



# Submittal of Qualifications

## A DESIGN-BUILD PROJECT

### Walney Road Bridge Replacement and Road Widening

From: Westfield Boulevard (Route 6755)

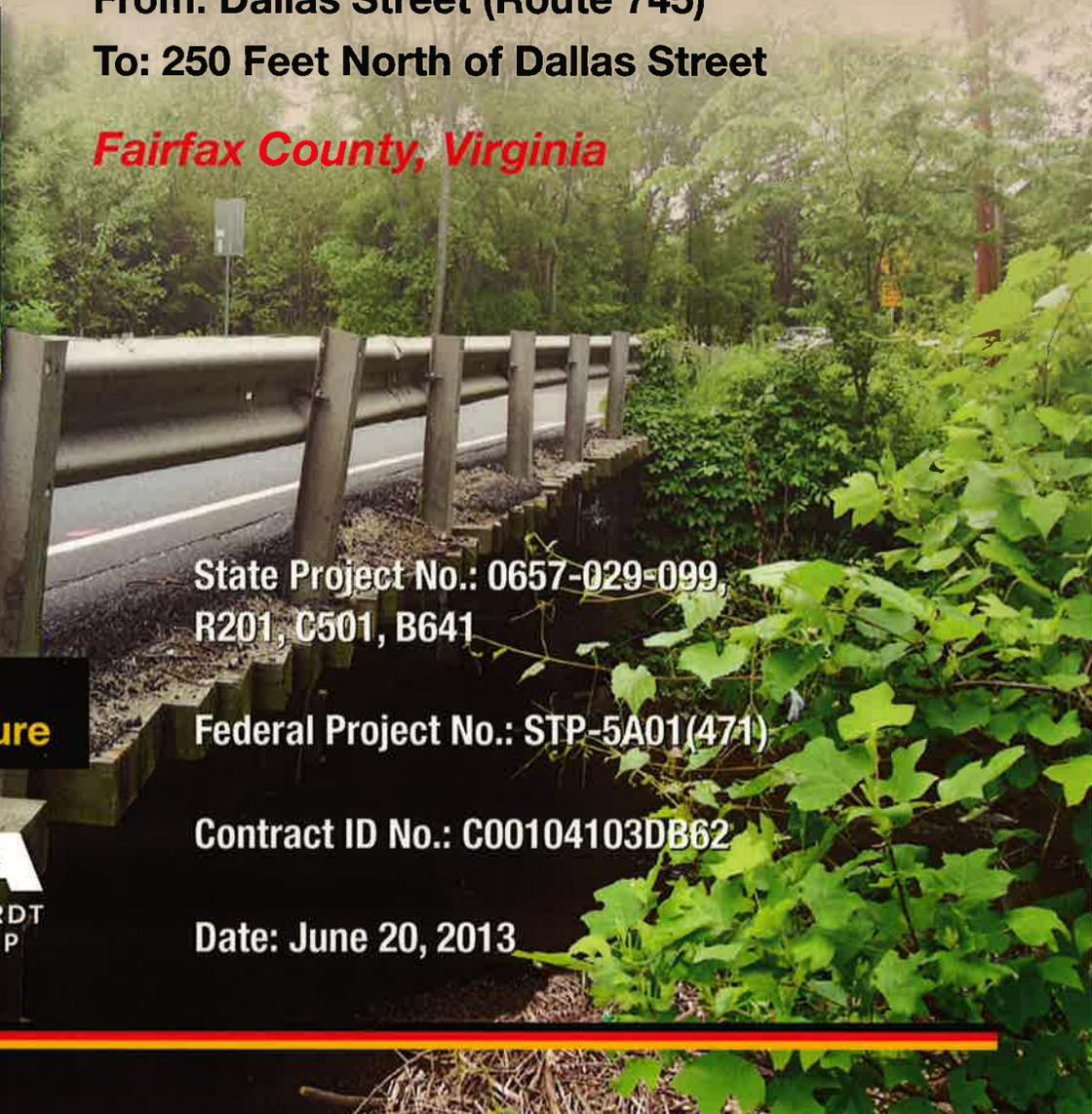
To: Willard Road (Route 6215)

and

From: Dallas Street (Route 745)

To: 250 Feet North of Dallas Street

*Fairfax County, Virginia*



State Project No.: 0657-029-099,  
R201, C501, B641

Federal Project No.: STP-5A01(471)

Contract ID No.: C00104103DB62

Date: June 20, 2013



**“BETTER, FASTER, SAFE”**

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Glen Allen, VA 23059  
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June 20, 2013

Kevin Reichert, P.E.  
Virginia Department of Transportation  
1401 East Broad Street  
Richmond, VA 23219

Letter of Submittal/Statement of Qualifications:  
Walney Road Bridge Replacement and Road Widening  
State Project No.: 0657-029-099, R201, C501, B641  
Contract ID Number: C00104103DB62

Dear Mr. Kevin Reichert:

American Infrastructure and Whitman, Requardt & Associates, LLP (AI/WR&A Team) invites you to review our submittal of qualifications for the Walney Road Bridge Replacement and Road Widening Project (Project). Our firms share common values for customer service, quality, cost-effective design and construction, schedule compliance, and safety of the public and our work force. Collectively, the AI/WR&A Team brings over 68 years of providing services to VDOT and over 133 years of providing design and construction services in the Northern Virginia area.

American Infrastructure (AI) and Whitman, Requardt & Associates, LLP (WR&A) have joined forces to present VDOT with a team that brings recent and relevant expertise and knowledge regarding the delivery of design-build projects. VDOT continues to play a major role in the successful use of design-build project delivery. In the opinion of our team, VDOT’s success can be attributed to selection of design-build teams that demonstrate each project has a distinct set of stakeholders that must be involved in every step of the design-build process. Our collaborative effort will be fostered by honest, open communication throughout every stage of the Project. Construction is inherent with risk and change. By proactively collaborating with the project stakeholders, the AI/WR&A Team will minimize and mitigate risk to control the change process.

AI has been awarded nine design-build transportation projects worth over \$650 million in the last ten years, and is currently working on three design-build projects for VDOT. In Virginia, AI has completed two design-build projects, both of which were delivered ahead of schedule and within budget. WR&A has completed over 60 design-build transportation projects in the region in the last ten years and is currently working on two such projects in Virginia. The combination of this extensive design-build experience will ensure that the AI/WR&A Team uses the innovation of the design-build process to determine the right solution for the Walney Road project, VDOT and the project stakeholders.

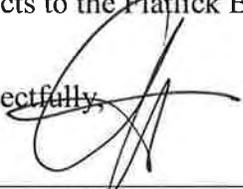
A primary goal of the AI/WR&A Team is to safely deliver this project for VDOT while minimizing the inconvenience to VDOT’s customer, the daily users of Walney Road. In addition to hard work, unmitigated attention to quality and adherence to the project schedule, safety sits at the top of our list of commitments to VDOT. Safety of the public is of paramount importance to our team. Our MOT/TMP design leads and construction crews and supervisors are certified through ATSSA and VDOT’s Work Zone Safety Traffic Control Training Programs. Through AI’s “Home Safe Tonight” initiative, safety is planned into every phase and work operation in the construction process.

**SUBMITTAL REQUIREMENTS**

The AI/WR&A Team submits the information below as detailed in Section 3.2 of the Request for Qualifications:

- 3.2.1 The full legal name and address of American Infrastructure – VA, Inc. (AI-VA) is as follows:  
**American Infrastructure – VA, Inc.**, 301 Concourse Boulevard, Suite 300, Glen Allen, VA 23059
- 3.2.2 The contact information for Kevin Ott (DBPM), responsible for the oversight of the entire AI/WR&A Team and the primary point of contact with VDOT is as follows:  
**Kevin Ott, Design-Build Project Manager** 804.290.8500 (Telephone)  
301 Concourse Boulevard – Suite 300 804.418.7935 (Fax)  
Glen Allen, VA 23059 kevin.ott@americaninfrastructure.com
- 3.2.3 The principal officer of AI-VA with whom a design-build contract with VDOT would be written is:  
**Aaron Myers, VP/GM** 804.290.8500 (Telephone)  
301 Concourse Boulevard – Suite 300 804.418.7935 (Fax)  
Glen Allen, VA 2305 aaron.myers@americaninfrastructure.com
- 3.2.4 AI-VA is a registered corporation in the Commonwealth of Virginia and will take financial responsibility for the Project.
- 3.2.5 American Infrastructure – VA, Inc. will be the Lead Contractor and Whitman, Requardt & Associates, LLP will be the Lead Designer for the Project.
- 3.2.6 All affiliated and subsidiary companies are identified on Attachment 3.2.6 in **APPENDIX 3.2.6**.
- 3.2.7 Executed Certification Regarding Debarment Forms are included in **APPENDIX 3.2.7**.
- 3.2.8 AI-VA is active, in good standing and prequalified to bid on the Project. AI-VA’s prequalification number is G303 and evidence of prequalification is included as in **APPENDIX 3.2.8**.
- 3.2.9 AI-VA has the capability to obtain a performance and payment bond for the \$12M estimated contract value of the Project as exhibited by the letter of surety in **APPENDIX 3.2.9**.
- 3.2.10 The summary of professional licenses, Attachment 3.2.10, as well as full-size copies of individual licenses for the AI/WR&A Team business entities and Key Personnel are included in **APPENDIX 3.2.10**.
- 3.2.11 AI-VA will achieve the 14% DBE participation goal for the Project. AI-VA consistently meets DBE goals and has met the goal on both of our completed design-build projects in Virginia.

The AI/WR&A Team appreciates the opportunity to provide our Statement of Qualifications for the Walney Road Bridge Replacement and Road Widening Project in Fairfax County. Our team of qualified firms brings the experience and expertise on similar projects in the NOVA District that is needed to successfully deliver the Project while minimizing the inconvenience to the motorists on Walney Road and potential impacts to the Flatlick Branch floodplain. We look forward to your review of our submittal.

Respectfully,  
  
\_\_\_\_\_  
Aaron T. Myers, VP/GM  
American Infrastructure – VA, Inc.

The AI/WR&A Team's strong relationships and project experience with VDOT and Fairfax County staff will ensure the project design and construction meets all the requirements of the RFP, while minimizing VDOT staff efforts to review project submittals. This experience includes AI's five VDOT design-build projects and WR&A's experience on over 100 projects for the VDOT NOVA District.

### 3.3.1 KEY PERSONNEL

**3.3.1.1 Design-Build Project Manager (DBPM):** AI has identified *Kevin Ott* as DBPM for the Project and the primary point of contact for VDOT. He will be responsible for the execution and progress of the work under the contract including corresponding with third parties and project stakeholders, oversight of construction quality, coordination of design, and managing the project schedule to ensure timely completion. Mr. Ott is currently overseeing the *I-95 at Contee Road Interchange Design-Build Project* in Maryland. Mr. Ott also held key positions on both the *Woodrow Wilson Bridge Replacement* and *Inter-County Connector Design-Build* projects. Mr. Ott was involved with coordination of the Woodrow Wilson Bridge construction through Jones Point Park with the City of Alexandria. He also managed the coordination of significant MOT and utility relocation challenges on the *Inter-County Connector and Contee Road Project*. Mr. Ott lives in northern Virginia, approximately 16 miles from the Project, which gives him firsthand knowledge of the MOT challenges facing constructors in the region.

