A Design-Build Project

ROUTE 7 WIDENING
AND BRIDGE REHABILITATION
OVER DULLES TOLL ROAD AND AIRPORT ACCESS HIGHWAY

STATEMENT OF QUALIFICATIONS

Prepared for

VDOT

State Project No.: 0007-029-139, P101, R201, C501, B617, B618
Federal Project No.: BR-5401 (738)
Contract ID Number: C00082135DB77

June 19, 2014
3.2 Letter of Submittal

June 19, 2014

Mr. Stephen D. Kindy, P.E.
Alternate Project Delivery Office
Virginia Department of Transportation
1401 East Broad Street
Richmond, VA 23219

RE: A Design-Build Project, Route 7 Widening and Bridge Rehabilitation over Dulles Toll Road and Airport Access Highway
Fairfax County, Virginia
State Project No.: 0007-029-139, P101, R201, C501, B617, B618
Federal Project No.: BR-5401(738) Contract ID Number: C00082135DB77

Dear Mr. Kindy:

G.A. & F.C. Wagman, Inc. (Wagman) is pleased to submit our response to your Request for Qualifications (RFQ) dated May 13, 2014 for the above referenced project, and in doing so, offers our Statement of Qualifications (SOQ) and strong interest in being selected to serve as the Design-Build for this very unique and important project. Wagman is teaming with Rinker Design Associates, P.C. (RDA) as the Lead Design Consultant. Together, our Team brings substantial design-build experience on numerous projects throughout the Mid-Atlantic region.

Founded in 1902, Wagman is a 4th generation privately owned heavy civil contractor specializing in transportation infrastructure and has grown to become a nationally recognized leader within the industry. Core competencies include design-build, bridges, structures, highway construction, interchange reconstruction, drainage, marine, modified latex concrete, roadway excavation, grading and geotechnical construction services. Wagman excels at overcoming challenges for complex projects, mega-projects, and similar highway projects, providing innovative solutions and alternatives with a talented and experienced workforce. Wagman has recently completed work in the Washington Metropolitan Area including both Design-Build and Bid-Build projects, receiving awards such as the Northern Virginia Transportation Alliance Award and the MdQI “Award of Excellence”. We have the local knowledge, local resources and expertise to successfully meet or exceed the requirements of this project as outlined in the RFQ.

3.2.1 Offeror’s Full Legal Name and Address. The full legal name and address of Wagman is as follows:

G.A. & F.C. Wagman, Inc.
3290 N. Susquehanna Trail, York, PA 17406-9754

Phone: (717) 767-8277
Fax: (717) 767-5546
3.2.2 Offeror’s Point of Contact Information. **Mr. David W. Lyle**, Vice President & Division Manager of Wagman, is the official representative and point of contact for the Wagman Team for all matters associated with this qualifications submittal. His contact information is as follows:

**David W. Lyle, Vice President & Division Manager**  
5911 Nena Grove Lane, Chester, VA 23831  
Phone: (804) 731-3707, Fax: (804) 778-4929  
Email: dwlyle@wagman.com

3.2.3 Principal Officer Information. **Mr. Gregory Andricos, P.E.**, Executive Vice President of Wagman, is a principal officer of G.A. & F.C. Wagman, Inc. and the legal entity with whom a design-build contract with VDOT will be written. His contact information is as follows:

**Gregory Andricos, P.E., Executive Vice President**  
3290 N. Susquehanna Trail, York, PA 17406-9754  
Phone: (717) 764-8521, Fax: (717) 767-5457  
Email: gmandricos@wagman.com

3.2.4 Offeror’s Corporate Structure. G.A. & F.C. Wagman, Inc. (Wagman) is a Corporation registered in the Commonwealth of Virginia and will take financial responsibility for this project. Wagman will have no liability limitations on this project and will provide a single 100% performance bond and a single 100% payment bond.

3.2.5 Identity of Lead Contractor and Lead Designer  
- Lead Contractor: G.A. & F.C. Wagman, Inc.  
- Lead Designer: Rinker Design Associates, P.C.

3.2.6 Affiliated/Subsidiary Companies. All affiliated and subsidiary companies are identified on Attachment 3.2.6 in the Appendix.

3.2.7 Debarment Forms. Executed Certification Regarding Debarment Forms are included in the Appendix.

3.2.8 Offeror’s VDOT Prequalification Evidence. Wagman is active, in good standing, and prequalified with VDOT (Vendor Number: W002). A copy of Wagman’s prequalification certificate is located in the Appendix.

3.2.9 Evidence of Obtaining Bonding. Wagman has the capability to obtain a performance and payment bond for the $29.7 million estimated contract value of the Project, as exhibited by the surety letter from The Continental Casualty Company is included in the Appendix.

3.2.10 Full Size Copies of SCC and DPOR Registration Documentation (Appendix). Please see Attachment 3.2.10 and full-size documentation in the Appendix for SCC and DPOR registrations of Team Members.

3.2.11 DBE Statement within Letter of Submittal (8%). Wagman is fully committed to achieving 8% DBE participation for the entire value of the Project.

The narrative in the following pages highlights the qualifications and experience of our firms and key personnel presented for the Route 7 Widening and Bridge Rehabilitation over Dulles Toll Road and Airport Access Highway project. We look forward to your review of our submittal.

Respectfully,

**G.A. & F.C. WAGMAN, INC.**

[Signature]

David W. Lyle  
Vice President & Division Manager
3.3 Offeror’s Team Structure
3.3 Offeror's Team Structure

The Wagman Team will provide VDOT with an experienced and integrated DB team for the Route 7 Widening and Bridge Rehabilitation over Dulles Toll Road and Airport Access Highway (DTR&AAH) project. Wagman has selected individuals from across our organization to provide the most qualified staff for this Project. These individuals will report to executive management of Wagman throughout construction.

3.3.1 Identity of and Qualifications of Key Personnel

The individuals from our Team (Key Personnel), below, will be responsible for overseeing the different components in the delivery of this project. It is important to note that our Team has been strategically selected, from key personnel to key subcontractors/subconsultants, to best deliver the Route 7 Widening and Bridge Rehabilitation over DTR&AAH project to the Department. Our Key Personnel each possesses extensive Design-Build (DB) experience to make this a well-integrated and experienced team.

3.3.1.1 Design-Build Project Manager—Greg Andricos, P.E. (G.A. & F.C. Wagman, Inc.)

Mr. Greg Andricos, P.E. will serve as the Design-Build Project Manager (DBPM) and will oversee the project, to include design, construction, construction quality management and contract administration. Mr. Andricos has over 22 years of construction experience and is the Executive Vice President for Wagman. His most recent achievements as the DBPM on the Fairfax County Parkway Phases I, II, and IV give proof of his qualifications and experiences.

As DBPM, Mr. Andricos will report directly to VDOT at an executive level for all project activities including contract administration, scheduling, design, construction, and quality. He will directly manage the Key Personnel: Richard Allen, P.E. (Quality Assurance Manager), Darell Fischer, P.E., DBIA (Design Manager), and Mike Mansfield (Construction Manager). Also reporting to Mr. Andricos will be additional personnel whose roles are instrumental to the project’s success.

3.3.1.2 Quality Assurance Manager—Richard Allen, P.E. (Quinn Consulting Services, Inc.)

Mr. Richard Allen, P.E. will serve as the Quality Assurance Manager (QAM) on the Project. In this role, Mr. Allen will be independent of the Contractor QC team and will be responsible for overseeing compliance with the approved project specific QA/QC Plan as well as the VDOT Minimum Standards for Design-Build and PPTA Projects. As the QAM, Mr. Allen will have the authority to stop work on the project should it significantly deviate from the QA/QC Plan and will also be responsible for generating Non-Compliance Reports (NCRs) and deficiency logs for non-conforming work.

Mr. Allen has a Master’s Degree in Civil Engineering and is a licensed professional civil engineer. His professional record includes over 20 years of experience in quality assurance and engineering with a heavy emphasis in the transit and transportation disciplines. His DB transit and transportation experience includes Quality Assurance on both the design and construction phases of the Washington DC Silver Line Metro Extension and Quality Assurance during the construction phase of the I-95 Express Lanes South of Washington, DC. Mr. Allen has provided professional services on both DB and Design-Bid-Build transit and transportation projects where he has held the positions of Quality Assurance Manager (QAM), Resident Engineer, Regional Engineer, and Senior Structural Engineer. His responsibilities have included Quality Assurance Management, supervision of Quality Assurance inspection staff, supervision of Structural Design engineering staff, and light rail station Structural Design (which includes structural, architectural, and utility coordination design elements). In summary, his experience includes extensive work with light rail, roadways, bridges and abutments, mass transit stations, and project structural elements.

On this Project, Mr. Allen's responsibilities will include: holding preparatory meetings before the start of each new contractor activity; overseeing QA inspection staff; assuring that the minimum testing and inspection frequencies as defined in the tables of the Minimum Standards for DB projects are met for both QA and QC; reviewing and signing monthly Contractor pay estimates; developing and following through to successful
resolution project NCR's and deficiencies; and assuring that all project QA/QC records are kept up-to-date and in accordance with the approved project QA/QC Plan.

### 3.3.1.3 Design Manager—Darell Fischer, P.E., DBIA (Rinker Design Associates, P.C.)

Darell Fischer, P.E., DBIA will serve as the Design Manager (DM) for the project and be responsible for overall management of the QA/QC programs for design and will report directly to the DBPM. He will be responsible for overseeing all QA/QC activities associated with multi-discipline design elements of this project. Mr. Fischer shall maintain close communication with the DBPM and shall ensure the Project is completed in accordance with the requirements of the contract documents. Our Team’s selection of Mr. Fischer is strategic due to his extensive DB experience in Virginia and his ability to manage all technical and disciplinary aspects of the design. He brings substantial roadway and pedestrian design expertise to the team with 27 years of experience. His DM experience on DB projects includes four VDOT projects: Route 36 Roadway Improvements, Middle Ground Boulevard Extension, I-581/ Elm Avenue Interchange Improvements, and Rolling Road/Franconia-Springfield Interchange Improvements. Additionally, Mr. Fischer is a current member of the VTCA Engineering Consultant Leadership Committee.

He will be assisted by Mr. Erik Shively, PE, PTOE, who will provide an independent design QA review; Mr. Shively is not part of the day-to-day production team. Mr. Fischer shall perform all of the design oversight reviews along with Mr. Shively. Design QC will be performed at the office where the work is conducted by a qualified independent staff person of each team member [per section 4.1.4 of the current minimum requirements] but will also be technically reviewed by Mr. Shively for QA. Under this procedure, Mr. Fischer will provide VDOT with draft design plans for review and approval to confirm that the design work complies with the requirements of the Contract Documents, prior to initiation of construction activities on the Project.

### 3.3.1.4 Construction Manager—Mike Mansfield, P.E. (G.A. & F.C. Wagman, Inc.)

Mike Mansfield, P.E. will serve as the Construction Manager (CM) and will plan, schedule, and execute construction. He will oversee a multi-disciplined staff of construction professionals and subcontractors. Mr. Mansfield will also oversee all construction QC activities to ensure the materials used and work performed meet contract requirements, plans and specifications. As the CM, Wagman commits that Mike will be present on-site full time for the duration of the construction operation.

Mr. Mansfield has 15 years of bridge and roadway construction experience. Having a Professional Engineers License and Masters of Engineering degree allows Mr. Mansfield to provide critical constructability input during the design phase because he understands both design and construction. He has developed project management skills which include cost estimating, CPM schedule development, planning and coordinating traffic control, and planning and scheduling of project staff. With regards to construction quality control, Mr. Mansfield will also be the main interface for the construction quality control manager, the quality control testing technicians and the off-site materials sampling and testing. Mr. Mansfield has worked on a number of DB projects in Virginia including: Route 61 over the New River, Virginia Capital Trails over Route 895, I-495 HOT Lanes and DTR Interchange, James Madison Highway (Route 15) Improvements, Watkins Center Parkway (Route 60) Improvements, and Route 288 PPTA DB.

### 3.3.2 Organizational Chart and Narrative

#### Team Members.

The following firms will support Wagman and RDA on this Project:

- **Quinn Consulting Services, Inc. (QCS)** will provide the Quality Assurance Manager, QA inspection services, and oversight of the QA DBE laboratory (Specialized Engineering).
- **Whitman, Requardt & Associates, LLP (WR&A)** will provide bridge and geotechnical design as well as overlapping support in other areas of design.
- **Branch Highways, Inc. (BHI)**, as an exclusive subcontractor to G.A. & F.C. Wagman, Inc., will provide grading, storm drainage, and utility construction services.
- **DMY Engineering Consultants, Inc. (DMY)** will provide geotechnical drilling and laboratory services for design and Construction QC services.

The Wagman Team organizational structure shows the chain of command and identifies major functions to be performed for the Project. The Project Team Organizational Chart is located below.
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 routine and open communication. VDOT’s participation in formal partnering will be requested to foster an atmosphere of trust and transparency between VDOT, the DB team, and project stakeholders. This will encourage open dialogue when issues arise that may jeopardize the success of the Project.

VDOT: 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, construction, and ROW acquisition. Open lines of communication between the QAM and VDOT will assist with monitoring quality assurance oversight.

Our Public Relations Manager (PRM) will conduct Open houses and other informal outreach efforts to allow the public to view plans and discuss concerns through the design and construction process. The DBPM, DM, and CM will be present to answer questions and address possible concerns. We anticipate VDOT’s oversight and support in our coordination efforts with project stakeholders. Our PRM will facilitate informal meetings and outreach to stakeholders to minimize VDOT’s direct efforts associated with public outreach.

Although our DBPM is not the point of contact through procurement, he will serve as VDOT’s single point of contact for all design and construction related issues upon contract execution. Reporting to the DBPM are four primary positions; the QAM, DM, CM, and PRM. This structure, combined with our DBPM’s maintenance of an action item log for potential issues and 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. 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.

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. WR&A 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 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.

