

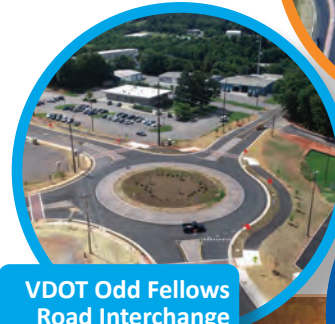
Statement of Qualifications

A DESIGN-BUILD PROJECT

TRANSPORTATION IMPROVEMENTS AT HYDRAULIC ROAD & US 29



VDOT I-95 / Temple Avenue Interchange Design-Build



VDOT Odd Fellows Road Interchange Design-Build



VDOT Route 7 Widening over Dulles Toll Road Design-Build

City of Charlottesville and Albemarle County, Virginia
State Project No.: 0029-M03-371, C501, P101, R201
Federal Project No.: STP-5104 (299)
Contract ID Number: C00118880DB114

3.2

**LETTER OF
SUBMITTAL**

June 7, 2022

Commonwealth of Virginia
Department of Transportation (VDOT)
1401 E. Broad Street
Richmond, VA 23219
Attention: Bryan Stevenson, PE, DBIA (APD Division)

RE: Statement of Qualifications for Transportation Improvements at Hydraulic Road and US 29
City of Charlottesville and Albemarle County, VA

Dear Mr. Stevenson:

Wagman Heavy Civil, Inc. (Wagman) is pleased to submit our Statement of Qualifications for the Transportation Improvements at Hydraulic Road and US 29 Design-Build Project. In accordance with the Letter of Submittal requirements in Section 3.2 of the RFQ, we present the following information:

- 3.2.1 Offeror's Full Legal Name and Address:** Wagman Heavy Civil, Inc., the Offeror, is located at 3290 N. Susquehanna Trail, York, PA 17406-9754.
- 3.2.2 Offeror's Point of Contact:**
Glen K. Mays, DBIA
Design-Build Project Manager
26000 Simpson Road, N. Dinwiddie, VA 23803
Phone: 804.631.0005 | Fax: 804.733.6281
Email: gkmays@wagman.com
- 3.2.3 Principal Officer of the Offeror:**
Gregory Andricos, PE
President / COO
3290 N. Susquehanna Trail, York, PA 17406
Phone: 717.764.8521 | Fax: 717.767.5457
Email: gmandricos@wagman.com
- 3.2.4 Offeror's Team Structure:** Wagman Heavy Civil, Inc. is a corporation and will take financial responsibility for this project. Wagman has no liability limitations. A single 100% performance bond and 100% payment bond will be provided for the total Design-Build (DB) contract value.
- 3.2.5 Lead Contractor:** Wagman Heavy Civil, Inc. **Lead Designer:** Rinker Design Associates, P.C.
- 3.2.6 Affiliated/Subsidiary Companies:** The full legal name and address of all affiliated and/or subsidiary companies are provided on Attachment 3.2.6 in the Appendix.
- 3.2.7 Certification Regarding Debarment Forms:** Signed Primary and Lower Tier Debarment Forms are included in the Appendix of this proposal.
- 3.2.8 Offeror's VDOT Prequalification:** Wagman's VDOT prequalification number is W002, and our status is active and in good standing. A copy of the prequalification is included in the Appendix.
- 3.2.9 Surety Letter Statement:** Our letter of surety is found in the Appendix. The letter states that Wagman can obtain a performance and payment bond based on the current estimated DB contract value referenced. This bond will cover the project and any warranty period.
- 3.2.10 SCC & DPOR Compliance:** Current SCC certificates and DPOR licenses are included in the Appendix.
- 3.2.11 DBE Participation Goal:** Wagman is committed to achieving a 12% DBE participation goal for the entire value of the contract.

Respectfully,
Wagman Heavy Civil, Inc.



Glen K. Mays, DBIA
Vice President Virginia Operations

OFFEROR'S TEAM STRUCTURE

3.3 OFFEROR'S TEAM STRUCTURE

Wagman Heavy Civil, Inc. (Wagman) is fully committed to providing VDOT with an experienced and integrated DB Team that will successfully deliver the Route 29/Hydraulic Road DB project. We have carefully assembled a team of highly qualified firms and individuals who have successfully collaborated in the past and have recent experience delivering similar projects for VDOT. We have designed and constructed important transportation infrastructure in Virginia and have the local knowledge, resources, and expertise to successfully meet or exceed the requirements of this project as outlined in the RFQ.

Wagman, the Offeror, Legal Entity, and Lead Contractor for this project, is a heavy civil contractor specializing in transportation infrastructure and has grown to become a nationally recognized leader within the industry. Founded in 1902, Wagman is a fourth-generation, family-owned business with more than 120 years of experience successfully completing large, complex infrastructure projects and has earned national recognition for the safe and timely delivery of award-winning projects. Wagman excels at overcoming challenges for complex and mega-projects as well as those similar in size and scope to the Route 29/Hydraulic Road DB project, providing innovative solutions and alternatives with a talented and experienced workforce. Wagman has constructed over \$1.5 Billion in DB projects in the Mid-Atlantic Region, receiving awards such as the **Northern Virginia Transportation Alliance Award**, the MdQI “**Award of Excellence**”, and most recently the **VTCA 2020 Contractor Safety Award**.

Rinker Design Associates, P.C. (RDA) will serve as the Lead Designer for this project, providing overall project management for all design activities and overseeing design quality assurance/quality control (QA/QC). RDA is an award-winning, mid-sized Virginia-based firm with approximately 140 employees and offices in **Richmond (Glen Allen)**, Manassas (Headquarters), Fredericksburg, and Virginia Beach. They are a Virginia-certified SWaM that has provided professional services throughout the Commonwealth since 1982. RDA has served as the Lead Designer on 19 DB projects in Virginia since 2010 and has supported another 15, many of which were directly for VDOT. Additionally, RDA's roundabout design experience includes serving as the Lead Designer on the **VDOT I-95/Temple Avenue Interchange DB project that was selected as the 2020 VTCA Engineering Awards Program Design-Build Winner and the 2018 ASHE National Project of the Year**.

Additional Team Members

To supplement our Team, Wagman and RDA has added the following firms which have extensive DB and VDOT experience:

FIRM	ROLE	DBE/ SWaM
CES Consulting	Quality Assurance Manager	☑
Dulles Geotechnical & Materials Testing Services	Quality Assurance Lab	☑
DMY Engineering Consultants	Geotechnical Engineering & Analysis, Quality Control Lab	☑
Land Planning & Design Associates	Landscaping	☑



TEAM HIGHLIGHTS:

- ☑
Design & Construction of Urban Roundabouts:
 - VDOT Odd Fellows Road Interchange
 - East Riverfront Improvements
 - VDOT I-95/Temple Avenue
- ☑
Development & Management of Effective Communication Strategies with Key Stakeholders
- ☑
Successfully Completing Projects On Time and Ahead of Schedule
- ☑
Experienced Staff/ DB Professionals

3.3 OFFEROR'S TEAM STRUCTURE

3.3.1 Key Personnel

Glen Mays, DBIA will serve as the **Design-Build Project Manager (DBPM)** for the project and will be responsible for overall project management, including design, construction, construction quality management, and contract administration. Mr. Mays has 37 years of construction management and heavy civil project experience. His most recent DB experience includes serving as the DBPM on VDOT's I-95 Northbound and Southbound Rappahannock River Crossing DB projects. As DBPM, Mr. Mays will be VDOT's primary point of contact and will directly manage all key personnel.

Avtar Singh, P.E., CCM, DBIA will serve as the **Quality Assurance Manager (QAM)** and will be responsible for the quality assurance inspection of all work performed on the project; monitoring the contractor's QC program; and ensuring that the work, materials, and testing/sampling are performed in conformance with the contract requirements and construction plans. He will report to the DBPM but has direct lines of communication and coordination with VDOT. Mr. Singh's expertise lies in delivering QA management services for the construction of transportation infrastructure in urban areas. His 28 years of experience include serving as the QAM on VDOT's Albemarle Intersection Bundling and Route 29 Solutions DB projects. Mr. Singh is a registered and licensed Professional Engineer in Virginia.

Brandon Shock, P.E., DBIA will serve as the **Design Manager (DM)** for the project and will be responsible for the overall management of the design and oversight of design QA/QC activities associated with the multi-discipline design elements of this project. Mr. Shock will report to the DBPM and will maintain close communication with the DBPM to ensure the project is completed in accordance with the requirements of the contract documents. Our Team's selection of Mr. Shock is strategic due to his extensive DB experience in Virginia and his ability to manage all technical and disciplinary aspects of the design. Over the past 14 years, he was the lead designer or the Deputy DM on 12 DB projects including the Award-Winning Route 7 Widening over Dulles Toll Road and I-95 at Temple Avenue Interchange Improvement projects, Middle Ground Boulevard Extension, I-581/Elm Avenue Interchange Improvements, and Rolling Road/Franconia-Springfield Interchange Improvements. Additionally, Mr. Shock is a registered and licensed Professional Engineer in Virginia and a certified DB Professional by DBIA. In 2019, Mr. Shock served on VTCA's Engineering Consultant Leadership Committee as an Emerging Leader.

Brad McClung will serve as the **Construction Manager (CM)** for the project. He will be hands-on through the duration of construction to provide assistance to the DBPM and oversee a team of construction engineers, quality control (QC) personnel, and superintendents to ensure quality and safety. He will also develop the project schedule and look-ahead schedules to ensure that equipment, personnel, and subcontractors are efficiently utilized during construction. With 15 years of experience, Mr. McClung has an extensive construction management background that includes managing complex DB transportation projects including VDOT's Odd Fellows Road Interchange and Northbound & Southbound Rappahannock River Crossing Projects. Additionally, Mr. McClung is certified by the Virginia Department of Environmental Quality (DEQ) as a Responsible Land Disturber (RLD) and holds a VDOT Erosion and Sediment Control Contractor Certification (ESCCC).

KEY PERSONNEL

*Design-Build
Project Manager*

**Glen Mays,
DBIA**



*Quality Assurance
Manager*

**Avtar Singh, PE,
CCM, DBIA**



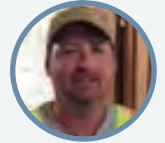
Design Manager

**Brandon Shock,
PE, DBIA**



*Construction
Manager*

Brad McClung



PAST SUCCESS

Wagman and RDA, and the majority of our proposed key staff, recently teamed together on the highly successful award-winning Route 7 Widening over Dulles Toll Road DB project and will use best practices and lessons learned to safely deliver this project in accordance with VDOT's goals.

3.3 OFFEROR’S TEAM STRUCTURE

Value Added Personnel

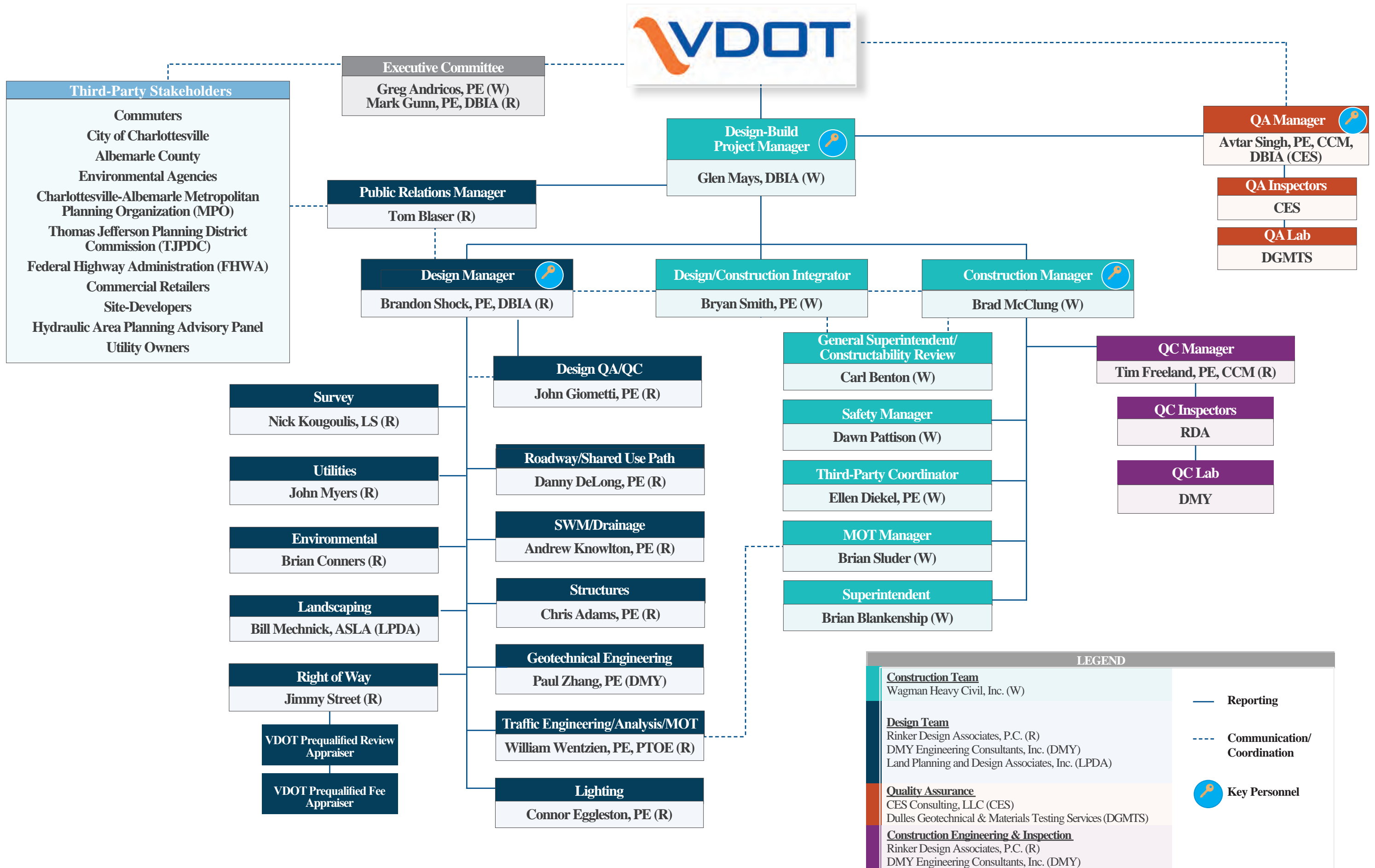
In addition to our Key Personnel, the Wagman/RDA Team offers highly experienced construction and design value-added personnel that have been selected based on their experience with VDOT DB projects in Virginia, as well as their proven ability to successfully manage a safe and quality project that meets schedule. While accountability begins and ends with the DBPM, success is reinforced by the expertise of our Team.

PERSONNEL	ROLE	ADDED VALUE / BENEFIT TO THIS PROJECT
Construction		
Carl Benton	General Superintendent/ Constructability Review	Over 35 years’ experience in construction with over 20 years on DB projects
Brian Sluder	MOT Manager	Over 20 years of experience managing Maintenance of Traffic (MOT) on local roadway and major interstate projects
Ellen Diekel P.E.	Third-Party Coordinator	Has 7 years of experience and is currently working with utility companies, environmental agencies and local municipalities on the Route 234 Brentsville Road Interchange Public-Private Partnership (P3) project.
Bryan Smith, P.E.	Design/Construction Integrator	A Professional Engineer who has worked on multiple DB projects in Virginia and will be co-located with the design team.
Design		
John Giometti, P.E.	Design QA/QC	Has more than 30 years of experience in the design and management of roadway improvement projects in the region and extensive experience with VDOT. John was the L&D Engineer for VDOT’s Culpeper District from 2004 – 2013. He also served as RDA’s Design Manager for the Route 29 widening element of the award-winning VDOT Route 29 Solutions DB project.
William Wentzien, P.E., PTOE	Traffic Engineering Lead/ MOT/TMP	Has over 22 years of experience and extensive experience leading MOT/ TMP on VDOT projects. Was the Senior Traffic Engineer for the Hillsdale Drive Extension project in the City of Charlottesville.
Tom Blaser	Public Relations Manager	Has nearly four decades of experience in transportation planning and leading public outreach/third-party stakeholder coordination efforts for critical transportation projects.
Danny DeLong, P.E.	Roadway/Shared Use Path Lead	Has been involved in the design of numerous projects in highly developed urban areas, including the City of Charlottesville, which included the design of roundabouts and complex ADA accommodations.
John Myers	Utility Lead	Brings 23 years of extensive experience leading utility coordination & relocation efforts for VDOT projects across the Commonwealth and was previously the VDOT NOVA Regional Utility Coordinator. He has led highly-complex utility design and relocation efforts in congested urban corridors including the VDOT Route 29 Solutions DB project.
Jimmy Street	Right of Way Lead	Brings over 40 years of experience in leading ROW acquisitions including 37 years working directly for VDOT. He led the ROW acquisitions for the VDOT Route 29 Solutions DB project.

3.3.2 Organizational Chart and Narrative

The Design-Build Team (Wagman/RDA) assembled for this project provides extensive experience and expertise in the successful delivery of similar projects. The majority of our team members proposed herein have experience working together, particularly on the award-winning VDOT Route 7 Interchange over the Dulles Toll Road DB project and the Route 234 Brentsville Road Interchange P3 project. Wagman/RDA’s existing and functioning processes and procedures will be used to ensure that VDOT’s goals for this project are achieved while delivering a safe, quality project on time and within budget. We can draw from the considerable strengths of each team member to provide the necessary level of technical skills, along with the flexibility and timely, comprehensive planning and problem solving required for success in this type of design-build project.