**3.3.1.2 Quality Assurance Manager (QAM):** *Gale Dickerson, P.E.* has 25 years of experience in both the public and private sectors. In the public sector, Ms. Dickerson was assigned to VDOT's Fredericksburg District. This assignment enabled Ms. Dickerson to gain a thorough understanding of VDOT's quality assurance inspection, testing and construction quality control programs. Upon joining the private sector, Ms. Dickerson had the opportunity to put into practice her knowledge of VDOT's programs. Ms. Dickerson is serving as the QAM on AI's current *Middle Ground Boulevard Extension Design-Build Project* and the recently completed *Route 29 Approaches and Bridge over the Tye River Project*. Ms. Dickerson has also worked extensively with WR&A's bridge design group while serving as ACE and Resident Engineer in the Fredericksburg District on projects including the *Norris Bridge Rehabilitation* and the *West Point Bridge Approach Repair* projects.

**3.3.1.3 Design Manager (DM):** *John Maddox, P.E.* has 28 years of experience designing major highway facilities and will serve as the DM for this project. He has been functioning in this capacity for over 20 years and has designed several similar bridge replacements and widening projects in the Commonwealth. Since 2001, Mr. Maddox has managed over 100 projects for VDOT in the NOVA District. Additionally, he has worked directly with Fairfax County through several transportation projects and on-call contracts including the *Poplar Tree Road Widening Project*. His experience as the Design Manager for the *Fairfax County Parkway Interchange at Fair Lakes Parkway Project* required extensive coordination with the Fairfax County Park Authority and the development of an innovative approach to stormwater management. This experience with the innovative approach for stormwater management will be critical to the success of the Walney Road Bridge Replacement and Road Widening Project. In addition, he will establish and oversee the design of a QA/QC program for all appropriate disciplines involved in the design of the project including review of design, working plans, shop drawings, specifications and constructability.

**3.3.1.4 Construction Manager (CM):** *Paul Flatley* has 13 years of construction experience, and manages design-build bridge construction projects for AI. His expertise includes in-stream construction that minimizes environmental impacts. His construction management experience includes the *Route 29 NBL Bridge Replacement over Tye River Design-Build Project*, the *Bridge Rehabilitation on Route 208 Bridge over Lake Anna*, and the *Mulligan Road Phase I Project at Fort Belvoir*. The Tye River project was delivered seven months ahead of schedule and was presented by VDOT at the VTCA as an example of a project where "all parties acted as a team with the project being placed ahead of individual interests." The Mulligan Road Project included two bridges over stream crossings and was adjacent to 12 environmental

conservation areas. Mr. Flatley's experience and attention to construction QC will ensure all material and work performed meets contract requirements and the "Approved for Construction" plans and specifications.

**3.3.1.5 Lead Utility Coordination Manager (LUCM): Dan Seli, P.E.**, has 25 years of experience in utility designs/relocations and has managed the *VDOT NOVA District On-Call Utility Design Contract* since 1996. Mr. Seli has completed over 120 utility design projects for VDOT and is also currently managing the *VDOT Statewide Utility Coordination Contract*. He has a working relationship with numerous utility owners and is conversant in VDOT's 2011 Utility Manual and UT-9 determination process. This VDOT experience ensures he has the expertise to verify conflicts; determine cost responsibilities; conduct utility field inspections; coordinate utility relocation design; review and recommend approval of utility relocation plans and estimates; and ensure inspection of utility relocation construction. His relevant project experience includes coordination with Verizon, Virginia Dominion Power, Washington Gas, Fairfax Water, Fairfax DPWES, and several fiber optic cable providers. Mr. Seli is currently managing utility coordination for the *George Mason University Campus Drive Design-Build Project*.

DBPM	QAM	DM	CM	LUCM
<p><b>Kevin Ott</b></p> <ul style="list-style-type: none"> <li>17 yrs. experience</li> <li>13 yrs. design-build experience</li> <li>4 yrs. NOVA project experience</li> <li>Design oversight</li> <li>Construction QC management</li> </ul>	<p><b>Gale Dickerson, PE</b></p> <ul style="list-style-type: none"> <li>25 yrs. experience</li> <li>QAM on 3 VDOT design-build projects</li> <li>QAM on 2 AI design-build projects</li> <li>QC monitoring</li> </ul>	<p><b>John Maddox, PE</b></p> <ul style="list-style-type: none"> <li>28 yrs. experience</li> <li>12 yrs. VDOT NOVA experience</li> <li>Design-build</li> <li>Design QA/QC oversight</li> <li>Design reviews</li> <li>Constructability</li> </ul>	<p><b>Paul Flatley</b></p> <ul style="list-style-type: none"> <li>13 yrs. experience</li> <li>5 yrs. NOVA project experience</li> <li>Construction QC management</li> <li>Design-build experience</li> <li>ESCCC &amp; RLD certifications</li> </ul>	<p><b>Dan Seli, PE</b></p> <ul style="list-style-type: none"> <li>25 yrs. experience</li> <li>19 yrs. VDOT NOVA experience</li> <li>Design-build experience</li> <li>Utility relocations</li> </ul>

*Figure 3.3.1: Key Personnel Relevant Experience. The AI/WR&A Team key personnel will minimize the project risks through personal experience and team accountability.*

**3.3.2 ORGANIZATIONAL CHART AND NARRATIVE**

The AI/WR&A Team organizational chart on Page 7 shows the chain of command of all companies and includes the individuals responsible for pertinent disciplines. In addition to the five key personnel, the AI/WR&A Team has identified Public Relations Manager (PRM) from AI to facilitate inclusion of the project stakeholders during design and construction. This organizational structure shows a clear separation between the Quality Control (QC) and Quality Assurance (QA) programs for construction activities.

This organizational structure is similar to the successful model used by AI on the *Route 29 Approaches and Bridge over the Tye River Design-Build Project* for VDOT, which was completed ahead of schedule and within VDOT's budget.

**FUNCTIONAL RELATIONSHIPS AND COMMUNICATION**

**VDOT** – The Department will coordinate directly with our DBPM as the primary contact for all aspects of design and construction oversight of the Project. Open lines of communication between the QAM and VDOT will assist with monitoring quality assurance oversight. We anticipate VDOT's oversight and support in our coordination efforts with project stakeholders. The AI/WR&A Team public relations manager will facilitate involvement of stakeholders to minimize additional effort needed by VDOT.

**Design-Build Management** – Our DBPM will serve as VDOT's primary point of contact for the Project. Reporting to the DBPM are four key managers; the QAM, DM, CM and Public Relations Manager. This structure, combined with our DBPM's maintenance of an action item log for potential project issues and

three-month look-ahead schedule will ensure the design, construction, and environmental compliance efforts remain on schedule and in conformance with VDOT commitments.

**Quality Assurance** – 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 both the DBPM and CM during the design phase to develop a cost-effective, efficient, and constructible design. He will also coordinate directly with the CM during the construction phase to confirm field conditions meet design assumptions and reevaluate as necessary. The Design QA/QC Manager and design discipline leads will report to our DM. In addition, the LUCM will report to our DM, streamlining this coordination during the design process.

*Roadway Design Lead Bruce Barnett, P.E. has over 23 years of experience and has completed more than 80 assignments under the NOVA District On-Call Design Contract over the last four years.*

*Structural Design Lead Jeremy Schlussel, P.E. has 15 years of experience and is currently providing design services similar to those required for this project for two design-build projects in Virginia.*

*Hydraulic Design Lead Ipek Aktuglu, P.E. has over 12 years of experience and is currently providing services to the VDOT NOVA District under WR&A's On-Call Design Contract.*

**Construction** – AI's CM will report to our DBPM and communicate directly with the PRM on construction coordination with project stakeholders. He will also communicate with the DM during both design and construction phases to ensure construction is consistent with the project design. Our CM will be on the project site for the duration of construction operations. He will oversee the entire construction team, including our QC Manager for quality control activities, General Superintendent for construction progress, and DBE coordinator to manage the project goal. AI lead's for field utility coordination, safety, environmental compliance, MOT, and schedule have been identified and will report to our CM as the comprehensive construction manager. WR&A is currently providing QC service to VDOT on six Construction Engineering and Inspection contracts including two contracts in the VDOT NOVA District.

*AI's CM, Paul Flatley, has 4 years of experience with roadway projects in NOVA and has completed construction ahead of schedule on projects such as the Bridge Replacement over Tye River Design-Build.*

**Public Relations** – *Thomas Heil, P.E.* will serve as the PRM and will assist the DBPM in coordination with third party stakeholders. This team will keep project stakeholders informed about construction activities and their impacts. Our PRM brings over 12 years of recent experience working closely with VDOT in the NOVA District addressing stakeholder issues and concerns on transportation projects. One example of this experience includes the intersection improvements at the Braddock/Union Mill Road and Lucasville Road Widening and Drainage Improvements Project.

**Utility Coordination** – Our LUCM will report to the DM and coordinate early and continuously with the utility companies to establish easements and follow relocations through to completion. He will lead the Utility Coordination Task Team to verify conflicts and develop a coordination plan. This coordination plan will be presented to the DM, DBPM, and VDOT for approval prior to finalizing with the utility companies.

### TEAM COORDINATION MEETINGS

The AI/WR&A Team meetings will coordinate design and construction including the critical elements of schedule, utility coordination, SWM, and right-of-way acquisition required for the Project.

**Design Coordination** – Coordination will occur between the Designer and the Builder to determine construction means and methods at critical stages of design. Meetings may also include design disciplinary reviews, over the shoulder reviews, and any comment resolution meetings with stakeholders. Task forces

may be established by design discipline as necessary to coordinate technical discussions between the project stakeholders and the AI/WR&A Team.

**Utility Coordination** – After an initial utility kickoff meeting with all utility owners, a utility task force will be established to discuss and coordinate design and construction of each utility with other utilities and the design-builder’s work. Where issues arise, this task force will meet to address and resolve the conflict with the necessary parties present. This meeting will also be used to discuss the schedule with each utility owner.

**Progress Meetings** – Weekly progress meetings will discuss key issues not limited to design status, construction status, project schedule, ROW status, contract administration, safety, and public outreach with updates provided by the responsible person. This is a key meeting that will be used to monitor prosecution and progress of the work. Project stakeholders will be invited to attend, as necessary. Monthly meetings between project key personnel, and others designated by them, will be used to discuss and resolve high level issues that may be affecting work progress.

**Public Outreach** – Open houses may be used to allow the public to view plans and discuss concerns through the design and construction process. The DBPM and DM will be present to answer questions and address possible concerns. Concerns that cannot be addressed will be returned to the Team for resolution.

**Schedule Review** – The AI/WR&A Team will have daily coordination meetings, weekly planning and schedule meetings, and monthly safety meetings where the project schedule will be communicated throughout the entire team. Daily coordination meetings between the CM, senior inspectors, and VDOT’s onsite representative will help keep communication open about construction progress. Weekly planning and schedule meetings may include the QA and QC team, VDOT representatives, and design team members as necessary. The weekly look ahead schedule and the project monthly CPM schedule will be distributed.