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<thead>
<tr>
<th>Name</th>
<th>Yrs Exp</th>
<th>Expertise</th>
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<tbody>
<tr>
<td>Brandon Shock, PE</td>
<td>15</td>
<td>Roadway design, pedestrian access, and TMP</td>
</tr>
<tr>
<td>Jeremy Schlussel, PE</td>
<td>18</td>
<td>Bridge, foundation, and retaining wall designs</td>
</tr>
<tr>
<td>Nikhil Deshpande, PE</td>
<td>12</td>
<td>Water resource design, hydrology, and hydraulics</td>
</tr>
<tr>
<td>Stephen Seay, LS</td>
<td>28</td>
<td>Topographic and boundary surveys and platting</td>
</tr>
<tr>
<td>John Myers</td>
<td>14</td>
<td>Coordination with utility companies and cost estimates</td>
</tr>
<tr>
<td>Jeff Basford, PE</td>
<td>14</td>
<td>Geotechnical analysis, reports, and recommendations</td>
</tr>
<tr>
<td>Janet O’Neill, PWS, PWD</td>
<td>40</td>
<td>NEPA, Wetlands, and VSMP permitting</td>
</tr>
<tr>
<td>James Street</td>
<td>38</td>
<td>ROW negotiations and management</td>
</tr>
<tr>
<td>Adam Welschenbach, PE, PTOE</td>
<td>11</td>
<td>Traffic analysis, signal design, and TMP</td>
</tr>
<tr>
<td>Erik Shively, PE, PTOE</td>
<td>20</td>
<td>Roadway, traffic, and TMP designs</td>
</tr>
</tbody>
</table>
Construction: The CM will report to the DBPM and communicate directly with the QAM/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 during both to ensure construction is consistent with the project design. Our CM will be on-site for the duration of construction operations and will personally oversee the entire construction team. Construction leads have been identified for Bridges, Grading, Utilities, MOT Coordination, Construction QC, and Safety—all reporting to the CM.

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 in upcoming work.

Executive Task Force Review Committee: The Executive Task Force Review 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 Task Force Review Committee is composed of vice presidents from our key design and construction team members in order to facilitate quick responses and resolutions. Additionally, they bring extensive experience on DB and complex projects within their areas of expertise.
3.4 Experience of Offeror’s Team
3.4 Experience of Offeror’s Team

The Wagman Team’s collective experience with DB projects and major interstate widening projects, as well as our proven cooperative work history, provides VDOT with a strong team for Route 7 Widening and Bridge Rehabilitation over DTR&AAH Project. This organizational experience is supported by key personnel that successfully managed similar risks on the projects included as Work History Forms in Appendix 3.4.1.

G.A. & F.C. Wagman, Inc. (Wagman), the Offeror, Legal Entity, Prime/General Contractor for this Project, is a heavy civil contractor specializing in transportation infrastructure since 1902 and has grown to become a nationally recognized leader within the industry. We are an experienced DB contractor and have partnered to complete over $1.5 billion of highways and bridges in the Mid-Atlantic region during the last 10 years. We will be responsible for overall project management and will self-perform the majority of construction as the general contractor. With innovative engineering experience and a large fleet of heavy equipment, we are well positioned to manage this project and can ensure a successful end result. Our local resources and knowledge of the area (which are enhanced through the recent acquisition of D.W. Lyle Corporation and Key Constructors, Inc.), combined with decades of experience working with owners, contractors, and designers allows us to be a valuable resource and provide competitive advantages as the Lead Contractor. David Lyle, Vice Chairman and long-standing member of VTCA’s Structure and Bridge sub-committee, will assist during design and construction as a value-added position and lead the Executive Task Force Review Committee.

Wagman has extensive DB experience in the Mid-Atlantic region. Wagman has been working on DB projects for over 40 years. Recent projects include:
- ICC Contract A (DC Metro Area)
- ICC Contract B (DC Metro Area)
- Route 895 PPTA
- Route 288 PPTA
- James Madison Highway (Route 15) PPTA

Rinker Design Associates, P.C. (RDA) will be the lead designer for the Project and provide roadway, utility, pedestrian access, and drainage design as well as utility coordination and right-of-way acquisition (as needed). RDA is a mid-sized firm of over 100 employees with locations in Manassas, Fredericksburg, and Glen Allen. RDA has been providing professional services throughout Virginia for over 32 years. RDA is a Virginia-Certified Small Business and a leading provider of professional civil engineering, transportation engineering, environmental, surveying, right-of-way acquisition, utility design and coordination, and permitting services. RDA consistently receives “exceeds expectations” on their consultant performance reports from the Department, including scores ranging from 3.76 to 4.0 on the Stringfellow Road project.

RDA’s DB experience includes 11 projects in the last 10 years. Projects include:
- Route 36 Roadway Improvements
- Middle Ground Boulevard Extension
- I-581/Elm Avenue Interchange Improvements
- Crosspointe Centre Roadway Improvements
- James Madison Highway (Route 15) PPTA
- I-66/Route 15 Interchange Reconstruction
- Sudley Manor Drive PPTA
- GMU West Campus Road
- Rolling Road/Franconia-Springfield Interchange Improvements
- Heritage Center Parkway
- Prince William Parkway

Quinn Consulting Services Incorporated (QCS) is a 100% woman-owned DBE/WBE engineering consulting firm that will provide QA services on this DB project. QCS has supported their clients from all perspectives on large and small DB projects. QCS has worked as owner QA representatives, contractor QC inspectors, and consultant engineer quality assurance managers where they have served as an integral part of project QA/QC teams delivering a quality product by working in partnership with owners, design engineers, and contractors. Some of QCS’s representative DB projects in Virginia include:
Route 7 Widening and Bridge Rehabilitation over Dulles Toll Road and Airport Access Highway
Fairfax County, VA

- Dulles Metrorail Extension, Phases 1 and 2
- I-495 HOT Lanes
- Fairfax County Parkway, Phase III
- I66/Route 15 Interchange Reconstruction
- Waxpool Road
- I-81 Truck Climbing Lanes
- Route 50 Traffic Calming near Gilberts Corner

**Whitman, Requardt and Associates, LLP (WR&A)** will provide structural analysis and design services in addition to geotechnical design services for this project. WR&A has provided engineering and planning services in the Mid-Atlantic region for nearly 100 years. WR&A and Wagman have successfully partnered on numerous projects over the years, ranging from large interchanges ($200 million) to small bridge widening and rehabilitation projects ($0.5 to $8.5 million). WR&A, with a staff of over 640 company-wide, has transportation and environmental planners, and engineers, including highway, traffic and bridge engineers with over 30 years of experience. This experienced staff allows knowledge to be passed through the disciplines at all levels and provides excellent resources for our clients.

WR&A has established itself as a regional leader in the capital improvement planning and civil engineering field by setting standards and leading in innovative technology; this enables the firm to establish an excellent reputation within the planning and engineering community. WR&A has been recognized as a Top 200 Engineering Firm by *Engineering News-Record* for the past decade. Some of WR&A’s representative DB projects include:

- Walney Road Bridge Replacement and Road Widening
- I-95/I-495 at Arena Drive from MD 202 to MD 214
- Fall Hill Avenue Widening and Mary Washington Boulevard Extension
- MD 237 from MD 235 to Pegg Road

**Branch Highways, Inc. (BHI),** a wholly owned subsidiary of The Branch Group, Inc. (an employee-owned Virginia corporation), is a dedicated subcontractor providing grading, storm drainage, and utility construction services. Headquartered in Roanoke, BHI has been constructing transportation infrastructure since the mid-1960s. BHI has successfully partnered with Wagman’s Virginia division on several projects in recent history.

BHI provides construction services for both public and private owners, including numerous large and complex projects. BHI is one of five subsidiary operating companies of The Branch Group, Inc., currently ranked No. 232 overall nationally by *Engineering News-Record (ENR).* Some of Branch’s representative DB projects include:

- Route 58 PPTA
- James Madison Highway (Route 15) PPTA
- GMU Campus Drive
- Heritage Center Parkway
- Prince William Parkway

**Design-Build Approach**

The Wagman Team has a structured approach to the DB process. Through continuous refinement of our processes (independently and now together), our approach includes:

- Selecting teaming partners we have worked successfully with on other similar Projects.
- Committing key personnel experienced at assessing and managing Project risks based on successful similar Project experience.
- Continuously analyzing and mitigating risks during the proposal, design, and construction phases.
- Utilizing innovative designs to avoid and minimize potential impacts to the traveling public, utilities, environmental resources, and ROW acquisition requirements while maintaining the highest quality standards in design and construction.
- Incorporating construction means and methods and phasing approaches into the proposal / design process and continuing through detailed construction planning and implementation.
- Partnering with VDOT and project stakeholders to achieve project objectives and coordinate effectively.
We will use frequent design/construction task force meetings and management meetings to execute our DB approach, as we have on previous projects.

**Team Integration**

Wagman, RDA, BHI, WR&A, and QCS have been working together in various forms and configurations for the past decade. Our familiarity with VDOT work and each other not only make this a strong team, but one that will hit the ground running at project NTP. Highlighted in the figure below are several projects on which our Team members have, in some combination, worked together.

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<tr>
<th>Team Integration Matrix</th>
<th>Wagman</th>
<th>RDA</th>
<th>QCS</th>
<th>WR&amp;A</th>
<th>BHI</th>
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<td>James Madison Highway (Route 15) PPTA</td>
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**Work History Forms (Appendix 3.4.1)**

The Wagman Team has included work history forms for those Projects that best represent our qualifications and direct working experience for this Route 7 Widening and Bridge Rehabilitation over DTR&AAH project. Wagman has included work history forms from our recent acquisition, D.W. Lyle and some of our recent Washington Metro work. Wagman routinely utilizes equipment and manpower from affiliated companies to provide clients with the most qualified staff for the specific challenges presented by an individual project. Construction staff was selected from these projects for this Project because they have successfully managed similar scope and risk elements based on this specific experience. These individuals will report to executive management of Wagman for the duration of the Project.

**Lead Contractor Work History**
- HOT Lanes—I-495 Beltway & DTR&AAH Interchange
- I-95/I-495/I-295 Interchange, Inner Loop Local & Inner Loop Express and Pedestrian Trail
- I-95/I-495/MD 210 Interchange, Mainline and Ramp B and Pedestrian Trails—Woodrow Wilson Bridge Project

**Lead Designer Work History**
- Stringfellow Road Widening
- James Madison Highway (Route 15) PPTA
- I-581/Elm Avenue Interchange Improvements
3.5 Project Risks
3.5 Project Risks

The Wagman Team has carefully considered the key elements of work for the Route 7 Widening and Bridge Rehabilitation over DTR&AAH project to develop a risk assessment strategy. In our risk assessment, we considered numerous potential risks to the project including geotechnical conditions, environmental coordination, and right of way but concluded that BRIDGES, UTILITIES, and STAKEHOLDER COORDINATION will be most critical to the success of this Project.

**RISK 1: BRIDGES**

**Risk Description and Criticality.** There are multiple risks associated with utilizing the existing pier elements (pier foundations and pier stems) for the proposed widening and superstructure replacement of the two existing bridges. The first risk is condition based—the existing bridge structures were built in 1961 as simple span structures and have been in service for over 50 years; exposing the reinforced concrete pier elements to yearly freeze/thaw cycles and roadway salts from above through leaking joints and from below by roadway salt spray. Based on available information neither bridge has had any repairs or major rehabilitation performed to the piers. The second risk is design based—the existing bridge structures were designed under the 1957 AASHTO Standard Specifications for Highway Bridge Design. Subsequently, the EBL Bridge was widened in 1985 under the 1981 AASHTO Standard Specifications for Highway Bridge Design. These standards did not take into consideration various design elements that are currently accounted for in today’s codes/standards, including, but not limited to shear design, earthquake loading, foundation design (including pier impact), geometry standards (shoulder width and clearances) and service life.

**Impacts.**

**Material Risk:** As with many projects built in the 1960s, these bridges were designed and built as simple span bridges and with a more permeable concrete than what is used today. The presence of joints and the more permeable concrete causes the bridge structures to be more susceptible to being contaminated with chlorides from roadway salts.

**Design Risk:** As with all projects where existing elements are proposed to be re-used and widened, it is critical that the Engineer review how the existing bridge structures were designed and how current service loads may impact the existing bridge elements. The existing pier foundations are founded on residual soils and the installation of new foundations adjacent to these existing foundations could affect the existing bridge structures. The use of LRFD for design of the new pier elements and the Standard Specifications for design of the existing pier elements may subject the structures to differential settlement issues. The incorporation of the existing pier elements into the design will most certainly preclude the use of heavier prestressed concrete superstructure alternatives which could provide a more economical and durable long term solution. The use of continuous steel superstructures to eliminate the joints will increase loads to the existing pier foundations which risks having to perform major modifications to the spread footing foundations.

Additionally, the design may require a Design Waiver for the required minimum two-foot offset from the through lane to the new TL-5 barrier system placed along the piers for the DTR&AAH.

Finally, the design of the new pier footings may require significant encroachment into the adjacent through lanes of the DTR&AAH. This encroachment would require extended lane closures, which may cause severe congestion on the DTR&AAH.

**Construction Risk: Bridges:** The narrow median between the two existing bridges will make construction and erection of the new superstructure difficult. Existing lanes will need to be maintained while sufficient new structure is built to effectively shift traffic and still maintain two through lanes with right turn movements, in each direction. This is exacerbated by the fact that temporary sheeting will be required longitudinally next to the existing bridges to relocate the abutments further back to facilitate future CD lanes along the DTR&AAH. These constraints also make pile driving efforts very difficult, affecting budget and schedule requirements.
Pedestrian Structures: Given the close proximity of some of the pedestrian crossings to the ramp intersections with Route 7 as well as major utilities in the interchange, phased construction of the underpasses may not be feasible or reasonable thereby significantly affecting cost and schedule.

Mitigation Strategies. To mitigate the risk of the impact from these events, and to minimize VDOT’s efforts, the Design-Builder will employ the following strategies:

Material Mitigation Strategy: To mitigate the material condition, a full hands-on field investigation will take place to record the deficient concrete elements present in the sub-structure. In addition to recording the deficient concrete, the sub-structure elements would be tested to record their chemical compositions. The chemical composition analysis would include half-cell potential, chloride measurements, petrographic analysis, and/or compressive strength tests to provide a comprehensive understanding of existing material conditions. Once the results of the material testing have been received, the long-term material performance risks can be minimized by including a passive cathodic protection system or a combination of chloride extraction and long-term cathodic protection.

