.

Firm name	Engineering Operations, LLC.		Discipline(s)*	Bridge	
Project name	CDOT Statewide Off-System Bridge Inspections and Load Ratings			Firm responsibility (prime or sub?)	Prime
Project number	HQ010925	Owner's name	Colorado Department of Transportation		
Project location	Statewide (Colorado)		Owner's Project Manager	Andrew Brown	
Owner's address, phone, email	2829 W. Howard Place	Denver, CO 80204	303-512-4172	andrew.brown@state.co.us	
Services commenced by this firm (mm/yy)	10/19	Total consultant contract cost (\$1,000's)			\$10,086
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm (\$1,000's)			\$7,679



This load rating-heavy inspection contract allowed eO the opportunity to rate bridges across Colorado. Some task orders are written solely to provide load rating services, while others include load ratings when significant deterioration is found during an inspection and may affect the overall capacity of the structure. On this contract, ratings range from simple steel multi-girder structures to continuous-span prestressed multi-girder structures.

Load Rating Modeling, Analysis, and Reporting – Depending on the age of construction, both LFR and LRFR rating methods are utilized to rate bridges on this project, using a variety of load rating and analysis programs, including BrR, CANDE, Plank, Winbeam, and Slab. Structures are required to be rated utilizing the most recent bridge inspection findings to account for current wearing surface thicknesses and levels of deterioration that may impact the load rating. When new structures are added to the inventory, eO is responsible for performing the initial inspection as well as the load rating. We were also assigned one task order that entailed rating several structures in accordance with the FAST Act to include SHV's and EV's within the rating.

Training – eO's project management worked with CDOT to revise their load rating manual, inquiring about new code language and giving feedback to increase clarity on several portions of the new manual; consequently, eO has experience providing feedback on load rating processes.

Since 2021, eO has inspected more than 3,200 bridges and completed nearly 200 load ratings under this contract.

Key Personnel Involved: Load rating engineer (eO lead) **Benjamin Kenney** serves as the project manager responsible for inspection planning, analysis team management, load posting resolution, and manual revisions. **Load rating engineer Remy Stern** is a primary load rater and load rating quality control administrator who serves as an engineer of record and who performed over 100 load ratings on the project.

Firm name	Engineering Operations, LLC.		Discipline(s)*		Bridge	
Project name	WYDOT Statewide On & Off-System Bridge Inspections				Firm responsibility (prime or sub?)	Prime
Project number	IS02728 & IS12728	Owner's name	Wyoming Department of Transportation			
Project location	Statewide (Wyoming)			Owner's Project Manager	Randy Ringstmeyer, PE	
Owner's address, phone, email	5300 Bishop Blvd. Cheyenne, WY 82009 307-777-4428 randy.ringstmeyer@wyo.gov					
Services commenced by this firm (mm/yy)		08/22	Total consultant contract cost (\$1,000's)			\$6,491
Services completed by this firm (mm/yy)		Ongoing	Cost of consultant services provided by this firm (\$1,000's)			\$5,409



eO holds the prime inspection role to perform routine and NSTM inspections throughout the 23 Wyoming statewide counties. Inspections of each bridge element have been performed with visual and in-depth inspection methods.

Load Rating Modeling & Analysis– Typically, when a Condition State 4 defect is found in a primary element in the field, a structural review is necessitated by a qualified engineer. This is where the eO team excels and brings value to our clients by looking into these issues to determine if they pose a significant risk toward impacting the current controlling load rating for the structure. By looking into these issues and documenting the process in our CS4 logs, we've been able to pull affected elements back to CS3 after structural review where appropriate. In other instances, we have been able to prioritize more severe findings that need near-term attention and separate them from issues that may be of lower concern and can be monitored rather than repaired.