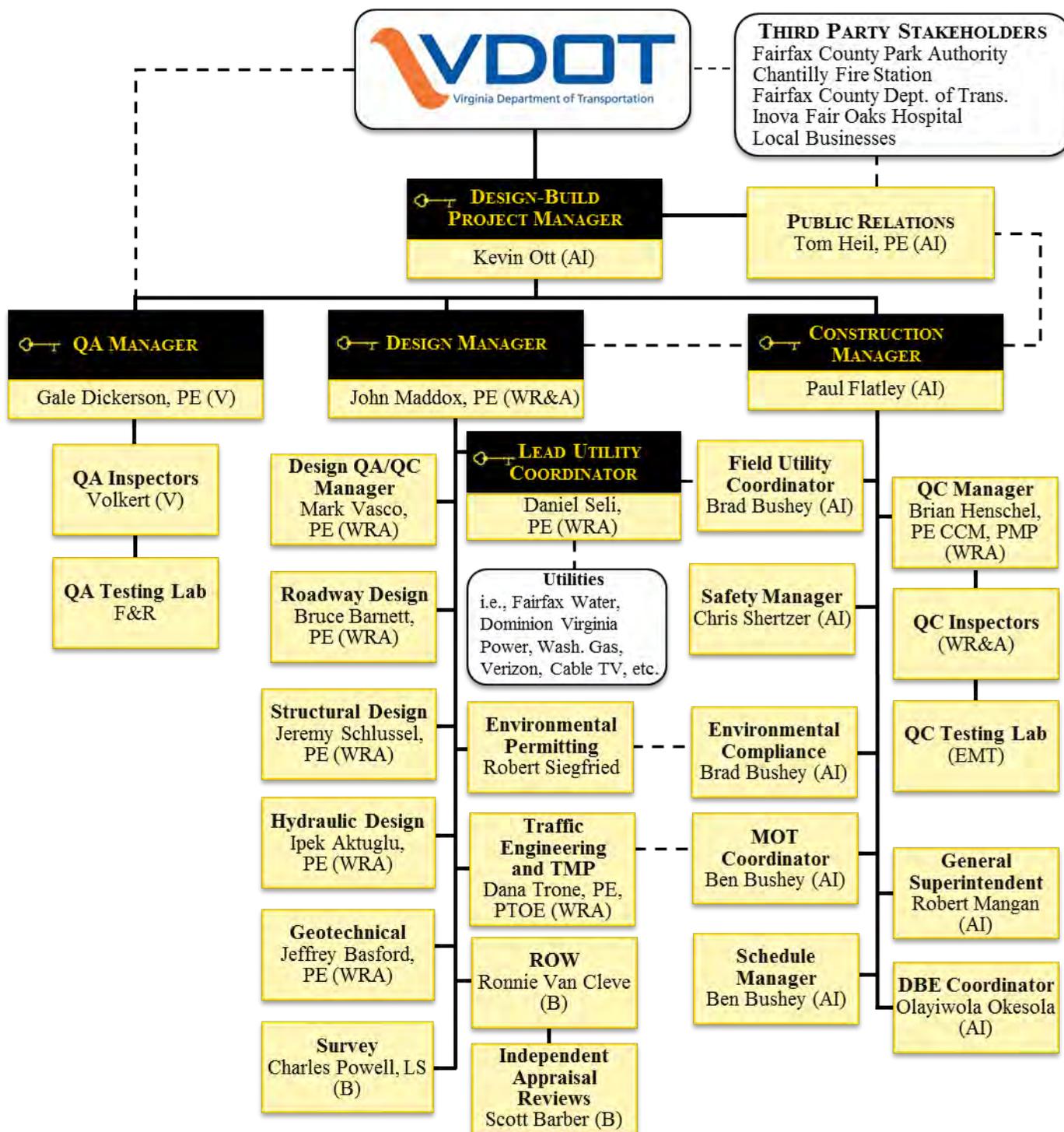
**Safety Meetings** – Before and after each shift, the field supervisors will review safety issues and successes with their crew as part of the work planning process. Once a month the entire project staff will review safety on the project, address any issues, and celebrate work completed safely. Any member of the project team will have the opportunity to promptly bring their concerns to the attention of the team during safety meetings.

**TASK TEAMS**

The AI/WR&A Team has identified task teams crucial to the Project success. Task teams for constructability, utility coordination, environmental, and traffic will manage the project risks with oversight by our DBPM.



**Figure 3.3.2: Task Teams.** The AI/WR&A Team will manage the project risk elements utilizing task teams experienced at implementing solutions to these challenges.



Key Personnel     
 Reporting Relationships     
 Communication  
 American Infrastructure – VA, Inc. (AI)      Whitman, Requardt & Associates, LLP (WRA)  
 Volkert, Inc. (V)      Bowman Consulting Group, Ltd. (B)  
 Engineering & Materials Technologies, Inc. (EMTech)      Froehling & Robertson, Inc. (F&R)

The AI/WR&A Team was brought together by previous work experience of individual members of our team. We believe the strength of AI's design-build experience as complemented by WR&A's experience for VDOT's NOVA District provides VDOT with a strong team for this Project.



**American Infrastructure (AI)** is a heavy civil contractor that has provided quality construction services in the Mid-Atlantic region since 1939 and in the Commonwealth of Virginia since 1967. Currently ranked #116 in the Top 400 Contractors and #24 in Top 50 Domestic Heavy Contractors by *Engineering News-Record*, AI has a Virginia workforce of over 310 employees and 240 pieces of heavy equipment/rolling stock. AI strategically utilizes equipment and personnel by resource sharing throughout the Mid-Atlantic region, with a total fleet of over 1,300 pieces of heavy equipment/rolling stock and over 1,600 employees.

To date, AI has been awarded over \$625M of design-build projects in the Mid-Atlantic region, including \$479M for VDOT projects in the past five years. The *Richmond Airport Connector Road Design-Build Project* for Transurban and the *VDOT Route 29 Bridge over Tye River Design-Build Project* were completed two months and seven months ahead of schedule, respectively.

AI's company-wide safety initiative, known as "Home Safe Tonight", has the well-being and safety of our people as its primary consideration. "Home Safe Tonight" is based on the premise that safe work operations must be planned into every phase of the construction process.



**Whitman, Requardt & Associates, LLP (WR&A)** has provided transportation design services to VDOT for over 60 years and engineering, planning and construction management services in the Mid-Atlantic region for nearly 100 years. Currently ranked #111 by *Engineering News-Record*, WR&A has one of the largest design groups in Virginia (with over 150 engineers and technicians) and a total staff of over 650 in the region. WR&A has provided engineering services for over 60 design-build projects in the region and is currently working on two design-build projects in Virginia. WR&A is a multi-disciplined engineering firm that has experienced staff for roadway, bridge, retaining wall, drainage, river mechanics analysis, traffic engineering, ITS, utility and geotechnical engineering and is currently providing design services to VDOT for numerous projects. Additionally, WR&A's environmental staff has developed permits and environmental documents for VDOT as well as other local government agencies.

**AI/WR&A RELEVANT EXPERIENCE**

*AI's recent design-build experience includes:*

- |                                           |                                                          |
|-------------------------------------------|----------------------------------------------------------|
| ▪ Richmond Airport Connector Road (39.4M) | ▪ Middle Ground Boulevard Extension (32.6M)              |
| ▪ SR 476, Section RDC (78M)               | ▪ Route 29 Approaches & Bridge over the Tye River (6.7M) |
| ▪ I-95 at Contee Road Interchange (34M)   | ▪ I-581 Elm Avenue Interchange Improvements (20.4)       |
| ▪ US 40 / MD 715 (17.7M)                  |                                                          |
| ▪ Route 460 Corridor Improvements (1.4B)  |                                                          |

*AI's recent NOVA experience includes:*

- |                                                          |                                        |
|----------------------------------------------------------|----------------------------------------|
| ▪ Saintsbury Drive and Vienna Metro Improvements (19.2M) | ▪ Fort Belvoir USACOE Hospital (53.9M) |
| ▪ Fort Belvoir Mulligan Road (14M)                       | ▪ Potomac Yard (6.6M)                  |

*WR&A's recent design-build experience includes:*

- |                                                          |                                                           |
|----------------------------------------------------------|-----------------------------------------------------------|
| ▪ George Mason University Campus Drive Connector (15.6M) | ▪ I-95/I-495 at Arena Drive from MD 202 to MD 214 (29.5M) |
| ▪ MD 237 From MD 235 To Pegg Road (38.4M)                | ▪ Rte 636 over CSXT PPTA (Est. 1.6M - bridge)             |

**WR&A's recent NOVA experience includes:**

- Fairfax County Parkway Interchange at Fair Lakes Parkway (44M)
- Route 123 Interchange at Route 1 (70M)
- Poplar Tree Road Widening (2.7M)
- Towlston Bridge over Rocky Run (1.2M)
- Lee Road Widening and Box Culvert Extension (3.5M)
- Route 234 Park and Ride Lot (10M)

**AI/WR&A SHARED WORK HISTORY**

In addition to each firm's extensive list of individual accomplishments, the AI/WR&A Team has been working together since 2009 on transportation and infrastructure projects throughout the region including the similar projects in the partial list below:

- **Route 208 Bridge over Lake Anna, Spotsylvania County, VA**
- **Nicodemus Road Bridge, Reisterstown, MD**
- **Newbury Street over Western Run Superstructure Replacement, Baltimore, MD**
- **Runway 15R/33L Earthwork Package at BWI Airport, Baltimore, MD**
- **I-695 Inner & Outer Loop Safety & Resurfacing, Baltimore County, MD**
- **Broening Highway over Colgate Creek Immediate Girder Repairs, Baltimore, MD**

**SUBCONSULTANTS**

The AI/WR&A Team is strengthened by design support and key subconsultants with local and previous teaming experience with AI and WRA:

**Volkert, Inc.** – Volkert will provide QA for the Project. The firm has a Virginia staff of 65 including 35 dedicated to QA and CM. Volkert's staff has significant experience with VDOT's road and bridge construction methods, materials, standards and specification. Volkert's relevant experience with AI includes the *Middle Ground Boulevard* and *Route 29 Approaches and Bridge over the Tye River*.

**Froehling & Robertson, Inc.** – F&R will monitor construction quality control and construction materials testing for the Project. F&R's QC program ensures that projects meet the requirements of multiple stakeholders. F&R's laboratories are accredited by AASHTO (AMRL/CCRL), USACE, and WACEL. Technical personnel are certified by agencies including ACI, ASTM, AWS, ICC, NICET, and WACEL.

**Bowman Consulting Group, LTD.** – Bowman will provide surveying and ROW acquisition services. Their staff has expertise with land rights issues and managing ROW agents, appraisers, title companies and survey crews. Bowman has experience in Northern Virginia including VDOT's *Route 1/123 Interchange Project*, and the *GMU Faculty and Staff Housing Design-Build Project*. Bowman also provided services for the *Warriors in Transition Complex* where AI was the contractor.