The detailed organizational chart provided in this section shows the “chain of command”, our key personnel, and the major functions to be performed to manage, design, and construct the Route 29/Hydraulic Road DB Project.



3.3 OFFEROR'S TEAM STRUCTURE

Functional Relationships and Communication

The integration of our design and construction staff with VDOT and the project stakeholders throughout the duration of the project will promote timely and open communications. VDOT's participation in formal partnering will be requested to foster an atmosphere of trust and transparency between VDOT, the DB Team, the City of Charlottesville, and project stakeholders. This will encourage open dialogue when issues arise that may jeopardize the success of the project.

The Department will coordinate directly with our DBPM as the primary contact for all aspects of design and construction oversight of the project. Bi-weekly design and weekly construction progress meetings will include discussions on contract administration, safety, schedule updates, conflict resolution, stakeholder concerns, and progress updates for design and construction activities.

Reporting to the DBPM are five primary positions—the QAM, DM, CM, Public Relations Manager (PRM), and Design/ Construction Integrator. This structure, combined with our DBPM's maintenance of an action item log for potential issues and a three-month look-ahead schedule will ensure the project remains on schedule and in conformance with VDOT commitments.

The QAM will report to our DBPM, with independent oversight by VDOT. Open lines of communication between the QAM and VDOT will assist with monitoring quality assurance. QA Inspectors and Labs will report through the QAM. Our QAM will also monitor the construction QC program to ensure all work and materials, testing, and sampling is performed in accordance with the contract requirements and the "approved for construction" plans and specifications.

The PRM will report to the DBPM and will act as a liaison between the Wagman/RDA Team, third party stakeholders, and the general public to facilitate communication and outreach efforts throughout the design and construction process, minimizing VDOT's direct efforts associated with public outreach. Additionally, an on-site third-party coordinator employed by Wagman and reporting to the CM, will be available to obtain and address third-party input.

The Design/Construction Integrator will report to the DBPM and will work closely with the DM and CM to seamlessly tie together the design development and construction.

Design: Our DM will report to the DBPM and coordinate with the CM to develop an efficient and constructible design. He will work with the CM during construction to confirm field conditions meet design assumptions and reevaluate these assumptions if necessary. The Design QA/QC Manager will report to the DM and independently monitor the design QA/QC process. DMY and LPDA will all be subcontracted with RDA for their respective services and their individual discipline leads will report to the DM. This structure will ensure effective and efficient design management. Coordination between the design and construction staff will start during the preparation of the technical proposal and continue throughout the Project to incorporate means and methods into the design. Meetings will also include design disciplinary reviews, over-the-shoulder reviews, and comment resolution meetings with stakeholders.

Construction: The CM will report to the DBPM and communicate directly with the QC Manager/DM/PRM and VDOT's field personnel to provide construction progress updates and verify conformance with the contract documents. He will also communicate with the DM, Design/Construction Integrator, and the General Superintendent during both to ensure construction is consistent with the project design and constructible. Our CM will be on-site for the duration of construction operations and will personally oversee the entire construction team. Daily coordination meetings between the CM, senior inspectors, and VDOT's representative will facilitate communication regarding construction progress. Weekly planning and schedule meetings will include the QA and QC team, VDOT representatives, and design team members as necessary. Before each shift, field supervisors will review safety and performance with their crews to establish protocols for upcoming work.

Executive Committee: The Executive Committee will coordinate with the DM and the CM to provide a unified and global evaluation of project challenges to ensure that the project's goals are maintained. They will establish a resolution hierarchy to ensure that solutions are developed and coordinated at the lowest level feasible. Issues will be tracked through the use of a resolution matrix and will be reported to the DBPM for his acceptance and implementation. Our Executive Committee is composed of Wagman's President/Chief Operating Officer and RDA's Chief Operating Officer to facilitate quick responses and resolutions. Additionally, they bring extensive experience in DB and complex projects within their areas of expertise.

3.4

EXPERIENCE OF THE OFFEROR'S TEAM

3.4 EXPERIENCE OF THE OFFEROR'S TEAM

The Wagman/RDA Team's collective experience with DB projects and similar roadway improvement projects provides VDOT with a strong and experienced Team for the Route 29/Hydraulic Road DB project. This organizational experience is supported by key personnel that successfully managed similar risks on the projects highlighted on the Work History Forms in Appendix 3.4.1.

Work History Forms

The Wagman/RDA Team has included Work History Forms for projects which are similar in scope and complexity to the Route 29/Hydraulic Road DB project and best demonstrates our qualifications and experience in the parameters identified in the RFQ. Below are the highlights of each of the Lead Contractor and Lead Designer Work History Forms.

VDOT Route 7 Widening and Bridge Rehabilitation over Dulles Toll Road–Fairfax, VA



- ◆ Design-Build Project with RDA
- ◆ Roadway Construction
- ◆ Shared Use Path/Sidewalk/Pedestrian Bridges
- ◆ Survey
- ◆ Environmental
- ◆ Geotechnical
- ◆ Drainage/SWM/E&S
- ◆ TMP/MOT
- ◆ Traffic Control Devices & ITS
- ◆ Sign Structures
- ◆ Utility Relocation Coordination/Design
- ◆ Roadway/Pedestrian Lighting Design
- ◆ Public Involvement/Stakeholder Coordination
- ◆ QA/QC
- ◆ CEI

VDOT Odd Fellows Road Interchange Improvements–Lynchburg, VA



- ◆ Design-Build Project
- ◆ Developed Urban Area
- ◆ Roundabout Construction
- ◆ Pedestrian Facilities
- ◆ Utilities
- ◆ Landscaping
- ◆ Lighting
- ◆ TMP/MOT
- ◆ Coordination with Adjacent Projects
- ◆ Public Involvement/Stakeholder Coordination
- ◆ Permitting/Environmental

East Riverfront Transportation Improvements–Richmond, VA



- ◆ Developed Urban Area
- ◆ Roundabout Construction
- ◆ Pedestrian Facilities
- ◆ Utilities
- ◆ Landscaping
- ◆ Lighting
- ◆ TMP/MOT
- ◆ Coordination with Adjacent Projects
- ◆ Public Involvement/Stakeholder Coordination

VDOT I-95 at Temple Avenue Interchange Improvements–Colonial Heights, VA



- ◆ Design-Build Project
- ◆ Roundabout Design
- ◆ Survey
- ◆ Environmental
- ◆ Geotechnical
- ◆ Hydraulics/SWM
- ◆ TMP/MOT
- ◆ Utilities
- ◆ Lighting
- ◆ Public Involvement/Stakeholder Coordination
- ◆ QA/QC

VDOT Route 29 Widening Element of the Route 29 Solutions-Albemarle County, VA



- ◆ Design-Build Project
- ◆ Developed Urban Area
- ◆ Roadway Design
- ◆ Pedestrian Accommodations
- ◆ Survey
- ◆ Environmental Support
- ◆ Geotechnical
- ◆ Drainage/Stormwater Management/ Hydraulics Analysis
- ◆ Complex TMP/MOT
- ◆ ROW Acquisition
- ◆ Utility Relocation Coordination

3.5

PROJECT RISKS

3.5 PROJECT RISKS

Our team has carefully considered the elements of work for the Route 29/Hydraulic Road DB project to determine the three most relevant and critical project risks. During our evaluation, we considered numerous risks to the project including bicycle & pedestrian accommodations, geotechnical, utilities, maintenance of traffic (MOT), construction resources, agency/stakeholder coordination, public relations, environmental, drainage & stormwater management, and associated right of way (ROW) access & coordination. **We concluded that Traffic Operations During Construction, Utilities, and Third-Party Coordination are the three most important risks that must be mitigated early to ensure the success of the project.**

Risk #1: Traffic Operations During Construction

Why this risk is critical:

The Wagman/RDA Team considers maintaining traffic operations during construction safely and efficiently to be a critical risk to this project. Both the Route 29 and the Hydraulic Road corridors are crucial arteries, carrying over 46,000 and 24,000 vehicles per day respectively. These routes not only provide a vital regional route for commuters but serve as access to numerous local businesses and residents. The intersection of Route 29 and Hydraulic Road is a highly congested intersection and functions as a choke point for both corridors. Researching the existing traffic volumes and inherent crash statistics for this area in the Hydraulic Safety Assessment Report, between 2014 and 2019 there were a total of 299 accidents between the five intersections that are part of this project. This is an average of 60 accidents per year. Most crashes at the intersections are rear-ended or angle crashes which are a characteristic of highly congested intersections that suffer from queuing issues.

These conditions alone make maintaining traffic operations difficult on a daily basis. Combining them with the fact that each of the five project elements have their own unique operational and site characteristics makes this a critical risk during construction. The proximity of the work zones to one another, and the complex sequencing required to phase each of the elements, has the potential to increase driver confusion and frustration. Multiple access points to commercial properties coupled with construction work zone ingress/egress, signs, barrels, narrow lanes, and shifted alignments exacerbate existing safety operational issues.

Impacts this risk will have on the Project:

If not properly mitigated, the impacts this risk will have on the project include:

- ◆ Adverse travel delays along Route 29, Route 250, and Hydraulic Road
- ◆ Reduction of safety for both the traveling public and construction personnel
- ◆ Interruptions to and/or increased response time for emergency response activities
- ◆ Negative perception from local communities, leading to frustration/work zone travel fatigue
- ◆ Construction delays
- ◆ Increased project costs
- ◆ Adverse impact on local commerce

Our MOT Leads have 35+ years of combined experience leading MOT/TMP on VDOT projects.

Mitigation strategies:

The Wagman/RDA Team has partnered together on a multitude of projects with complex MOT characteristics. We have the technical expertise and innovative minds to develop and implement a safe and effective Traffic Management Plan (TMP) within this urban environment. Our team will develop a design that exceeds VDOT's expectations and addresses project stakeholder concerns to clearly communicate changes in traffic patterns and work zone strategies that are safe for everyone involved. The Wagman/RDA Team has identified three high impact mitigation strategies to combat the risk for traffic operations during construction which include: **Enhancing Safety and Traffic Operations, Efficient Sequence of Construction (SOC), and Improved/Enhanced Public Communications.**

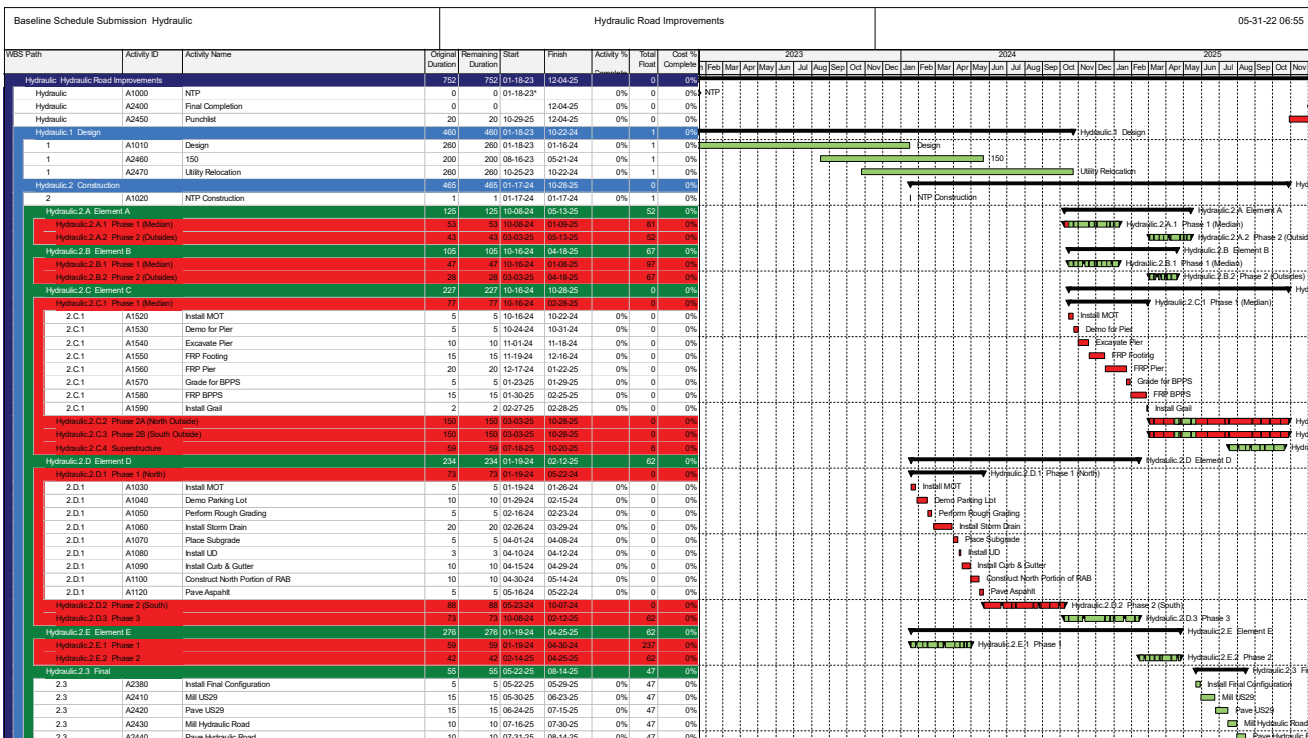
Enhancing Safety and Traffic Operations—Our Team is focused on maintaining the highest possible levels of traffic mobility and safety within the work zone for the traveling public, pedestrians, and construction personnel. The Wagman/RDA Team has identified the following strategies for enhancing safety and traffic operations:

- ◆ **Work-Zone Traffic Analysis:** To support the MOT plan, the project's TMP will include operational analysis of any lane closures, short- and long-term detours, or any other traffic configuration that differs from the current traffic patterns today.

3.5 PROJECT RISKS

- ◆ **Minimize temporary lane closures:** Our Team will make every effort to minimize lane closures during peak hours. When temporary lane closures are necessary, our Team will propose installing additional signage for alternate routes to be utilized by non-local commuters.
- ◆ **Enhanced traffic control devices:** Our Team proposes using enhanced traffic control devices such as larger construction signage, high visibility pavement markings and markers, optimized signal timings and well-defined pedestrian routes. These elements will assist all users in navigating through the work zones.
- ◆ **Efficient use of temporary barriers:** To improve worker safety and shield road users from construction hazards, specifically while constructing the roundabout on Hydraulic Road and the pedestrian bridge on Route 29, our team will incorporate an efficient use of barrier service in areas of active construction activities and promptly remove them once construction has been completed. It is understood that barrier itself can pose a safety risk and be considered a hazard. A warrant analysis will be performed for each phase of the project and temporary barrier will only be incorporated where necessary. Pedestrian curb ramps and curb construction at the intersections will utilize a more practical approach to work zone safety where positive protection may not be warranted.
- ◆ **Advertise the project:** Incorporate Alternative Routes Campaign / coupled with a Public Communication Plan.
- ◆ **Certified personnel:** Employ an American Traffic Safety Services Association (ATSSA) and VDOT-certified MOT Manager (Mr. Brian Sluder–Wagman).

Efficient Sequence of Construction (SOC)–The Wagman/RDA Team understands that an efficient SOC improves the project schedule, safety, traffic operations, and the opportunity for a successful project. Sequencing the construction so that shared work zones can be utilized between multiple project elements not only increases the efficiency of construction, but also reduces driver confusion by limiting the number of traffic shifts through the project. Our team recognizes the importance of approaching this as a single project with multiple elements instead of five separate projects. To meet the project schedule and goals, multiple elements of work will need to be performed concurrently. We also recognize that certain project elements cannot be completed and put into service before others are complete. For example, the left turns at the Hydraulic Road and Route 29 intersection cannot shut down before completing construction of the roundabout at Hillsdale Drive and Hydraulic Road. We will develop a fully integrated CPM schedule to capture the logic associated with the traffic movements and the SOC. **The Wagman/RDA Team has developed a preliminary CPM schedule, as shown in the below snapshot, to ensure we can deliver this project with a final completion as indicated in Section 2.5 of the RFQ.**



3.5 PROJECT RISKS

Improved/Enhanced Public Communications—Our Team will develop and implement an effective Communication Plan as a component of our TMP. Our focus will remain on informing and educating the public about the traffic pattern changes, delays, and project updates as they drive along Routes 29, 250, and Hydraulic Road. Our Team will be responsible for inputting lane closures and related traffic impacts on VDOT's LCAMS for the duration of the project and for keeping the traveling public, VDOT, and other critical stakeholders fully aware of all traffic pattern changes. Multiple outreach tools will be used to deliver these messages, such as message boards, VDOT's project webpage, social media, and pardon our dust/citizen meetings. This outreach will be fully coordinated with the VDOT Culpeper District Public Affairs staff. Additionally, we recommend incorporating active Driver Awareness measures in advance of, and within, the work zones to include:

- ◆ Public outreach/information locations
- ◆ Active communication thru social media, websites, and radio
- ◆ Portable changeable message signs
- ◆ Radar speed signs
- ◆ Increased police presence

Our Team's Communication Plan will be developed to allow for continuous stakeholder input to mitigate issues and concerns. We will hold regularly scheduled meetings during construction with stakeholders, documenting actions and issues to ensure all concerns are addressed in an orderly/timely fashion. Our third-party coordinator, Ms. Ellen Diekel, is currently doing this on our Route 234 Brentsville Road Interchange P3 project in Prince William County. This outreach will be fully coordinated with the VDOT Culpeper District Construction Division and Public Affairs staff. This outreach will include representatives from:

- ◆ VDOT
- ◆ City of Charlottesville
- ◆ Albemarle County
- ◆ Local and State Police
- ◆ Local Fire and Rescue
- ◆ Local Schools and Colleges
- ◆ Local Businesses
- ◆ Community Associations

We will also prepare an Incident Management Plan (IMP), including an Emergency Response Plan, that will detail the response protocols for incidents to include weather impacts, traffic accidents (crashes), special events (such as University of Virginia events and holidays), establishing emergency detour routes, and more. Our IMP will utilize an experienced team to minimize incident related risks by:

- ◆ Setting up coordination meetings with participating agencies to ensure that all Unified Commands and Incident Action Plans (IAP) are deployed within the Project limits.
- ◆ Abide by the VDOT safety manuals and regulations (VAWAPM, MUTCD, IIM-LD-241, hardhats, vests, etc.).
- ◆ The DB Team will distribute monthly updates, at a minimum, to VDOT providing a summary of crashes within the work zone, the number of events requiring tow service, and recommendations, if any, to improve the safety of travel through the project.