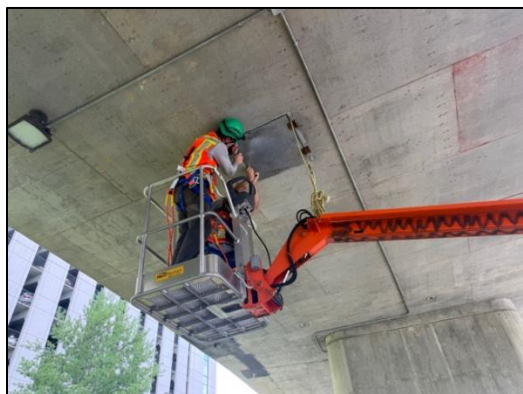
Review & Update Files – eO also provides capacity checks on field findings. Typically, when a team leader finds a deficiency that is located within the primary load path that would indicate within their field book, a cursory capacity check is flagged and performed in-house as part of a CS4 review. We then complete a structural analysis using Wyoming legal live loads to determine if a full re-rating and posting adjustment would be required to keep the structure in service at the current level. Load rating calculations and defect drawings have been included in the submittal to WYDOT to provide clear and actionable results, and to ensure

we have completed our due diligence in verifying adequate remaining capacity and to avoid the need for future analysis by teams that encounter the same condition during subsequent inspection cycles.

Key Personnel Involved: Load rating engineer (eO lead) Benjamin Kenney is the project principal, responsible for communicating with the client regarding the contract and high-level concerns, administering the QA/QC process, and working with the project manager and deputy project manager to ensure teams were appropriately staffed and managed. **Load rating engineer Remy Stern** is the project manager and primary team leader, leading field teams in inspections and overseeing structural condition reporting (including load rating reporting).

Firm name	Engineering Operations, LLC.	Discipline(s)*	Bridge
Project name	Naval Facilities Engineering Systems Command (NAVFAC) Worldwide Bridge Inspection & Assessment	Firm responsibility (prime or sub?)	Prime
Project number	N3943024R0017	Owner's name	Naval Facilities Engineering Systems Command
Project location	Worldwide Naval Base Locations	Owner's Project Manager	Anne Marie Prieto
Owner's address, phone, email	1322 Patterson Ave SE, Suite 1000 Washington Navy Yard, DC 20374-5065 805-407-1477 anne.m.prieto.civ@us.navy.mil		
Services commenced by this firm (mm/yy)	04/25	Total consultant contract cost (\$1,000's)	\$12,000
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm (\$1,000's)	\$1,851

eO serves as the prime consultant for the NAVFAC Worldwide Bridge Inspection contract, a role that underscores our capability to deliver comprehensive structural evaluations for U.S. Navy bridge assets across the globe. Under this contract, our responsibilities include load rating analyses along with routine, underwater, and special in-depth bridge inspections.



Site Visits – eO's detailed inspections of structures' current conditions allow us to accurately and thoroughly offer load rating analyses, scour evaluations, and rehabilitation design recommendations for mission-critical infrastructure. At Naval Support Activity Crane in Indiana, eO recently completed routine inspections on 26 bridge structures, providing detailed assessments to support the base's ongoing maintenance and operational planning; we've performed similar assessments in dozens of other locations under this contract, including New Orleans, Pensacola, Annapolis, and more. At Norfolk Naval Shipyard in Virginia, eO recommended the closure of seven pedestrian bridges due to deterioration and one bridge was immediately taken out of service following the issuance of a Critical Inspection Finding (CIF).

Load Rating Modeling, Analysis, and Reporting – Ratings have had significant FHWA requirement changes in the last ten years and are addressed to account for SHV and EV loadings. This commonly affects short span structures, which is the majority of NAVFAC's bridge inventory. eO's team of load rating specialists have taken steps to address rating changes or re-rating requirements as we perform the ratings and structural inspections throughout the inventory. The eO team has utilized RISA 3D modeling and supporting MathCAD documentation to analyze member forces and validate the structural capacity of aging systems, when lacking an existing load rating. Our load raters also utilize AASHTOWare BrR to assess load capacities and model structures.

Key Personnel Involved: Load rating engineer (eO lead) Benjamin Kenney serves as the Project Manager responsible for inspection planning, field logistics, and structural condition reporting (including load rating reporting).