**Engineering & Materials Technologies, Inc.** – E.M.Tech will provide QC testing for this Project. The firm is a full service engineering company providing geotechnical and structural engineering, consulting, materials testing, and construction QA/QC services. E.M. Tech has previously provided relevant services with WR&A for the *George Mason University Campus Drive Connector Project*.

**WORK HISTORY FORMS (APPENDIX 3.4.1)**

AI and WR&A have included the following projects to best demonstrate our individual qualifications for the Walney Road Project.

**AI WORK HISTORY**

- Mulligan Road Phase I
- I-95 at Contee Road Interchange Design-Build
- Route 29 Approaches and Bridge over Tye River Design-Build

**WR&A WORK HISTORY**

- Fairfax County Parkway Interchange at Fair Lakes Parkway
- MD 237 from MD 235 to Pegg Rd Design-Build
- GMU Campus Drive Connector Design-Build

## ROAD CLOSURE TIMING AND DURATION

**DESCRIPTION** – The proposed bridge over Flatlick Branch is larger than the existing bridge and cannot be completely constructed without removing the existing bridge. The existing road is two lanes and may not accommodate phased construction, nor may it be desirable to build the project in phases. A detour lasting several months during the summer of 2015 has been proposed by VDOT to allow expedited construction of the bridge over Flatlick Branch. The following activities are critical to closing the road in order to construct the bridge at a time that is the most convenient for the traveling public:

- **Conservation Easement:** The proposed replacement of the conservation easement on Fairfax County Park Authority property adjacent to the project will be coordinated by VDOT. Any proposed construction or utility easements on the Park Authorities property may be a part of this process to finalize the agreement with the Park Authority.
- **Utility Easements:** Coordination of construction easements with other utility easements, roadway design, and bridge design is required for final ROW acquisition. The details of the utility easements will be included in any ROW parcel agreements.
- **Construction Easements:** ROW acquisition may not proceed on certain parcels until coordination of the construction easements with final design has been completed. The details of any perpetual or temporary construction easements included in any ROW parcel agreements.
- **ROW Acquisition:** Twelve parcels have been identified to be impacted by construction. The coordination of construction and utility easements through the design process will continue through the ROW acquisition process. The ROW acquisition process is dependent upon fully understanding the impact from utility and construction easements.
- **Fairfax Public Schools Schedule:** Specific starting and ending dates for 2015 summer break have not yet been determined. However, it is generally expected that school will be out of session from mid-June to early-September. If road closures are constrained to the duration of the summer break, there will be little flexibility in the construction schedule.

Involvement by numerous third-party entities including utility owners and existing land owners must be aligned with the final design. All design solutions will be explored including the feasibility of the detour after preparing a traffic analysis and understanding the Level of Service that is acceptable to VDOT. The design solution with the potential to reduce the construction timeframe and provide flexibility in the construction phasing and that best supports the needs of all of the project stakeholders, adjacent businesses, and private utility owners will be proposed with the final design.

**IMPACT** – Several potential issues have been identified, which increase the risk to the proposed road closure timing and duration. The road closure required to build the bridge must be coordinated with public schools' summer recess. Utility relocations and incidental sitework must be completed prior to beginning construction of the new bridge.

The linear nature of these activities preceding start of bridge construction creates a ripple effect if one activity is not complete, then the succeeding activity cannot start. Due to the critical timing of the bridge construction, almost all project activities will be critical to the schedule. Below is a conceptual schedule of the activities as they must be completed in order for the timing of the road closure to be used successfully to construct the bridge over Flatlick Branch.

Utility relocation and roadway construction activities can happen earlier, but cannot start any later than the



*Graphic 3.5.1: Route 250 over Buckingham Branch Railroad, Albemarle County, VA. Bridge was replaced in six weeks*

beginning of 2015. Some work can begin earlier on the bridge if other activities begin early. If all activities preceding the road closure are late, then the bridge will not be substantially complete by the time public schools are back in session.

Work Activity	2014												2015											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Design	←-----→																							
Define Utility Easements	←-----→																							
Replace Conservation Easement	←-----→																							
ROW Acquisition							←-----→																	
Utility Relocation							←-----→																	
Road Construction							←-----→																	
Bridge Construction																←-----→								
Road Closure																		←-----→						

Figure 3.5.1: Concept Schedule. Activities Preceding Road Closure Critical to Timing

**MITIGATION STRATEGIES** – The identified potential impacts above will be accommodated during design by determining the best options with potential to reduce the construction timeframe and provide flexibility in the construction phasing. Through investigation of alternative design options and accelerated construction methods, preparations for a reduction in the overall construction delivery time as a result of these risks shall be made to account for these concerns.

The AI/WR&A Team will develop a baseline CPM schedule for the Project that is conservative with respect to design, permitting, and the right-of-way acquisition process. The following considerations will be investigated and incorporated into the CPM schedule.

- **Phased Construction of the Bridge:** Utilizing temporary support of excavation methods to build one-half of the bridge at a time will be investigated in order to eliminate the need for a detour.
- **Scope Minimization:** Reduction in the scope of work can be achieved by optimizing the profile of the roadway. An optimized profile would result in less imported earthwork, reduced utility impacts, reduced ROW needs, and improved stormwater management therefore, reducing the time to build the approach roadways to the bridge and minimizing the impact to the traveling public.
- **Precast Bridge Components:** An integral part to the bridge design will be the construction methods selected to simplify the bridge and accelerate construction. Our team will investigate several options to complete bridge construction, and will propose the most suitable option. Pre-fabricated components may be incorporated for ease of bridge assembly.
- **Team Coordination Meetings:** The meetings discussed in Section 3.3: Team Structure will be used to track any planning and scheduling issues as they arise. Team members will be assigned responsibility to each issue and given a deadline to bring it to resolution.
- **Public Outreach:** Periodic open houses will be held to provide opportunity for the public to view the design and discuss construction status. Dissemination of information to the public will be coordinated with VDOT.
- **EMS Coordination:** In conjunction with public outreach, close coordination with local emergency response providers during construction will not be limited to the closest police, fire stations, and:
  - Chantilly Fire Station – 14005 Vernon St. Chantilly, VA
  - Inova Fair Oaks Hospital – 3600 Joseph Siewick Dr., Fairfax, VA
  - Inova Urgent Care Center – Centreville – 6201 Centreville Rd., Centreville, VA
  - Fairfax County Sheriff’s Office – Sully District – 4900 Stonecroft Blvd., Chantilly, VA

The AI/WR&A Team will successfully mitigate the risk to the road closure timing and duration through the use of the above strategies. The work history forms further demonstrate projects where these strategies were used successfully by the AI/WR&A Team.

**VDOT'S ROLE** – The AI/WR&A Team will request VDOT's participation in team meetings. VDOT shall maintain an understanding of any issues as they pertain to replacing the conservation easement, relocating utilities, and coordinating ROW acquisition. The AI/WR&A Team will coordinate public outreach with VDOT's support throughout construction and keep the traveling public and adjacent property owners informed.

### UTILITY RELOCATIONS

**DESCRIPTION** – Existing utilities, both private and public present risks associated with additional project costs, safety issues, and potential impacts to the project schedule. These risks will be discussed separately since private and public utility relocations are handled differently. The utility risk is associated with first determining the cost responsibility of the private utility relocation and second, with the scheduling impacts for relocation of the following private and public utilities:

- Fairfax Water Facilities
- Fairfax County Sanitary Sewer Facilities
- Washington Gas Facilities
- Fiber Optic Facilities (MCI, Level 3, Verizon)  
– Buried and Aerial
- Dominion Virginia Power (DVP) Distribution
- Buried Telephone Lines and Aerial Poles (Verizon)
- Cable TV (Cox Communications)

Buried fiber optic and telephone lines, DVP poles, and telephone poles exist along the entire length of the project and will be impacted by the proposed widening, drainage facilities and proposed cut and fills. There are multiple owners of the fiber optic facilities including: Level 3 Communications, Verizon Virginia, and MCI. The DVP poles carry overhead distribution power and services and even if not in conflict with proposed widening they may impact clear zone requirements and require relocation. Washington Gas facilities are buried and provide gas distribution and individual service connections. Work in and around gas facilities also has a safety impact on the project both during and after construction. The buried telephone facilities and poles are owned by Verizon Virginia.



*Graphic 3.5.2: Walney Road Bridge, Fairfax County, VA. Existing utility conflicts at bridge.*

The existing facilities appear to be located both in and outside VDOT right-of-way. It is not known at this time if the facility owners have prior rights and if relocation/adjustment costs would be borne by the project or by the facility owner. Identifying utility owners' prior rights is critical in determining the cost responsibility of the required relocation.

Public utilities for this project include Fairfax Water facilities (8", 12" lines) and Fairfax County DPWES sanitary sewer lines (24", 10", 8" gravity sewer lines). Sanitary sewer relocations may require pump around arrangements in order to maintain service during construction.

Project risks associated with the relocation of public and private utilities include:

- Costs for relocation of the existing utilities.
- Time for relocation of additional utilities.
- Coordination of utility easements with the conservation easement.
- Third-party inspection requirement during construction may be required.
- Public service interruption.

- Conflict with prior rights.
- Private utility relocation by others.

**IMPACT** – The risks associated with both the private and public utilities along Walney Road are critical because they impact project costs, coordination efforts and schedule. The private facilities will be impacted by the proposed widening, drainage facilities, and proposed cuts and fills. Usually the costs for relocation of public facilities are the responsibility of the project.

A major potential impact of the utility relocations is the need for additional easements outside the proposed right of way and easements currently shown on plans, which will require the modification of the Fairfax County Park Authority proposed conservation easement replacement. This could impact VDOT’s ability to finalize the necessary coordination with the Park Authority.

**MITIGATION STRATEGIES** – To maintain the proposed project schedule and minimize financial and service interruption risk, the AI/WR&A Team, utility owners, VDOT and other stakeholders collaborate with a sense of urgency to avoid the risks mentioned above. During the RFP phase the exact location, type and size of the private and public utilities will have to be confirmed along with any special relocation requirements. It is also imperative that determination of prior rights for private utilities is complete to determine if relocation costs will be the responsibility of the private utility owner or the project.