Our Team is committed to implementing an IMP as part of our overall TMP before any construction activities requiring MOT. The key elements of a successful IMP will be jointly developed with VDOT Traffic Operations Center, Virginia State Police, Safety Service Patrol, local police, fire and rescue departments, and communities, as appropriate.

Role of VDOT and/or other Agencies:

The role the DB Team anticipates VDOT and other stakeholders, including the City of Charlottesville and Albemarle County, to play in the development of the TMP and TTCP as an active and engaged reviewer during the approval process and during construction. The DB Team will be proactive in reviewing and addressing the concerns of the reviewers during the development process. Throughout the construction phase, the DB Team will actively coordinate with VDOT District Traffic, NWRO TOC, Public Involvement Officers, City of Charlottesville, and Albemarle County to communicate pending traffic shifts, and incidents within the work zone, and regular maintenance activities.

3.5 PROJECT RISKS

Risk #2: Utility Coordination & Relocations

Why this risk is critical:

Utilities within a project corridor are often on the critical path of a schedule on DB projects due to the coordination effort required when multiple utilities are present. The design work for most utilities is performed by independent design firms or by the utility owners themselves. The DB Team must rely on utility owners to complete their design and relocations to meet the project schedule and the sequence of construction developed by the DB Team. The Route 29/Hydraulic Road DB project will require extensive coordination and possible relocation of various utilities throughout the corridors. Within the project there are multiple communications ducts (including those serving government facilities and the airport), underground electric distribution lines, a municipally-owned gas line as well as water and sanitary sewer.

Since private utility relocations are controlled by each utility owner, the risk of utilities delaying a project is a significant risk to the overall schedule and cost. The compounding effect of each utility relocating in series is significant if not properly planned and executed by the utility owners. On this project we must follow a very specific SOC to allow proper traffic flow, therefore adding utility risk. Utility owners are often juggling multiple projects and being pulled in many directions, so our Team must help focus their efforts.

In addition to the number of identified utilities on a project, the presence of unknown utilities poses a large risk as well. Designations performed to date are outdated, very limited and in many cases, ends short of the work area.

Utility relocations are especially critical on this project for a variety of additional reasons including:

- ◆ City of Charlottesville owned gas lines have limited companies approved to perform relocations. These companies may be unavailable due to other commitments and may be difficult to get them to service this project.
- ◆ Multiple communication companies with long lead splicing windows for fiber and copper lines.
- ◆ Possible impacts to transmission power facilities with disruptions to adjacent businesses and neighborhoods.

RDA maintains an experienced in-house utility department comprised of expert specialists including: a 30+ year designer formerly with Dominion Power, a 24+ year gas line designer/project manager, a fiber specialist with over 20 years of experience, and water/sewer designers with more than 65 years of combined experience. Leading the utility coordination on this project will be RDA's Mr. John Myers, with 23 years of experience in the private sector, plus he previously was the VDOT NOVA Regional Utility Coordinator and has worked with Wagman on multiple projects.

Coordination is required with each utility owner to discuss potential conflicts as well as ways to mitigate them during the design process. Our discussion below identifies specifics within designated work areas about various major utilities and how their combined issues may result in significant risks to the project's schedule and cost.

Element A | US Route 29 and Hydraulic Road Pedestrian Improvements—This work area is thought to have minimal utility impacts; further analysis will be required once a full survey and design are available. Potential valve relocations on water or gas may be needed for the sidewalk installation.

Element B | US Route 29 and Angus Road Green "T"—This area should have little impact to utilities with the exception of a gas line which carries its own unique risk. As previously discussed, Charlottesville Gas has a limited number of contractors approved to perform work on their facilities. There also could be relocation needed due to the proposed entrance.

Element C | US Route 29 Pedestrian Bridge—The pedestrian bridge has a number of possible impacts. A sewer line is located within the footprint but incomplete information was provided. It is 10+ feet deep, leading to a possible deep sewer relocation. Multiple communication and CATV lines are shown in close proximity lending itself towards being a ductbank. If they do not exist in the same ductbank due to limited space in the work zone, the need to move to a joint ductbank may be needed. The lack of aerial electric lines and equipment leads us to believe that underground electric could be present. Not only can these lines themselves be problematic, but if large manholes are required it could be difficult to find areas they can be installed. Multiple municipal-owned gas facilities are in the area. Lastly, multiple fiber optic companies appear in the project area and can be problematic to get relocated, often requiring large splicing windows or have "no splice" moratoriums that have to be worked

3.5 PROJECT RISKS

around. Overall, this work area has the above concerns plus the need for room to relocate the facilities. Easements outside of the bridge area may very well be required to get these facilities out of conflict posing a schedule concern due to the time it takes to acquire ROW easements.

Element D | Hydraulic Road and Hillside Drive Roundabout—The roundabout presented in the RFQ has the potential to impact several critical utility features. On the south side of the project a double circuit aerial power line appears to be avoided; however, close attention to guy wires will need to be evaluated with the design development. Public sewer and water lines exist within the roundabout development area and will require careful planning to avoid impacts; the sewer lines are 10 or more feet deep posing a large excavation operation if relocation is necessary. At the corner of the Whole Foods property, several utilities (electric, communication ductbank) traverse across the existing intersection and are in conflict with the proposed drainage. Other unknown utilities are another potential impact to the project and will need to be evaluated with a complete subsurface utility evaluation.

Element E | Hydraulic Road Access Management—This area appears to be a small portion of the overall project, but it could have the largest utility impacts. An existing steel mono-pole electric transmission tower sits slightly elevated from the existing road. While it is not able to be confirmed or cleared at this stage, the proposed work could impact the tower and force relocation. Even if it does not directly impact the tower, in-depth coordination with the utility owner will be needed to ensure the tower is clear and does not have to relocate. The relocation time for this pole is 18 months leaving minimal time in the schedule to perform the roadway work.



Impacts this risk will have on the Project:

Utility conflicts for this project introduce substantial risk to the overall project schedule and budget. If proper utility coordination is not initiated at the onset and continues throughout construction, utilities could quickly impact the schedule. Utility companies are experiencing a shortage in their workforce and/or approved contractors to perform their work. Materials shortages are an issue. Fiber optic lines, steel, and ductile iron pipe are in short supply and have long lead times to acquire. Fiber splicing has become an issue with long lead times to acquire the crews to perform the work. Coordination amongst the various utilities and the sequence in which their facilities must be relocated is critical. All of these conditions lead to the potential for a significant impact to the project schedule.

Mitigation strategies:

To mitigate the risks that revolve around the utilities as identified above, our Team realizes the most important strategy is early and continued coordination with utility owners throughout the project, beginning with design and continuing throughout construction. Understanding the importance of establishing good relationships with the utility owners at the onset of the project is important to any project's success. Our Team has previously worked with all of the utility owners within the project footprint and has established relationships which will be used as a foundation to set this project up for success. Having an experienced in-house utility coordination team (design and construction) further ensures our ability to identify and mitigate potential utility schedule impacts. During design we will develop a comprehensive utility matrix to identify all utilities within the project limits. Prior to the start of construction, Wagman will create a utility conflict spreadsheet that identifies every conflict and the solution to mitigate.

First and foremost, our plan is to design the project to avoid/reduce conflicts whenever possible. Our knowledge base and previous experience with each of the utilities give us a head start on means and methods to avoid and protect their facilities. We will engage them with our design team to best address each situation. To help mitigate the risk of coordination, our team has a specific strategy related to each type of utility on this project. Furthermore, recent experience with Dominion Transmission will help us in determining what wall options at the transmission tower will be most acceptable if total mitigation through design does not work out.

3.5 PROJECT RISKS

Power—A detailed review of power facilities will be explored early in the design development. The risk of project delays due to the power companies will be mitigated with early coordination to understand their project-specific constraints for protection in place. Early and continued coordination with the power companies will further mitigate the project risk.

Water & Sewer—Similar to power, avoidance of their facilities is the first course of action for risk mitigation. However, if conflicts are unavoidable, minimizing the impact is the next course since water and sewer can be replaced in sections whereas power needs to be replaced from splice point to splice point. Coordination to avoid the steel/iron pipe facilities will be critical to project cost and schedule.

Communications—Early coordination and communication are a priority with these companies. Risk mitigation strategies are more focused on keeping communication utility owners informed throughout the design and construction process. Keeping open contact with these owners is important during design development in case a utility impact is encountered. Our established relationships with the owners relative to the project will allow for swift conflict resolution.

Gas—This will be one of the key items we aim to mitigate or avoid. With multiple items adding to the amount of risk on these facilities, the less we impact them the better off the project will be. We will mitigate what conflicts we can through design and meet with the Gas Department to get their agreement and buy-in before a final scope of any relocations is established.

Unidentified Utilities—Early field investigation is a proven strategy to mitigate utility conflicts and protect against potential unknown utilities. Our Team understands the importance of a thorough field investigation including extensive sub-surface locating, test holes, records review, and field visits. Similarly, early coordination with the companies as it relates to their utility infrastructure will be vital to making sure the facilities are accounted for and protected through the DB project.

Construction Mitigation—Wagman utilizes numerous processes and procedures to avoid utilities during the construction process. Our plan starts with an extensive utility test pitting/identification process during the design phase to avoid and mitigate any potential conflicts that would exist during construction. Limiting the number of conflicts and proximity of construction activities to existing utilities is our overall goal to prevent damage.

During construction, our crews and subcontractors are required to complete daily “dig” tickets for all earth disturbing activities and overhead utility permits for any work near overhead utilities. These safety reports / checklists identify all potential utilities within the work zone and require the Foreman to review the drawings, test pit the utility and obtain management approval to proceed with work based on the proximity to the utility. Wagman also has the equipment and ability to perform our own utility locating, utilizing this tool as a second line of defense to the Miss Utility markings.

Understanding the potential risks posed by utilities and making them known to the entire DB Team during the design development and construction is also imperative to risk mitigation so designers can work around conflicts as much as feasible from the beginning rather than reacting to conflicts created during an uncoordinated design. The RDA /Wagman utility coordination teams plan to be involved in design discussions with all team disciplines to raise awareness and collaborate on solutions to work around utilities or at least minimize the impacts. Utility team involvement from the onset will also allow for the identification of unavoidable utility conflicts early on so they can be coordinated with the appropriate utility owners as soon as possible.

Role of VDOT and/or other Agencies:

Participation and engagement by utility owners during the design and construction process are paramount to minimizing the utility risk to the project schedule and budget. Our Team appreciates the need for utility owner involvement. Addressing utilities throughout the project will occur hand in hand with VDOT involvement and awareness of the coordination. As previously mentioned, early and continued coordination is critical but needs to be meaningful. Utility owners need to be connected with the project to prevent “catch up” by them once construction begins. Our Team has previous relationships with all of the utility owners within the project limits and will use those relationships to facilitate the meaningful coordination efforts that are required.

3.5 PROJECT RISKS

Risk #3: Third Party Stakeholder Coordination & Approvals

Why this risk is critical:

VDOT, the City of Charlottesville, and Albemarle County have realized the need to improve pedestrian and vehicular safety in and around the heavily traveled Route 29/Hydraulic Road intersection. Improvements along Route 29 and Hydraulic Road were identified and adopted in the regional MPO Long-Range Transportation Plan. These proposed improvements were presented to the public at the May 25, 2022 Design Public Hearing held in Charlottesville. After review of the available Public Hearing plans and supporting documents, as well as our familiarity with the project location, the Wagman/RDA Team feels that the risk associated with Public Outreach and Stakeholder Coordination will be in developing a consensus among the diverse group of stakeholders. The Wagman/RDA Team will work with VDOT as well as the key stakeholders to gain consensus on the recommended improvements culminating in the design approval. On the heels of the Covid pandemic, there will be challenges associated with how to manage an effective public outreach program to engage stakeholders, gaining their input and consensus by keeping them informed of the project's progress as well as impacts. The challenges can be mitigated by having a dedicated team that understands the process, the project's needs, as well as the citizens that will be utilizing the facility.

A significant number of third parties that include regulatory agencies as well as state, federal, and local government entities may be involved or affected by the project and have different needs and concerns that must be understood and addressed for the project to be successful. These potential impacts during the construction process include changes to access which could potentially cause a decrease in business and revenue; reduced business visibility; noise during construction; impacts to operations such as delivery times and resource availability; response times (including first responders); bicyclist and pedestrian movements; area avoidance (commuters and local drivers avoiding the area during construction); and overall perception of the project.

Below is a partial list of the key third parties potentially impacted by this project:

- ◆ Commuters
- ◆ VDOT
- ◆ City of Charlottesville
- ◆ Albemarle County
- ◆ Environmental Agencies
- ◆ Thomas Jefferson Planning District Commission (PDC)
- ◆ Charlottesville-Albemarle Metropolitan Planning Organization (MPO)
- ◆ Site-Developers
- ◆ Commercial Retailers
- ◆ Utility Owners
- ◆ Hydraulic Area Planning Advisory Panel
- ◆ First Responders

In addition to the identified key stakeholders and agencies noted above, residential, commercial, and high-density offices will be equally critical.

Impacts this risk will have on the Project:

Impacts to the project arise when stakeholder buy-in, expectations and perceptions are not achieved. This results in a public outcry which can cause costly modifications or adjustments in construction features or sequencing, in turn impacting the schedule. Community/stakeholder buy-in to potential changes in their daily commute as well as pedestrian/bicyclist accessibility will be of utmost concern. Access, operations, and services of the third parties in the area will most likely be affected. Without proper communication and coordination, the project could result in the following:

- ◆ Potentially conflicting project design input from stakeholders, requiring resolution effort from the DB Team and VDOT
- ◆ Delays in emergency-vehicle response times
- ◆ Increased likelihood of accidents and delays
- ◆ Additional accidents, injuries, and other safety impacts, along with poor perceptions of VDOT and the City because of driver frustrations during construction
- ◆ Business service times could be interrupted, creating increased or delayed operation
- ◆ Utility services to nearby businesses and residences could be degraded
- ◆ Elected officials could receive an inordinate number of calls from angry constituents requiring resolution

3.5 PROJECT RISKS

Design-Build is developed on the premise of efficiency and cost-effectiveness. Changes that affect the design-builder’s approach to the project will have an impact on schedule or cost or both.

Mitigation strategies:

The Wagman/RDA Team has extensive experience in coordinating with stakeholders on nearly all our projects. We have learned that this process must begin as early as possible and continue throughout the project. Early meetings ensure that a comprehensive list of stakeholders is developed and that their needs are accommodated as efficiently as possible in the completed project. Some stakeholders are concerned with how the design of the project will affect their property; others are concerned with construction impacts and time of day restrictions. We understand the importance of maintaining and fostering good relations with the project stakeholders and will develop a specialized communications plan to support these efforts. Communication with stakeholders is expected to take various forms, including public forums, one on ones with single property owners, and social and print media. The Wagman/RDA Team will coordinate initial meetings with stakeholders to request input, open the lines of communication, and identify their concerns soon after Notice to Proceed. RDA has a full-service VDOT approved ROW acquisition department with experienced staff in negotiating with affected and sometimes contentious property owners is of great value in assisting our team in gaining public acceptance of the project.

In the following table we have identified third-party stakeholder mitigation strategies for keeping them involved to successfully move the project to completion.

Third-Party Stakeholder Mitigation Strategies	
Commuters & Community (businesses & neighborhoods)	<ul style="list-style-type: none"> ◆ Well planned and in-depth MOT Plan ◆ Public awareness, Communication Plan ◆ Advertise work hour schedules
City of Charlottesville	<ul style="list-style-type: none"> ◆ Develop a partnership to deliver the project ◆ Include in regularly scheduled progress meetings ◆ Provide opportunity to review plans and provide input
Albemarle County	<ul style="list-style-type: none"> ◆ Develop a partnership to deliver the project ◆ Include in regularly scheduled progress meetings ◆ Provide opportunity to review plans and provide input
Charlottesville-Albemarle Metropolitan Planning Organization (MPO)	<ul style="list-style-type: none"> ◆ Coordinate design and public involvement through the City
Commercial Retailers	<ul style="list-style-type: none"> ◆ Advanced coordination of utility interruptions ◆ Hold Pardon-Our-Dust Meeting
Thomas Jefferson Planning District Commission (TJPDC)	<ul style="list-style-type: none"> ◆ Involve at Public Hearing and Project Information Meetings
Hydraulic Area Planning Advisory Panel	<ul style="list-style-type: none"> ◆ Involve at Public Hearing and Project Information Meetings
Utility Owners & Environmental Agencies	<ul style="list-style-type: none"> ◆ Early coordination to mitigate impacts
VDOT	<ul style="list-style-type: none"> ◆ Over the shoulder reviews

Furthermore, Wagman employs a third-party stakeholder coordinator, Ms. Ellen Diekel, P.E., who will collect, distribute, and organize comments and concerns to ensure that comments are addressed and incorporated into the design and construction.