Design Mitigation Strategy: The DB Team is a leader in the bridge design and construction fields, having worked on numerous VDOT bridge projects that involved investigating existing conditions and how to apply the current codes appropriately. The Team has a unique knowledge working on existing bridge structures to extend their service life and will determine the most appropriate solution for these bridges from both a design and construction perspective. Our Team will conduct a review of the existing elements to identify where the sub-structure might be deficient compared to current standards and determine how these existing elements can be incorporated into the project with minimal impacts. Strategies to be reviewed will include the use of lightweight concrete, superstructure types, and simple span with continuous for live load versus fully continuous superstructure to eliminate the joints, which is VDOT’s preferred alternative.

Construction Mitigation Strategy: Bridges: Wagman has extensive experience working in confined areas as it relates to support of excavation, foundation construction (including pile driving, drilled shafts and micropiles) and girder erection. Phasing of the bridge construction, taking into account girder spacing (proposed and existing) will be critical in determining the phasing of the project as a whole. Working hand in hand with the bridge designers (WR&A), Wagman will identify needed work areas for constructing each phase. This may require adjustment of girder spacing (and number) in order to maximize constructed elements while maintaining traffic on the existing structures. In order to maintain traffic without significant impact to Route 7 or the DTR&AAH, the most cost effective solution may not be feasible. Constructability will be a determining factor for the foundation type. Innovative construction methods that Wagman has experience with will be investigated such as the use of micropiles or low headroom pile hammers as well as drilled shafts.

Pedestrian Structures: Where feasible, the most cost effective solution is anticipated to be phased construction, which is a strength of Wagman’s. Phased construction presents challenges due to support of excavation, limited working room, maintenance of traffic, and protection of utilities. Wagman has gained knowledge from completing a multitude of phased projects which will assist in designing and constructing this project. Some of the phased projects that Wagman has successfully constructed include: Route 1 over Stony Creek, Route 654 over Swift Creek, Route 40 over Reedy Creek, Route 60 over NSRR, Route 30 over CSX, Route 156 over CSX and Route 150 over CSX. Two recent projects (Route 49 over NSRR and James Madison Highway (Route 15) Improvements) involved pedestrian access in addition to phased construction.

Where pedestrian structures are in close proximity to existing intersections or utilities, alternative methods of construction will be explored. Our Team will investigate the use of various tunneling operations to determine the best solution. This may change the shape of the underpass but will not change the effective area of the pedestrian passage.

Role of VDOT and Other Agencies. VDOT’s role will involve review and oversight of these activities during the scope validation period and responsibility for approval of major changes in the scope that may result (i.e., complete bridge replacement).
RISK 2: UTILITIES

Risk Description and Criticality. Utilities are a major risk with any roadway improvement project. The cost implications to VDOT on a job such as this one are minimal due to the fact that most of the utilities in conflict exist within VDOT Right of Way. The major risk that utilities pose to this project lies in the unpredictability they can give to the project schedule. There are numerous utilities that may require relocation to accommodate this project, and there are two main ways to mitigate the risk. The first, and most important mitigation strategy will be to avoid utility conflicts wherever possible. If a utility doesn’t have to move, there is zero impact to the project schedule. Communication and coordination of relocations is the second key in mitigating the project schedule risks. As much as we would like to avoid all of the utilities on a project, impacts are inevitable. Where conflicts cannot be avoided, coordination with the utilities involved will play a large role in reducing the risks involved, and we have good experience working with utility owners.

Impacts. The impacts to utilities occur throughout the project, but the main areas of concern to our Team are listed below:

- **Existing Bridge Attachments.** One of the largest impacts this project poses to the utilities is the replacement of the bridge. Multiple fiber optic companies have bridge attachments on the existing bridge that would be removed and the approaches to the bridge will be impacted by the new bridge abutments, affecting fiber companies and overhead electric lines. Verizon, Level 3, XO, MCI, AT&T, and Cox all have fiber optic lines that run along Route 7 that will be impacted by this project.

- **Asphalt Shared Use Path in Southeast Quadrant.** A major utility impact from a cost and schedule perspective is the conflict with the shared use path at the crossing of Ramps E, D, and A. The existing duct bank, connecting Traction Power Substations powering MWAA’s Silver Line Metro Rail, which is owned and operated by Dominion Power, may require relocation due to impacts both by the retaining walls and the proposed cuts required to get the shared use path under the ramps.
Mitigation Strategies. In order to mitigate the impact caused by the bridge reconstruction, our Team will investigate constructing bore casings on both sides of the bridge under the DTR to give the fiber companies a route in which to relocate their facilities free of conflict. As a result, the utility companies will be able move their fiber lines prior to the bridge construction without the need for costly, temporary relocations.

To address the mitigation of the Shared Use Path conflicts, our team will strategize everything from alignment and grade of the pedestrian trail to means and methods to find a solution that avoids the impacts where feasible and lessens the impacts where avoidance is impractical. We will first confirm the location of the concrete-encased duct bank by test pitting the line. Once we know the exact location of the duct bank, our strategies will be refined and the most cost effective approach will be implemented. Some possible solutions may include: shifting the Pedestrian Underpasses to the north slightly to avoid the ductbank manholes and adjusting the location of retaining walls to keep the lines within the undisturbed areas; vertical adjustments to the trail to go below the ductbank; use of utility bridges; and the use of tunneling operations versus staged construction.

Role of VDOT and Other Agencies. When it comes to utility coordination on DB jobs, VDOT’s main role will be oversight of the utility coordination process. Participation in the UFI meeting and review of approved plan and estimate packages are some of the main tasks in which we expect VDOT will participate. All coordination will be done by our Team, and with the relationships we have with all of the utilities involved with this project, the need to involve VDOT in extreme cases should be non-existent. VDOT will be informed on a regular basis with Utility Status Reports during the course of the utility relocations.

RISK 3: STAKEHOLDER COORDINATION

Risk Description and Criticality. VDOT has performed extensive public outreach prior to the Design Public Hearing on February 20, 2014. The focus of the comments received at the Hearing appear to provide for public support for the project and the needs to address traffic comments, landscaping, and the location of the shared use path, which comply with requirements of the RFQ and future RFP. The Wagman Team, after review of the available Public Hearing Transcript, the NEPA document, and our familiarly with the project location, feels that the risk associated with Public Outreach and Stakeholder Coordination will be in developing a consensus among the diverse group of Stakeholders, and building on the outreach started during the early stages in a manner in which the public trust, support, and confidence in the project will be maintained.

Stakeholders include: communities and local residents to the west; vast commercial interests associated with Tysons Corner, as well as some mixed use development to the east; pedestrians that travel through the corridor to and from the residential/commercial areas; vehicular traffic; utilities; WMATA; and MWAA. Each stakeholder has their own unique concern; however, the single biggest commonality amongst them will be how the project [Maintenance of Traffic (MOT)] affects their daily routine during construction.

Impacts. Impacts to the project arise when stakeholder expectations and perceptions are not achieved, resulting in public outcry which can cause costly modifications or adjustments in construction features or sequencing, in turn impacting schedule, all in order to mitigate public concerns. Construction of the bridge while maintaining the existing structures and incorporation of the existing substructures into the finished product pose unique challenges, as discussed in the first risk. The MOT associated with this work will be the primary impact on Stakeholders and the impacts that may arise.

Additionally, community/stakeholder buy-in to potential changes in the pedestrian trails due to probable impacts to utilities and the need to use multiple means and methods which may result in different architectural character (i.e., shape and aesthetic treatment) may affect schedule and cost. 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 impacts to schedule or cost or both.

Mitigation Strategies. The Wagman Team will develop a Media and Public Information Plan that will provide proactive, effective, and responsive project communications that will meet or exceed VDOT’s goals for the project. The plan may include such items as a project website, Facebook site, newsletters, and e-mail
notifications. The first and most important step will be to set up a public information team responsible for all media and public information efforts for the project, in which all external information will flow through. Such a team will allow the project delivery team to effectively speak with "one voice". The intent is to proactively advise stakeholders of bike/pedestrian access, work-hours as well as updated commuter and traffic information, including traffic pattern changes, periods of lane closures, traffic delays, work zone accidents, alternate routes available, and alternate forms of transportation available. A contact person for direct communication with stakeholders to remedy any reasonable issues or questions will be identified early in the process and a system will be developed for documenting and responding back to these stakeholders. The DB Team will coordinate with all stakeholders and prepare displays and exhibits, and presentations, as needed to address their concerns, including computer-simulated videos showing a completed project drive-through, press releases, media briefings, groundbreaking and ribbon cutting ceremonies, project tours, and public information meetings.

An in-depth and detailed MOT design will be developed along with traffic models for each phase of construction. As an added measure, observational data during field implementation will be obtained and incorporated back into the model to identify adjustments which may help alleviate stakeholder stresses. Additionally, an incident management plan will be developed for accidents occurring within the project limits, including accident prevention strategies, emergency procedures, reporting requirements, and mitigation strategies associated with the coordination and assisting of VDOT’s Public Affairs Office, our Public Information team and local news media.

To mitigate the potential alignment adjustments and design changes that may be needed to avoid utilities, our team will meet with stakeholders soon after NTP to advise them of the issues/concerns; to establish a trust and working relationship; and to ensure that they have a voice in the possible solutions to the issues. We will make them a part of the solution.

Wagman has employed many of these strategies on past projects such as the ICC, Woodrow Wilson Bridge, and I-95/I-695 Interchange.

**Role of VDOT and Other Agencies.** VDOT will have the ultimate say in the level of and type of Public Outreach the DB Team undertakes. MWAA will have to grant a permit for construction over the MWAA right-of-way and permit conditions may require some level of communication with the Public. Fairfax County may require a plan to notify First Respondents of lane closures, traffic shifts, work hours, etc. in order to maintain public safety. In coordination with VDOT, the Public Information Plan will identify all potential media and public stakeholders, consisting of businesses along the project corridor, communities along the corridor and others impacted by the project, all forms of media, governmental agencies (elected/appointed officials and their staffs), and civic associations and citizen groups. It will be the role of the DB Team to provide information in a manner that considers the safety of both the individuals working on the project and for the traveling public a top priority.
Attachment 2.10: Form C-78-RFQ
Acknowledgement of Receipt of RFQ, Revisions, and/or Addenda
ATTACHMENT 2.10

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

RFQ NO.      C00082135DB77
PROJECT NO.:  0007-029-139, P101, R201, C501, B617, B618

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 05/13/2014
   (Date)

2. Cover letter of RFQ Addendum No. 1 06/04/14
   (Date)

3. Cover letter of
   (Date)

[Signature] 6/17/2014
SIGNATURE    DATE
ATTACHMENT 3.1.2

Project: 0007-029-139, P101, R201, C501, B617, B618

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.

<table>
<thead>
<tr>
<th>Statement of Qualifications Component</th>
<th>Form (if any)</th>
<th>RFQ Cross reference</th>
<th>Included within 15-page limit?</th>
<th>SOQ Page Reference</th>
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<td>Section 3.1.2</td>
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<td>Section 3.2.7</td>
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### ATTACHMENT 3.1.2

**Project:** 0007-029-139, P101, R201, C501, B617, B618  
**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

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- confirming Offeror is committed to achieving the required DBE goal

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## Statement of Qualifications Checklist and Contents

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Attachment 3.2.6: Affiliated and Subsidiary Companies of the Offeror
Attachment 3.2.6

State Project No. 0007-029-139, P101, R201, C501, B617, B618

Affiliated and Subsidiary Companies of the Offeror

Offerors shall complete the table and include the addresses of affiliates or subsidiary companies as applicable. By completing this table, Offerors certify that all affiliated and subsidiary companies of the Offeror are listed.

- The Offeror does not have any affiliated or subsidiary companies.
- Affiliated and/ or subsidiary companies of the Offeror are listed below.

<table>
<thead>
<tr>
<th>Relationship with Offeror (Affiliate or Subsidiary)</th>
<th>Full Legal Name</th>
<th>Address</th>
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<tr>
<td>Affiliate</td>
<td>Wagman Companies, Inc.</td>
<td>3290 North Susquehanna Trail, York, PA 17406</td>
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<tr>
<td>Affiliate</td>
<td>Wagman Construction, Inc.</td>
<td>231 North George Street, York PA 17401</td>
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1 of 1
Attachment 3.2.7(a): Certification Regarding Debarment Forms
(a) Primary Covered Transactions & (b) Lower Tier Covered Transactions
ATTACHMENT NO. 3.2.7(a)

CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS

Project No.: 0007-029-139, P101, R201, C501, B617, B618

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 form.

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] 6/13/2014  Vice President, Division Manager
[Date] [Title]

G.A. & F.C. Wagman, Inc.
Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0007-029-139, P101, R201, C501, B617, B618

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 form.

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.


[Name of Firm]

[Date]

Title
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0007-029-139, P101, R201, C501, B617, B618

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 form.

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: ____________________________ Date: May 27, 2014

President: ____________________________ Title: ________________

Quinn Consulting Services, Inc.

Name of Firm: ____________________________
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0007-029-139, P101, R201, C501, B617, B618

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.

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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] 5-29-14 [Name]
[Title]

Specialized Engineering
Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0007-029-139, P101, R201, C501, B617, B618

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[Signature]
Signature

[Date]
Date

Senior Vice President
Title

Whitman, Requardt & Associates, LLP
Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0007-029-139, P101, R201, C501, B617, B618

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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] 6/9/14  Chief Estimator

Signature  Date  Title

Branch Highways, Inc.

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0007-029-139, P101, R201, C501, B617, B618

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 form.

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] 6/16/2014 [Vice President]
Signature Date Title

DMY Engineering Consultants Inc.
Name of Firm
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0007-029-139, P101, R201, C501, B617, B618

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 form.

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] [Date] [President] [Title]

McCormick Taylor, Inc.
Name of Firm
Attachment 3.2.8: VDOT Prequalification Supporting Documentation
W002
G. A. & F. C. WAGMAN, INC.
PREQ. Exp : 10/31/2014

--PREQ ADDRESS ----------------- WORK CLASSES (LISTED BUT NOT LIMITED TO)
3290 NORTH SUSQUEHANNA TRAIL 003 - MAJOR STRUCTURES
YORK, PA 17406-9754 007 - MINOR STRUCTURES
PHONE : 717-764-8521 011 - CLEARING AND GRUBBING
FAX : 717-764-2799 080 - DEMOLITION OF STRUCTURES

BUSINESS CONTACT: BECKER, TODD EUGENE
EMAIL: INFO@WAGMAN.COM

-----DBE INFORMATION-----

DBE TYPE : N/A
DBE CONTACT: N/A
June 5, 2014

Virginia Department of Transportation
1401 E. Broad Street
Richmond, VA 23219

Re: A Design-Build Project
RFQ Contract ID #C00082135DB77
State Project No: 0007-029-139, P101, R201, C501, B617, B618
Route 7 Widening and Bridge Rehabilitation over Dulles Toll Road
And Airport Access Highway, Fairfax County, VA
From 0.56 miles West of Tyco Road to 0.13 Miles West of Tyco Road

Dear Sirs:

As surety for G.A. & F.C. Wagman, Inc., Continental Casualty 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 $30,000,000 (estimated contract value) and said bonds will cover the project and any warranty periods on behalf of the Contractor, in the event that such firm be the successful bidder and enter into a contract for this project.