*Through our VDOT relocation contract with over 140 tasks completed to date, we have designed the relocation of fiber, power, phone, water, sanitary sewer, and gas facilities in order to improve project schedules and coordination efforts between utilities.*

- **Utility Task Force:** Immediately upon award a Utility Task Force will be established, with an experienced, strong leader assigned to push progress. **Dan Seli, P.E.** has been assigned to this role; Dan has led over 140 utility relocation task assignments for VDOT. This approach has proven successful on our past, large complicated projects with the same utilities as found on this project. The task force will meet regularly as required to ensure proper coordination and that all issues are identified and resolved or escalated in a timely manner.
- **Confirm As-Built Information:** The AI/WR&A Team will again contact each utility company to confirm any utility claims of prior rights and collect any new as-built information and specific procedures and concerns, search through utility company records to identify if any additional utility facilities are on site in addition to those shown on the plans, by survey and confirm field marking with the utility companies. We will excavate test pits at potential areas of conflict to accurately determine exact vertical and horizontal locations (SUE Level A) and discuss potential relocation options within the Utility Task Force to minimize ROW and easement requirement needs and expedite construction and minimize cost.
- **Identify Prior Rights:** We will determine any special requirements of the facilities and revise the roadway and drainage designs to eliminate or reduce utility conflicts. Information gathered on the existing facilities will assist us in revising the design to eliminate conflicts while still maintaining VDOT standards. As an example, the AI/WR&A Team will look at adjusting the cut limits along the proposed roadway to determine if relocations of the fiber, phone and water lines can be reduced. In addition, revisions to the storm sewer design will be reviewed to see if conflicts with utilities can be eliminated.
- **Leverage our Expertise:** The AI/WR&A Team will utilize our utility design, relocation coordination, and construction expertise to design and construct a project that will minimize impacts to the fiber optic, gas, water, sewer, power and telephone facilities. This will allow for construction of the roadway improvements to proceed on an aggressive, safe, and attainable schedule. At each stage of design utility owners will be involved to ensure that their design and construction requirements are being maintained. Existing VDOT policies and procedures will be followed including the proper completion of VDOT UT-

9 forms and the full RUMS system. Construction methods will also be analyzed so that all construction activities meet facility owner requirements associated with activity in and around the existing facilities including construction traffic, compaction, shut downs, storage and excavation limits.

- **Coordinate Permanent Easements:** Additional permanent easements required for utility relocation will be coordinated with the Fairfax County Park Authority through VDOT. The AI/WR&A Team staff will be available to assist VDOT with this coordination and provide solution to minimizing the required width of the easement by using utility duct backs along the project.

**VDOT’S ROLE** – Following the proactive strategies listed above will minimize risk to both VDOT and the project by addressing any design or construction requirements that would affect the project development. VDOT’s role will be to complete the review of project design submittals for both in-plan and out of plan utilities. All utility relocation agreements entered into with the private utilities will be reviewed and approved by VDOT. RUMS system will be maintained by the AI Team for VDOT’s use in tracking the project. VDOT will lead the coordination of any required modification in the Fairfax County Park Authority proposed conservation easement.

### STORMWATER MANAGEMENT APPROACH

**DESCRIPTION** – The RFP plans for the Walney Road Project include a proposed “Stormwater Management Site” which is located just to the northeast of the proposed bridge on private property and designed as a conventional stormwater management basin. This stormwater management site is within the Flatlick Branch 100-year floodplain and immediately adjacent to the stream. The Flatlick Branch is defined as a FEMA floodplain “Zone AE”. Fairfax County has also established a Resource Protection Area (RPA) along the stream and the proposed stormwater management facility is located within the RPA. Based on our field review, wetlands are present at the proposed location for the basin. Additionally, a drainage outfall from the development to the north of the site drains through the proposed basin. The design of the stormwater management will be complex and must consider several factors including:



*Graphic 3.5.3: Proposed SWM Site, Fairfax County, VA. Proposed SWM within floodplain limits.*

- Effects the earthen berm immediately adjacent to the stream will have on the hydraulic analysis of Flatlick Branch FEMA floodplain.
- Locating the stormwater management facility in the 100-year floodplain and the RPA.
- The outfall of an existing upstream pond drains through the proposed facility location requiring either the proposed basin to be designed in series with the private basin or the outfall for the existing pond be relocated outside of the proposed basin.
- The preliminary geotechnical report indicates that stabilized groundwater was encountered in the stormwater management basin boring at a depth of 0.6 feet below the existing ground surface.

**IMPACTS** – The design of the stormwater management as shown on the plans will have a major impact on the project budget and schedule. The following are the impacts from the current design:

- **Floodplain Impact:** According to the VDOT drainage manual, it is VDOT’s policy not to allow any increase in the level of the 100-year flood where actual flood elevations have been established and published (Zone AE). The preliminary H&H study that was performed for the proposed bridge indicates a decrease in 100-year flood elevation; however, there is no indication that the SWM basin was considered in the hydraulic model. There is a distinct possibility that the proposed basin will increase the 100-year water surface elevation. If the 100-year flood elevation increases, an amendment or

revision to the FEMA map (LOMAR) will be required delaying the project.

- **Maintenance Costs:** The potential for scour of the dam for the basin may require slope protection. Additionally during a major storm event the basin may be overtopped requiring maintenance to remove sediment and debris and basin repair, resulting in additional maintenance costs.
- **Park Authority Coordination:** The close proximity of the proposed stormwater management facility to the Flat Lick Stream Valley Park will require aesthetics coordination with the Fairfax County Park Authority, which would impact the schedule and cost of this project.
- **Wetlands:** Our site visit identified wetlands that will require permitting, which will impact the project budget and schedule to mitigate.
- **Stormwater Management Embankment:** Due to the groundwater elevation, the basin is anticipated to be constructed with embankment, which may require subsoil stabilization, reinforcement, or replacement to allow placement of embankment. The embankment would need to come from offsite, further increasing project costs.

**MITIGATION STRATEGIES** – The AI/WR&A Team will mitigate the risk of the impact of the stormwater management basin proposed in the floodplain by utilizing similar strategies implemented on other VDOT projects such as on the *Fairfax County Parkway at Fair Lakes Parkway Interchange Project*, the *Lee Road Widening and Culvert Extension*, or the *Evergreen Mills at Ryan Road Intersection Improvement*. These strategies include:

- Coordinating the impacts of the SWM basin on the floodplain and environmentally sensitive areas like RPA and wetlands with VDOT, Fairfax County, the Park Authority and other regulatory agencies early in the process.
- Development of a SWM design during the RFP stage that will not increase the 100-year floodplain elevation.
- If required, providing scour protection for the dam and stream bank to minimize future maintenance costs.
- Exploring innovative SWM facility options along the project site to reduce impacts and overall cost.
- Evaluate providing the required water quality for the Project at a location within the same watershed HUC code such as enhancing the basins within the Route 28 interchanges.

The AI/WR&A Team will complete this analysis during the RFP stage of the Project to ensure maximum time is allowed to obtain the environmental permits and that they cover all impacts to the existing streams and that all necessary right-of-way and permanent/temporary easements are acquired for the Project.

**VDOT'S ROLE** – VDOT's primary role will be reviewing the stormwater management design to ensure the proposed design is in compliance with all of VDOT's design requirements. In addition, VDOT will be involved in the coordination with the Fairfax County Park Authority.

**ATTACHMENT 3.1.2**

**Project: 0657-029-099, R201, C501, B641**

**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.

<b>Statement of Qualifications Component</b>	<b>Form (if any)</b>	<b>RFQ Cross reference</b>	<b>Included within 15-page limit?</b>	<b>SOQ Page Reference</b>
<b>Statement of Qualifications Checklist and Contents</b>	Attachment 3.1.2	Section 3.1.2	no	Appendices
<b>Acknowledgement of RFQ, Revision and/or Addenda</b>	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	Appendices
<b>Letter of Submittal (on Offeror's letterhead)</b>				
Authorized Representative's signature	NA	Section 3.2.1	yes	Page 2
Offeror's point of contact information	NA	Section 3.2.2	yes	Page 2
Principal officer information	NA	Section 3.2.3	yes	Page 2
Offeror's Corporate Structure	NA	Section 3.2.4	yes	Page 2
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	Page 2
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	Appendices
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	Appendices
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	Appendices
Evidence of obtaining bonding	NA	Section 3.2.9	no	Appendices

**ATTACHMENT 3.1.2**

**Project: 0657-029-099, R201, C501, B641**

**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

<b>Statement of Qualifications Component</b>	<b>Form (if any)</b>	<b>RFQ Cross reference</b>	<b>Included within 15-page limit?</b>	<b>SOQ Page Reference</b>
Full size copies of SCC and DPOR registration documentation (appendix)	NA	Section 3.2.10	no	Appendices
SCC Registration	3.2.10	Section 3.2.10.1	no	Appendices
DPOR Registration (Offices)	3.2.10	Section 3.2.10.2	no	Appendices
DPOR Registration (Key Personnel)	3.2.10	Section 3.2.10.3	no	Appendices
DPOR Registration (Non-APELSCIDLA)	3.2.10	Section 3.2.10.4	no	Appendices
<b>DBE statement within Letter of Submittal</b> confirming Offeror is committed to achieving the required DBE goal	NA	Section 3.2.11	yes	Page 2
<b>Offeror's Team Structure</b>				Pages 3-7
Identity of and qualifications of Key Personnel	NA	Section 3.3.1	yes	Pages 3-4
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	Page 3
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.2	no	Page 3
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.3	no	Page 3
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.4	no	Pages 3-4
Key Personnel Resume – Lead Utility Coordination Manager	Attachment 3.3.1	Section 3.3.1.5	no	Page 4
Organizational chart	NA	Section 3.3.2	yes	Page 7
Organizational chart narrative	NA	Section 3.3.2	yes	Pages 4-6

**ATTACHMENT 3.1.2**

**Project: 0657-029-099, R201, C501, B641**

**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

<b>Statement of Qualifications Component</b>	<b>Form (if any)</b>	<b>RFQ Cross reference</b>	<b>Included within 15- page limit?</b>	<b>SOQ Page Reference</b>
<b>Experience of Offeror's Team</b>				Pages 8-9
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4.1	no	Appendices
Lead Designer Work History Form	Attachment 3.4.1(b)	Section 3.4.1	no	Appendices
<b>Project Risk</b>				Pages 10-15
Identify and discuss three critical risks for the Project	NA	Section 3.5.1	yes	Pages 10-15

**ATTACHMENT 2.10****COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF TRANSPORTATION**

RFQ NO. C00104103DB62  
 PROJECT NO.: 0657-029-099, R201, C501, B641

**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 04/30/13  
(Date)
2. Cover letter of RFQ Addendum No. 1 06/12/13  
(Date)
3. Cover letter of \_\_\_\_\_  
(Date)

  
 \_\_\_\_\_  
 SIGNATURE

6/20/13  
 \_\_\_\_\_  
 DATE

## ATTACHMENT 3.2.6

### State Project No. U000-111-233, P101, R201, C501, B609

#### 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.

<input type="checkbox"/> <b>The Offeror does not have any affiliated or subsidiary companies.</b>
<input checked="" type="checkbox"/> <b>Affiliated and/ or subsidiary companies of the Offeror are listed below.</b>

Relationship with Offeror (Affiliate or Subsidiary)	Full Legal Name	Address
Affiliate	American Infrastructure, Inc.	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	Myers Aviation Company, LLC	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	American Infrastructure-MD, Inc.	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	Allan A. Myers, Inc.	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	Allan A. Myers, Co.	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	Allan A. Myers, LP	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	American Infrastructure Investments, Inc.	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	Devault Partners, LP	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	Devault Crushed Stone Partners, Inc.	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	The Myers Group, Inc.	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	Compass Quarries, Inc.	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	AI Transport Co	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	Independence Construction Materials, Inc.	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	ICM of Maryland, Inc.	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	ICM of Pennsylvania, Inc.	1805 Berks Road, P.O. Box 98, Worcester, PA 19490



## **ATTACHMENT 3.2.6**

**State Project No. U000-111-233, P101, R201, C501, B609**

### **Affiliated and Subsidiary Companies of the Offeror**

<b>Affiliate</b>	<b>ICM of Delaware, Inc.</b>	<b>1805 Berks Road, P.O. Box 98, Worcester, PA 19490</b>
<b>Affiliate</b>	<b>D. M. Stoltzfus &amp; Son, Inc.</b>	<b>1805 Berks Road, P.O. Box 98, Worcester, PA 19490</b>
<b>Affiliate</b>	<b>Elk Mills Partners, LP</b>	<b>1805 Berks Road, P.O. Box 98, Worcester, PA 19490</b>
<b>Affiliate</b>	<b>Cedar Hill Quarry Partners, LP</b>	<b>1805 Berks Road, P.O. Box 98, Worcester, PA 19490</b>
<b>Affiliate</b>	<b>Talmage Partners, LP</b>	<b>1805 Berks Road, P.O. Box 98, Worcester, PA 19490</b>
<b>Affiliate</b>	<b>440 Twin Oaks Drive, LP</b>	<b>1805 Berks Road, P.O. Box 98, Worcester, PA 19490</b>
<b>Affiliate</b>	<b>Jessup Asphalt Partners, LP</b>	<b>1805 Berks Road, P.O. Box 98, Worcester, PA 19490</b>
<b>Subsidiary</b>	<b>US 460 Mobility Partners, LLC</b>	<b>301 Concourse Blvd, Suite 300, Glen Allen, VA 23059</b>





**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0657-029-099, R201, C501, B641

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

June 20, 2013

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: 0657-029-099, R201, C501, B641

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

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



Signature

May 28, 2013

Date

Senior Vice President

Title

Volkert, Inc.