Role of VDOT and/or other agencies:

VDOT will have the ultimate say in the level and type of Public Outreach the DB Team undertakes. The Wagman/RDA Team will develop a project work plan to include all aspects of stakeholder coordination. This will include VDOT’s required level of involvement with each stakeholder as well as the coordination of overlapping and adjacent activities to minimize cumulative impacts and effects. The work plan will be provided to VDOT for concurrence. It is understood that VDOT and the City will work with the impacted businesses as part of the design process. The Wagman/RDA Team will support this process and provide the necessary information and meeting facilitation as required. It will be the role of the DB Team to provide information in a manner that considers the safety of the public, commuters, and construction personnel working on the project as top priority.

APPENDIX

ATTACHMENT

3.1.2 –

SOQ Checklist

ATTACHMENT 3.1.2

Project: 0029-M03-371

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Offerors shall furnish a copy of this Statement of Qualifications (SOQ) Checklist, with the page references added, with the Statement of Qualifications.

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
Statement of Qualifications Checklist and Contents	Attachment 3.1.2	Section 3.1.2	no	Appendix, Page 16-18
Acknowledgement of RFQ, Revision and/or Addenda	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	Appendix, Page 19
Letter of Submittal (on Offeror's letterhead)				Page 1
Authorized Representative's signature	NA	Section 3.2.1	yes	Page 1
Offeror's point of contact information	NA	Section 3.2.2	yes	Page 1
Principal officer information	NA	Section 3.2.3	yes	Page 1
Offeror's Corporate Structure	NA	Section 3.2.4	yes	Page 1
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	Page 1
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	Appendix, Page 20
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	Appendix, Page 21-26
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	Appendix, Page 27
Evidence of obtaining bonding	NA	Section 3.2.9	no	Appendix, Page 28-30

ATTACHMENT 3.1.2

Project: 0029-M03-371

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15- page limit?	SOQ Page Reference
SCC and DPOR registration documentation (Appendix)	Attachment 3.2.10	Section 3.2.10	no	Appendix, Page 31-32
Full size copies of SCC Registration	NA	Section 3.2.10.1	no	Appendix, Page 33-36
Full size copies of DPOR Registration (Offices)	NA	Section 3.2.10.2	no	Appendix, Page 37-42
Full size copies of DPOR Registration (Key Personnel)	NA	Section 3.2.10.3	no	Appendix, Page 43
Full size copies of DPOR Registration (Non-APELSCIDLA)	NA	Section 3.2.10.4	no	Appendix, Page 44
DBE statement within Letter of Submittal confirming Offeror is committed to achieving the required DBE goal	NA	Section 3.2.11	yes	Page 1
Offeror's Team Structure				Page 2-6
Identity of and qualifications of Key Personnel	NA	Section 3.3.1	yes	Page 3
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	Appendix, Page 45-46
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.2	no	Appendix, Page 47-48

ATTACHMENT 3.1.2

Project: 0029-M03-371

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.3	no	Appendix, Page 49-50
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.4	no	Appendix, Page 51-52
Organizational chart	NA	Section 3.3.2	yes	Page 5
Organizational chart narrative	NA	Section 3.3.2	yes	Page 6
Experience of Offeror’s Team				Page 7
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	Appendix, Page 53-55
Lead Designer Work History Form	Attachment 3.4.1(b)	Section 3.4	no	Appendix, Page, 56-58
Project Risk				
Identify and discuss three critical risks for the Project	NA	Section 3.5.1	yes	Page 8-15

ATTACHMENT

2.10 –

Form C-78

**Acknowledgment of
RFQ, Revision, and/or
Addenda**



ATTACHMENT 2.10

**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION**

RFQ NO. C00118880DB114
PROJECT NO.: 0029-M03-371

ACKNOWLEDGEMENT OF RFQ, REVISION AND/OR ADDENDA

Acknowledgement shall be made of receipt of the Request for Qualifications (RFQ) and/or any and all revisions and/or addenda pertaining to the above designated project which are issued by the Department prior to the Statement of Qualifications (SOQ) submission date shown herein. Failure to include this acknowledgement in the SOQ may result in the rejection of your SOQ.

By signing this Attachment 2.10, the Offeror acknowledges receipt of the RFQ and/or following revisions and/or addenda to the RFQ for the above designated project which were issued under cover letter(s) of the date(s) shown hereon:

1. Cover letter of RFQ – April 19, 2022
(Date)
2. Cover letter of Addendum #1- May 10, 2022
(Date)
3. Cover letter of _____
(Date)



SIGNATURE

May 24, 2022
DATE

Glen K. Mays
PRINTED NAME

Vice President & General Manager
TITLE

ATTACHMENT

3.2.6 –

Affiliated and Subsidiary Companies of the Offeror

ATTACHMENT

3.2.7(a) –

Certification Regarding Debarment Primary Covered Transactions

ATTACHMENT 3.2.7(a)

CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS

Project No.: 0029-M03-371

1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency.


b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; and have not been convicted of any violations of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false statements, or receiving stolen property;

c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1) b) of this certification; and

d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

	Glen K. Mays	May 24, 2022	Vice President & General Manager
Signature		Date	Title

Wagman Heavy Civil, Inc.

Name of Firm

ATTACHMENT

3.2.7(b) –

Certification Regarding Debarment Lower Tier Covered Transactions

ATTACHMENT 3.2.7(b)


**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0029-M03-371

- 1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

- 2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

 _____ Signature	June 7, 2022 _____ Date	Chief Operating Officer _____ Title
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Rinker Design Associates, P.C.

Name of Firm

ATTACHMENT 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0029-M03-371

- 1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- 2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.



Signature

4/27/2022

Date

President

Title

CES CONSULTING LLC

Name of Firm

ATTACHMENT 3.2.7(b)


CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0029-M03-371

- 1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

- 2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

 _____ Signature	5-24-2022 _____ Date	Senior Vice President _____ Title
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DMY Engineering Consultants Inc.

Name of Firm

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0029-M03-371

- 1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- 2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

 _____ Signature	<u>5-3-22</u> _____ Date	<u>VICE PRESIDENT</u> _____ Title
<u>LAND PLANNING & DESIGN ASSOC. INC.</u> _____ Name of Firm		

ATTACHMENT 3.2.7(b)

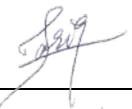
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0029-M03-371

- 1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

- 2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

 _____ Signature	05/26/2022 _____ Date	President _____ Title
---	-----------------------------	-----------------------------

Dulles Geotechnical and Materials Testing Services, Inc.

Name of Firm

3.2.8 –

**Offeror's VDOT
Prequalification
Evidence**



Virginia Department of Transportation

Date Printed: 05/25/2022

**Department's List of Prequalified Vendors
Includes All Qualified Levels As Of 5/25/2022
- W -**

12:00 AM

Page 393

Vendor ID: W002
Vendor Name: WAGMAN HEAVY CIVIL, INC.
Prequal Level: Prequalified
Prequal Exp: 10/31/2022

-- PREQ Address --

3290 NORTH SUSQUEHANNA TRAIL
YORK, PA 17406-9754
Phone: (717)764-8521
Fax: (717)764-2799

Work Classes (Listed But Not Limited To)

003 - MAJOR STRUCTURES
007 - MINOR STRUCTURES
011 - CLEARING AND GRUBBING
080 - DEMOLITION OF STRUCTURES
101 - EXCAVATING

Bus. Contact: BECKER, TODD EUGENE
Email: ESTIMATING@WAGMAN.COM

-- DBE Information --

DBE Type: N/A
DBE Contact: N/A

3.2.9 –

Surety Letter



151 N. Franklin Street
Chicago, IL 60606

April 29, 2022

Mr. Bryan W. Stevenson, P.E., DBIA
Alternative Project Delivery Division
Virginia Department of Transportation
1401 East Broad Street
Richmond, VA 23219

Re: A Design-Build Project
Transportation Improvements at Hydraulic Road and US 29
City of Charlottesville and Albemarle County, Virginia
State Project No: 0029-M03-371, C501, P101, R201
Federal Project No. : STP-5104(299)
Contract ID Number: C00118880DB114

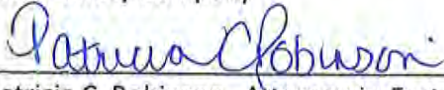
Dear Mr. Stevenson:

As surety for Wagman Heavy Civil, Inc., Western Surety Company , with A.M. Best Financial Strength Rating "A" and Financial Size Category "XV", is capable of obtaining 100% Performance and 100% Labor and Materials Payment Bond in the amount of \$16,700,000 the anticipated cost of construction, and said bonds will cover the Project and any warranty periods as provided for in the Contract Documents on behalf of the Contractor, in the event that such firm be the successful bidder and enter into a contract for this Project.

As always, Western Surety Company reserves the right to perform normal underwriting at the time of any bond request, including, without limitation, prior review and approval of relevant contract documents, bond forms, and project financing.

Sincerely,

Western Surety Company

By: 
Patricia C. Robinson , Attorney-in-Fact

Western Surety Company

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

Alson O Wolcott Jr, Robert N Striewig Jr, Eugene M Fritz, Patricia C Robinson, Donald R Wert, Kristen D Pedrick, Individually

of Mechanicsburg, PA, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law printed on the reverse hereof, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 23rd day of June, 2021.



WESTERN SURETY COMPANY

Paul T. Bruflat

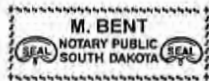
Paul T. Bruflat, Vice President

State of South Dakota }
County of Minnehaha } ss

On this 23rd day of June, 2021, before me personally came Paul T. Bruflat, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is the Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires

March 2, 2026



M. Bent

M. Bent, Notary Public

CERTIFICATE

I, L. Nelson, Assistant Secretary of WESTERN SURETY COMPANY do hereby certify that the Power of Attorney hereinabove set forth is still in force, and further certify that the By-Law of the corporation printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said corporation this 29th day of April, 2022.



WESTERN SURETY COMPANY

L. Nelson

L. Nelson, Assistant Secretary

Authorizing By-Law

ADOPTED BY THE SHAREHOLDERS OF WESTERN SURETY COMPANY

This Power of Attorney is made and executed pursuant to and by authority of the following By-Law duly adopted by the shareholders of the Company.

Section 7. All bonds, policies, undertakings, Powers of Attorney, or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, and Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile.

ATTACHMENT
3.2.10 –

SCC and DPOR
Information Tables

ATTACHMENT 3.2.10

State Project No. 0029-M03-371

SCC and DPOR Information

Offerors shall complete the table and include the required state registration and licensure information. By completing this table, Offerors certify that their team complies with the requirements set forth in Section 3.2.10 and that all businesses and individuals listed are active and in good standing.

SCC & DPOR INFORMATION FOR BUSINESSES (RFQ Sections 3.2.10.1 and 3.2.10.2)							
Business Name	SCC Information (3.2.10.1)			DPOR Information (3.2.10.2)			
	SCC Number	SCC Type of Corporation	SCC Status	DPOR Registered Address	DPOR Registration Type	DPOR Registration Number	DPOR Expiration Date
Wagman Heavy Civil, Inc.	F0198988	Stock Corporation	Active, In Good Standing	3290 N Susquehanna Trl, York, PA 17406	Class A Contractor	2701015887	01.31.2023
Rinker Design Associates, P.C.	0227062-7	Stock Corporation	Active, In Good Standing	11100 Endeavor Court, Suite 200, Manassas, VA 20109	ENG, LS	0405000502	12.31.2023
Rinker Design Associates, P.C.	0227062-7	Stock Corporation	Active, In Good Standing	927 Maple Grove Drive, Suite 105, Fredericksburg, VA 22407	ENG	0410000156	02.28.2024
Rinker Design Associates, P.C.	0227062-7	Stock Corporation	Active, In Good Standing	4301 Dominion Boulevard, Suite 100, Glen Allen, VA 23060	ENG, LS	0410000220	02.28.2024
Rinker Design Associates, P.C.	0227062-7	Stock Corporation	Active, In Good Standing	4500 Main Street, Suite 310, Virginia Beach, VA 23462	ENG	0410000312	02.28.2024
Rinker Design Associates, P.C.	0227062-7	Stock Corporation	Active, In Good Standing	11100 Endeavor Court, Suite 200, Manassas, VA 20109	Real Estate Appraisals	4008001684	02.28.2023
CES Consulting, LLC	S3416007	Limited Liability Company	Active	23475 Rock Haven Way, Suite 255, Dulles, VA 20166	ENG	0407005783	12.31.2023
Dulles Geotechnical and Material Testing Services, Inc.	07582323	Stock Corporation	Active, In Good Standing	14119 Sullyfield Circle, Suite H, Chantilly, VA 20151	ENG	0407006236	12.31.2023
DMY Engineering Consultants, Inc.	07688955	Stock Corporation	Active	4170 Lafayette Center Drive, Suite 500, Chantilly, VA 20151	ENG	0407005631	12.31.2023

ATTACHMENT 3.2.10

State Project No. 0029-M03-371

SCC and DPOR Information

Land Planning and Design Associates, Inc.	01425545	S Corp	Active	1006 E Jefferson St #B, Charlottesville, VA 22902	Landscape Architect	0407001789	12.31.2023
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DPOR INFORMATION FOR INDIVIDUALS (RFQ Sections 3.2.10.3 and 3.2.10.4)

Business Name	Individual's Name	Office Location Where Professional Services will be Provided (City/State)	Individual's DPOR Address	DPOR Type	DPOR Registration Number	DPOR Expiration Date
Rinker Design Associates, P.C.	Brandon Shock	Glen Allen, VA	3530 Aston Tr Powhatan, VA 23139	Professional Engineer	0402041356	01.31.2023
CES Consulting, LLC	Avtar Singh	Dulles, VA	12423 Henderson Rd. Clifton, VA 20124	Professional Engineer	0402035169	01.31.2023

3.2.10.1 –

SCC Registrations

3.2.10.1 SCC REGISTRATIONS

WAGMAN HEAVY CIVIL, INC.

State Corporation Commission Clerk's Information System

Entity Information

Entity Information

Entity Name: Wagman Heavy Civil, Inc.	Entity ID: F0198988
Entity Type: Stock Corporation	Entity Status: Active
Series LLC: N/A	Reason for Status: Active and In Good Standing
Formation Date: N/A	Status Date: 10/08/2010
VA Qualification Date: 09/20/1967	Period of Duration: Perpetual
Industry Code: 0 - General	Annual Report Due Date: N/A
Jurisdiction: PA	Charter Fee: \$2500.00
Registration Fee Due Date: Not Required	

Registered Agent Information

RA Type: Entity	Locality: RICHMOND CITY
RA Qualification: BUSINESS ENTITY THAT IS AUTHORIZED TO TRANSACT BUSINESS IN VIRGINIA	
Name: CORPORATION SERVICE COMPANY	Registered Office Address: 100 Shockoe Slip Fl 2, Richmond, VA, 23219 - 4100, USA

Principal Office Address

Address: 3290 N Susquehanna Trl, York, PA, 17406 - 9754, USA

Principal Information

RINKER DESIGN ASSOCIATES, P.C.

State Corporation Commission Clerk's Information System

Entity Information

Entity Information

Entity Name: Rinker Design Associates, P.C.	Entity ID: 02270627
Entity Type: Stock Corporation	Entity Status: Active
Formation Date: 02/24/1982	Reason for Status: Active and In Good Standing
VA Qualification Date: 02/24/1982	Status Date: 04/22/1991
Industry Code: 70 - All professions not listed above	Period of Duration: Perpetual
Jurisdiction: VA	Annual Report Due Date: N/A
Registration Fee Due Date: Not Required	Charter Fee: \$0.00

Registered Agent Information

RA Type: Individual	Locality: FAIRFAX COUNTY
RA Qualification: Member of the Virginia State Bar	
Name: Thomas F. Quinn	Registered Office Address: 1775 Wiehle Ave Ste 400, Reston, VA, 20190 - 5159, USA

Principal Office Address

Address: 11100 ENDEAVOR COURT, SUITE 200,
MANASSAS, VA, 20109 - 0000, USA

3.2.10.1 SCC REGISTRATIONS

CES CONSULTING, LLC

State Corporation Commission Clerk's Information System

Entity Name: CES Consulting, LLC	Entity ID: S3416007
Entity Type: Limited Liability Company	Entity Status: Active
Series LLC: No	Reason for Status: Active
Formation Date: 10/14/2010	Status Date: 10/14/2010
VA Qualification Date: 10/14/2010	Period of Duration: Perpetual
Industry Code: 70 - Other DULY LICENSED PROFESSIONAL ENTITY not listed below as SPECIFIED in Section 13.1-543 of the Code of Virginia	Annual Report Due Date: N/A
Jurisdiction: VA	Charter Fee: N/A
Registration Fee Due Date: Not Required	
RA Type: Individual	Locality: FAIRFAX COUNTY
RA Qualification: Member or Manager of the Limited Liability Company	
Name: AVTAR SINGH	Registered Office Address: 12423 Henderson Rd, Clifton, VA, 20124 - 2021, USA
Address: 23475 ROCK HAVEN WAY, SUITE 255, DULLES, VA, 20166 - 0000, USA	

DULLES GEOTECHNICAL AND MATERIALS TESTING SERVICES, INC.