18. Approach and Methodology:

Founded in 1989 as a bridge load rating firm, Bridge Diagnostics, Inc. (BDI) has decades of experience evaluating thousands of bridges, from routine load ratings to complex structure evaluations. BDI serves as a prime consultant for multiple infrastructure owners across the country, including the Louisiana Department of Transportation and Development (DOTD). As part of these contracts, BDI supports clients in assessing and prioritizing their bridge evaluation and preservation program needs.

Task Order Development, Coordination, and Scheduling

BDI's approach for this contract is centered on four objectives: (1) timely and efficient task order execution, (2) development of reliable load ratings using our progressive methodology, (3) creation of robust AASHTOWare BrR models that support DOTD's automated permitting initiatives, and (4) practical engineering solutions that optimize load rating/posting results while maintaining public safety.

Because DOTD anticipates multiple concurrent assignments, BDI will maintain a centralized task order tracking system that monitors scope, budget, staffing assignments, schedule milestones, and deliverable status across all active assignments. BDI and subconsultant Engineering Operations, LLC (eO) bring decades of experience performing routine and complex load ratings, including AASHTOWare BrR, providing the capacity to immediately respond to concurrent DOTD assignments

Task 1: Plan and Document Retrieval and Review

Reviewing existing bridge documentation is a critical first step in any successful structural evaluation and load rating effort. BDI will assign an experienced structural engineer to conduct a comprehensive review of all bridge documentation available in DOTD sources. This review will determine where sufficient information exists to support load rating calculations and where gaps in the documentation may require additional research, engineering evaluation, or field verification.

When information required to perform a load rating is not available through standard DOTD resources, BDI will coordinate with DOTD headquarters and the appropriate district or parish office to identify and

obtain all remaining and available bridge records. Our team has extensive experience researching historical bridge information for hundreds of DOTD structures and is intimately familiar with DOTD data repositories, including the microfiche library, AssetWise, FileNet, and other archival sources.

During previous routine load rating projects, BDI has encountered structures with incomplete documentation despite extensive records research. In these cases, our team has developed and documented libraries of engineering assumptions through comparison with standard plan sets, historical design practices, and similar existing bridges. When appropriate and approved, BDI will develop and apply similar DOTD/Louisiana specific tools to support the development of accurate, consistent, and validated load rating analyses.

Task 2: Site Visits

BDI has developed a proven, efficient approach for identifying and performing field investigations that provide meaningful value to the load rating process. When validation is required, approved site visits will be scheduled and performed by BDI's experienced local field crew based in Metairie, LA. All critical missing bridge details will be verified, including structural dimensions, condition of materials and members, and missing reinforcement details. Our local team has extensive experience in bridge nondestructive evaluation (NDE) techniques, including as-built reinforcement verification using ground-penetrating radar (GPR). By incorporating field data into the load rating evaluations, BDI will validate and refine rating inputs and minimize unnecessary conservatism. Field investigations, including load testing and advanced NDE, are core BDI capabilities and will be available when they provide a clear benefit, such as preventing load posting or keeping a bridge in service. BDI will perform site visits only when they are necessary to resolve critical data gaps or materially improve the load rating. In the vast majority of cases, sufficient information will be available from Task 1 to complete the load rating without a site visit. This targeted approach will allow us to provide expert load rating services while minimizing unnecessary time, travel, and expense for the DOTD.

Task 3: Analysis and Load Rating

Upon completion of load rating data collection and verification activities, BDI will perform load rating analyses using a structured, progressive methodology. Our approach begins with a thorough understanding of each structure, its condition, available documentation, and applicable rating requirements. The load ratings will incorporate all available structural information, inspection findings, and documented bridge history to develop accurate and complete ratings in accordance with the AASHTO Manual for Bridge Evaluation (MBE) and DOTD Bridge Design & Evaluation Manual (BDEM). Each rating will consider HL-93 design loading and applicable Louisiana legal loads, including SHVs and EVs, as well as secondary and temperature effects where applicable.