Name of Firm

**ATTACHMENT NO. 3.2.7(b)**

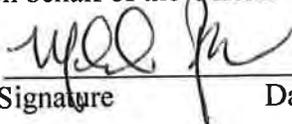
**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0657-029-099, R201, C501, B641

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.

 5/7/2013 COO/VP  
Signature Date Title

Bowman Consulting Group, Ltd.

Name of Firm

**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0657-029-099, R201, C501, B641

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.

hmasa.      6.11.13  
Signature      Date

Principal Engineer  
Title

Engineering & Materials Technologies, Inc. (E.M. Tech)  
Name of Firm



=====  
A1065  
AMERICAN DRAINAGE SYSTEMS, INC.  
PREQ. EXP : 01/31/2014

--PREQ ADDRESS ----- WORK CLASSES (LISTED BUT NOT LIMITED TO)  
6415 ROBINSON RD 173 - WICK DRAINS  
WAXHAW, NC 28173-0000  
PHONE : 704-843-5985  
FAX : 704-843-1834

BUSINESS CONTACT: CASE, JOHN EDWARD  
EMAIL: JCASE@WICKDRAINS.COM

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

DBE TYPE : N/A  
DBE CONTACT: N/A

=====  
G303  
AMERICAN INFRASTRUCTURE-VA, INC.  
PREQ. EXP : 01/31/2014

--PREQ ADDRESS ----- WORK CLASSES (LISTED BUT NOT LIMITED TO)  
301 CONCOURSE BLVD 002 - GRADING  
SUITE 300 003 - MAJOR STRUCTURES  
GLEN ALLEN, VA 23059 004 - ASPHALT CONCRETE PAVING  
PHONE : 804-290-8500 007 - MINOR STRUCTURES  
FAX : 804-418-7935 013 - ROADWAY MILLING  
171 - SURFACE TREATMENT

BUSINESS CONTACT: THURSTON, GINA  
EMAIL: GINA.THURSTON@AMERICANINFRASTRUCTURE.COM

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

DBE TYPE : N/A  
DBE CONTACT: N/A  
=====

# ROSENBERG & PARKER®

S U R E T Y B O N D . C O M

*Philadelphia · Toronto*

June 4, 2013

Virginia Department of Transportation  
1401 East Broad St.  
Richmond, VA 23219

Re: American Infrastructure-VA, Inc.  
Contract ID Number: C00104103DB62; Federal Project No.: STP-5A01(471); State Project No.:  
0657-029-099, R201, C501, B641 – Walney Road Bridge Replacement and Road Widening From:  
Westfield Boulevard (Route 6755) To: Willard Road (Route 6215) and From: Dallas Street (Route  
745) To: 250 Feet North of Dallas Street, Fairfax County, Virginia

To Whom It May Concern:

American Infrastructure-VA, Inc., a subsidiary of American Infrastructure, is a highly regarded and valued client of Fidelity and Deposit Company of Maryland, Zurich American Insurance Company and Arch Insurance Company. Fidelity and Deposit Company of Maryland is rated A+ XV in the Best's Key Rating Guide, listed in the Department of the Treasury's listing of Approved Sureties (Department Circular 570) and licensed to transact business in the Commonwealth of Virginia. Zurich American Insurance Company is rated A+ XV in the Best's Key Rating Guide, listed in the Department of the Treasury's listing of Approved Sureties (Department Circular 570) and licensed to transact business in the Commonwealth of Virginia. Arch Insurance Company is rated A+ XV in the Best's Key Rating Guide, listed in the Department of the Treasury's Listing of Approved Sureties (Department Circular 570) and licensed to transact business in the Commonwealth of Virginia. Fidelity and Deposit Company of Maryland, Zurich and Arch have expressed to them their willingness to provide bonding to support on individual projects in the amount of \$250,000,000.00 and aggregate of \$600,000,000.00. As surety for American Infrastructure-VA, Inc., Fidelity and Deposit Company of Maryland, Zurich American Insurance Company and Arch, with A.M. Best Financial Ratings as stated above, is capable of obtaining a 100% Performance Bond and a 100% Labor and Materials Payment Bond in the amount of the anticipated cost of construction, and said bonds will cover the Project and any warranty periods on behalf of the Contractor, in the event that American Infrastructure-VA, Inc. be the successful bidder and enter into a contract for this project.

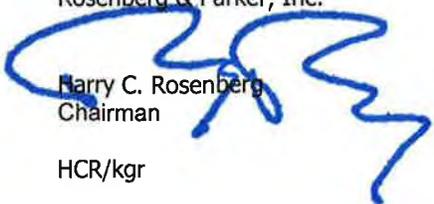
In accordance with the normal practice, the willingness of Fidelity and Deposit Company of Maryland, Zurich American Insurance Company and Arch Insurance Company to extend suretyship will be based on their underwriting of the account at the time the bonds are requested. This letter shall be valid for a period of 180 days from the date of this letter.

In addition, we would expect that the execution of any final bonds would be subject to a review of the contract documents by American Infrastructure-VA, Inc., Fidelity and Deposit Company of Maryland, Zurich American Insurance Company and Arch Insurance Company as well as satisfactory evidence of financing for the project.

If we can provide any further assistance, please do not hesitate to call upon us.

Sincerely,

Rosenberg & Parker, Inc.

  
Harry C. Rosenberg  
Chairman

HCR/kgr

cc: Mr. John Souder, Fidelity and Deposit Company of Maryland and Zurich American Insurance Company and Mr. Joe Crawford, Arch Insurance Company



455 SOUTH GULPH ROAD • SUITE 400 • KING OF PRUSSIA, PENNSYLVANIA 19406

p 610.668.9100 • p 800.394.9200 • f 610.667.5200

info@suretybond.com • suretybond.com

## ATTACHMENT 3.2.10

### State Project No. 0657-029-099, R201, C501, B641

#### SCC and DPOR Information

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

<b>SCC &amp; DPOR INFORMATION FOR BUSINESSES (RFQ Sections 3.2.10.1 and 3.2.10.2)</b>							
Business Name	SCC Information (3.2.10.1)			DPOR Information (3.2.10.2)			
	SCC Number	SCC Type of Corporation	SCC Status	DPOR Registered Address	DPOR Registration Type	DPOR Registration Number	DPOR Expiration Date
American Infrastructure-VA, Inc.	0113780-1	Corporation	Active	44209 Wade Drive Chantilly, VA 20152	Class A Contractors	2701009872	12/31/2014
Whitman, Requardt & Associates, LLP	K000382-4	Limited Liability Corporation	Active	801 South Caroline Street Baltimore, MD 21231	ARC, ENG, LS, LA	0407001676	12/31/2014
Whitman, Requardt & Associates, LLP				3701 Pender Drive, Suite 450 Fairfax, VA 22030	ENG	0411000134	02/28/2014
Whitman, Requardt & Associates, LLP				9030 Stony Point Parkway, Suite 220 Richmond, VA 23235	ENG	0411000133	02/28/2014
Whitman, Requardt & Associates, LLP				103 Paulette Circle, Suite C Lynchburg, VA 24502	ENG	0411000774	02/28/2014
Volkert, Inc.	F136659-2	Corporation	Active	5400 Shawnee Road Alexandria, VA 22312	ENG, LA	0407002610	12/31/2013
Bowman Consulting Group, LTD	0448198-2	Limited Company	Active	3951 Westerre Parkway, Suite 150 Richmond, VA 23233	ENG	0411000610	02/28/2014
Engineering & Materials Technologies, Inc.	0478633-1	Corporation	Active	7857 Coppermine Drive Manassas, VA 20109	ENG	0407005994	12/31/2013
Froehling & Robertson, Inc.	0027211-2	Corporation	Active	22923 Quicksilver Drive, Suite 111 Sterling, VA 20166	ENG	0411000051	02/28/2014





Commonwealth of Virginia  
**State Corporation Commission**

S  
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CISM0180

CORPORATE DATA INQUIRY

05/28/13

09:41:31

CORP ID: 0113780 - 1 STATUS: 00 ACTIVE STATUS DATE: 11/03/08  
 CORP NAME: American Infrastructure-VA, Inc.