State Corporation Commission Clerk's Information System

Entity Name: Dulles Geotechnical and Material Testing Services, Inc.	Entity ID: 07582323
Entity Type: Stock Corporation	Entity Status: Active
Series LLC: N/A	Reason for Status: Active and In Good Standing
Formation Date: 11/26/2012	Status Date: 12/19/2018
VA Qualification Date: 11/26/2012	Period of Duration: Perpetual
Industry Code: 0 - General	Annual Report Due Date: N/A
Jurisdiction: VA	Charter Fee: \$50.00
Registration Fee Due Date: Not Required	
RA Type: Individual	Locality: LOUDOUN COUNTY
RA Qualification: Director of the Corporation	
Name: TARIQ BIN HAMID	Registered Office Address: 20585 Blue Water Ct, Ashburn, VA, 20147 - 7920, USA
Address: 14155 SULLYFIELD CIRCLE, SUITE H, CHANTILLY, VA, 20151 - 0000, USA	

3.2.10.1 SCC REGISTRATIONS

DMY ENGINEERING CONSULTANTS, INC.

State Corporation Commission Clerk's Information System

Entity Name: DMY ENGINEERING CONSULTANTS INC.	Entity ID: 07688955
Entity Type: Stock Corporation	Entity Status: Active
Series LLC: N/A	Reason for Status: Active and In Good Standing
Formation Date: 09/06/2013	Status Date: 10/25/2021
VA Qualification Date: 09/06/2013	Period of Duration: Perpetual
Industry Code: 0 - General	Annual Report Due Date: N/A
Jurisdiction: VA	Charter Fee: \$50.00
Registration Fee Due Date: Not Required	

RA Type: Individual	Locality: FAIRFAX COUNTY
RA Qualification: Director of the Corporation	
Name: WEIYI MA	Registered Office Address: 4170 LAFAYETTE CENTER DRIVE, SUITE 500, CHANTILLY, VA

Address: 4170 Lafayette Center Dr Ste 500, Chantilly, VA, 20151 - 1254, USA

LAND PLANNING AND DESIGN ASSOCIATES, INC.

State Corporation Commission Clerk's Information System

Entity Name: LAND PLANNING AND DESIGN ASSOCIATES, INC.	Entity ID: 01425545
Entity Type: Stock Corporation	Entity Status: Active
Series LLC: N/A	Reason for Status: Active and In Good Standing
Formation Date: 12/21/1972	Status Date: 02/22/2013
VA Qualification Date: 12/21/1972	Period of Duration: Perpetual
Industry Code: 0 - General	Annual Report Due Date: N/A
Jurisdiction: VA	Charter Fee: \$10.00
Registration Fee Due Date: Not Required	

RA Type: Individual	Locality: CHARLOTTESVILLE CITY
RA Qualification: Member of the Virginia State Bar	
Name: RICHARD G RASMUSSEN III	Registered Office Address: 250 E HIGH ST, CHARLOTTESVILLE, VA, 22902 - 0000, USA

Address: 1006 E. JEFFERSON ST. STE B, CHARLOTTESVILLE, VA, 22902 - 0000, USA

Commonwealth OF Virginia



State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That WAGMAN HEAVY CIVIL, INC., a corporation incorporated under the laws of Pennsylvania, is authorized to transact business in the Commonwealth of Virginia

That the corporation obtained a certificate of authority to transact business in Virginia from the Commission on September 20, 1967; and

That the corporation is in good standing in the Commonwealth of Virginia as of the date set forth below.

Nothing more is hereby certified.



Signed and Sealed at Richmond on this Date:

February 16, 2022

A handwritten signature in cursive script, reading "Bernard J. Logan".

Bernard J. Logan, Clerk of the Commission

3.2.10.2 –

**DPOR Registrations
(Offices)**

3.2.10.2 DPOR REGISTRATIONS (OFFICES)


WAGMAN HEAVY CIVIL, INC.


COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation
9960 Mayland Drive, Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

EXPIRES ON
01-31-2023

NUMBER
2701015887

BOARD FOR CONTRACTORS
CLASS A CONTRACTOR
CLASSIFICATIONS H/H

 **WAGMAN HEAVY CIVIL INC**
3290 NORTH SUSQUEHANNA TRAIL
YORK, PA 17406



Mary Broz-Vaughan
Mary Broz-Vaughan, Director

Status can be verified at <http://www.dpor.virginia.gov>

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS) DPOR-LIC (02/2017)

RINKER DESIGN ASSOCIATES, P.C.


COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation
9960 Mayland Drive, Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500


EXPIRES ON
12-31-2023

NUMBER
0405000502

**BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS**
PROFESSIONAL CORPORATION REGISTRATION

PROFESSIONS: ENG, LS

 **RINKER DESIGN ASSOCIATES PC**
11100 ENDEAVOR CT STE 200
MANASSAS, VA 20109



Mary Broz-Vaughan
Mary Broz-Vaughan, Director

Status can be verified at <http://www.dpor.virginia.gov>



COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

Glenn A. Youngkin
Governor

March 2, 2022

G. Bryan Slater
Secretary of Labor

Demetrios J. Melis
Director

RINKER DESIGN ASSOCIATES PC
4301 DOMINION BOULEVARD,
STE 100,
GLEN ALLEN, VA 23060

Re: License Type: Professional Corporation Branch
Office

Firm License Number: 0410000220
Issue Date: March 17, 2011
Expiration Date: February 29, 2024

Dear RINKER DESIGN ASSOCIATES PC:

Due to recent supply chain issues, the Department of Professional & Occupational Regulation is not able to print your license at this time. The Department expects to deliver your license in the next several months. In the meantime, this letter serves as your official license.

If you need further assistance, please visit our website at <https://dpor.virginia.gov/>, contact the Board office by email at apelscidla@dpor.virginia.gov or telephone at (804) 367-8506.

Sincerely,

Board for Architects, Professional Engineers, Land Surveyors,
Certified Interior Designers and Landscape Architects



COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

Glenn A. Youngkin
Governor

March 2, 2022

G. Bryan Slater
Secretary of Labor

Demetrios J. Melis
Director

RINKER DESIGN ASSOCIATES PC
927 MAPLE GROVE DR,
STE 105,
FREDERICKSBURG, VA 22407

Re: License Type: Professional Corporation Branch
Office

Firm License Number: 0410000156

Issue Date: December 27, 2005

Expiration Date: February 29, 2024

Dear RINKER DESIGN ASSOCIATES PC:

Due to recent supply chain issues, the Department of Professional & Occupational Regulation is not able to print your license at this time. The Department expects to deliver your license in the next several months. In the meantime, this letter serves as your official license.

If you need further assistance, please visit our website at <https://dpor.virginia.gov/>, contact the Board office by email at apelscidla@dpor.virginia.gov or telephone at (804) 367-8506.

Sincerely,

Board for Architects, Professional Engineers, Land Surveyors,
Certified Interior Designers and Landscape Architects



COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

Glenn A. Youngkin
Governor

March 2, 2022

G. Bryan Slater
Secretary of Labor

Demetrios J. Melis
Director

RINKER DESIGN ASSOCIATES PC
4500 MAIN ST,
STE 310,
VIRGINIA BEACH, VA 23462

Re: License Type: Professional Corporation Branch
Office

Firm License Number: 0410000312
Issue Date: January 31, 2019
Expiration Date: February 29, 2024

Dear RINKER DESIGN ASSOCIATES PC:

Due to recent supply chain issues, the Department of Professional & Occupational Regulation is not able to print your license at this time. The Department expects to deliver your license in the next several months. In the meantime, this letter serves as your official license.

If you need further assistance, please visit our website at <https://dpor.virginia.gov/>, contact the Board office by email at apelscidla@dpor.virginia.gov or telephone at (804) 367-8506.

Sincerely,

Board for Architects, Professional Engineers, Land Surveyors,
Certified Interior Designers and Landscape Architects

3.2.10.2 DPOR REGISTRATIONS (OFFICES)

CES CONSULTING, LLC

COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation
9960 Mayland Drive, Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

EXPIRES ON
12-31-2023

NUMBER
0407005783

BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY REGISTRATION

PROFESSIONS-ENG



CES CONSULTING LLC
23475 ROCK HAVEN WAY
SUITE 255
DULLES, VA 20166



Mary Broz-Vaughan
Mary Broz-Vaughan, Director

Status can be verified at <http://www.dpor.virginia.gov>

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS) DPOR-LIC (02/2017)

DULLES GEOTECHNICAL AND MATERIAL TESTING SERVICES, INC.

COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation
9960 Mayland Drive, Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

EXPIRES ON
12-31-2023

NUMBER
0407006236

BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY REGISTRATION

PROFESSIONS-ENG




DULLES GEOTECHNICAL AND MATERIAL TESTING
SERVICES, INC
14155 SULLYFIELD CIR
STE H
CHANTILLY, VA 20151-



Mary Broz-Vaughan
Mary Broz-Vaughan, Director

Status can be verified at <http://www.dpor.virginia.gov>

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS) DPOR-LIC (02/2017)

 COMMONWEALTH of VIRGINIA (DETACH HERE)

3.2.10.2 DPOR REGISTRATIONS (OFFICES)

DMY ENGINEERING CONSULTANTS, INC.


COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation
9960 Mayland Drive, Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

EXPIRES ON
12-31-2023


NUMBER
0407005631

BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY REGISTRATION

PROFESSIONS: ENG



DMY ENGINEERING CONSULTANTS INC
4170 LAFAYETTE CENTER DR
SUITE 500
CHANTILLY, VA 20151



Mary Broz-Vaughan
Mary Broz-Vaughan, Director

Status can be verified at <http://www.dpor.virginia.gov>

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (02/2017)

LAND PLANNING AND DESIGN ASSOCIATES, INC.

COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation
9960 Mayland Drive, Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

EXPIRES ON
12-31-2023

NUMBER
0407001789

BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY REGISTRATION

PROFESSIONS: LA



LAND PLANNING AND DESIGN ASSOCIATES INC
1006 E JEFFERSON ST #B
CHARLOTTESVILLE, VA 22902



Mary Broz-Vaughan
Mary Broz-Vaughan, Director

Status can be verified at <http://www.dpor.virginia.gov>

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (02/2017)

3.2.10.3 –

**DPOR Registrations
(Key Personnel)**

3.2.10.3 DPOR REGISTRATIONS (KEY PERSONNEL)


BRANDON SHOCK, P.E., DBIA


COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation
9960 Mayland Drive, Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500


EXPIRES ON
01-31-2023

NUMBER
0402041356

BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
PROFESSIONAL ENGINEER LICENSE

 BRANDON CLAY SHOCK
3530 ASTON TR
POWHATAN, VA 23139




Mary Broz-Vaughan, Director

Status can be verified at <http://www.dpor.virginia.gov>

AVTAR SINGH, P.E.

License Search Advanced License Search Disciplinary Action Search

License Details

Related Licenses



Name	SINGH, AVTAR
License Number	0402035169
License Description	Professional Engineer License
Rank	Professional Engineer
Address	CLIFTON, VA 20124
Initial Certification Date	2001-01-18
Expiration Date	2023-01-31

The license information in this application was last updated at Fri May 27 02:50:17 EDT.

License Lookup [legal disclaimer](#)

3.2.10.4 –

DPOR Registrations (Non-APELSCIDLA)

3.2.10.4 DPOR REGISTRATIONS (NON-APELSCIDLA)

RINKER DESIGN ASSOCIATES, P.C.

COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation
9960 Mayland Drive, Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

EXPIRES ON
02-28-2023

NUMBER
4008001684

**REAL ESTATE APPRAISER BOARD
APPRAISAL BUSINESS REGISTRATION**

 RINKER DESIGN ASSOCIATES PC
11100 ENDEAVOR CT STE 200
MANASSAS, VA 20109




Mary Broz-Vaughan, Director

Status can be verified at <http://www.dpor.virginia.gov>


ATTACHMENT

3.3.1 –

Key Personnel Resumes

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title:	Glen Mays, DBIA Vice President / General Manager
b. Project Assignment:	Design-Build Project Manager (DBPM)
c. Name of the Firm with which you are employed at the time of submitting SOQ.:	Wagman Heavy Civil, Inc. 
d. Employment History: With this Firm <u>8</u> Years With Other Firms <u>29</u> Years	Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below): <u>Wagman Heavy Civil, Inc., VP/General Manager/Design-Build Project Manager, December 2014 – Present:</u> Company officer with principal responsibility for civil operations in Virginia including safety, quality control, estimating, engineering, and construction for Design-Build and conventional projects. Glen reports directly to the President/COO of Wagman Heavy Civil and leads a team of over 100 construction professionals including: managers, engineers, estimators, surveyors, administrators, and field personnel. Glen has over 35 years of experience in the management of heavy civil projects ranging from \$5M to over \$200M. These projects include VDOT, Design-Build, and major interstate projects. <u>Granite Construction Company, Design-Build Project Manager, December 2010 - 2014:</u> Primary Point of Contact (POC) with principal responsibility for supervising all design and construction efforts from proposal through final acceptance, including Quality Control for \$45M FDOT Design Build Project on I-75. Also responsible for the supervision of design, construction, quality management, contract administration and procuring contract resources. <u>Hubbard Construction, Tampa Division Manager, 2009 - 2010:</u> Division Manager responsible for all aspects of civil work on a \$110M urban highway Design-Bid-Build financed project for FDOT in Tampa. Led public outreach efforts, and was responsible for resolving all contract conflicts, and led partnering for the avoidance of disputes. <u>Skanska USA Civil, Senior Project Manager, 2008 - 2009:</u> Senior Project Manager responsible for the civil work on the \$214M Tampa Interchange project being performed via a Joint Venture with Flatiron. <u>Cherry Hill Construction, Design-Build Project Manager, Projects Director, Division Manager, 1994 - 2008:</u> Glen had 13 years of experience in estimating, managing, and administering numerous projects inclusive of conventional bid-build and Design-Build for various private and public clients including VDOT and Maryland State Highway Administration. Was also responsible for the supervision of design, construction, quality management, contract administration, procuring contract resources, and managing partnering/ public outreach.
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:	Virginia Military Institute, Lexington, Virginia / BS / 1983 / Civil Engineering
f. Active Registration: Year First Registered/ Discipline/VA Registration #:	2019 / Design-Build Institute of America (DBIA) / D-2872 2018 / Virginia DEQ Responsible Land Disturber / RLD10897
g. Document the extent and depth of your experience and qualifications relevant to the Project.	<ol style="list-style-type: none">1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i>2. <i>Note whether experience is with current firm or with other firm.</i>3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> <p>(List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)</p> <p>* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.</p>

VDOT I-95 Northbound Rappahannock River Crossing Design-Build, Stafford County, VA**Firm:** Wagman | **Role:** DBPM | **Beginning Date:** 05/2020 | **End Date:** Present

▶ **Specific Responsibilities:** As Design-Build Project Manager (DBPM), Glen is responsible for the overall design and construction of this \$107.5M project that includes construction of approximately five miles of new interstate roadway, a major I-95 bridge structure over the Rappahannock River, and one additional I-95 bridge structure over US Route 17. Involved with the project since the pursuit phase, Glen is leading an integrated Design-Build team to successfully achieve project goals. He is responsible for ensuring that the team meets or exceeds Quality Assurance/Quality Control project requirements. Glen is the primary point of contact for VDOT and all third-party stakeholders. He coordinates with adjacent projects including the I-95 Express Lanes Fredericksburg Extension project whose limits encroach into Wagman's project requiring significant coordination for ITS and Tolling infrastructure. Glen also leads the team's public outreach efforts to effectively communicate with numerous stakeholders.

▶ **Similarities with the US 29/Hydraulic Road Project:** Hydraulics, permitting/ environmental, SWM/ESC, geotechnical, utility coordination and relocation, coordinated TMP/MOT/traffic control, survey, construction engineering and inspection, stakeholder coordination, signage & lighting, ROW, construction in an urban corridor with pedestrians and vehicular traffic, phased construction with bridge construction, re-routing of traffic through the corridor.

VDOT I-95 Southbound CD Lanes Rappahannock River Crossing, Design-Build, Stafford County, VA**Firm:** Wagman | **Role:** DBPM | **Beginning Date:** 11/2018 | **End Date:** 05/2022

▶ **Specific Responsibilities:** As DBPM, Glen was responsible for the overall project management and all design and construction of this \$114M project that includes construction of approximately five miles of new interstate roadway, a major I-95 bridge structure over the Rappahannock River, as well as three additional I-95 bridge structures over US Route 17. Involved with the project since the pursuit phase, Glen was responsible for leading an integrated DB team to successfully achieve project goals. He was responsible for ensuring that the team meets or exceeds Quality Assurance/Quality Control project requirements. Glen was the primary point of contact for VDOT and all third-party stakeholders, overseeing public involvement and relations. He coordinated with adjacent projects including the I-95 Express Lanes Fredericksburg Extension project whose limits encroach into Wagman's project requiring significant coordination for ITS infrastructure. Glen also led the team's public outreach efforts to effectively communicate with the numerous stakeholders.

▶ **Similarities with the US 29/Hydraulic Road Project:** Hydraulics, permitting/ environmental, SWM/ESC, geotechnical, utility coordination and relocation, coordinated TMP/MOT/traffic control, survey, construction engineering and inspection, stakeholder coordination, signage & lighting, ROW, construction in an urban corridor with pedestrians and vehicular traffic, phased construction with bridge construction, and re-routing of traffic through the corridor.