Sincerely,
Continental Casualty Company

By: [Signature]
Eugene M. Fritz
Attorney-In-Fact
POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That Continental Casualty Company, an Illinois insurance company, National Fire Insurance Company of Hartford, an Illinois insurance company, and American Casualty Company of Reading, Pennsylvania, a Pennsylvania insurance company (herein called "the CNA Companies"), are duly organized and existing insurance companies having their principal offices in the City of Chicago, and State of Illinois, and that they do by virtue of the signatures and seals herein affixed hereby make, constitute and appoint

Eugene M Fritz, Kathy R Reisinger, Donald R Wert, Patricia C Robinson, Deborah L Cottom, James R Gould, Joseph G Buyakowski, Alson O Wolcott, Jr, Individually

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

- In Unlimited Amounts -

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

This Power of Attorney is made and executed pursuant to and by authority of the By-Law and Resolutions, printed on the reverse hereof, duly adopted, as indicated, by the Boards of Directors of the insurance companies.

In Witness Whereof, the CNA Companies have caused these presents to be signed by their Vice President and their corporate seals to be hereto affixed on this 15th day of August, 2013.

Continental Casualty Company
National Fire Insurance Company of Hartford
American Casualty Company of Reading, Pennsylvania

Paul T. Bruflat
Vice President

State of South Dakota, County of Minnehaha, ss:

On this 15th day of August, 2013, 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 a Vice President of Continental Casualty Company, an Illinois insurance company, National Fire Insurance Company of Hartford, an Illinois insurance company, and American Casualty Company of Reading, Pennsylvania, a Pennsylvania insurance company described in and which executed the above instrument; that he knows the seals of said insurance companies; that the seals affixed to the said instrument are such corporate seals; that they were so affixed pursuant to authority given by the Boards of Directors of said insurance companies and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said insurance companies.

My Commission Expires June 23, 2015

J. Mohr
Notary Public

CERTIFICATE

I, D. Bult, Assistant Secretary of Continental Casualty Company, an Illinois insurance company, National Fire Insurance Company of Hartford, an Illinois insurance company, and American Casualty Company of Reading, Pennsylvania, a Pennsylvania insurance company do hereby certify that the Power of Attorney herein above set forth is still in force, and further certify that the By-Law and Resolution of the Board of Directors of the insurance companies printed on the reverse hereof is still in force. In testimony whereof I have hereto subscribed my name and affixed the seal of the said insurance companies this 5th day of June, 2014.

Continental Casualty Company
National Fire Insurance Company of Hartford
American Casualty Company of Reading, Pennsylvania

D. Bult
Assistant Secretary
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)

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<th>SCC Number</th>
<th>SCC Type of Corporation</th>
<th>SCC Status</th>
<th>SCC Information (3.2.10.1)</th>
<th>DPOR Registered Address</th>
<th>DPOR Information (3.2.10.2)</th>
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<td>927 Maple Grove Dr, Suite 105</td>
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<td>4301 Dominion Blvd, Suite 100</td>
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<td>Chantilly, VA 20151</td>
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<td>Active</td>
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<td>K0003824</td>
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<td>Active</td>
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<td>Richmond, VA 23235</td>
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<td>801 South Caroline St</td>
<td>Baltimore, MD 21231</td>
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<td>Branch Highways, Inc.</td>
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<td>McCormick Taylor, Inc.</td>
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<td>4951 Lake Brook Dr, Suite 275</td>
<td>Glen Allen, VA 23060</td>
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<td>113 Mill Place Pkwy, Unit 103</td>
<td>Verona, VA 24482</td>
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### SCC and DPOR Information

**DPOR INFORMATION FOR INDIVIDUALS (RFQ Sections 3.2.10.3 and 3.2.10.4)**

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<th>Individual’s Name</th>
<th>Office Location Where Professional Services will be Provided (City/State)</th>
<th>Individual’s DPOR Address</th>
<th>DPOR Type</th>
<th>DPOR Registration Number</th>
<th>DPOR Expiration Date</th>
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<td>G.A. &amp; F.C. Wagman, Inc.</td>
<td>Greg Andricos, PE</td>
<td>Chester, VA</td>
<td>4202 Kilbourne Drive Fairfax, VA 22032</td>
<td>Professional Engineer</td>
<td>0402032211</td>
<td>07-31-2014</td>
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<tr>
<td>Quinn Consulting Services, Inc.</td>
<td>Richard Allen, PE</td>
<td>Chantilly, VA</td>
<td>10128 Elliston Court Bristow, VA 20136</td>
<td>Professional Engineer</td>
<td>0402036809</td>
<td>11-30-2015</td>
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<tr>
<td>Rinker Design Associates, P.C.</td>
<td>Darell Fischer, PE, DBIA</td>
<td>Glen Allen, VA</td>
<td>14101 Spring Gate Terrace Midlothian, VA 23112</td>
<td>Professional Engineer</td>
<td>0402023296</td>
<td>06-30-2016</td>
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<td>G.A. &amp; F.C. Wagman, Inc.</td>
<td>Mike Mansfield, PE</td>
<td>Chester, VA</td>
<td>13716 Berkley Davis Drive Chester, VA 23838</td>
<td>Professional Engineer</td>
<td>0402040130</td>
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</table>
Please note: The SCC website will be unavailable Thursday, June 12, from 6 p.m. until 10 p.m. for system maintenance. We apologize for the inconvenience and appreciate your patience.

CORPORATE DATA INQUIRY

06/12/14
13:03:45

CISM0180

CORP ID: F019898 - 8
STATUS: 00 ACTIVE
STATUS DATE: 10/08/10

CORP NAME: WAGMAN, INC., G. A. & F. C.

DATE OF CERTIFICATE: 09/20/1967
PERIOD OF DURATION: INDUSTRY CODE: 00

STATE OF INCORPORATION: PA PENNSYLVANIA
STOCK INDICATOR: S STOCK

MERGER IND: CONVERSION/DOMESTICATION IND:

GOOD STANDING IND: Y
MONITOR INDICATOR:

CHARTER FEE: 2500.00
MON NO: MON STATUS: MONITOR DTE:

R/A NAME: CORPORATION SERVICE COMPANY

STREET: BANK OF AMERICA CENTER
AR RTN MAIL:
16TH FLOOR, 1111 EAST MAIN STREET

CITY: RICHMOND
STATE: VA
ZIP: 23219

R/A STATUS: 5 B.E. AUTH IN VI
EFF. DATE: 09/11/12
LOC: 216

ACCEPTED AR#: 213 54 5686
DATE: 09/30/13
RICHMOND CITY

CURRENT AR#: 213 54 5686
DATE: 09/30/13
STATUS: A
ASSESSMENT INDICATOR: 0

YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
13 1,700.00 4,000,000

(Screen Id:/Corp_Data_Inquiry)
Commonwealth of Virginia

State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That G. A. & F. C. WAGMAN, INC., a corporation incorporated under the law of Pennsylvania, is authorized to transact business in the Commonwealth of Virginia;

That it 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:
June 17, 2013

Joel H. Peck, Clerk of the Commission
06/12/14
CISM0180 CORPORATE DATA INQUIRY 13:03:06

CORP ID: 0227062 - 7 STATUS: 00 ACTIVE STATUS DATE: 04/22/91

CORP NAME: Rinker Design Associates, P.C.

DATE OF CERTIFICATE: 02/24/1982 PERIOD OF DURATION: INDUSTRY CODE: 70

STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK

MERGER IND: CONVERSION/DOMESTICATION IND:

GOOD STANDING IND: Y MONITOR INDICATOR:

CHARTER FEE: MON NO: MON STATUS: MONITOR DTE:

R/A NAME: JOHN S WISIACKAS

STREET: ODIN FELDMAN & PITLEMAN PC AR RTN MAIL:
1775 WIEHLE AVENUE STE 400

CITY: RESTON STATE: VA ZIP: 20190

R/A STATUS: 4 ATTORNEY EFF. DATE: 08/27/12 LOC: 129

ACCEPTED AR#: 214 03 0074 DATE: 01/30/14 FAIRFAX COUNTY
CURRENT AR#: 214 03 0074 DATE: 01/30/14 STATUS: A ASSESSMENT INDICATOR: 0

YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
14 190.00

(Screen Id:/Corp_Data_Inquiry)
CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That Rinker Design Associates, P.C. is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is February 24, 1982;

That the period of its duration is perpetual; and

That the corporation is in existence and 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:
January 28, 2014

Joel H. Peck, Clerk of the Commission

CISECOM
Document Control Number: 1401285885
Please note: The SCC website will be unavailable Thursday, June 12, from 6 p.m. until 10 p.m. for system maintenance. We apologize for the inconvenience and appreciate your patience.

CISM0180 CORPORATE DATA INQUIRY

CORP ID: 0492551 - 7 STATUS: 00 ACTIVE STATUS DATE: 12/01/08
CORP NAME: QUINN CONSULTING SERVICES INCORPORATED
DATE OF CERTIFICATE: 10/24/1997 PERIOD OF DURATION: INDUSTRY CODE: 00
STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
MERGER IND: S SURVIVOR CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: 50.00 MON NO: MON STATUS: MONITOR DTE:
R/A NAME: JOHN H QUINN JR

STREET: 2208 S KNOLL ST AR RTN MAIL:

CITY: ARLINGTON STATE: VA ZIP: 22202 2134
R/A STATUS: 4 ATTORNEY EFF. DATE: 10/24/97 LOC : 106
ACCEPTED AR#: 213 12 8953 DATE: 08/21/13 ARLINGTON COUNT
CURRENT AR#: 213 12 8953 DATE: 08/21/13 STATUS: A ASSESSMENT INDICATOR: 0

YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
13 100.00

(Screen Id:/Corp_Data_Inquiry)
Commonwealth of Virginia

State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That QUINN CONSULTING SERVICES INCORPORATED is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is October 24, 1997;

That the period of its duration is perpetual; and

That the corporation is in existence and 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:
October 22, 2013

Joel H. Peck, Clerk of the Commission

CISECOM
Document Control Number: 1310226098
STATE CORPORATION COMMISSION

Richmond, August 10, 2000

This is to Certify that the statement of registration of

Whitman, Requardt & Associates, LLP

a limited liability partnership registered under the laws of MARYLAND; was this day admitted to record in this office and that the partnership is registered to transact business in Virginia as a foreign Registered Limited Liability Partnership, subject to all laws applicable to the partnership and its business.

State Corporation Commission
Attest:

Clerk of the Commission
CERTIFICATE OF FACT

I Certify the Following from the Records of the Commission:

On August 10, 2000, a statement of registration as a registered limited liability partnership was filed in this office by WHITMAN, REQUARDT & ASSOCIATES, LLP, a Maryland registered limited liability partnership.

As of the date below, this statement of registration is in effect.

Nothing more is hereby certified.

Signed and Sealed at Richmond on this Date:
June 17, 2013

Joel H. Peck, Clerk of the Commission
Dear Customer:

This is your receipt for $50.00 to cover the fee for filing the annual continuation report for the above-referenced registered limited liability partnership.

The annual continuation report was filed on May 28, 2013.

If you have any questions, please call (804) 371-9733 or toll-free in Virginia, 1-866-722-2551.

Sincerely,

Joel H. Peck  
Clerk of the Commission
The undersigned, on behalf of the partnership set forth below, pursuant to Title 50, Chapter 2.2, Article 9.1 of the Code of Virginia, states as follows:

1. The name of the partnership, which is registered as a registered limited liability partnership in Virginia, is:

   WHITMAN, REQUARDT & ASSOCIATES, LLP

2. The partnership's SCC ID number is K000382 - 4.

3. The jurisdiction in which the partnership is registered as a registered limited liability partnership is MARYLAND.

4. The principal office address of the partnership according to the records of the Commission is:

   801 S CAROLINE ST
   BALTIMORE, MD 21231

   (Mark the appropriate box.)
   ☐ The address listed above is the current address of the partnership's principal office.
   ☐ The address listed above is not the current address of the partnership's principal office. The current address, including the street and number, if one is associated with the location, is:

   ____________________________  ____________________________
   (number/street)                   (a post office box is not acceptable – see instructions)

   ____________________________  ____________________________
   (city or town)                    (state)                        (zip)

   Signed on behalf of the partnership by the following partner, receiver or trustee:

   ______________________________
   (signature)

   ______________________________
   (printed name)

   ______________________________
   (title)

   ______________________________
   (date)

   410.235.3450
   (telephone number (optional))
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Image On-Demand
CORPORATE DATA INQUIRY

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CORP NAME: DIW GROUP, INC.

DATE OF CERTIFICATE: 01/30/1997  PERIOD OF DURATION: INDUSTRY CODE: 00
STATE OF INCORPORATION: MD MARYLAND  STOCK INDICATOR: S STOCK
MERGER IND:  CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y  MERGER IND:
CHARTER FEE: 2500.00  MONITOR INDICATOR:
R/A NAME: C T CORPORATION SYSTEM

STREET: 4701 COX ROAD  AR RTN MAIL:
S U I T E  2 8 5
CITY: GLEN ALLEN  STATE: VA ZIP: 23060
R/A STATUS: 5 B.E. AUTH VI EFF. DATE: 12/12/13 LOC : 143
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CURRENT AR#: 214 50 1162  DATE: 12/12/13  STATUS: A
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(Screen Id:/Corp_Data_Inquiry)
CORPORATE DATA INQUIRY

CORP ID: 0295618 - STATUS: 00 ACTIVE
CORP NAME: BRANCH HIGHWAYS, INC.