DATE OF CERTIFICATE: 10/06/1967 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: CT CORPORATION SYSTEM

STREET: 4701 COX RD STE 301 AR RTN MAIL:

CITY: GLEN ALLEN STATE : VA ZIP: 23060 6802  
 R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 01/05/04 LOC : 143  
 ACCEPTED AR#: 212 16 0177 DATE: 10/10/12 HENRICO COUNTY  
 CURRENT AR#: 212 16 0177 DATE: 10/10/12 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
12	670.00					100,000

---

 (Screen Id:/Corp\_Data\_Inquiry)

**DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA**

**EXPIRES ON  
12-31-2014**

**NUMBER  
2701009872**

9860 Mayland Dr., Suite 400, Richmond, VA 23233  
Telephone: (804) 367-8500

**BOARD FOR CONTRACTORS  
CLASS A CONTRACTOR  
\*CLASSIFICATIONS\* H/H**

**AMERICAN INFRASTRUCTURE-VA INC  
44209 WADE DRIVE  
CHANTILLY, VA 20152**



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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**(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)**

**(POCKET CARD) COMMONWEALTH OF VIRGINIA  
CLASS A BOARD FOR CONTRACTORS  
CONTRACTOR**

**\*CLASSIFICATIONS\* H/H  
NUMBER: 2701009872 EXPIRES: 12-31-2014**

**AMERICAN INFRASTRUCTURE-VA INC  
44209 WADE DRIVE  
CHANTILLY, VA 20152**



**(DETACH HERE)**

**DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
9860 Mayland Dr., Suite 400, Richmond, VA 23233**

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# Commonwealth of Virginia



## 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:*

*Joel H. Beck*

*Clerk of the Commission*

# Commonwealth of Virginia



## State Corporation 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*  
Joel H. Peck, Clerk of the Commission



COMMONWEALTH OF VIRGINIA  
STATE CORPORATION COMMISSION

Office of the Clerk

May 28, 2013

CT CORPORATION SYSTEM  
4701 COX RD STE 301  
GLEN ALLEN, VA 23060-6802

RECEIPT

RE: WHITMAN, REQUARDT & ASSOCIATES, LLP

ID: K000382 - 4

DCN: 13-05-28-0509

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

GPACCEPT  
CIS0363

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA

EXPIRES ON

12-31-2013

9960 Mayland Dr., Suite 400, Richmond, VA 23233  
Telephone: (804) 367-8500

NUMBER

0407001676

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

PROFESSIONS: ARC, ENG, LS, LA

WHITMAN, REQUARDT AND ASSOCIATES LLP  
801 SOUTH CAROLINE STREET  
BALTIMORE, MD 21231



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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(POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR APELSCIDLA  
BUSINESS ENTITY REGISTRATION  
NUMBER: 0407001676 EXPIRES: 12-31-2013  
PROFESSIONS: ARC, ENG, LS, LA  
WHITMAN, REQUARDT AND ASSOCIATES LLP  
801 SOUTH CAROLINE STREET  
BALTIMORE, MD 21231



DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
9960 Mayland Dr., Suite 400, Richmond, VA 23233

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA

EXPIRES ON  
02-28-2014

9960 Mayland Dr., Suite 400, Richmond, VA 23233  
Telephone: (804) 367-8500

NUMBER  
0411000134

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

PROFESSIONS: ENG

WHITMAN REQUARDT AND ASSOCIATES  
3701 PENDER DRIVE  
SUITE 450  
FAIRFAX, VA 22030-6045



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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(DETACH HERE)

COMMONWEALTH OF VIRGINIA  
BOARD FOR APPELSCIDLA  
BUSINESS ENTITY BRANCH OFFICE REGISTRATION  
NUMBER: 0411000134 EXPIRES: 02-28-2014  
PROFESSIONS: ENG  
WHITMAN REQUARDT AND ASSOCIATES  
3701 PENDER DRIVE  
SUITE 450  
FAIRFAX, VA 22030-6045



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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
9960 Mayland Dr., Suite 400, Richmond, VA 23233

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA

EXPIRES ON

02-28-2014

9960 Mayland Dr., Suite 400, Richmond, VA 23233  
Telephone: (804) 387-8500

NUMBER

0411000133

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

PROFESSIONS: ENG

WHITMAN REQUARDT AND ASSOCIATES  
9030 STONY POINT PKWY  
SUITE 220  
RICHMOND, VA 23235



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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COMMONWEALTH OF VIRGINIA

BOARD FOR APESCIDLA  
BUSINESS ENTITY BRANCH OFFICE REGISTRATION  
NUMBER: 0411000133 EXPIRES: 02-28-2014  
PROFESSIONS: ENG  
WHITMAN REQUARDT AND ASSOCIATES  
9030 STONY POINT PKWY  
SUITE 220  
RICHMOND, VA 23235



DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
9960 Mayland Dr., Suite 400, Richmond, VA 23233

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA

EXPIRES ON  
02-28-2014

9960 Mayland Dr., Suite 400, Richmond, VA 23233  
Telephone: (804) 367-8500

NUMBER  
0411000774

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

PROFESSIONS: ENG

WHITMAN REQUARDT AND ASSOCIATES LLP  
103 PAULETTE CIRCLE  
SUITE C  
LYNCHBURG, VA 24502



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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COMMONWEALTH OF VIRGINIA

BOARD FOR APESCIDLA  
BUSINESS ENTITY BRANCH OFFICE REGISTRATION  
NUMBER: 0411000774 EXPIRES: 02-28-2014  
PROFESSIONS: ENG  
WHITMAN REQUARDT AND ASSOCIATES LLP  
103 PAULETTE CIRCLE  
SUITE C  
LYNCHBURG, VA 24502



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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
9960 Mayland Dr., Suite 400, Richmond, VA 23233

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**DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA**

**EXPIRES ON  
01-31-2014**

9960 Mayland Dr., Suite 400, Richmond, VA 23233  
Telephone: (804) 367-8500

**NUMBER  
0402026613**

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

**JOHN PATRICK MADDOX  
2825 WILLBROOK DRIVE  
RICHMOND, VA 23233**



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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**COMMONWEALTH OF VIRGINIA**

**BOARD FOR APPELSCIDLA  
PROFESSIONAL ENGINEER LICENSE  
NUMBER: 0402026613 EXPIRES: 01-31-2014**

**JOHN PATRICK MADDOX  
2825 WILLBROOK DRIVE  
RICHMOND, VA 23233**



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9960 Mayland Dr., Suite 400, Richmond, VA 23233**

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA

EXPIRES ON  
06-30-2014

9960 Mayland Dr., Suite 400, Richmond, VA 23233  
Telephone: (804) 367-8500

NUMBER  
0402023410

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

DANIEL JOSEPH SELI  
2205 ALBION ROAD  
MIDLOTHIAN, VA 23113



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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(POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR APPLSCIDLA  
PROFESSIONAL ENGINEER LICENSE  
NUMBER: 0402023410 EXPIRES: 06-30-2014

DANIEL JOSEPH SELI  
2205 ALBION ROAD  
MIDLOTHIAN, VA 23113



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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
9960 Mayland Dr., Suite 400, Richmond, VA 23233

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Commonwealth of Virginia  
**State Corporation Commission**

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CISM0180

CORPORATE DATA INQUIRY

05/28/13

09:40:09

CORP ID: F136659 - 2 STATUS: 00 ACTIVE STATUS DATE: 01/21/99  
 CORP NAME: Volkert, Inc.

DATE OF CERTIFICATE: 01/21/1999 PERIOD OF DURATION: INDUSTRY CODE: 00  
 STATE OF INCORPORATION: AL ALABAMA 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: CORPORATION SERVICE COMPANY

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

CITY: RICHMOND STATE : VA ZIP: 23219  
 R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 07/13/11 LOC : 216  
 ACCEPTED AR#: 213 01 4511 DATE: 12/17/12 RICHMOND CITY  
 CURRENT AR#: 213 01 4511 DATE: 12/17/12 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
13	100.00					2,250

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 (Screen Id:/Corp\_Data\_Inquiry)

**DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA**

**EXPIRES ON  
12-31-2013**

**NUMBER  
0407002610**

9960 Mayland Dr., Suite 400, Richmond, VA 23233  
Telephone: (804) 367-8500

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

**PROFESSIONS: ENG, LA**

**VOLKERT INC  
5400 SHAWNEE RD  
STE 301  
ALEXANDRIA, VA 22312**



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA

EXPIRES ON  
01-31-2014

9960 Mayland Dr., Suite 400, Richmond, VA 23233  
Telephone: (804) 367-8500

NUMBER  
0402020558

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

GALE MACKEY DICKERSON  
913 IVEY CREEK ROAD  
LANCASTER, VA 22503



*Gordon N. Dixon*  
Gordon N. Dixon, Director



Commonwealth of Virginia  
**State Corporation Commission**

S  
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CISM0180

CORPORATE DATA INQUIRY

05/31/13

08:38:38

CORP ID: 0448198 - 2 STATUS: 00 ACTIVE STATUS DATE: 07/23/10  
 CORP NAME: BOWMAN CONSULTING GROUP, LTD.

DATE OF CERTIFICATE: 06/07/1995 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: 700.00 MON NO: MON STATUS: MONITOR DTE:  
 R/A NAME: ROBERT A HICKEY

STREET: 3863 CENTERVIEW DR STE 300 AR RTN MAIL:

CITY: CHANTILLY STATE : VA ZIP: 20151  
 R/A STATUS: 2 OFFICER EFF. DATE: 05/13/04 LOC : 129  
 ACCEPTED AR#: 213 52 1753 DATE: 05/07/13 FAIRFAX COUNTY  
 CURRENT AR#: 213 52 1753 DATE: 05/07/13 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
13	1,700.00					360,000

---

 (Screen Id:/Corp\_Data\_Inquiry)

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA

EXPIRES ON

02-28-2014

9960 Mayland Dr., Suite 400, Richmond, VA 23233  
Telephone: (804) 367-8500

NUMBER

0411000610

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

PROFESSIONS: ENG

BOWMAN CONSULTING GROUP LTD  
3951 WESTERRE PARKWAY  
SUITE 150  
RICHMOND, VA 23233



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)

(POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR APELSCIDLA  
BUSINESS ENTITY BRANCH OFFICE REGISTRATION  
NUMBER: 0411000610 EXPIRES: 02-28-2014  
PROFESSIONS: ENG  
BOWMAN CONSULTING GROUP LTD  
3951 WESTERRE PARKWAY  
SUITE 150  
RICHMOND, VA 23233



(DETACH HERE)

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
9960 Mayland Dr., Suite 400, Richmond, VA 23233

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Commonwealth of Virginia  
**State Corporation Commission**

Virg

CISM0180

CORPORATE DATA INQUIRY

05/24/13

13:37:43

CORP ID: 0478633 - 1 STATUS: 00 ACTIVE STATUS DATE: 01/29/97  
 CORP NAME: ENGINEERING & MATERIALS TECHNOLOGIES, INC.

DATE OF CERTIFICATE: 01/29/1997 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: 50.00 MON NO: MON STATUS: MONITOR DTE:  
 R/A NAME: SHAHZAD S MOOSA

STREET: 7857 COPPERMINE DR AR RTN MAIL:

CITY: MANASSAS STATE : VA ZIP: 20109  
 R/A STATUS: 2 OFFICER EFF. DATE: 07/20/06 LOC : 176  
 ACCEPTED AR#: 213 01 1156 DATE: 11/28/12 PRINCE WILLIAM  
 CURRENT AR#: 213 01 1156 DATE: 11/28/12 STATUS: A ASSESSMENT INDICATOR: 0

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

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 (Screen Id:/Corp\_Data\_Inquiry)

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA

EXPIRES ON  
12-31-2013

9960 Mayland Dr., Suite 400, Richmond, VA 23233  
Telephone: (804) 367-8500

NUMBER  
0407005994

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

PROFESSIONS: ENG

ENGINEERING & MATERIALS TECHNOLOGIES, INC  
7857 COPPERMINE DR  
MANASSAS, VA 20109



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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(POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR APELSCIDLA  
BUSINESS ENTITY REGISTRATION  
NUMBER: 0407005994 EXPIRES: 12-31-2013  
PROFESSIONS: ENG  
ENGINEERING & MATERIALS TECHNOLOGIES, INC  
7857 COPPERMINE DR  
MANASSAS, VA 20109



(DETACH HERE)

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
9960 Mayland Dr., Suite 400, Richmond, VA 23233

(FRONT)

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Commonwealth of Virginia  
**State Corporation Commission**