East River Front Transportation Improvements, Bid-Build, Richmond, Virginia**Firm:** Wagman | **Role:** Project Executive | **Beginning Date:** 02/2017 | **End Date:** 06/2018

▶ **Specific Responsibilities:** Glen served as the primary point of contact with the City of Richmond, supervising a staff consisting of engineers, project manager utility coordinators, and field personnel. He was also responsible for the overall management of the project from the contract negotiating phase through all phases of permitting, design changes, utility relocations, and phased construction including a roundabout that connected two major streets allowing businesses and pedestrians better access through the City and to recreational areas along the James River. The project was highly visible due to the construction of a new bus transit system through the City of Richmond and its status as a priority for the Governor. This required intense stakeholder coordination with businesses, recreational users of the James River, residents and other ongoing and surrounding construction projects, which also connected to this project. It was a fast-track project that was completed on-time and within budget.

▶ **Similarities with the US 29/Hydraulic Road Project:** Roadway, coordination with adjacent projects, SOE, ITS, overhead signage, signals, permitting/environmental, phased construction, ROW, utility coordination, coordinated TMP, stakeholder coordination, earthwork/embankments, drainage, ESC, roundabout construction, and major utility relocations during construction.

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment. **N/A**

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title: Avtar Singh, PE, CCM, DBIA President and Quality Assurance Manager	
b. Project Assignment: Quality Assurance Manager (QAM)	
c. Name of the Firm with which you are employed at the time of submitting SOQ.: CES Consulting, LLC	
d. Employment History: With this Firm <u>12</u> Years With Other Firms <u>16</u> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below): Mr. Avtar Singh has 28 years of construction management and project controls experience focused on transportation infrastructure. He served as the QAM or QCM for 6 DB and P3 projects, including the regionally significant \$565M I-95 Express Lanes Fredericksburg Extension for Transurban. In addition, he has provided technical guidance and oversight of QA, QC, and Owner's Independent Assurance (OIA) management services on more than 20 DB and P3 projects, including projects on high-volume, high-speed urban interstates. Due to Avtar's leadership and expertise, VDOT has rated his QAM services as 'Exceeds Expectations' and he has earned excellent CQIP scores for QA services ranging up to 100%. As a result, Avtar understands the complexities of managing large construction projects on congested interstates and has proven ability to develop QA/QC plans; mitigate risks; and resolve design and field issues. As the former Area Construction Engineer for VDOT's Northern Virginia District, Avtar was responsible for more than 28 projects with a cumulative construction value of more than \$230M. He ensured that project startup, execution and closeout processes complied with VDOT and FHWA standards. Certifications: CMAA, Certified Construction Manager, #A2127; DBIA, Design Build Professional, #141914; DEQ ESC Inspector and SWM Inspector (2020); OSHA 30-Hour Safety Training <u>CES Consulting, LLC, President and Quality Assurance Manager, 2010 - Present:</u> Mr. Avtar Singh, a licensed P.E. in the Commonwealth of Virginia, is a hands-on manager who actively manages QA and QC services for DB and P3 projects. He develops and updates QA/QC plans and monitors compliance; conducts QA audits of the design QA/QC plan; manages QA inspection and testing to confirm correct frequency and accuracy of QC inspection and testing; approves materials testing reports; identifies and resolves non-compliant work and testing results; certifies compliance to contract requirements; leads preparatory inspection meetings; coordinates witness and hold points; prepares QA reports and NCRs; maintains the non-conformance and deficiency logs, and project testing/frequencies materials notebook; and generates the punch list and verifies completion. <u>Virginia Department of Transportation Northern Virginia District, Area Construction Engineer, 2006 – 2010:</u> As Area Construction Engineer for VDOT's NOVA District, Mr. Avtar Singh managed VDOT Design-Bid-Build projects and provided oversight of locally administered projects in Prince William and Loudoun Counties. He was responsible for constructability and biddability reviews prior to advertisement, project startup and execution, pay application certifications, and contract closeouts. He resolved field issues and contractual issues with the District and Central Office, reviewed and negotiated work orders, and resolved construction and schedule claims.	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: George Washington University, Washington, DC / Master's Certificate / 2007 / Project Management Queens University, Kingston, Ontario Canada / M.S. / 1994 / Civil Engineering Queens University, Kingston, Ontario Canada / B.S. / 1992 / Civil Engineering	
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2001 / Professional Engineer / VA #04020035169	
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i>	

(List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)

* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.

VDOT Albemarle Intersection Bundling Projects, Design-Build, Charlottesville, VA,

Firm: CES | **Role:** Quality Assurance Manager | **Beginning Date:** 07/2019 | **End Date:** 02/2023

Specific Responsibilities: Quality Assurance Manager. Avtar manages QA services for the DB project delivery of six project sites, including two new single-lane roundabouts to enhance safety, new connecting roads to enhance connectivity, a diverging diamond interchange to improve traffic flow and volume connecting to I-64, and entrance/exit ramp improvements to eliminate dangerous traffic weaving concerns. All locations include pedestrian paths with ADA requirements and ADA QA inspection. The design-builder concurrently works on designing several project sites while starting construction on approved locations, which requires extensive collaboration and coordination to confirm compliance with approved design and construction QA/QC plans. Avtar drafted the construction QA/QC plan; manages QA inspection, testing and documentation to ensure construction activities are inspected, tested and documented properly; reviews and approves inspection documentation; and reviews and certifies pay applications. Challenges include construction under heavy traffic adding safety concerns; coordinating multiple projects at various phases of scoping, design, and construction; scheduling and maximizing the work of limited staff to inspect and document multiple projects simultaneously. Construction Cost: \$28.5M

Similarities with the US 29/Hydraulic Road Project: VDOT DB project, roadway construction under heavy traffic adding safety concerns, coordinating multiple project locations at various phases of scoping, design, and construction, roundabout construction, pedestrian facilities & ADA requirements, utility relocations, signals, signs and MOT.

VDOT Warrenton Southern Interchange U.S. Routes 15/17/29 Design-Build, Fauquier County, VA

Firm: CES | **Role:** Quality Assurance Manager | **Beginning Date:** 02/2018 | **End Date:** 10/2020

Specific Responsibilities: Avtar managed QA services for the construction of an innovative interchange (using a modified barbell interchange Concept) with two roundabouts at each end of the precast-concrete bridge to replace a signalized intersection. The single-lane roundabouts can handle tractor-trailers up to 69 feet long. The project also features a 2,000-foot-long pedestrian path across the bridge connecting pedestrian traffic and creating safe passage for pedestrians through the workzone. Avtar drafted the Construction Quality Management Plan; managed QA inspection, testing, and documentation to ensure all construction activities were inspected, tested and documented properly; reviewed and certified pay applications; coordinated OIA/IV testing with VDOT; and coordinated with the FHWA Area Engineer. He also recommended solutions to field challenges, such as safety concerns due to extensive work in heavy traffic, limited staff to inspect day and night operations, and multiple MOT patterns to allow construction of the multiple ramps coming off the roundabouts. In a 2020 VDOT performance evaluation, Avtar's QA/QC plan, as well as the QA materials testing and QA inspection services, received an 'Exceeds Expectations' rating. Due to Avtar's leadership and attention to detail, the QA team received a CQIP score of 100%. Construction Cost: \$18.5M

Similarities with the US 29/Hydraulic Road Project: VDOT DB project, roadway construction, construction under heavy traffic adding safety concerns; roundabout construction, coordinating complex sequence of construction, MOT, utility relocation/protection, pre-activity meetings and ADA requirements for the pedestrian trail.

VDOT Route 29 Solutions Design-Build, Albemarle County and City of Charlottesville, VA

Firm: CES | **Role:** Quality Assurance Manager | **Beginning Date:** 02/2015 | **End Date:** 10/2017

Specific Responsibilities: Avtar managed QA inspection and testing services for the simultaneous construction of three projects along the Route 29 corridor: (1) accelerated bridge construction (ABC) of a grade-separated intersection at Route 29 and Rio Road; (2) widening of a 3-mile segment of Route 29 from 4 to 6 lanes; and (3) a 2.3-mile extension of Berkmar Drive, including a new 715-foot-long bridge crossing over the Rivanna River, a bike lane, sidewalk and shared use path to meet all ADA requirements. Avtar prepared the QA/QC plan ensuring testing and sampling procedures met or exceeded the minimum requirements and oversaw QA inspections in compliance with the QA/QC Plan. He was responsible for QA staffing; reviewing and confirming inspection frequencies and reporting; conducting and participating in preconstruction and weekly meetings; reviewing and approving RFIs; and auditing ESC inspections. Avtar recommended procedural improvements that reduced rework and overall construction costs. He recommended solutions to project challenges, such as meeting a fast-track schedule to avoid extensive monetary disincentives and 24-hour-a-day work operations requiring long QA/QC work hours and staffing coordination. Also, Avtar recommended solutions that involved maintaining heavy traffic volumes and safety for many pedestrians; wet and dry utility relocations with numerous latent conflicts and tight urban workspaces; and maintaining access and minimizing impacts to businesses. Construction Cost: \$117M

Similarities with the US 29/Hydraulic Road Project: VDOT DB project, roadway construction under heavy traffic adding safety concerns, coordinating multiple project locations at various phases of scoping, design, and construction, complex MOT sequence for vehicles & pedestrians. Local knowledge.


h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment.

Albemarle Bundled Projects | Quality Assurance Manager (part time) | project completion December 2022

I-95 Express Lanes Fredericksburg Ext. | Quality Assurance Manager (part time) | project completion May 2023

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title: Brandon Shock, P.E., DBIA Assistant Director of Transportation	
b. Project Assignment: Design Manager (DM)	
c. Name of the Firm with which you are employed at the time of submitting SOQ.: Rinker Design Associates, P.C. (RDA)	
d. Employment History: With this Firm <u>14</u> Years With Other Firms <u>8</u> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below): Mr. Brandon Shock, proposed Design Manager, is a licensed Professional Engineer in VA. He is experienced in working with VDOT and local jurisdictions and has extensive DB project experience. Brandon will be responsible for coordinating the individual design disciplines and ensuring the overall Project design is in conformance with the contract documents. <u>Rinker Design Associates, P.C., Assistant Director of Transportation, 2020 - Present:</u> Mr. Brandon Shock, a licensed P.E., has 22 years of experience in design and management of transportation projects, possessing strong qualifications in all aspects of roadway design. He has designed, managed, and provided design QA/QC services for various transportation improvement projects throughout Virginia. His experience includes oversight and management for secondary, primary, urban, and interstate projects which includes new alignments, widenings, reconstructions, structure replacements and innovative intersection designs in varying project delivery methods such as Locality, VDOT, and PPTA/Design-Build projects. <u>Rinker Design Associates, P.C., Senior Transportation Manager, 2007 - 2020:</u> Brandon was responsible for the management of complex public transportation engineering projects and specializing in design-build delivery for RDA in the Richmond, Virginia location. His responsibilities include project scoping, design development, scheduling, planning, and coordination with varying design disciplines and subconsultants throughout the life of a project. Among his other responsibilities were quality control and quality assurance, client interaction, preparation of proposal documents, and construction engineering services. <u>Johnson, Mirmiran & Thompson (JMT), Project Engineer, 2006 - 2007:</u> Brandon was a transportation engineer responsible for the design of roadway plans horizontal and vertical geometry, typical sections, roadway modeling, and cross sections.	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Fairmont State College, Fairmont, WV / BSCET / 1999 / Civil Engineering Technology	
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2008 / Professional Engineer / VA #0402041356	
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> (List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.) * On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.	

VDOT I-95 at Temple Avenue Interchange Improvements Design-Build, City of Colonial Heights, VA

Firm: RDA | **Role:** Assistant Design Manager | **Beginning Date:** 02/2015 | **End Date:** 04/2016

▶ **Specific Responsibilities:** As Assistant Design Manager, Brandon was responsible for the design, management, and design QA/QC for plan elements. Brandon's project responsibilities included the design of interchange modifications (realignment of ramps, design of a roundabout, and roadway widening) and design oversight of Transportation Management Plans (TMP), utility coordination/design, signal design, and geotechnical analysis and coordination. He was also responsible for coordinating with the contractor, VDOT, the City of Colonial Heights, Kroger development, and utility companies to ensure that the design requirements of the contract were met, to expedite the design and associated services, and to explore opportunities at every step of the design development to reduce costs and/or expedite construction. Brandon also coordinated and addressed Requests for Information (RFIs) and shop drawing reviews. This project won the **2020 VTCA Engineering Awards Program "Design-Build" Winner Award, 2018 ASHE National Project of the Year Award, 2018 ENR Mid Atlantic Merit Award, and the 2018 ASHE National Project of the Year Award.**

▶ **Similarities with the US 29/Hydraulic Road Project:** DB project, operational and safety improvements, design of a roundabout, traffic signals, retaining walls, TMP, urban construction with high traffic demand and crash history, design QA/QC, drainage/Stormwater Management (SWM)/Erosion and Sediment (E&S), utility coordination and design, lighting design, right-of-way (ROW) acquisition, post-design services, stakeholder coordination/public involvement/relations, client coordination/collaboration.

VDOT Route 7 Widening & Bridge Rehabilitation Over Dulles Toll Road Design-Build, Fairfax, VA

Firm: RDA | **Role:** Assistant Design Manager | **Beginning Date:** 05/2014 | **End Date:** 05/2018

▶ **Specific Responsibilities:** As Assistant Design Manager, Brandon was responsible for evaluating the design to find cost effective and innovative solutions. For this project, Brandon led the Team in reevaluating the grade-separated design for the SUP to both realign the eastbound grade-separated path and to change the westbound SUP from a tunnel to an overpass at the easternmost grade separation. Other innovations included evaluation and integration of SWM features to minimize the number and extents of the facilities. This \$40M DB project reconstructed and widened the bridge over the Dulles Toll Road, widened Route 7, replaced and reconfigured signals through the limited access interchange, reconstructed the ramps in all four quadrants, and provided continuous SUPs along Route 7 (eastbound and westbound directions). **This project won the HCCA 2018 Excellence in Infrastructure Award.**

▶ **Similarities with the US 29/Hydraulic Road Project:** DB project, operational and safety improvements, pedestrian and bicycle improvements, ADA-compatible design elements, new SUP construction, pedestrian bridge design (including prefabricated structures), geotechnical analysis, design QA/QC, drainage/SWM/E&S, utility coordination and design, right-of-way acquisition, post-design services, stakeholder coordination/public involvement/relations, client coordination/collaboration.

VDOT I-581/Elm Avenue Interchange Improvements, City of Roanoke, VA

Firm: RDA | **Role:** Deputy Design Manager | **Beginning Date:** 04/2012 | **End Date:** 05/2015


▶ **Specific Responsibilities:** As Deputy Design Manager, Brandon was responsible for the coordination and management of efforts required for the design of construction plans associated with widening and interchange capacity improvements. Brandon's duties included direct supervision of roadway, drainage, SWM, maintenance of traffic (MOT), traffic signals, signing and pavement marking plans, as well as assisting with the management and coordination of subconsultants for geotechnical, survey, and bridge designs. He was responsible for coordinating with the contractor, VDOT, the City of Roanoke, and utility companies to ensure that the design requirements of the contract were met and the design and associated services were expedited. He directly reported to the Design Manager on the status of design efforts, scheduling, and report writing, and he conducted task force meetings with the design and construction teams. This \$20 million interchange capacity improvement project featured modifications to both I-581 and Elm Avenue. I-581 consists of a six-lane divided highway, freeway/other principal arterial, and median barrier. Elm Avenue work included the four-lane divided highway, Urban Minor Arterial Typical Section with curb and gutter and raised median. **This project won the 2016 VTCA Design-Build Honorable Mention.**

▶ **Similarities with the US 29/Hydraulic Road Project:** DB project, improved connectivity and capacity, roadway widening, pedestrian sidewalks, ADA-compliant designs, prefabricated pedestrian bridge structure (used in construction sequencing), geotechnical analysis, design QA/QC, roadside drainage design, E&S, SWM, utility coordination and design, ROW acquisition, post-design services, stakeholder coordination/public outreach, client coordination/collaboration.