DATE OF CERTIFICATE: 11/25/1986 PERIOD OF DURATION: INDUSTRY CODE: 00
STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: MON NO: MON STATUS: MONITOR DTE:
R/A NAME: MELANIE F WHEELER

STREET: 442 RUTHERFORD AVE NE AR RTN MAIL:
CITY: ROANOKE STATE: VA ZIP: 24016
R/A STATUS: 2 OFFICER EFF. DATE: 01/11/08 LOC: 217
ACCEPTED AR#: 213 16 7645 DATE: 11/20/13 ROANOKE CITY
CURRENT AR#: 213 16 7645 DATE: 11/20/13 STATUS: A ASSESSMENT INDICATOR: 0

YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
13 100.00 5,000
Commonwealth of Virginia

State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That BRANCH HIGHWAYS, INC. is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is November 25, 1986;

That the period of its duration is perpetual; and

That the corporation is in existence and 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:
June 10, 2014

Joel H. Peck, Clerk of the Commission

CISECOM
Document Control Number: 1406105725
**CISM0180** CORPORATE DATA INQUIRY

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(Screen Id:/Corp_Data_Inquiry)
CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That DMY ENGINEERING CONSULTANTS INC. is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is September 6, 2013;

That the period of its duration is perpetual; and

That the corporation is in existence and 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:
January 21, 2014

Joel H. Peck, Clerk of the Commission
CISM0180 CORPORATE DATA INQUIRY 01/23/14 09:53:41

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(Screen Id:/Corp_Data_Inquiry)
Commonwealth of Virginia

STATE CORPORATION COMMISSION

Richmond, June 2, 1997

This is to certify that a certificate of authority to transact business in Virginia was this day issued and admitted to record in this office for

McCormick, Taylor & Associates, Inc.

a corporation organized under the laws of Pennsylvania

and that the said corporation is authorized to transact business in Virginia, subject to all Virginia laws applicable to the corporation and its business.

State Corporation Commission

Attest:

William J. Bridgeman

Clerk of the Commission
Commonwealth of Virginia

State Corporation Commission

I Certify the Following from the Records of the Commission:

The foregoing is a true copy of the certificate of authority to transact business in Virginia issued for McCormick, Taylor & Associates, Inc., a PENNSYLVANIA corporation.

Nothing more is hereby certified.

Signed and Sealed at Richmond on this Date:
October 11, 2001

Joel H. Peck, Clerk of the Commission
Attachment 3.2.10.2: DPOR Supporting Documentation for Offices
Attachment 3.2.10.3: DPOR Supporting Documentation for Key Personnel
Attachment 3.2.10.4: DPOR Supporting Documentation
for Non-APELSCIDLA Regulated Services
**PANEL OF RIGHT OF WAY ACQUISITION CONSULTANTS**

**FIRMS WHO ARE PREQUALIFIED FOR VDOT ADMINISTERED CONTRACTS**
**INCLUDES P3, DESIGN BUILD AND**
**LOCALLY ADMINISTERED PROJECTS**

<table>
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<tr>
<th>COMPANY NAME</th>
<th>CONTACT</th>
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<tr>
<td>AECOM</td>
<td>Richard Leininger, P.E.</td>
<td>(804) 515-8469</td>
</tr>
<tr>
<td>4840 Cox Road</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glen Allen, VA 23060</td>
<td></td>
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<tr>
<td>American Acquisition</td>
<td>Wade Brown</td>
<td>(813) 287-8191</td>
</tr>
<tr>
<td>5600 Mariner St., Suite 104</td>
<td>W. C. Miller</td>
<td>(813) 287-8191</td>
</tr>
<tr>
<td>Tampa, Florida 33609</td>
<td></td>
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<tr>
<td>Cardno TBE</td>
<td>Mike Woods</td>
<td>(804) 285-4811</td>
</tr>
<tr>
<td>1100 Athens, Suite A</td>
<td></td>
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<tr>
<td>Richmond, VA 23227-1145</td>
<td></td>
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<tr>
<td>Coates Field Service, Inc.</td>
<td>Joe Coates</td>
<td>(405) 528-5676</td>
</tr>
<tr>
<td>4800 N. Santa Fe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oklahoma City, OK 73118</td>
<td></td>
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<tr>
<td>Continental Field Services</td>
<td>Michael Hill</td>
<td>(914) 234-4194</td>
</tr>
<tr>
<td>P. O. Box 915 (32 E. Field Rd.)</td>
<td></td>
<td></td>
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<tr>
<td>Bedford, NY 10506</td>
<td>Paul Shray</td>
<td>(703) 451-5577</td>
</tr>
<tr>
<td>6320 Augusta Dr., Suite 401</td>
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<tr>
<td>Springfield, VA 22150</td>
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<tr>
<td>Diversified Property Services</td>
<td>Patricia E. Dablock</td>
<td>(410) 252-5075</td>
</tr>
<tr>
<td>20 E. Timonium Road, Suite 111</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timonium, MD 21093</td>
<td></td>
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</tr>
<tr>
<td>Stantec Consulting Services Inc., (formerly Greenhorne &amp; O’Mara)</td>
<td>Tim Copeland</td>
<td>(804) 897-6309</td>
</tr>
<tr>
<td>10800 Midlothian Turnpike, Suite 310</td>
<td>Project Director</td>
<td>(757) 647-8474 (cell)</td>
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<tr>
<td>Richmond, VA 23235</td>
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PANEL OF RIGHT OF WAY ACQUISITION CONSULTANTS

FIRMS WHO ARE PREQUALIFIED FOR VDOT ADMINISTERED CONTRACTS
INCLUDES P3, DESIGN BUILD AND
LOCALLY ADMINISTERED PROJECTS

KDR Real Estate  Allen G. Dorin (804) 672-1368 Ext. 302
2500 Grenoble Road
Richmond, Virginia 23294

O. R. Colan  Catherine Muth (704) 529-3115 Ext. 255
22710 Fairview Center Drive
Fairview, Ohio  44126
Kevin Robison (440) 827-6116 Ext. 202
Steve Toth (440) 827-6116

Pinnacle Consulting Management  Jennifer Harrison (405) 879-0600
1141 N. Robinson, Ste 402
Oklahoma City, OK 73103

Vaughn & Melton  Randolph Scott (606) 248-6600
Consulting Engineers, Inc.
P. O. Box 1425
109 S. 24th Street
Middlesboro, Kentucky 40965

Volkert & Associates  Dennis Morrison (703) 642-8100
5400 Shawnee Road, Suite 301
Alexandria, VA  22312

Universal Field Services  Steve Benson (918) 494-7600
P. O. Box 35666 (74153-0666)
6666 South Sheridan Rd., Suite 230
Tulsa, Oklahoma 74133-1763
Leslie Pacheco (856) 795-1314

Rinker Design Associates, P. C.  Christopher R. Reed, CSI (703) 368-7373
9385 Discovery Boulevard
Suite 200
Manassas, VA  20109

Telics  Steve Nichols (704) 872-5060
PO Box 830
Statesville, NC 28687
David Bailey, Senior Mgr. (919) 356-6695
Taylor Keith, Manager (252) 375-5010

Bowman Consulting Group  Ronnie Van Cleve (703) 302-8740
9813 Godwin Drive
Manassas, VA  20110
Senior Project Manager (703) 867-5197
### PANEL OF RIGHT OF WAY ACQUISITION CONSULTANTS

#### FIRMS WHO ARE PREQUALIFIED FOR VDOT ADMINISTERED CONTRACTS
**(INCLUDES P3 AND DESIGN BUILD)**

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<td>Gulf Coast Property Acquisition, Inc.</td>
<td>Paul W. McMahan</td>
<td>(704) 529-3949</td>
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<tr>
<td>4339 Stuart Andrew Blvd. Suite 220</td>
<td></td>
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<td>Charlotte, NC  28217</td>
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<tr>
<td>Johnson, Mirmiran &amp; Thompson, Inc.</td>
<td>G. Lee Cooper</td>
<td>(804) 267-1272</td>
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<tr>
<td>9201 Arboretum Parkway</td>
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</tr>
<tr>
<td>Suite 310</td>
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<tr>
<td>Richmond, VA  23236</td>
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<tr>
<td>CDM SMITH</td>
<td>Wesley O. Stafford, P. E.</td>
<td>(304) 345-2339</td>
</tr>
<tr>
<td>2112 West Laburnum</td>
<td></td>
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<tr>
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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: GREGORY ANDRICOS, P.E. | EXECUTIVE VICE PRESIDENT

b. Project Assignment: DESIGN-BUILD PROJECT MANAGER

c. Name of Firm with which you are now associated: G.A. & F. C. WAGMAN, INC.

d. Years experience: With this Firm 1 Years With Other Firms 21 Years
   Please list chronologically (most recent experience 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 experience, please list the experience for those years you have worked. Project specific experience shall be included in Section (g) below):

G.A. & F.C. Wagman, Inc. [Executive Vice President, June 2014–Present]. Company Executive with principal responsibility for civil operations including: safety, quality control, estimating, engineering, and construction for Design-Build and conventional projects.

Cherry Hill Construction, Inc. Individual duties were performed at the same time frame or period as listed below.

[Design-Build Project Manager, October 1999–May 2014]. Primary Point of Contact (POC) with principal responsibility for overseeing all design and construction efforts from proposal through final acceptance, including of QA/QC for the following competitively bid Eastern Federal Lands Highway Division (EFLHD) DB projects: Mark Center Short and Mid-Interim Improvements DB—$9.1M (for VDOT) Alexandria, VA (4/12–5/14); Fairfax County Parkway Project Phase I, II, and IV DB—$112.5M (for VDOT) Springfield, VA (7/08–7/11); 9th Street Bridge Replacement DB, $58.4M (for DDOT) Washington, DC (7/06–7/11); and Taylor Street Bridge Replacement DB, $10.8M (for DDOT) Washington, DC (4/03–4/06). Principal responsibility for the design/construction of the Patapsco and Back River Railroad Bridge and approaches in Baltimore, MD (6/00–6/01). Coordinated the design development/construction operations for all aspects of the project.

[Field Operations Manager, April 2008–July 2010]. Principal responsibility for all construction operations with direct management of all DB projects.

[Bridge & Structures Division Manager, October 2000–April 2008]. Principal responsibility for estimating and construction of all bridges and structures company wide. Served as the chief bridge engineer to review all design and construction related issues.

[Chief Structures Estimator and Bridge Design Manager, January 1999–December 1999]. Principal responsibility for estimating all highway, bridge, and structures projects. Served as Chief Structures Engineer for construction projects throughout the company to review design or construction issues.

Summary of Relevant Experience

- 17 years Interchange Design Mgmt
- 21 years Construction Management
- VDOT NOVA DB Projects $120M
- DB Manager on 5 DB Projects $188M
- Registered Licensed PE in Virginia
- Integrated Utility & ROW Management
- VDOT Compliant QA/QC
- Complex TMP/MOT Plan Development
- Phased Construction

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
   Virginia Military Institute, Lexington, VA / BS / 1992 / Civil Engineering

f. Active Registration: Year First Registered/ Discipline/VA Registration #: 1998 / Professional Engineer / #0402 032211

g. Document the extent and depth of your experience and qualifications relevant to the Project.
   1. Note your specific responsibilities and authorities for each project, not those of the firm.
   2. Note whether experience is with current firm or with other firm.
   3. Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.

(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)

EFLHD/VDOT, Fairfax County Parkway (FCP), Phase I/II & IV (Design-Build), Springfield, VA ($112.5 million)

1. Design-Build Project Manager who served as Primary point of contact (POC) and was responsible for supervising a staff consisting of engineers, public relations professionals, ROW specialists, utility coordinators, CM/CI, and field personnel. Also responsible for managing the project from the proposal through all phases of permit, design, utility relocation, and construction. He coordinated with multiple stakeholders (VDOT, FHWA-EFLHD, DOD, and Fairfax County) to insure the project met contractual requirements for all agencies. As the DBPM, he ensured strict adherence to the QA/QC programs for both design and construction. The project included six major

Relevance to the Project
✓ Design-Build
✓ Roadway/Surveys
✓ Structures/Bridges
✓ Environmental
✓ Geotechnical
highway bridge structures, highway and local ramps and interchanges, more than 2.7 miles of roadway construction, utility relocation, stringent environmental concerns and SWM practices, a critical ordinance safety/removal program, design and construction of shared use pathways, and an extremely aggressive BRAC mandated schedule. Context sensitive means/methods were used in the design of the Accotink Creek bridge structure minimizing impact to the watershed. Additional design work enhanced multi-modal accessibility at the Fullerton Rd. intersection. Served on the VA Mega Projects Community Resource Board during this project & received a “Star Partner” award for his exceptional dedication, teamwork, and professionalism in support of the project’s goals by the NGA and USACE. This project won a 2013 National DBIA Award for Transportation as well as DB honor awards in the Transportation category from ACEC and VTCA (Transportation Engineering Award, VDOT Project Greater Than $10 Million).


EFLHD/VDOT, Mark Center Short and Mid-Term Improvements Design-Build, Alexandria, VA ($9.1 million)
1. Design-Build Project Manager who served as Primary point of contact (POC) and was responsible for the overall project design, quality management, contract administration, and construction oversight. Short-term improvements were completed in Sept. 2012. Mid-Term construction improvements were substantially complete and finished in July 2013 as required to ensure the timely completion of the project to alleviate the complex transportation issues resulting from increases in traffic volumes related to BRAC.


EFLHD/DDOT, 9th Street Bridge Replacement over CSXT and AMTRAK Rail and New York Avenue, Washington, DC ($58.4 million)
1. Design-Build Project Manager who served as Primary point of contact (POC) for the DB Team and supervised a staff consisting of engineers, PR professionals, context sensitive artisans, ROW specialists, utility coordinators, inspectors, managers, and field personnel for this project. Managed this project from the proposal that provided the overall best value through all phases of permitting, design, and construction. Project required multi-disciplined design efforts to facilitate the phased removal and complete reconstruction of an existing structure spanning NY Avenue, as well as active CSXT and Amtrak Railroads. Context sensitive means and methods were used in the design of the bridge structure, which resulted in numerous enhancements including widened sidewalks and bicycle lanes, and architectural elements. A formal partnership established between all project shareholders including the FHWA-EFLHD, DDOT, AMTRAK, CSXT, and the USPS was crucial to this project.