Factors considered in each rating evaluation will be tailored to the structure's type and condition and will include material types and strengths, overall structural condition, existing member deficiencies, traffic-related loading considerations, previous repairs or modifications, and long-term deterioration trends identified through inspection records. BDI will model and rate bridges using AASHTOWare BrR to the maximum extent permitted by the software. BDI's standard approach is to start with the simplest method first, which allows us to complete the work in the most economical way possible. For most standard bridges, a straightforward girder-line analysis will result in suitable rating factors, negating the need to expend additional manhours to perform more refined calculations or in-depth investigations.

Where a bridge or structural element cannot be adequately rated using standard AASHTO BrR, or where standard analysis results in rating factors less than 1.0, BDI will supplement the evaluation with more refined analytical methods, and we will provide influence lines for all critical members, including evaluated substructure members. Finite-element model (FEM) analysis typically provides a more accurate representation of load paths and distribution, and can be used as an economical way to more accurately evaluate non-gravity loads induced by factors such as unique geometry, unique member connections, temperature/thermal gradient effects, lateral loads, and other behaviors commonly deemed as "secondary" in standard load rating procedures.

Evaluation of all relevant substructure elements will be initiated based on DOTD BDEM triggers, which include poor member condition, the potential for a substructure element to control the structure's rating, rehabilitation design affecting the substructure, or any other cause based on engineering judgement and load rating experience. BDI has evaluated and analyzed substructure elements on hundreds of bridges, including concrete bent caps, reinforced concrete columns, and prestressed concrete and structural steel piling. Further, BDI has well-established procedures for determining capacity of bridge substructure elements with missing plans or unknown foundations.

If posting requirements are identified during any stage of the evaluation process, BDI will implement approved measures to refine rating assumptions and better reflect the structure's actual condition, configuration, and behavior. A great deal of inherent conservatism is built into standard bridge load rating approaches, with design provisions frequently applied to existing structures that grossly underestimate actual bridge performance. Our team will first assess the evaluation to identify potential sources of conservatism, which generally fall into three categories: (1) load application and live load distribution, (2) basis of member capacity, and (3) analytical modeling assumptions. Live load distribution factors calculated using AASHTO MBE simplified approaches are frequently the primary culprit in overly-conservative rating factor calculations, and BDI has substantial experience in determining more accurate live load distributions while still staying well within acceptable factors of safety. BDI will ensure that any modifications align with DOTD requirements, applicable specifications, and sound engineering judgment. If all other available approaches have been exhausted and the rating factor is still low despite the bridge performing well, then BDI will coordinate with DOTD to determine whether a load test is warranted.

Once load rating analysis is complete, our team will develop and submit individual rating report packages containing discussions of load rating procedures and assumptions, supplemental calculations, detailed load rating results, documentation of all deteriorated or rehabilitated structural members, and corresponding rating files in editable format. Our team will upload rating packages and supporting data to DOTD's ProjectWise

database incrementally as each bridge rating is completed and approved, allowing DOTD to review results, track methodologies, and monitor project progress in real time rather than waiting for large batch submissions.

We understand that the impact of making a load posting recommendation can have serious negative ramifications for DOTD and the traveling public. BDI will consider all reasonable avenues for validation, refinement, and analysis before recommending a posting restriction. While serving as Texas State Bridge Engineer, BDI Program Manager Graham Bettis oversaw TxDOT's statewide bridge inspection and load rating program, and he understands well the need to avoid unnecessary load restrictions. He has extensive experience in all facets of this work and is well qualified to bring a bridge owner's perspective to this project.

Depending on a structure's condition, age, and design, it is possible that posting requirements will remain even after load rating refinement has been completed. For any bridge requiring load posting, BDI will prepare a detailed DOTD Load Rating Options Form to include recommendations to reduce or eliminate the need to post the bridge via load testing, repair or rehabilitation, or replacement. In these cases, our team will work with DOTD and engage our bridge preservation experts to determine if a repair/retrofit plan can appropriately and reliably remove posting requirements for the structure in question. Schematic recommendations to improve the structure's proposed posting will be compiled by our experienced team of bridge preservation engineers. BDI's subconsultant eO are experts in designing repairs and preparing schematic plans for bridge repair and strengthening.