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment. **N/A**

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a.	Name & Title: Brad McClung Construction Manager
b.	Project Assignment: Construction Manager (CM)
c.	Name of the Firm with which you are employed at the time of submitting SOQ.: Wagman Heavy Civil, Inc. 
d.	Employment History: With this Firm <u>9</u> Years With Other Firms <u>6</u> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below): Mr. Brad McClung has an extensive design-build background in Virginia which includes managing the construction and quality of interchanges, roadways, and bridge projects. His experience includes working in urban environments where pedestrian mobility/safety and utility avoidance are planned into every construction activity. Brad develops the project schedule and is responsible for implementing the plan to complete the project ahead of schedule and to the satisfaction of all stakeholders. Brad understands the quality requirements for DB Projects and has implemented successful quality control programs on all his projects. Brad has the training and experience to implement Wagman's Safety Program and deliver the project safely to all stakeholders. He currently holds the following certifications: VDOT Erosion & Sediment Certification, Virginia Responsible Land Disturber Certification, First Aid & CPR/OSHA 10 Hour & OSHA 30 Hour. <u>Wagman Heavy Civil, Inc., Construction Manager, 2013 – Present:</u> Northbound & Southbound Rappahannock River Crossing Projects, Odd Fellows Road Interchange, Front Royal, Route 61 Bridge Replacement over New River. Brad was responsible for all field activities and allocation of resources such as personnel, equipment, materials and subcontractors. Brad was responsible for project safety, schedule and the construction quality control. Brad was assigned to each project full time during construction <u>Key Construction, Assistant Superintendent, December 2007 - 2013:</u> Bailey Road Bridge Widening and Reconstruction, Route 41 New Highway and Bypass Connector. Brad was responsible for all roadway construction including excavation, drainage, erosion/sediment control and utility relocations.
e.	Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: West Virginia University, Morgantown, WV / B.S. / 2005 / Physical Education
f.	Active Registration: Year First Registered/ Discipline/VA Registration #: 2010/ VDOT Intermediate Work Zone Traffic Control #021320202 2010/ Erosion and Sediment Control Certification #1-04486 2015 / Responsible Land Disturber #41398
g.	Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none">1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i>2. <i>Note whether experience is with current firm or with other firm.</i>3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> (List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.) * On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project. VDOT I-95 Southbound CD Lanes Rappahannock River Crossing, Design-Build, Stafford County, VA Firm: Wagman Role: CM (Roadway) Beginning Date: 11/2018 End Date: 5/2022 ▶ Specific Responsibilities: Brad served as the roadway CM on the project responsible for implementing the overall design and construction of this \$114M project that includes construction of approximately five miles of new interstate roadway, a major bridge structure over the Rappahannock River, as well as three additional bridge structures over US

Route 17. The project is heavily travelled by commuters and trucks. Brad is an integral part of the Design-Build team helping to achieve project goals and milestones. Brad was responsible for all highway elements, including excavation, widening, subbase, asphalt paving, drainage, maintenance of traffic (MOT), traffic phasing, utility relocations, erosion and sedimentation, guardrail, pavement markings and final landscaping. Brad also oversaw the project Quality Assurance/Quality Control requirements associated with the roadway elements and coordinated with adjacent projects including the I-95 Express Lanes Fredericksburg Extension and the I-95 Safety Improvements at Route 3 project.

▶ **Similarities with the US 29/Hydraulic Road Project:** DB, design development, partnering, safety, constructability reviews, QA/QC, environmental compliance, integrated team, stakeholder coordination, MOT/construction sequencing, on time/budget, utility coordination, public outreach, traffic phasing, traffic switches, and schedule updates, ensuring success for DBE subcontractors & suppliers.

VDOT Odd Fellows Road Interchange at US 29/460 Design-Build, Lynchburg, VA

Firm: Wagman | **Role:** CM (Roadway) | **Beginning Date:** 2015 | **End Date:** 2018

▶ **Specific Responsibilities:** As Construction Manager, Brad was responsible for construction operations including excavation, widening, subbase, asphalt paving, drainage, MOT, traffic phasing, utility relocations erosion and sedimentation, guardrail, pavement markings and final landscaping. Brad was also responsible for overseeing the project QA/QC requirements associated with the roadway elements for this \$29.8M project. One end of the project was a new interchange along the US Route 29/460 corridor at Odd Fellows Road. The other half of the project was situated in an urban/industrial area within the city of Lynchburg. It provides access to a vibrant industrial development area while aiding in attracting future business for the City. The project also included a two-span bridge over existing US Route 29/460, two on-ramps, two off-ramps, two traffic roundabouts, and the widening of an existing portion of Odd Fellows Road. Improvements to the existing roadway included full utility relocation (water, sewer, telecommunications, gas, and power), and the installation of curb and gutter, sidewalks, a 10-foot-wide shared use path (SUP), and a closed storm water drainage system that runs the entire length of the project. Access to local businesses and adjacent communities had to be maintained while constructing the new roundabout to improve traffic flow and safety.

▶ **Similarities with the US 29/Hydraulic Road Project:** DB, design development, partnering, safety, constructability reviews, QA/QC, environmental compliance, integrated team, stakeholder coordination, MOT/construction sequencing, on time/budget, utility coordination, public outreach, roundabouts, erosion and sedimentation control, coordination with adjacent property owners (business & residential) and widening of existing roadway with safety improvements, resolving issues with local property owners (good customer service).

VDOT South Fork Bridge Replacement Route 340/522, Warren County, VA

Firm: Wagman | **Role:** CM | **Beginning Date:** 2013 | **End Date:** 2017

▶ **Specific Responsibilities:** Brad was the Construction Manager for this \$48 million project that included the complete reconstruction of large bridge structures carrying Route 340 over the South Fork of the Shenandoah River and the Norfolk Southern Railroad. This project replaced the existing bridge and widened the roadway approaches along the existing urban corridor entering Front Royal, VA. The project included significant excavation, drainage, base, and asphalt paving to construct new roadway approaches to the bridge, as well as new interchanges on the approaches to the bridge. The project also included associated street lighting on both the roadway and bridge, new signalized interchanges, guardrail installation, signage, landscaping, and environmental compliance with erosion & sedimentation control devices.

Brad managed all highway elements including drainage, MOT widening, subbase, asphalt paving, excavation, traffic phasing, utility relocations, erosion and sedimentation control, guardrail, pavement markings and final landscaping. Brad was also responsible for overseeing the QA/QC requirements of the project.

▶ **Similarities with the US 29/Hydraulic Road Project:** construction planning, urban corridor, maintaining access to adjacent businesses, safety, constructability reviews, quality, environmental compliance, integrated team, partnering, MOT/construction sequencing, on time/budget, utility coordination, public outreach, drainage. Widening of existing roadway, improving mobility and minimizing disruption to the travelling public and pedestrians, assisting DBE subcontractors.

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment. **Brad is currently not assigned to any active projects.**

ATTACHMENT

3.4.1(a) –

Lead Contractor Work History Forms

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: Odd Fellows Road Interchange at U.S. Route 29/460 and Roadway Improvements Design-Build Location: Lynchburg, VA	Name: Johnson, Mirmiran & Thompson, Inc. (JMT)	Name of Client/ Owner: VDOT Phone: 434-856-8318 Project Manager: Raina Rosado, P.E. Phone: 434-856-8318 Email: raina.rosado@vdot.virginia.gov	08/2018	08/2018 (Actual)	\$29,846	\$30,082 (Final – Due to Owner-Approved Change Orders)	\$30,082

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly. The Work History Form shall include only one singular project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form. If the Offeror chooses to submit work performed as a Joint Venture or Partnership, identify how the Joint Venture or Partnership was structured and provide a description of the portion of the work performed only by the Offeror's firm.

RELEVANCE TO THE US 29 / HYDRAULIC ROAD PROJECT:

- ▶ VDOT Design-Build Project
- ▶ Developed Urban Area
- ▶ Roundabout Construction
- ▶ Pedestrian Facilities
- ▶ Utilities
- ▶ Landscaping
- ▶ Lighting
- ▶ TMP/MOT
- ▶ Coordination with Adjacent Projects
- ▶ Public Involvement/Stakeholder Coordination
- ▶ Permitting/Environmental
- ▶ Context Sensitive Solutions
- ▶ QA/QC & CEI
- ▶ Right-Of-Way
- ▶ ADA Ramps & Curb Cuts

Team Personnel Participation:
Glen Mays, DBIA (WAGMAN)
Brad McClung (WAGMAN)
Greg Andricos, PE (WAGMAN)
Carl Benton (WAGMAN)

PROJECT AWARDS: 2019 Engineering Excellence Merit Award, American Council of Engineering Companies of Virginia

Project Scope: VDOT awarded Wagman Heavy Civil this \$30 million design-build project located on Odd Fellows Road in the City of Lynchburg, VA. The purpose of the project was to upgrade and extend Odd Fellows Road, including a new interchange with US 460/29 and two roundabouts. Approximately 1.3 miles of Odd Fellows Road were widened and reconstructed to a three-lane typical section with a two-way left turn lane. Two roundabouts were constructed which also required landscaping and stamped concrete. Other roadway improvements included roadway lighting, curb and gutter, ADA Ramps, sidewalk, and a 10-foot shared use path as well as installation of new waterline, storm sewer, and sanitary sewer. All traffic, vehicular and pedestrian was maintained in a safe manner during construction. A new diamond interchange was constructed at US 460/29 which included a two-span bridge. Bridge construction incorporated a shared use path, lighting, architectural treatment, and under-bridge utilities. Approximately 1.0 miles of new ramp lanes were constructed along US 460/29 to accommodate the new interchange. The improvements required 430,000 cy of excavation and included stream relocations in three places.

Relevant Project Elements:

- ☑ **Finishing contracts on time or earlier than the original contract fixed completion date:** This project was completed on time with minimal disruption to the local business and the Town of Lynchburg.
- ☑ **Delivering projects in developed urban corridors:** This project included the reconstruction of Odd Fellows Road through a heavy commercial district with high truck traffic. We installed a new interchange to alleviate the traffic and constructed two roundabouts to improve traffic flow. All curb and sidewalk was reconstructed to meet ADA requirements and enhance pedestrian connectivity.
- ☑ **Use of innovative design solutions and construction techniques:** We developed a work sequence to construct the majority of the roundabout outside of traffic to minimize impacts to the vehicular traffic (primarily truck traffic).
- ☑ **Limiting impacts to the traveling public and affected businesses and communities, including commitments to effective strategies to minimize congestion during construction:** A complex and thorough maintenance of traffic plan was developed to accommodate the high volume of large trucks along the industrial corridor to ensure constructability and safety was achieved. A combination of temporary lane shifts, lane closures, and detours was utilized to expedite construction, enhance safety and minimize disruption to the public. The roundabout at the intersection of Mayflower Drive was constructed in 90 days to meet a key project interim milestone and minimize disruption to the public.
- ☑ **Developing and managing effective communication strategies with business owners and other key stakeholders:** Construction occurred in an urban industrial development area with many stakeholders. Wagman promoted interactive stakeholder involvement to ensure that project goals were achieved. Wagman held a public hearing and Pardon our Dust meeting on the project to share project information and gather input from affected stakeholders. The Wagman Team contacted over 50 businesses along the Odd Fellows Road Industrial Corridor to determine what type of vehicles were accessing each parcel, their frequency and how circulation was occurring to ensure our design satisfied stakeholder's needs.
- ☑ **Delivering multiple elements of a project concurrently on a fast-track schedule:** To advance the project schedule, the Wagman Team broke the project into two segments which allowed construction to begin in one segment while finalizing plans for the second segment. Due to close coordination with VDOT, the City of Lynchburg, and the Federal Highway Administration, the project was completed on time.



ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: East Riverfront Transportation Improvements Location: Richmond, VA	Name: Whitman, Requardt & Associates, LLP (WRA)	Name of Client/ Owner: City of Richmond Phone: 804-646-7000 Project Manager: Adel Edward Phone: 804-646-6584 Email: adel.edward@richmond.gov	01/2018	06/2018 (Actual – Contract date was extended due to Owner-Approved Change Orders)	\$10,031	\$10,408 (Final – Due to Owner-Approved Change Orders)	\$10,408

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly. The Work History Form shall include only one singular project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form. If the Offeror chooses to submit work performed as a Joint Venture or Partnership, identify how the Joint Venture or Partnership was structured and provide a description of the portion of the work performed only by the Offeror's firm.

RELEVANCE TO THE US 29 / HYDRAULIC ROAD PROJECT:

- ▶ Developed Urban Area
- ▶ Roundabout Construction
- ▶ Pedestrian Facilities
- ▶ Utilities
- ▶ Landscaping
- ▶ Lighting
- ▶ TMP/MOT
- ▶ Public Involvement/ Stakeholder Coordination



PROJECT AWARDS: 2019 Mid-Atlantic Transportation Project of the Year (\$5M-\$25M), American Public Works Association (APWA)

Team Personnel Participation:
Glen Mays, DBIA (WAGMAN)
Carl Benton (WAGMAN)
Greg Andricos, PE (WAGMAN)

Project Scope: The \$10M East Riverfront Transportation Improvements project for the City of Richmond is situated along Route 5 (East Main Street) in Richmond, Virginia. Located in a rapidly developing urban area, the purpose of this project was to provide a better transportation network to accommodate current and future traffic volumes, improve public transit, and enhance pedestrian and bicycle access along the riverfront. Work included reconstruction and widening of approximately 0.5 miles of roadway to accommodate sidewalk, bike lanes, bus pullouts, and parking; replacement of an existing intersection with a roundabout, construction of a signalized intersection, as well as streetscaping and landscaping. The roadway improvements included installation of new waterline, storm sewer, and sanitary sewer; adjustments to the existing sanitary sewer system; and installation of new duct banks for Dominion Power. Streetscape enhancements included cobblestone and brick pavers, brick sidewalks, decorative lighting, benches, as well as significant landscaping. Strict E&S protocols were followed throughout construction in order to protect the James River and Gillies Creek, which both bordered the project. Through close collaboration with the City of Richmond and WRA, Wagman was able to value-engineer the project in order to remain within the Owner's budget, reducing the original price by approximately \$300,000. The project was honored with the 2019 American Public Works Association Mid-Atlantic Project of the Year award which recognized innovative construction management techniques, completion of the project on schedule, excellent community relations, stakeholder & agency coordination, and minimization of public inconvenience during construction.

Relevant Project Elements:

- ☑ **Finishing contracts on time or earlier than the original contract fixed completion date:** Wagman achieved an on-time completion and also achieved an aggressive interim milestone that allowed the Greater Richmond Transit Company (GRTC) to begin operations on its Bus Rapid Transit route.
- ☑ **Delivering projects in developed urban corridors:** The project connected several roadways and intersections to allow local businesses, recreational users, pedestrian and vehicular traffic to maneuver safely and more efficiently throughout the corridor. Along with other construction projects that connected to this project at both ends and through the project, which included several bus stops, the vehicular and pedestrian traffic made for a very congested area. This required daily coordination with the local businesses, recreational users of the James River and local residents/pedestrian traffic, which ultimately led to a successful project for all stakeholders.
- ☑ **Use of innovative design solutions and construction techniques:** Wagman designed and constructed a variety of Support of Excavation systems to accommodate phased construction of the roundabout and MSE wall which helped reduce maintenance of traffic impacts and maintain the project schedule.
- ☑ **Limiting impacts to the traveling public and affected businesses and communities, including commitments to effective strategies to minimize congestion during construction:** The roundabout was constructed in phases to accommodate existing traffic movements. This phased construction was complicated by a very steep gradient on one of the existing connector streets which necessitated retaining walls and temporary shoring. Additionally, temporary signalization was employed at a second intersection in order to minimize impacts while the permanent improvements were being made.
- ☑ **Developing and managing effective communication strategies with business owners and other key stakeholders:** This project was built in conjunction with two adjacent roadway projects, Bus Rapid Transit (BRT) and Rte. 5 Bridge over NSRR, as well as other commercial developments such as Rockett's Landing, Intermediate Dock, and Stone Brewing. Additionally, the project corridor included Norfolk Southern Railway, CSX Railroad, and a variety of private businesses. Wagman coordinated closely with all stakeholders & agencies, held coordination meetings and published detailed two-week look ahead schedules which helped all parties be successful.
- ☑ **Delivering multiple elements of a project concurrently on a fast-track schedule:** Working in a constrained environment while performing multiple construction operations simultaneously and necessary in order to complete a very fast track schedule on-time was a challenge. This involved precise, detailed planning and coordination with all stakeholders. The most challenging element was utility relocations, particularly with Virginia Power. In order to successfully deliver the project on-time, construction crews worked around utility relocations while performing excavation, storm drain, sanitary sewer, support of excavation, roadway and streetscape elements of the project.

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: Route 7 Widening and Bridge Rehabilitation over the Dulles Toll Road and Dulles International Access Highway Design-Build Location: Fairfax, VA	Name: Rinker Design Associates, P.C. (RDA)	Name of Client/ Owner: VDOT Phone: 703-259-1940 Project Manager: Arifur Rahman, P.E. Phone: 703-259-1940 Email: md.rahman@vdot.virginia.gov	05/2018	05/2018	\$39,887	\$42,158 (Final – Due to Owner-Approved Change Orders)	\$42,158

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly. The Work History Form shall include only one singular project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form. If the Offeror chooses to submit work performed as a Joint Venture or Partnership, identify how the Joint Venture or Partnership was structured and provide a description of the portion of the work performed only by the Offeror's firm.

RELEVANCE TO THE US 29 / HYDRAULIC ROAD PROJECT:

- ▶ Wagman/RDA Team
- ▶ VDOT Design-Build Project
- ▶ Developed Urban Area
- ▶ Pedestrian Facilities/Bridges
- ▶ Utility Coordination/Relocations
- ▶ ADA Requirements
- ▶ Lighting
- ▶ TMP/MOT
- ▶ Public Involvement/Stakeholder Coordination

Team Personnel Participation:
 Greg Andricos, PE (WAGMAN)
 Brandon Shock, PE, DBIA (RDA)
 John Giometti, PE (RDA)
 Mark Gunn, PE, DBIA (RDA)
 Andrew Knowlton, PE (RDA)
 John Myers (RDA)
 Jimmy Street (RDA)
 Connor Eggleston, PE (RDA)
 Tim Freeland, PE, CCM (RDA)

Project Scope: This \$42 million design-build (D/B) project for the Virginia Department of Transportation (VDOT) reconstructs and widens the structurally deficient Route 7 bridge over Dulles Toll Road and the Dulles International Airport Access Highway from four lanes to six. This project required the widening of Route 7 approaches to the new structure, necessitating ROW acquisition and major utility relocation. Limited clearances within Metropolitan Washington Airports Authority's (Airports Authority's) right-of-way (ROW) required the design and installation of permanent foundations using micropiles to widen the existing bridge piers between Dulles Toll Road and the Dulles Access Highway. The project also includes a 10-foot-wide shared-use path that was built for pedestrians and bikes to travel in each direction. This path incorporates grade-separated crossings, including two pedestrian bridges and three tunnels.