MTA, I-95–Section 100 Express Toll Lanes (ETL): I-895 to South Kenwood/Chesaco Avenue Bridge, Baltimore County, MD ($96.6 million)
1. Field Operations Manager responsible for providing construction services extending 1.8 miles from the I-895 split to south of the Kenwood Avenue Bridge. This project consisted of extensive highway widening of a section of I-95, the primary interstate artery on the East Coast in order to provide two express toll lanes in each direction. The ETL consisted of a 12’ outside shoulder, two 12’ lanes and a 4’ inside shoulder. This project included extending the Chesaco Avenue Bridge and providing soil nail walls at both the Chesaco and Hazelwood Avenue structures. Also included were 8 retaining and 9 Noise Abatement Walls used to reduce impact to adjoining properties and stay within the existing ROW. CHC met with adjacent property owners and executed subterranean lease agreements permitting the installation of temporary tiebacks to permit top down wall construction within limited owner right of way.


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.

Not applicable.
ATTACHMENT 3.3.1
KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: RICHARD ALLEN, P.E. | QUALITY ASSURANCE MANAGER

b. Project Assignment: QUALITY ASSURANCE MANAGER (QAM)

c. Name of Firm with which you are now associated: QUINN CONSULTING SERVICES, INC.

d. Years experience: With this Firm 1 Years With Other Firms 18 Years

Please list chronologically (most recent experience 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 experience, please list the experience for those years you have worked. Project specific experience shall be included in Section (g) below):

Quinn Consulting Services, Inc. [Quality Assurance Manager, October 2013–Present]. In charge of all Quality Assurance activities and monitored Quality Control for compliance with the approved QA/QC Plan, the Minimum Requirements as set forth in the VDOT QA/QC Design-Build Manual, and other relevant documents incorporated into the contract.

Dulles Transit Partners [Senior Civil Structural Engineer, December 2007–October 2013]. Worked on the $1.6 billion Dulles Metrorail (Phase 1–Silver Line) Design-Build PPTA Project in Northern Virginia.

• During the design phase of the project, oversaw a group of design engineers with the overall goal of providing a quality design package with respect to completeness, accuracy, and consistency between various design package submittals. Specific responsibilities included the review of civil structural design calculations, drawings, and specifications for evaluation of constructability and conformance with contract plan documents, design standards and applicable specifications and codes such as WMATA, VDOT, AREMA, AASHTO, ASCE, ACI, PCI, and IBC.

• During the construction phase, performed site inspections and monitored quality of materials and workmanship and assisted the construction team in addressing field issues as they arose on the project. Also, developed remedial solutions to correct non-conformance issues.

The Reinforced Earth Company [Senior Civil Design Engineer, May 2000–December 2007]. Worked for this national leader in Mechanically Stabilized Earth (MSE) wall design and material supply as a Senior Civil Design Engineer. Responsibilities included final design of MSE wall shop drawings for specific regions of the United States. Also responsible for addressing both field design and quality control issues as related to both MSE and noise walls.

PA Department of Transportation [Project Manager/Lead Construction Inspector, June 1999–May 2000]. Project Manager (Lead Construction Inspector) position in the District 1-0 Construction Unit responsible for supervising a construction inspection staff of approximately three to six inspectors on-site during active road repair and rehabilitation projects.

Summary of Relevant Experience
• Over 20 years of experience in Quality Assurance and Engineering
• Heavy emphasis in the construction of transportation and transit facilities
• Master’s degree in Civil Engineering
• Licensed PE in Virginia, Maryland, Pennsylvania, and DC

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:

Old Dominion University, Norfolk, VA / MS / 1995 / Civil Engineering
The Pennsylvania State University, State College, PA / BS / 1992 / Civil Engineering

f. Active Registration: Year First Registered/ Discipline/VA Registration #:

2001 / Professional Engineer / #0402 036809

g. Document the extent and depth of your experience and qualifications relevant to the Project.

1. Note your specific responsibilities and authorities for each project; not those of the firm.
2. Note whether experience is with current firm or with other firm.
3. Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.

(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)

VDOT I-95 Express Lanes, Fairfax, Prince William, & Stafford Counties, VA ($900 million)

1. Quality Assurance Manager (QAM) for this nearly one billion dollar project financed, constructed and operated under Virginia's Public-Private Transportation Act (PPTA). The I-95 Express Lane project was/is divided into the following four segments:

• Segment 1 (8.3-miles): Garrisonville Road to Dumfries Road, 2-lane reversible section on new location (7 new bridges, inclusive of 2 flyovers & NB slip ramp)

• Segment 2 (7-miles): Dumfries Road to Prince William Parkway, Maintained Geom. of Existing Roadway.

Relevance to the Project
✓ Performed Quality Assurance Management Services that are identical as those required under the RFQ including the use of VDOT’s Design-Build Manual and the procedures and

WAGMAN
Mr. Allen was/is responsible for overseeing project QA staff and for verifying that all work performed on the project was inspected and tested in accordance with the VDOT Minimum Requirements for Quality Assurance and Quality Control on Design-Build and Public-Private Transportation Act Projects and the Project Specific QA/QC Plan.

2. Quinn Consulting Services, QAM
3. October 2013–December 2014 (projected)

MWAA Dulles Metro Rail, Silver Line, Northern VA ($1.6 billion)

1. Senior Civil Structural Engineer responsible for:
   • Oversight of four design engineers and four to six designer/draftsmen with high focus on contract due dates, completeness, accuracy, and consistency between various design package submittals.
   • Review of civil structural design calculations, drawings, and specifications for evaluation of constructability and conformance with contract plan documents, design standards, and applicable building codes such as WMATA, VDOT, AASHTO, ASCE, ACI, PCI, and IBC.
   • Coordination and review of subcontractor submitted shop drawings.
   • As Lead Structural Engineer for the McLean Station, coordination of station specific interdisciplinary engineering issues to deal with special engineering or construction problems such as conflicting utilities, mislocated structural connections, rebar interference with connections, honeycombing of concrete and develop and/or review remedial solutions to correct unforeseen issues.
   • Conducting periodic visits to active construction sites to investigate, conduct reviews, and provide sound engineering advice and solutions to field issues encountered during the construction phase of the project.
   • Greatly involved in the final design of seventeen miles of cast-in-place retaining walls and assisted Construction Unit with field issues arising during the material fabrication and construction phases of the walls.

2. Quinn Consulting Services, Senior Civil Structural Engineer

I-15 Now D/B Project, Utah Department of Transportation

1. Regional Engineer who oversaw the complete and final design of all MSE wall drawings and calculations including internal, external, and occasionally global stability. Coordinated work assignments with Regional Manager and assisted Project Managers with engineering related issues arising at the construction site. Performed site visits to investigate reasons, collect data, and observe extent of occasional settlement issues that arise on rare occasions working with Project Managers to formulate corrective procedures and perform any additional engineering calculations necessary to address the modified conditions. Worked closely with Owner’s (i.e., primarily State DOT’s) Engineering and Construction staff personnel to address field issues as they arose expeditiously but with sound engineering judgment and review of the causes to the issues.


Relevance to the Project
✓ Experience gained in this position is directly relevant to the project as it pertains to the structural engineering and construction processes that VDOT follows when designing and constructing project structural elements including MSE walls and bridges.

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.

Not applicable
ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel anticipated for the Project.</th>
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<tbody>
<tr>
<td>a. Name &amp; Title: DARELL FISCHER, P.E., DBIA</td>
</tr>
<tr>
<td>b. Project Assignment: DESIGN MANAGER</td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated: RINKER DESIGN ASSOCIATES, P.C.</td>
</tr>
<tr>
<td>d. Years experience: With this Firm 7 Years With Other Firms 21 Years</td>
</tr>
<tr>
<td>Please list chronologically (most recent experience 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 experience, please list the experience for those years you have worked. Project specific experience shall be included in Section (g) below):</td>
</tr>
<tr>
<td>Rinker Design Associates, P.C. [Assistant Director of Transportation, 2007–Present]. Mr. Fischer is responsible for allocating, overseeing and managing all designs performed in the Richmond Office or by another office for a project managed by the Richmond Office including roadway design, hydrology/hydraulic analysis, traffic analysis and design, construction plan preparation, R/W acquisition, utility coordination/design, environmental permitting, and environmental compliance. His duties include QA/QC, oversight of all subconsultant work and coordination with clients to ensure their satisfaction and product quality. Mr. Fischer is responsible for staffing projects; hiring subconsultants; negotiating contracts with clients, contractors, and subconsultants; and project scheduling to ensure on-time/on-budget performance.</td>
</tr>
<tr>
<td>Johnson, Mirmiran &amp; Thompson, Inc. [Vice President/Branch Manager, 2000–2007]. Mr. Fischer was responsible for obtaining the work, executing the work and ensuring the quality of all work produced by the Richmond Office of JMT, oversight of all disciplines of work to include: roadway, drainage, structures, survey, construction inspection and environmental. He was responsible for contractual obligations with clients and subconsultants as well as project management on many key projects. Additional responsibilities for the daily office operations included: hiring, firing, raises, evaluations, dispute resolution, resource allocation, manpower projections and marketing.</td>
</tr>
<tr>
<td>Carter &amp; Burgess, Inc. [Senior Project Manager, 1999–2000]. Mr. Fischer was responsible for the design and management of projects associated with roadway and H&amp;HA designs. His duties included daily coordination with design staff, coordination with subconsultants and coordination with clients. Mr. Fischer’s duties also included providing design changes during construction due to changed field conditions.</td>
</tr>
<tr>
<td>Summary of Relevant Experience</td>
</tr>
<tr>
<td>• 27 years of Transportation Design</td>
</tr>
<tr>
<td>• 20 years of Design Management</td>
</tr>
<tr>
<td>• Four VDOT DB Projects</td>
</tr>
<tr>
<td>• Design Manager on 5 DB Projects</td>
</tr>
<tr>
<td>• Registered Licensed PE in Virginia</td>
</tr>
<tr>
<td>• Integrated Utility &amp; ROW Management</td>
</tr>
<tr>
<td>• Design QA/QC</td>
</tr>
<tr>
<td>• Complex TMP/MOT Plan Development</td>
</tr>
<tr>
<td>• Phased Construction</td>
</tr>
<tr>
<td>e. Education: Name &amp; Location of Institution(s)/Degree(s)/Year/Specialization:</td>
</tr>
<tr>
<td>Virginia Polytechnic Institute and State University, Blacksburg, VA / BS / 1986 / Civil Engineering</td>
</tr>
<tr>
<td>f. Active Registration: Year First Registered/ Discipline/VA Registration #:</td>
</tr>
<tr>
<td>1992 / Professional Engineer / #0402 023296</td>
</tr>
<tr>
<td>g. Document the extent and depth of your experience and qualifications relevant to the Project.</td>
</tr>
<tr>
<td>1. Note your specific responsibilities and authorities for each project, not those of the firm.</td>
</tr>
<tr>
<td>2. Note whether experience is with current firm or with other firm.</td>
</tr>
<tr>
<td>3. Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</td>
</tr>
<tr>
<td>(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)</td>
</tr>
</tbody>
</table>

VDOT I-581/Elm Avenue Interchange Improvements DB Project, City of Roanoke, VA ($20.4 million) |
1. Design Manager responsible for the design, management and QA/QC for complete roadway construction plans. The project scope includes the development of roadway widening along Elm Avenue, on and off-ramps for I-581/Route 220 and shoulder improvement along I-581/Route 220 approach. Mr. Fischer’s project responsibilities include the design oversight of TMP, utility coordination/design, bridge reconstruction/widening design and geotechnical analysis. He is responsible for coordinating with AI, VDOT, the City of Roanoke, and utility companies to ensure that the design requirements of the contract are being met and the design and associated services are expedited. The TMP on this project requires significant integration of the roadway and bridge designers as it encompasses both bridge widening and the adjacent roadway work. In order to accommodate adequate taper lengths, the project design reconstructs medians and roadway beyond the

Relevance to the Project |
✓ VDOT Design-Build |
✓ Stakeholder Coordination |
✓ Phased Construction |
✓ Complex TMP/MOT
<table>
<thead>
<tr>
<th>Project</th>
<th>Relevance to the Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>James Madison Highway (Route 15) PPTA/DB Project, Prince William County, VA ($56.4 million)</td>
<td>✓ Design-Build ✓ Geotechnical Challenges ✓ Complex TMP/MOT ✓ Utility Coordination ✓ ROW Acquisition</td>
</tr>
<tr>
<td>VDOT Middle Ground Boulevard Extension DB Project, City of Newport News, VA ($32.5 million)</td>
<td>✓ VDOT Design-Build ✓ Geotechnical Challenges ✓ Complex TMP/MOT ✓ Utility Coordination ✓ ROW Acquisition</td>
</tr>
<tr>
<td>VDOT Stringfellow Road (Route 645) Widening Project, Fairfax County, VA ($22.3 million)</td>
<td>✓ VDOT Design-Bid-Build ✓ Complex TMP ✓ Phased Construction ✓ Stakeholder Coordination ✓ Utility Coordination</td>
</tr>
<tr>
<td>VDOT Route 36 Improvements DB Project, Prince George County, VA ($8.2 million)</td>
<td>✓ VDOT Design-Build ✓ Complex TMP ✓ Phased Construction ✓ Stakeholder Coordination ✓ Utility Coordination</td>
</tr>
</tbody>
</table>

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

- 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.

Not Applicable
# ATTACHMENT 3.3.1
## KEY PERSONNEL RESUME FORM

<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel anticipated for the Project.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a. Name &amp; Title:</strong> MICHAEL MANSFIELD, P.E.</td>
</tr>
<tr>
<td><strong>b. Project Assignment:</strong> CONSTRUCTION MANAGER</td>
</tr>
<tr>
<td><strong>c. Name of Firm with which you are now associated:</strong> G.A. &amp; F. C. WAGMAN, INC.</td>
</tr>
<tr>
<td><strong>d. Years experience:</strong> With this Firm <em>1</em> Years  With Other Firms <em>14</em> Years</td>
</tr>
</tbody>
</table>

Please list chronologically (most recent experience 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 experience, please list the experience for those years you have worked. Project specific experience shall be included in Section (g) below):

**G.A. & F.C. Wagman, Inc. [Senior Project Manager, 2013–Present].** Mr. Mansfield provides management oversight for all aspects of construction, including safety, quality, schedule and cost. He is responsible for coordinating labor, equipment, materials, and subcontractors. Mr. Mansfield manages the submittal process which includes preparing and submitting shop drawings, CPM schedules, change orders, RFI’s and progress payments. Mr. Mansfield has taken a lead on project estimating and cost proposal preparation.