A significant number of DOTD-owned permit-route bridges have been load rated using methods other than the current DOTD policies and AASHTOWare BrR software. In addition to performing new load ratings, our team is well prepared to systematically review and update existing bridge rating records to current DOTD requirements, including transitioning ratings to AASHTOWare BrR. Our team has extensive experience with AASHTO load rating specifications and large-scale rating database updates, and we are well-positioned to efficiently bring

existing ratings into compliance with current policies while minimizing unnecessary rework.

Task 4: Training

Our team will provide bridge rating training services tailored to DOTD's ongoing needs throughout the duration of this IDIQ contract. Training topics will be developed in coordination with DOTD and may include AASHTOWare BrR modeling and analysis, load rating methodologies, troubleshooting model files, interpretation of rating results, and resolution of complex bridge evaluation issues. Drawing on extensive experience in bridge load rating and BrR implementation, BDI has successfully delivered training programs for a variety of bridge evaluation applications including development of National Highway Institute training courses. BDI will prepare all curriculum, instructional materials, and supporting resources required for each training session. Training may be conducted virtually or in person and will provide DOTD staff with the knowledge and practical skills necessary to effectively analyze, evaluate, and rate structures using AASHTOWare BrR and other approved software.

Task 5: Overweight Permit Review

Under DOTD's direction, BDI will review and evaluate overweight vehicle permit requests for crossings on Louisiana bridges. With 15 years of DOTD overweight load evaluation experience, including weigh-in-motion and superheavy load crossings, we will deliver efficient and accurate results using AASHTOWare's BrR database. Bridge rating results will be evaluated to determine whether proposed crossings can be accommodated safely and whether transport optimization, route modifications, or additional analysis are required.

For bridges with complex load paths or configurations that are not adequately represented by standard rating methods, BDI will perform refined analytical evaluations, including finite element modeling when warranted. All analyses will undergo internal QA/QC review to verify assumptions, calculations, and recommendations. Findings will be documented and provided to DOTD in a clear, concise format to support timely permit decisions.

Task 6: Review, Update and Correct AASHTOWare BrR File

When sets of BrR model reviews are assigned, our team will evaluate and update the existing AASHTOWare BrR models to verify that bridge geometry, member properties, loads, and analysis assumptions accurately represent the structure and comply with DOTD requirements. Our review will include validation of SNBI data, superstructure definitions, reinforcement details, load configurations, and rating parameters, with a focus on identifying and correcting modeling errors, inconsistencies, and missing information. Particular attention will be given to model elements required for automated permit evaluations, including system-based superstructure definitions, lane configuration definition in superstructure alternatives, and other parameters necessary for reliable automated permit analysis. BDI has executed permit evaluations on DOTD highways since 2011, giving us direct insight into what the automated permit process requires. All revisions will be documented and verified through QA/QC procedures to ensure the resulting BrR files are accurate, consistent, and fully functional for DOTD's bridge rating and permitting program.

Task 7: Bridge Rating Review

Serving as an extension of DOTD's staff, our team will provide independent QA/QC reviews of bridge load rating analyses performed by other consultants. BDI has a well-established procedure for reviewing the load rating work performed by other consultants, including full QA/QC reviews, on load rating projects in which we serve as the prime. We will utilize the same approach to review the work of other prime consultants as part of this contract to verify compliance with the current AASHTO MBE, DOTD BDEM, and project-specific requirements, allowing DOTD staff to focus on emergency response and other critical priorities.

BDI's process for reviewing load rating work performed by other consultants includes verification of bridge inventory data, structural modeling assumptions, load application considerations, member capacity parameters, rating methodologies, and critical rating factors. Through our past and ongoing load rating work for the DOTD, we are

familiar with DOTD-specific reporting requirements. Our team will assess analysis inputs and outputs, evaluate the validity of results, and identify discrepancies, omissions, calculation errors, or missing rating package information that could affect the rating conclusions. Our proven QA/QC procedures utilize experienced bridge rating engineers and senior technical reviewers to provide a thorough and consistent assessment of each submittal. Review comments will be clearly documented and tracked through resolution to promote efficient coordination with the partner consultant and timely completion of the rating review process.