Relevant Project Elements:

- ☑ **Finishing contracts on time or earlier than the original contract fixed completion date:** The project was successfully completed ahead of schedule and within budget, and met the goals of numerous stakeholders including VDOT, MWAA, WMATA, Fairfax County, City of Tysons, and numerous local community associations.
- ☑ **Delivering projects in developed urban corridors:** Urban Gateway project in a highly developed and congested area connecting McLean communities west of the DTR to city of Tysons and WMATA Silver Line Metro. Wagman's project-specific safety plan allowed the workforce and traveling public to coexist in this tight corridor during construction without major incident. Wagman reduced traffic phases, thus reducing the safety risk to patrons on the Dulles Toll Road and Dulles Access Highway.
- ☑ **Use of innovative design solutions and construction techniques:** The project team developed a four-stage construction sequence for the Route 7 bridge. This eliminated three proposed stages, reducing the project cost and schedule. Through teamwork and communication, Wagman maintained all traffic in accordance with the RFP requirements while reducing the number of construction stages. The reduction in construction stages also reduced utility relocations costs. Wagman used micropiles for a deep-foundation solution due to low headroom and constrained work areas.
- ☑ **Limiting impacts to the traveling public and affected businesses and communities, including commitments to effective strategies to minimize congestion during construction:** Key features of this project were the complex traffic management plan (TMP) and maintenance of traffic (MOT) which took into account vehicle, cyclist, and pedestrian traffic during each phase of construction.. This project also included an extremely aggressive schedule for both design and construction that was mitigated using the "rolling D/B" method for all no structures work on the project.
- ☑ **Developing and managing effective communication strategies with business owners and other key stakeholders:** More than 80 percent of this project was constructed on the Airports Authority's property through agreements with VDOT. Design and construction involved close coordination with the Airports Authority to ensure that the project limits were within its approved property limits and that portions of the final construction that become its property exceeds its construction standards. In addition, project construction required day-to-day lane-closure coordination with the Airports Authority, VDOT, Airports Authority's noise-wall construction project, and the Silver Line project to ensure smooth and efficient operation of both the Dulles Toll Road and the Dulles Access Highway.



AWARDS

- 2019 Excellence in Infrastructure Award, HCCA
- 2019 "Design-Build" Honorable Mention, VTCA
- 2019 Award of Merit, DBIA-MAR

ATTACHMENT
3.4.1(b) –

**Lead Designer Work
History Forms**

ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: I-95 at Temple Avenue Interchange Improvements Location: City of Colonial Heights, VA	Name: Allan Myers VA, Inc.	Name of Client: VDOT Phone: 804-663-4188 Project Manager: R. Shane Mann, P.E. Phone: 804-720-4229 Email: shane.mann@vdot.virginia.gov	02/2015	11/2017	\$13,368	\$15,400	\$1,364

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant. The Work History Form shall include only one singular project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form.

RELEVANCE TO THE US 29 / HYDRAULIC ROAD PROJECT:

- ▶ VDOT Design-Build
- ▶ Roundabout Design
- ▶ Structures
- ▶ Survey
- ▶ Environmental
- ▶ Geotechnical
- ▶ Hydraulics & SWM
- ▶ TMP/MOT
- ▶ Utilities
- ▶ Lighting
- ▶ Public Outreach/Third-Party Stakeholder Coordination
- ▶ QA/QC
- ▶ Project Management

Team Personnel Participation:
 Brandon Shock, PE, DBIA (RDA)
 John Giometti, PE (RDA)
 Andrew Knowlton, PE (RDA)
 John Myers (RDA)
 Jimmy Street (RDA)
 Connor Eggleston, PE (RDA)

Project Scope: The I-95 at Temple Avenue Interchange Improvements replaced a signalized intersection with a roundabout and realigned the entrance and exit ramps. Implementing these project plans ultimately provided better sight distance, increased vehicle capacity, and improved transition from interstate speeds to the roundabout. Due to an adjacent development (Kroger) that was being built simultaneously, the roundabout lane configurations were increased and adjusted. A westbound bypass lane, along with free-flowing right turn movements (eastbound to the I-95 ramps and from the ramps to eastbound Temple Avenue), were incorporated into the design. A systematic demolition plan was set to remove the two bridges carrying traffic from the local roadway network to the interchange with I-95. Instead of replacing these bridges, fill was placed over an abandoned railroad bed beneath. Widening was maintained at all times for heavily traveled roadway where there was residential and commercial access. The project included the acquisition of right of way and easements from five parcels.

Relevant Project Elements:

- ☑ **Finishing contracts on time or earlier than the original contract fixed completion date:** The Design-Build Team managed to cut four months from the project schedule, with work finishing in November of 2017.
- ☑ **Delivering projects in developed urban corridors:** The project included design and construction of an expanded roundabout configuration within a limited project footprint in a developed urban area. A roundabout design was chosen to ensure a continuous flow of traffic, allowing queuing to be significantly reduced. In order to facilitate efficient construction, short-term detours were implemented to complete tie-in work on the interchange ramps and side streets. Traffic analysis was completed to justify the adequacy of these short-term detours within the urban environment.
- ☑ **Use of innovative design solutions and construction techniques:** To avoid stream and wetland impacts, RDA evaluated and designed a reinforced earth slope wall which is typically not standard practice for VDOT transportation projects and therefore required extensive coordination between the DB Team, VDOT, and wall manufacturer to achieve buy-in to the design. Ultimately, our Team was able to show the benefits of using a reinforced earth slope wall, which included schedule improvements, cost savings, reduced maintenance of traffic impacts, and long-term maintenance reductions.
- ☑ **Limiting impacts to the traveling public and affected businesses and communities, including commitments to effective strategies to minimize congestion during construction:** The City of Colonial Heights was engaged in the decision-making process not only through design but also throughout construction. Requests by the City were incorporated into the project to provide infrastructure (irrigation, power, and lighting) for a gateway entrance that would be constructed in the future. Furthermore, in a collaborative effort, the project team coordinated with the City and local businesses prior to implementing a detour to complete the I-95 ramp tie-ins in a single weekend. An intense Transportation Management Plan (TMP) was developed in order to clearly phase the roundabout construction to the traveling public. To allow for the public to adjust to these improvements, temporary striping and lane configurations were implemented to allow drivers to get used to the movements before permanent measures were set.
- ☑ **Developing and managing effective communication strategies with business owners and other key stakeholders:** The development of a Kroger adjacent to the project site necessitated adjustments and accommodations to the interchange design. The Design-Build team's close coordination with Kroger was instrumental in keeping the project ahead of schedule. The Design-Build team also worked closely with the City to upgrade key water and sanitary sewer facilities within the project during construction, preventing the need to disrupt traffic in the future to do so.
- ☑ **Delivering multiple elements of a project concurrently on a fast track schedule:** In order to exceed the project schedule requirements, the design-build team was able to overlap the ROW acquisition and utility relocation phases with construction. Parcels were prioritized based on the schedule allowing utility relocations to proceed in a phased manner. The team also provided advanced clearing, in addition to design coordination, to allow the utility relocations to proceed ahead of schedule and overlap with project construction.



AWARDS

- 2020 | VTCA Engineering Awards Program "Design-Build" Winner
- 2018 | ASHE National Project of The Year
- 2018 | DBIA-MAR Honorable Mention
- 2018 | ENR Mid-Atlantic Award of Merit

ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: 29 Widening Element of the Route 29 Solutions Design-Build Location: Albemarle County, VA	Name: Lane-Corman Joint Venture	Name of Client: VDOT Phone: 540-332-9093 Project Manager: Dave Covington, P.E. Phone: 540-487-6943 Email: dave.covington@vdot.virginia.gov	03/2015	10/2017	\$42,327	\$42,327	\$1,793

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant. The Work History Form shall include only one singular project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form.

RELEVANCE TO THE US 29 / HYDRAULIC ROAD PROJECT:

- ▶ Design-Build Project
- ▶ Roadway Design
- ▶ ADA Accommodations/Sidewalk
- ▶ Survey
- ▶ Environmental
- ▶ Geotechnical
- ▶ Drainage/Stormwater Management/E&S
- ▶ TMP/MOT
- ▶ Traffic Control Devices & Sign Structures
- ▶ Utility Relocation Coordination & Design
- ▶ Roadway & Pedestrian Lighting Design
- ▶ Public Involvement/Stakeholder Coordination

TEAM PERSONNEL PARTICIPATION:

Brandon Shock, PE, DBIA (RDA)
John Giometti, PE (RDA)
John Myers (RDA)
Jimmy Street (RDA)
Avtar Singh, PE, CCM (CES)

Project Scope:

RDA served as a major subconsultant and provided professional engineering services, survey, utility coordination, ROW acquisition, and public involvement for the Route 29 Widening element of the Route 29 Solutions Design-Build project from its Fredericksburg office, with support from their Manassas and Glen Allen offices. The project was designed to add capacity and improve the rural shoulder section along a heavy traffic corridor with large truck volumes. It expanded the existing road from four to six lanes for a length of approximately 1.8 miles from Route 634 (Polo Grounds Road) to Route 1719 (Towncenter Drive) in northern Albemarle County. Shoulder improvements included upgrading to an urban road section with curb and gutter and shared use path (SUP)/sidewalk on one side, which were crucial due to residential developments and businesses adjacent to the road.

Additionally, RDA provided contract-wide services (utility coordination, ROW acquisition, and public involvement) for the other two elements of the Route 29 Solutions project (Rio Road Grade Separated Interchange and Berkmar Road) as a major subconsultant to the Lead Designer.

Relevant Project Elements:

- ☑ **Finishing contracts on time or earlier than the original contract fixed completion date:** This project was completed four months ahead of schedule. RDA's design plans accounted for the challenges presented by this project, including a major box culvert extension/rehabilitation at Powells Creek and the presence of residential developments and businesses adjacent to the road. This allowed for construction to progress at an accelerated schedule.
- ☑ **Delivering projects in developed urban corridors:** The project's constraints included heavy traffic, and a large, parallel power distribution line in potential conflict. Additionally, the varying profiles of each direction of traffic created the need for bifurcated barrier.
- ☑ **Use of innovative design solutions and construction techniques:** Our team evaluated the detailed requirements of the project and opted to realign the roadway to avoid impacts to the large, costly parallel power distribution line. The roadway shift introduced some additional barrier bifurcation but saved the project \$4M overall.
- ☑ **Limiting impacts to the traveling public and affected businesses and communities, including commitments to effective strategies to minimize congestion during construction:** RDA's complex TMP involved several phases that brought existing vertical geometry to standard, maintained existing capacity, which resulted in significant cost savings for VDOT. Roadway design and MOT were considered simultaneously to eliminate costly retaining walls and minimize temporary pavement.
- ☑ **Developing and managing effective communication strategies with business owners and other key stakeholders:** RDA served as the Public Involvement lead on behalf of the contractor. Major activities included representation at monthly Project Delivery Advisory Panel meetings, establishing and maintaining a toll-free project hotline, and coordinating with VDOT's District Public Affairs Manager.
- ☑ **Utility Strategies:** Relocated utilities included electric, cable, gas, two water/sewer services, and six different communications lines. This coordination was on the critical path for construction activities to begin and was completed simultaneously for both projects (four months for Rio GSI and seven months for Route 29 Widening).
- ☑ **Quality Design:** RDA and the Contractor followed a QA/QC plan that had been tailored to the needs of this project. RDA's designers adhered to VDOT Minimum Requirements for QA/QC on DB and P3 Projects.



“Considering the Route 29 Solutions Design-Build contract as a whole, many are not aware that the Route 29 Widening project was actually the critical path to successful completion of the entire contract. As such, the Lane-Corman Team developed a design that utilized the existing right-of-way to the greatest extent possible which saved the taxpayers money and facilitated a quicker construction phase. The result is that the Route 29 Widening project was completed four months ahead of the already aggressive schedule.”

-Dave Covington, PE, VDOT

ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: Route 7 Widening and Bridge Rehabilitation Over Dulles Toll Road and Airport Access Highway Location: Fairfax, VA	Name: Wagman Heavy Civil, Inc.	Name of Client: VDOT Phone: 703-259-1940 Project Manager: Arifur Rahman, PE Phone: 703-259-1940 Email: md.rahman@vdot.virginia.gov	06/2015	05/2018	\$39,887	\$42,158 (Final – Due to Owner Approved Change Orders)	\$3,783

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant. The Work History Form shall include only one singular project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form.

RELEVANCE TO THE US 29 / HYDRAULIC ROAD PROJECT:

- ▶ VDOT Design-Build
- ▶ Wagman/RDA Team
- ▶ Roadway & Intersection Design
- ▶ Shared Use Path/Sidewalk/Pedestrian Bridge
- ▶ Survey
- ▶ Environmental
- ▶ Geotechnical
- ▶ Drainage/Stormwater Management/E&S
- ▶ TMP/MOT
- ▶ Traffic Control Devices & Sign Structures
- ▶ Utility Relocation Coordination & Design
- ▶ Roadway & Pedestrian Lighting Design
- ▶ Public Involvement/Relations
- ▶ QA/QC

Team Personnel Participation:

- Brandon Shock, PE, DBIA (RDA)
- John Giometti, PE (RDA)
- Mark Gunn, PE, DBIA (RDA)
- Andrew Knowlton, PE (RDA)
- John Myers (RDA)
- Jimmy Street (RDA)
- Connor Eggleston, PE (RDA)
- Tim Freeland, PE, CCM (RDA)
- Greg Andricos, PE (WAGMAN)

Project Scope: RDA provided professional engineering services from their Richmond office (supported by their Manassas office) serving as the Lead Designer to Wagman for the Route 7 Widening Over Dulles Toll Road (DTR) and Airport Access Highway (AAH) Design-Build project for VDOT. This \$42M D-B project provided multimodal improvements, reconstructed and widened the bridge over the DTR, widened Route 7, replaced and reconfigured signals through the interchange, reconstructed the ramps in all four quadrants, and provided continuous Shared Use Paths (SUPs) along Route 7 (east and westbound directions). The eastbound SUP is an at-grade crossing in the southwest quadrant, attached to the Route 7 bridge, and is a grade-separated crossing (prefab bridge) of the ramps in southeast quadrant. The westbound SUP is a grade-separated crossing (cast-in-place serpentine bridge in combo with a prefab bridge) in the northeast quadrant, attached to the Route 7 bridge, and navigates under the ramps in the northwest quadrant via a series of tunnel arches. The project constructed more than a mile of SUP through and around the interchange, creating an important new bicycle and pedestrian link across the Toll Road and into Tysons. The lighted SUP provides new multimodal access to the Silver Line's Metro Station and will tie into future trails.

Relevant Project Elements:

- ☑ **Finishing contracts on time or earlier than the original contract fixed completion date:** A number of the utility companies impacted by this project were unable to meet deadlines; however, the DB team ensured that this did not affect the overall project schedule by accelerating construction activities to make up for utility delays.
- ☑ **Delivering projects in developed urban corridors:** The project improved traffic operations by constructing additional travel lanes on the highly developed and congested Route 7 corridor. Design and construction of pedestrian tunnels, an SUP and sidewalk improved access and enhanced safety for bicyclists and pedestrians by creating a separate travel space. In addition to improvements to the final condition, a detailed sequence of construction was developed to maintain traffic, pedestrians and utilities during each stage bridge reconstruction along Route 7, the DTR, and the AAH.
- ☑ **Use of innovative design solutions and construction techniques:** During the development of the design, concerns were raised regarding the northeast quadrant (safety, future maintenance, constructability) that was originally identified as a tunnel under Ramps B and C. Our team developed a concept to change the underpass/tunnel into a overpass structure. The challenge was the need to maintain visual perspective under and through the structure. As a result, we designed a cast in place, curvilinear, slab bridge structure that required meticulous support of construction drawings/techniques. Additionally, we proposed the use of Betafence's wire mesh panel system that replaces chain link fence and provides added security and visibility.
- ☑ **Limiting impacts to the traveling public and affected businesses and communities, including commitments to effective strategies to minimize congestion during construction:** Extensive rush hour traffic has historically caused gridlock on Route 7. MOT/TMP designs were developed hand-in-hand with the contractor to ensure that means and methods were captured for efficiency while maintaining or enhancing safety. As a result, we revised and adjusted MOT during construction to address specific concerns affecting traffic along the corridor.
- ☑ **Developing and managing effective communication strategies with business owners and other key stakeholders:** The DB Team worked with VDOT to develop a public outreach plan, which included a Pardon Our Dust meeting. Project construction required daily lane closure coordination with the Airport Authority, VDOT, Airports Authority's noise wall construction project, and the Silver Line project to ensure smooth and efficient operation of both the DTR and the AAH. Roadway construction impacted WMATA easements for the Silver Line and traction power, which required their approval. Additionally, the DB Team had to place permanent survey markers on the WMATA pier columns to prove that construction would not cause settlement or shifting of their facilities.
- ☑ **Delivering multiple elements of a project concurrently on a fast-track schedule:** Along Route 7, the MOT design proposed completing the median bridge deck replacement in the initial construction phases, then moving the westbound lanes to the median to complete the bridge deck replacement on the west side, then shifting traffic to the newly completed portions and to complete the construction work. Through close coordination with both the contractor and the utility companies, we were able to accommodate utility relocations on the bridge sooner by installing the westbound girders early and working together to ensue relocations stayed on schedule.



PROJECT AWARDS:

- 2019 HCCA Excellence in Infrastructure Award
- 2019 VTCA "Design-Build" Honorable Mention
- 2019 DBIA-MAR Award of Merit



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