**D.W. Lyle Corporation [Senior Project Manager/Engineer, 1999–2013].** Through this 14-year work experience, Mr. Mansfield developed a wide range of skills, which include estimating, planning, resource allocation, and project management, that allow him to efficiently and effectively manage construction projects from start to completion. Much of Mr. Mansfield’s focus for the past 14 years has been on VDOT projects and design build projects. As such, he has acquired an intimate knowledge of VDOT’s specifications and standards, its safety and environmental regulations, as well as its policies and procedures. He has successfully applied this knowledge on numerous projects on new bridge construction as well as on bridge replacements and approaches, in rural and urban environments, and on projects large and small.

### Summary of Relevant Experience and Certifications
- Multiple VDOT DB Projects
- DB Construction Manager
- Complex TMP/MOT Projects
- Phased Construction
- HCSS Heavy Bid & Heavy Job
- Primavera P6 and Expedition
- Formwork & Shoring Design
- Registered Licensed PE in Virginia
- VDOT Intermediate Work Zone Training
- Erosion & Sediment Control Certification #1064C
- ACI & VDOT Cert. Concrete Field Tech.
- Multi Phased Structure Construction Experience
- 10-Hour OSHA Safety Training
- First Aid and CPR
- Fall Protection & Rigging Training
- Excavation Training
- Survey & Stakeout Experience
- Bridge Rehabilitation Construction Management Experience
- New Bridge Construction Experience
- VDOT Design-Build
- Complex TMP/MOT
- Stakeholder Coordination
- WMATA Coordination
- Utility Coordination

**e. Education:** Name & Location of Institution(s)/Degree(s)/Year/Specialization:
Virginia Polytechnic Institute and State University, Blacksburg, VA / BSCE 1999 / MS 2004 Civil Engineering

**f. Active Registration:** Year First Registered/ Discipline/VA Registration #:
2004 / Professional Engineer / #040130

### Document the extent and depth of your experience and qualifications relevant to the Project.
1. Note your specific responsibilities and authorities for each project, not those of the firm.
2. Note whether experience is with current firm or with other firm.
3. Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.

(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)

<table>
<thead>
<tr>
<th>VDOT Route I-495 HOT Lanes (I-495-00-C-042 Section 7 Jones Branch &amp; Dulles Toll Road) Fairfax County, VA ($43 million)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Project Manager</strong> responsible for the construction of 16 bridges at the Interstate 495 and Dulles Toll Road interchange. The scope of work included construction of 16 new bridge structures, drilled shaft foundations, pile foundations, approx. 170,000 square feet of MSE walls, complex shoring systems and bridge utility supports. Provided input to the design team on constructability. The schedule was coordinated around phased design. As the designs were completed, he began organizing the best possible plan to execute the project timely and within the project specifications. Planning and logistics within a complex MOT plan and highly congested roads was critical for success. Successfully met a 15% DBE goal set forth by Flour-Lane.</td>
</tr>
</tbody>
</table>

**Relevance to the Project**
- VDOT Design-Build
- Complex TMP/MOT
- Stakeholder Coordination
- WMATA Coordination
- Utility Coordination

---

3.3.1.4 Construction Manager
### VDOT Route 0061 Bridge Replacement Design-Build, Town of Narrows, VA ($16 million)

1. **Construction Manager** responsible for the construction and quality control of project. The project scope includes the phased construction of a new bridge and approaches over the New River within the Town of Narrows as well as demolition of the existing bridge. Bridge construction included drilled shaft foundations and MSE walls. Construction was designed and phased to have minimal disruption to both bridge and river traffic. Stringent environmental constraints were followed for working within the New River. Significant coordination and relocation of utilities was required.

**Owner Contact:** Mitchell Lester, Fluor-Lane, LLC / Project Director / 571-527-3600  
2. **D.W. Lyle Corporation**  
3. **April 2009—December 2012**

**Relevance to the Project**
- VDOT Design-Build
- Stakeholder Coordination
- Phased Construction
- Roadway Shoring

### James Madison Highway (Route 15) PPTA/DB Project, Prince William County, VA ($5 million)

1. **Structures Project Manager** who managed and led construction of bridge work. Project included construction of six bridges and removal of three bridges. Scheduled and managed labor, equipment, material and subcontractors for bridge construction. Provides input to the design team for value engineering.

**Owner Contact:** Duane Mann, P.E., PMP, Area Construction Engineer / Virginia Department of Transportation / 540-765-7226  
2. **D.W. Lyle Corporation**  
3. **November 2010—August 2014 (est.)**

**Relevance to the Project**
- Design-Build
- Phased Construction
- Roadway Shoring
- Utility Coordination

### VDOT Route 895 Airport Connector, Henrico County, VA ($3.7 million)

1. **Construction Manager** who managed and led construction of bridge work. Project includes construction of two bridges as well as foundation pile installation on two other bridges. Schedules and manages labor, equipment, material and subcontractors for bridge construction. Provides input to the design team for value engineering. Mr. Mansfield completed this project ahead of schedule and within the budget allowing for a better profit margin than anticipated.

**Owner Contact:** Gregg Newhouse, Project Manager / American Infrastructure / 571-437-4307  
2. **D.W. Lyle Corporation**  
3. **February 2007–December 2009**

**Relevance to the Project**
- VDOT Design-Build
- Geotechnical Challenges
- Complex TMP
- Stakeholder Coordination

---

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

**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.**

- **VDOT, Dinwiddie County, VA—Route 666 over Stony Creek / Project Manager / April 2014–August 2014**
- **VDOT, Giles County, VA—Route 61 over New River / Construction Manager / November 2010–August 2014 (est.)**
- **VDOT, Blackstone, VA—Amelia Avenue over NSRR / Project Manager / March 2014–November 2014**
- **VDOT, Henrico County, VA—Pedestrian Bridge over Route 895 / Project Manager / February 2014–December 2014**
- **NCDOT, Chowan County, NC—US Route 13 over Chowan River / Project Manager / August 2014–December 2014**
- **NCDOT, Currituck County, NC—Route 158 Wright Memorial Bridge over Currituck Sound / Project Manager / September 2013–May 2015**
Attachment 3.4.1(a): Lead Contractor Work History Forms
## ATTACHMENT 3.4.1(a)

### LEAD CONTRACTOR - WORK HISTORY FORM

**LIMI T1 PAGE PER PROJECT**

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Name of the prime design consulting firm responsible for the overall project design.</th>
<th>c. Contact information of the Client or Owner and their Project Manager who can verify Firm’s responsibilities.</th>
<th>d. Construction Contract Completion Date (Original)</th>
<th>e. Construction Contract Completion Date (Actual or Estimated)</th>
<th>f. Contract Value (in thousands)</th>
<th>g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement. (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOT LANES I-495 BELTWAY &amp; DTR&amp;AAH INTERCHANGE</td>
<td>HNTB</td>
<td>Fluor-Lane, LLC</td>
<td>12/19/2012</td>
<td>12/16/2012</td>
<td>$34,945</td>
<td>$43,062</td>
</tr>
<tr>
<td>Location: Tysons Corner, VA</td>
<td></td>
<td>(571) 480-4652</td>
<td></td>
<td></td>
<td>($43,062) (see below for explanation)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mr. Bob Portley</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(571) 527-3602</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:Bob.Portley@Fluor-Lane.com">Bob.Portley@Fluor-Lane.com</a></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 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.

D. W. Lyle Corporation (as a subcontractor to Fluor-Lane, LLC) built 16 bridges and approx. 140,000 SF of MSE wall in the 495 Beltway and DTR&AAH Interchange. D. W. Lyle Corporation was purchased by G.A. & F.C. Wagman, Inc. in June 2014 including Project Management, Supervision and Equipment resources that performed this project.

### PROJECT SCOPE AND DESCRIPTION:

This project consisted of new bridges and ramps to carry new HOT/HOV lanes over DTR&AAH and ramps to connect DTR&AAH to HOT/HOV lanes. A combination of foundation techniques were used in this project delivery. We self performed spread footings, drilled shafts, driven pile and pre-drilled pile. All substructure and superstructure concrete was self performed. Ongoing, excellent working relationships with subcontractors D.T. Read Steel Co., Inc. and Tavares Concrete provided additional resources to meet VDOT and Fluor-Lane, LLC’s DBE commitment and project schedule requirements. Erection of Prestressed Concrete Girders over DTR&AAH and ramps was self-performed. We successfully worked with another Fluor-Lane, LLC subcontractor to plan and coordinate the Structural Steel Staging and Erection.

This project changed significantly after the original contract was executed. MWAA, VDOT and Fluor-Lane, LLC negotiated to add additional lanes and ramps for DTR&AAH. Some bridges that had originally been structural steel superstructures were changed to prestressed concrete girder superstructures to accommodate fast track changes and long lead times. Quite a few bridges were lengthened to accommodate additional travel lanes. MSE wall quantities increased approximately 35% to allow more room for ramps and lanes between roadways. The additional $8,117,000 of work was completed within the original contract schedule.

### Lessons Learned

- **Planning and Coordination** with extremely high traffic counts requires detailed advanced planning and coordination not only within the construction team but with project stakeholders.
- **Construction Staging and Sequencing** is complex. Having sufficient equipment and human resources to prosecute work in multiple locations with complicated MOT requirements and restrictions.
- **Geotechnical Challenges** required various types of bridge foundations. The ability to self perform drilled shafts, driven piles, and pre drilled pile foundations is key to successful project completion.

### Evidence of Good Performance

- Completed ahead of required schedule
- Completed under budget
- Delivered required DBE goal

### Relevance to the Route 7 Widening Project

- Design-Build
- MWAA Coordination
- DTR&AAH Experience
- Complex Construction Sequencing
- Complex MOT Coordination
- Adjacent Project/ Stakeholder Coordination
3.4.1(a) Work History Form — Lead Contractor

**PROJECT SCOPE AND DESCRIPTION:**
G.A. & F.C. Wagman, Inc. was the Lead Contractor for the reconstruction of 1.34 miles of I-95/I-495 Inner Loop Local and Express Lanes, 1.21 miles of I-95/I-495 Outer Loop Express, portions of I-295 northbound and southbound and construction of 11 associated ramps. We constructed 8 bridges which included both curved steel girders and pre-cast concrete girders bridges. The project included 11 retaining walls constructed with various methods such as CIP walls, MSE walls and wire walls with a CIP veneer. We excavated 440,000 CY for concrete girder bridges. The project included 11 retaining walls constructed with various methods such as CIP walls, MSE walls and wire walls with a CIP veneer. We excavated 440,000 CY for concrete girder bridges. However, the soil in the area was very unstable and created unique opportunities.

**Construction Challenges:**
Temporary Shoring was the best opportunity for success. Extensive traffic control was required to reconstruct Mainline I-95/I-495/I-295 which included major traffic switches to allow a free flow of traffic along the inner and outer loop. The Project included extensive landscaping, irrigation, signing, lighting and ITS work. Working in the environmentally sensitive Potomac River watershed, erosion and sediment control was critical to the success of the Project.

Utilizing a design-build element, we were able to save the owner over $1.2 million. The redesign involved the shared use path that traveled along the Potomac, over I-495 and onto the main span of the Woodrow Wilson Bridge. We redesigned the approach and bridge foundation for the structure over I-495. A “pedestrian” bridge was constructed to Rosalie Island to allow the shared use path access to the structure over I-95/I-495. Partnering was an integral part of project and we had extensive coordination between adjacent contractors and stakeholders. The project won the MdQI “Award of Excellence, Partnering Bronze Award".

**Lessons Learned:**
- Completed major traffic switches without incident
- Completed under budget
- Achieved all project milestones
- Won the MdQI "Award of Excellence, Partnering Bronze Award"

**Evidence of Good Performance:**
- Completed under budget
- Achieved all project milestones
- Won the MdQI "Award of Excellence, Partnering Bronze Award"

**Relevance to the Route 7 Widening Project:**
- Shared Use Path & High Traffic Count
- Complex MOT
- Bridge Reconstruction
- Stakeholder Coordination
- Complex Construction Sequencing & Staging
- Staged Bridge Construction
- Temporary Shoring

**Location:** Prince George’s County, MD

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Name of the prime design consulting firm responsible for the overall project design</th>
<th>c. Contact information of the Client or Owner and their Project Manager who can verify Firm’s responsibilities.</th>
<th>d. Construction Contract Completion Date (Original)</th>
<th>e. Construction Contract Completion Date (Actual or Estimated)</th>
<th>f. Contract Value (in thousands)</th>
<th>g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requardt and Associates, LLP</td>
<td>Thompson and Whitman, LLP</td>
<td>Ms. Shirlene Cleveland, PE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name:</td>
<td>Name of Client/Owner:</td>
<td>Project Manager:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Phone: (703) 691-6710</td>
<td>Phone: (703) 713-2084</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Email: <a href="mailto:shirlene.cleveland@vdot.virginia.gov">shirlene.cleveland@vdot.virginia.gov</a></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name: Joint Venture of Johnson, Mirmiran &amp; Requardt and Associates, LLP</td>
<td>Name of Client/Owner: Maryland SHA</td>
<td>Project Manager: Ms. Shirlene Cleveland, PE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Name: I-95/I-495/MD 210 INTERCHANGE, MAINLINE AND RAMP B—WOODROW WILSON BRIDGE PROJECT Location: Prince George’s County, MD

Name: KCI Technologies

Name of Client/Owner: Maryland SHA
Phone: (703) 691-6710
Project Manager: Ms. Shirlene Cleveland, PE
Phone: (703) 713-2084
Email: shirlene.cleveland@vdot.virginia.gov

d. Construction Contract Completion Date (Original) 9/1/2008
e. Construction Contract Completion Date (Actual or Estimated) 1/24/2009
f. Contract Value (in thousands) $59,469
   Original Contract Value $61,564
   Final or Estimated Contract Value $61,564

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.