Task 8: Miscellaneous Rating Work

BDI's team of engineers has supported asset owners through a wide variety of bridge evaluation, load rating, preservation, and permitting initiatives. This experience positions us to effectively assist DOTD with the development, implementation, and continuous improvement of rating and permitting solutions, particularly those associated with the Department's automated permitting system.

Our team will provide flexible, on-demand support for miscellaneous rating tasks as they arise, including technical analysis, policy development, process evaluation, system validation, and implementation assistance. We will work closely with DOTD personnel to identify opportunities for automation, improve rating and permitting workflows, develop and refine business rules, and ensure seamless integration of new procedures within existing systems and operations. With 15 years of permitting experience and 37 years of rating experience, BDI's engineers are well equipped to handle any miscellaneous rating request or permitting request presented by DOTD. In addition, BDI will assist DOTD in the development and maintenance of rating and permitting policies, guidance documents, and standard operating procedures. Our approach emphasizes consistency, regulatory compliance, and practical implementation to support both current operations and future program enhancements.

19. Workload:

Firm(s) <u>ALL FIRMS</u> MUST BE REPRESENTED IN THIS TABLE	Discipline(s) *	Contract Number and State Project Number	Project Name	Remaining Unpaid Balance**
Prime: Bridge Diagnostics, Inc.	Bridge	4400025002 H.009730.5	IDIQ Contract for Non-Destructive Testing/Evaluation of Structures Statewide TO5	\$293,226
	Bridge	4400025002 H.009730.5	IDIQ Contract for Non-Destructive Testing/Evaluation of Structures Statewide TO9	\$112,479
	Bridge	4400025002 H.009730.5	IDIQ Contract for Non-Destructive Testing/Evaluation of Structures Statewide TO10	\$138,138
	Bridge	4400025002 H.009730.5	IDIQ Contract for Non-Destructive Testing/Evaluation of Structures Statewide TO11	\$120,918
	Bridge	4400025002 H.009730.5	IDIQ Contract for Non-Destructive Testing/Evaluation of Structures Statewide TO12	\$90,168
	Bridge	44-24187 H.004647.6	I-20 Miss. R. Bridge Geotechnical & Structural IDIQ Contract for Bridge Preservation Statewide TO 15	\$137,665
	Bridge	DOTLT1000638 H.972612	NDT Assessment for Link Slab Bridges	\$115,911
Prime: TRC Engineers, Inc. Sub: Bridge Diagnostics, Inc.	Bridge	4400024185 H.011996.5	IDIQ Contract for Bridge Preservation LA 182: Charenton Bridge Rehab (HBI) TO5	\$81,758
Prime: Moffatt & Nichol Inc. Sub: Engineering Operations, LLC	Bridge	4400029207 H.009730	IDIQ Contract for Statewide Underwater Bridge Inspection TO 1	\$122,189
	Other (must specify): Signs	4400031911 H.011331.1	IDIQ Contract for Inventory and Inspection of Sign Trusses and Radio Towers Statewide TO 1	\$187,768

20. Certifications/Licenses:

This section was intentionally left blank given that no certifications are required for this advertisement, and both CE&I and traffic engineering are not part of this scope.

21. QA/QC Plan:

This section was intentionally left blank given that the advertisement states that a QA/QC plan should not be included.

22. Sub-consultant information:

Firm Name (Name must match <u>exactly</u> as registered with Louisiana's Secretary of State (SOS): <u>including punctuation, include screenshot(s) from SOS at the end of Section 20</u>)	Address	Point of Contact and email address	Phone Number
Engineering Operations LLC	27350 U.S. Hwy 190, Lacombe, LA 70445	Mike Collins; mpcollins@eopsco.com	(303) 917-5127

23. Location:

This section was intentionally left blank given that location was not an evaluation criterion for this advertisement.