PROJECT SCOPE AND DESCRIPTION: As part of the overall Woodrow Wilson Bridge Contract, this contract included the reconstruction of 2 miles of Mainline I-95/I-495, Improvements to seven ramps on the I-95/I-495/MD 210 Interchange, 310,000 CY roadway excavation, 10,300 LF storm drainage, 35,000 SF noise barrier. Six retaining walls consisting of 16,000 SF MSE Walls, 19,000 SF CIP walls and a 37,000 SF contractor designed top down soldier pile and lagging wall with a CIP concrete face. This retaining wall was a design-build element that Wagman designed and coordinated with the owner to obtain approval of the design and construction methods. 81,500 LF steel pile were driven to support bridges and walls. Construction also included two bridge structures; one bridge was 1,160 LF that included a post-tension pier cap with curved structural steel over the inner and outer loop of the Washington Beltway. The second bridge was a mainline structure that required 3 phases of construction to widen the new structure. During construction of this mainline bridge we maintained traffic on the Beltway, and after each phase coordinated major traffic switches to minimize impacts to the traveling public. We worked hand in hand with the owner and engineering staff to create seamless transitions. Extensive traffic control was needed to reconstruct Mainline I-95/I-495 along the corridor. The project included landscaping, signing, lighting and ITS work. Wagman won the Maryland Quality Initiative (MdQI) “Award of Excellence, Major Roadway Over $10 Million and the was one of the projects that were included in Wagman receiving the “Northern Virginia Transportation Alliance Award”.

Relevance to the Route 7 Widening Project:
- Roadway & Ped Access
- Structures & Bridges
- Geotechnical
- TMP
- Noise Walls
- Utilities
- Public Relations
- CEI
- Overall Project Mgmt

Evidence of Good Performance:
- Completed ahead of required schedule
- Completed under budget
- Delivered required DBE goal
- Maintained an “A” rating for E&S during construction

Lessons Learned:
Planning and Coordination with extremely high traffic counts requires detailed advanced planning and coordination not only within the construction team but with project stakeholders.

Construction Staging and Sequencing is complex. Having sufficient equipment and human resources to prosecute work in multiple locations with complicated MOT requirements and restrictions

Geotechnical Challenges required various types of bridge foundations. The ability to self perform drilled shafts, driven piles, and predrilled pile foundations is key to successful project completion.
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**

| Name: STRINGFELLOW ROAD (ROUTE 645) WIDENING  
Location: Fairfax County, VA | Name: Fort Meyer Construction Corporation | Name of Client/Owner: VDOT NOVA District  
Phone: (703) 259-1794  
Project Manager: Mr. Zamir Mirza  
Phone: (703) 259-1794  
Email: zamir.mirza@vdot.virginia.gov | 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 Completion Date (Original)  
| e. Construction Contract Completion Date (Actual or Estimated)  
| f. Construction Contract Value (Original)  
| g. Construction Contract Value (Actual or Estimated)  
| h. Design Fee for the Work Performed  
by the Firm identified as the Lead  
Designer for this procurement.  

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Name of the prime/ general contractor responsible for overall construction of the project.</th>
<th>c. Contact information of the Client and their Project Manager who can verify Firm’s responsibilities.</th>
<th>d. Construction Contract Completion Date (Original)</th>
<th>e. Construction Contract Completion Date (Actual or Estimated)</th>
<th>f. Construction Contract Value (Original)</th>
<th>g. Construction Contract Value (Actual or Estimated)</th>
<th>h. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.</th>
</tr>
</thead>
</table>
| STRINGFELLOW ROAD (ROUTE 645) WIDENING  
Location: Fairfax County, VA | Fort Meyer Construction Corporation | VDOT NOVA District  
(703) 259-1794  
Mr. Zamir Mirza  
(703) 259-1794  
zamir.mirza@vdot.virginia.gov | 11/2015 | 11/2015 (est.) | $22,320 | $22,320 (est.) | $2,876 |

**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.**

**PROJECT SCOPE AND DESCRIPTION:** RDA performed the design services on this project as the Prime Designer out of their Manassas Office. RDA prepared the right of way and construction plans for this 2.02-mile project to include all roadway, traffic, lighting, structural, and construction coordination and support. The project consists of widening the existing two-lane roadway to a four-lane divided roadway with on-road bicycle lanes, sidewalks and trails. The project passes through a densely populated residential corridor with several public facilities including a library, schools and parks, as well as several stream crossings. In addition, the corridor has major utilities including a newly installed 24 inch water main, several large aviation fuel lines serving Dulles International Airport’s fuel farm, as well as numerous other overhead and underground utilities. Roadway design required various avoidance strategies regarding utilities, parks and schools. As a result, the proposed alignment crossed the existing alignment several times thereby complicating the Traffic Management Plan (TMP). In addition to the alignment challenges, the TMP also provides for pedestrian access during construction to facilitate the numerous pedestrian receptors (i.e. schools, ballfields, library, etc.). RDA prepared and participated in frequent meetings with VDOT, Fairfax County, the public and other stakeholders which helped create a partnering atmosphere focused to resolve challenges. Finally, RDA assisted VDOT with the relocation of underground and above ground utilities by developing detailed utility relocation information plans depicting as-built information for each relocated utility in plan view, profile view, and on cross sections.

"Rinker staff has been very cooperative in addressing the needs/requirements of the Department.", “Rinker has worked very well with other agencies particularly Fairfax County” and “exceeded expectations on many tasks.” and “Rinker staff work diligently to prosecute the work thoroughly and efficiently” —Zamir Mirza, NOVA

**Relevance to the Route 7 Widening Project**
- Roadway widening and phased construction
- Pedestrian access
- Utility impacts
- Stakeholder coordination
- TMP challenges

**Evidence of Good Performance**
- RDA received high marks on the Consultant Performance Reports (3.76-4.0)
- Revised design to avoid a large watermain and large fuel lines, saving millions
- RDA was hired by Fairfax County to redesign several park parking areas to avoid project impacts

**Lessons Learned**
- **Utility Avoidance.** The best way to mitigate utility impacts is to avoid them. The second best way is to minimize their impacts. Early coordination and strong working relationships help coordinate impacts that are unavoidable.
- **TMP.** When widening a curvilinear roadway, parallel widening is not feasible. Therefore, MOT and TMP must be incorporated into the initial design to ensure that the road widening can be built as it transitions from widening from one side of the road to the other.
- **Pedestrian Access.** Existing sidewalks, worn paths, and off-site trails had to be accounted for in our TMP. Large scale maps were developed to determine where trails existed and how we would incorporate them into the TMP design.
**Lessons Learned**

- **Utility Avoidance.** The best way to mitigate utility impacts is to avoid them. The second best way is to minimize their impacts. High tension power lines were avoided by redesigning the project from the preliminary plans provided by the County during pursuit. In the process, many other utilities were minimized and/or avoided.

- **Engineering vs. Construction.** Designing multiple solutions and constructing the most cost efficient solution results in delivering projects within budget.

- **Stakeholder Coordination.** Working in close coordination with all review agencies including VDOT, PWC, and environmental agencies incorporated their comments into the design and avoided the additional cost of redesigns.

**Project Scope and Description:** RDA performed the design services on this project as the Prime Designer out of their Manassas Office. RDA performed the design services on this project as the Prime Designer out of their Manassas Office. RDA provided engineering design services, right-of-way acquisition services, and environmental permitting and construction engineering/inspection services for the project. The project scope consisted of complete roadway and bridge construction for 2.2 miles of US Route 15, 0.3 miles of Waterfall Road, 0.7 miles of Old Carolina Road and 0.3 miles of Heathcote Boulevard. Project limits were from the I-66/Route 15 interchange on the south to the Route 15/Route 234 intersection on the north, including construction of bridge structures over Little Bull Run Creek and Catharpin Creek and a major box culvert at the tributary to Catharpin Creek. The project widened Route 15 from two lanes to four lanes using an Urban Principal Arterial typical. The Waterfall Road design was a realignment on new location while the Heathcote Boulevard design completed the missing section of roadway to connect Heathcote to Route 15. Finally, Old Carolina Road was widening from two to four-lanes with a raised median. The project TMP involved several shifts where the existing roadway meandered across the proposed roadway creating alignment, cross slope and profile challenges.

RDA’s commitment to quality is demonstrated in their willingness to provide innovative solutions throughout the Design-Build process. Working closely with VDOT, Prince William County, the contractor, and other stakeholders, RDA facilitated conflict resolution by providing numerous engineered solutions that were acceptable to all parties involved. These solutions reduced property impacts, minimized and avoided utility impacts, and enabled the project to maintain momentum without compromising VDOT standard and requirements while meeting the project’s budgetary constraints.

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**Project Name & Location**

Name: JAMES MADISON HIGHWAY (ROUTE 15) PPTA/DENIGN-BUILD
Location: Prince William County, VA

**Name:** Branch Highways, Inc.
**Name of Client/Owner:** Prince William County
**Phone:** (703) 792-6825
**Project Manager:** Mr. Thomas Blaser
**Phone:** (703) 792-6825
**Email:** tblaser@pwc.gov.org

**Contact information of the Client and their Project Manager who can verify Firm’s responsibilities.**

**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 Completion Date (Original)**

**e. Construction Contract Completion Date (Actual or Estimated)**

**f. Contract Value (in thousands)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Name of Client/Owner</th>
<th>Phone</th>
<th>Project Manager</th>
<th>Phone</th>
<th>Email</th>
<th>Construction Contract Completion Date (Original)</th>
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<th>Construction Contract Value (Original)</th>
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<th>Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement (in thousands)</th>
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<tr>
<td>JAMES MADISON HIGHWAY (ROUTE 15) PPTA/DENIGN-BUILD</td>
<td>Prince William County</td>
<td>(703) 792-6825</td>
<td>Mr. Thomas Blaser</td>
<td>(703) 792-6825</td>
<td><a href="mailto:tblaser@pwc.gov.org">tblaser@pwc.gov.org</a></td>
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**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.**

**Completed Bridge over Little Bull Run Creek**

**Construction of new bridge over Little Bull Run Creek**

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**Evidence of Good Performance**

- Zero work zone incidents
- Designed and constructed on schedule
- Designed and constructed on budget

**Relevance to the Route 7 Widening Project**

- ✔ Design-Build
- ✔ Road widening
- ✔ Bridge design/construction
- ✔ Utility impacts/coordination
- ✔ Shared use path

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**Lessons Learned**

- Utility Avoidance. The best way to mitigate utility impacts is to avoid them. The second best way is to minimize their impacts. High tension power lines were avoided by redesigning the project from the preliminary plans provided by the County during pursuit. In the process, many other utilities were minimized and/or avoided.

- Engineering vs. Construction. Designing multiple solutions and constructing the most cost efficient solution results in delivering projects within budget.

- Stakeholder Coordination. Working in close coordination with all review agencies including VDOT, PWC, and environmental agencies incorporated their comments into the design and avoided the additional cost of redesigns.
**ATTACHMENT 3.4.1(b)**

**LEAD DESIGNER - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Name of the prime/ general contractor responsible for overall construction of the project.</th>
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<th>d. Construction Contract Completion Date (Original)</th>
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<th>g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement (in thousands)</th>
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<tbody>
<tr>
<td>I-581 ELM AVENUE INTERCHANGE IMPROVEMENT</td>
<td>Name: American Infrastructure-VA, Inc.</td>
<td>Name of Client/Owner: VDOT Phone: (540) 378-5038 Project Manager: Mr. Robert Phlegar Phone: (540) 378-5038 Email: <a href="mailto:r.phlegar@vdot.virginia.gov">r.phlegar@vdot.virginia.gov</a></td>
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**Name:** I-581 ELM AVENUE INTERCHANGE IMPROVEMENT  
**Location:** City of Roanoke, VA

**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 Completion Date (Original)**

**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)**

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**PROJECT SCOPE AND DESCRIPTION:** RDA performed the design services on this project as the Prime Designer out of their Glen Allen Office. The project consists of four-Lane Divided Highway, Urban Minor Arterial Typical Section (GS-6) with Curb and Gutter, and Raised Median (1,200 linear feet); Six-Lane Divided Highway, Freeway/Other Principal Arterial (GS-5), Median Barrier.

The project scope was complete roadway and bridge design and construction for 0.3 miles of widening and reconstruction on Elm Avenue to include the replacement of two bridges (one over I-581 and the other over the Norfolk Southern Railroad). The project also includes reconstruction of all four ramps to provide additional capacity and better traffic flow. Finally the project includes guardrail replacement along I-581 to current standards along with the replacement of a 60-inch pipe crossing with an 84-inch pipe—originally designed using micro-tunneling technology.

As the Lead Designer for the I-581 / Elm Avenue Design-Build project, Rinker Design is responsible for the following critical project elements:

- **Roadway Design:** includes typical section development, horizontal and vertical geometry, TMP/MOT Plans, signage (including major overhead signing), pavement marking, and signalization plans
- **Drainage Design:** roadway drainage, erosion/sediment control, and major drainage (box culverts & 84” culvert design) requiring detailed analysis
- **Environmental Support:** avoidance strategies and permit sketches/drawings preparation for impacted areas
- **Right of Way Acquisition:** responsible for right of way and easement acquisition from 5 affected parcels
- **Utility Relocation Coordination:** responsible for holding UFI meeting, developing easement requirements, evaluating UT-9 forms to determine cost responsibility, reviewing utility plan and estimates, and monitoring the relocation of utilities including the relocation of Norfolk Southern’s signal line
- **Subconsultant Management:** activities performed by subconsultants reporting to RDA include geotechnical, bridge design, surveying, and underground utility designation and location.

*For multiple phase projects, only a single phase of construction (or single contract) will be considered as a Project. If additional phases are shown under the same Work History Form, only the first phase (or contract) listed will be evaluated.

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**Relevance to the Route 7 Widening Project**

- Design-Build
- Interchange Improvements
- Complex TMP/MOT
- Ramp Reconstruction
- Retaining Wall Construction

**Evidence of Good Performance**

- 10 months from NTP to Approved Plans
- Limited number of review comments

**Lessons Learned**

- Communication. Communication and early and often involvement of the City of Roanoke and FHWA to address issues uniquely affecting each of them.
- Quality Control. With as many “moving parts” as there are in a very confined interchange, the need to maintain and excel at quality control was critical to ensure that each piece and part correlates to the next and is accurate.
- TMP. A critical component of TMP is flexibility. Analyzing each phase of the MOT (as required), allows the designer to alter the sequencing in order to develop a better functioning workzone. However, observing the construction phasing in the field and applying those results back to the “working model” is the ultimate lesson learned.