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CISM0180

CORPORATE DATA INQUIRY

05/31/13

08:55:24

CORP ID: 0027211 - 2 STATUS: 00 ACTIVE STATUS DATE: 11/13/09  
 CORP NAME: FROEHLING & ROBERTSON, INCORPORATED

DATE OF CERTIFICATE: 10/11/1924 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: 2480.00 MON NO: MON STATUS: MONITOR DTE:  
 R/A NAME: WILLIAM H HOOFNAGLE III

STREET: 1900 ONE JAMES CENTER AR RTN MAIL:  
 901 E CARY ST  
 CITY: RICHMOND STATE : VA ZIP: 23219  
 R/A STATUS: 4 ATTORNEY EFF. DATE: 09/21/11 LOC : 216  
 ACCEPTED AR#: 212 14 0123 DATE: 08/29/12 RICHMOND CITY  
 CURRENT AR#: 212 14 0123 DATE: 08/29/12 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
12	1,700.00					1,100,000

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 (Screen Id:/Corp\_Data\_Inquiry)

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA

EXPIRES ON  
02-28-2014

9960 Mayland Dr., Suite 400, Richmond, VA 23233  
Telephone: (804) 367-8500

NUMBER  
0411000051

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

PROFESSIONS: ENG

FROEHLING & ROBERTSON, INC  
22923 QUICKSILVER DR STE 111  
STERLING, VA 20166



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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(POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR APESCIDLA  
BUSINESS ENTITY BRANCH OFFICE REGISTRATION  
NUMBER: 0411000051 EXPIRES: 02-28-2014  
PROFESSIONS: ENG  
FROEHLING & ROBERTSON, INC  
22923 QUICKSILVER DR STE 111  
STERLING, VA 20166



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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
9960 Mayland Dr., Suite 400, Richmond, VA 23233

from

ALTERATION OF THIS DOCUMENT, USE AFTER EXPIRATION, OR USE BY PERSONS OR FIRMS OTHER THAN THOSE NAMED MAY RESULT IN CRIMINAL PROSECUTION UNDER THE CODE OF VIRGINIA.

## ATTACHMENT 3.3.1

### KEY PERSONNEL RESUME FORM

<b>Brief Resume of Key Personnel anticipated for the Project.</b>	
a. Name & Title: <b>KEVIN R. OTT, DESIGN-BUILD PROJECT MANAGER</b>	
b. Project Assignment: <b>DESIGN-BUILD PROJECT MANAGER</b>	
c. Name of Firm with which you are now associated: <b>AMERICAN INFRASTRUCTURE</b>	
	
d. Years experience: With this Firm <u>2</u> Years With Other Firms <u>15</u> Years Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.): <b>AMERICAN INFRASTRUCTURE, DESIGN-BUILD PROJECT MANAGER / SR. CONSTRUCTION MANAGER; 2011 - PRESENT:</b> Responsible for managing all aspects of his projects including planning and scheduling work activities, coordination with the owner & other stakeholders, design consultants, private utility owners, and public outreach for all phases of construction. Mr. Ott oversees the field construction activities to ensure project delivery that meets or exceeds all expectations of quality, safety, environment, schedule, and budget. Mr. Ott has simultaneously managed up to 5 projects for a combined value of \$50M. <b>GRANITE CONSTRUCTION COMPANY, PROJECT MANAGER; 2007-2011:</b> Managed engineering, budget, schedule, documents, subcontractor & suppliers, and negotiated contract changes within a business unit generating \$12M monthly revenue. Managed staffs of up to 16 professionals including three departments and over one-hundred subcontractors and suppliers coordinating construction operations with design management, quality control, environmental monitoring, and public outreach. Assigned, monitored, and adjusted resources to ensure timely project completion. <b>GRANITE CONSTRUCTION COMPANY, PROJECT ENGINEER; 2007 - 2007:</b> Responsible for preparing and negotiating change orders with owners and subcontractors, performing cost analysis, and preparing progress payment applications. <b>GRANITE CONSTRUCTION COMPANY, PROJECT ENGINEER/PRECAST PROJECT MANAGER; 2003 - 2007:</b> Managed segmental precast operation from start-to-finish including the development of the complete work plan for the casting yard where all segments of the precast substructure of the WWB were fabricated. Managed the engineering, construction operations, and construction quality control departments of the precast operation. Responsible for casting schedule, budget, and construction quality, including coordination of numerous subcontractors and suppliers. <b>GRANITE CONSTRUCTION COMPANY, PROJECT ENGINEER; 1999–2002:</b> Oversight of project civil/sitework construction operations performing engineering, construction management, and project controls duties including scheduling, work plan development, submittals, cost management, forecast analysis, estimating, and subcontractor/supplier negotiations on large heavy/civil DOT project. <b>GRANITE CONSTRUCTION COMPANY &amp; ANGELO IAFRATE CONSTRUCTION, FIELD ENGINEER; 1997-1999:</b> Production management on large highway DOT reconstruction and heavy rail projects. Responsible for material procurement, cost tracking, quantity tracking, and contract administration. Coordinated progress payments, developed work plans, provided field engineering and field supervision for bridges, retaining walls, concrete paving, electrical, and utility construction activities. <b>SUMMARY OF RELEVANT EXPERIENCE</b> <ul style="list-style-type: none"><li>▪ 17 years experience</li><li>▪ 13 years of D/B experience</li><li>▪ 4 years of NOVA experience</li><li>▪ Construction Quality Control</li><li>▪ Utility Coordination</li><li>▪ Complex Heavy Traffic Widening</li><li>▪ MD SHA Erosion &amp; Sediment Control Certification</li></ul>	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Iowa State University – Ames, Iowa/B.S./1997/Construction Engineering	
f. Active Registration: Year First Registered/ Discipline/VA Registration #: RLD and ESCCC certifications will be obtained prior to commencement of construction	
g. Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none"><li>1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i></li><li>2. <i>Note whether experience is with current firm or with other firm.</i></li><li>3. <i>Provide beginning and end dates for each assignment.</i></li></ol> <b>(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)</b>	



### **I-95 AT CONTEE ROAD INTERCHANGE DESIGN-BUILD PROJECT – LAUREL, MD (\$30.7M)**

1. The project required design and construction of a new bridge over-pass and Interchange on I-95 between MD198 and the Inter-County Connector - MD200 including one-mile of approach roadways and Ramps to/from the I-95 C-D Roads being added by the ICC Contract D/E. Scope of work included road widening and median construction. Mr. Ott was the key person representing American Infrastructure coordinating the design, managing onsite operations, and coordinating with the Owner. The project also required close coordination with several adjacent state, county, and private contracts. The new bridge was required to be opened and the existing bridge demolished in advance of project completion in order for adjacent contractors to complete their work.

#### **Relevance to the Project**

- ✓ DOT Design-Build project
- ✓ Bridge Construction
- ✓ Utility Coordination & Relocation
- ✓ Coordination with adjacent business owners
- ✓ Stormwater Management

2. *American Infrastructure; Construction Manager*

3. *Dec. 2011 – Anticipated May 2014*

### **INTER-COUNTY CONNECTOR (ICC) CONTRACT DESIGN-BUILD PROJECT – ROCKVILLE, MD (\$485M)**

1. The project included design and construction of a new 7-mile 6-lane toll road from I-270 to MD97. Work scope included road widening, 8 new bridges, ramps/interchanges, median construction, new highway, and a shared use path. Mr. Ott was instrumental in establishing the builder's Joint Venture policies & procedures and developing the organizational structure initially as Project Controls Manager. He also managed the engineering department as the Project Engineer in another role, which included 3 departments, 16 assistant/field engineers, and over one-hundred subcontractors and suppliers. He was a leader of the organization involved in coordination of design, quality control, environmental monitoring, and public outreach with day-to-day construction operations. He assigned, monitored, and adjusted personnel to ensure the timely completion of the project. Mr. Ott worked together with the Client's representatives and project stakeholders on a daily basis through open and constant communication for the duration of the project. Mr. Ott was one of the founding team members of the project to see it through completion.

#### **Relevance to the Project**

- ✓ DOT Design-Build project
- ✓ Bridge Construction
- ✓ Complex MOT
- ✓ Environmental Stewardship
- ✓ Utility Coordination & Relocation
- ✓ Stormwater Management

2. *Granite Construction Company, Construction Manager*

3. *April 2007 – Nov. 2011*

### **WOODROW WILSON BRIDGE VIRGINIA APPROACH SPANS (BR3B) – ALEXANDRIA, VA (\$126M)**

1. Mr. Ott managed the segmental precast operation including the project engineering, construction operations, and quality control department for the project duration. While working closely with the Client's designer, precast oversight personnel, and the construction superintendent, he developed the complete work plan for the casting yard where 460 segments were cast for the segmental concrete V-Pier substructure. Mr. Ott closely monitored and adjusted the plan as work progressed and was successful at completing the casting operation on schedule and on budget. The project included construction of 13 spans of a dual 6-lane bridge through Jones Point Park. Most notably, the project received the 2008 Mid-Atlantic Construction Best of 2008 Bridge Award of Merit and 2009 American General Contractors (AGC) Marvin M. Black Excellence in Partnering Award.

#### **Relevance to the Project**

- ✓ NOVA Project
- ✓ Bridge Construction
- ✓ Coordination with City
- ✓ Public Coordination
- ✓ Environmental Considerations

2. *Granite Construction Company, Precast Project Manager*

3. *Mar. 2003 – Dec. 2006*

### **HIAWATHA LIGHT RAIL TRANSIT DESIGN-BUILD PROJECT – MINNEAPOLIS, MN (\$330M)**

1. The scope of work included design and construction of the first light rail transit line in Minnesota, extending over 11 miles through downtown Minneapolis to the Minneapolis-St. Paul International Airport and Mall of America in Bloomington, including the Operations and Maintenance Facility, roadway reconstruction, underground utility relocation, CIP post tensioned box girder bridges, retrofit of four existing bridges, MSE retaining walls, track work, stations, traction/power & signal communications, and landscaping. Mr. Ott served as Project Engineer performing engineering, construction management, and project controls duties related to the civil-site work. The civil site work scope included demolition, grading, concrete flatwork and barrier, HMA paving, and electrical duct bank. Mr. Ott coordinated timely completion of the Phase 2 Environmental Site Assessment for the entire 11-mile project alignment working closely with a consultant, the Client's representatives, and the Pollution Control Agency.

#### **Relevance to the Project**

- ✓ DOT Design-Build project
- ✓ Bridge Construction
- ✓ Utility Coordination & Relocation
- ✓ Stormwater Management

2. *Granite Construction Company, Project Engineer*

3. *Sept. 2000 – Feb. 2003*



## ATTACHMENT 3.3.1

### KEY PERSONNEL RESUME FORM

<b>Brief Resume of Key Personnel anticipated for the Project.</b>											
a. Name & Title: <b>GALE DICKERSON, P.E., CONSTRUCTION MANAGER</b>											
b. Project Assignment: <b>QUALITY ASSURANCE MANAGER</b>											
c. Name of Firm with which you are now associated: <b>VOLKERT, INC.</b> 											
d. Years experience: With this Firm <u>3.5</u> Years With Other Firms <u>26</u> Years Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen(15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.): <b>VOLKERT, INC., CONSTRUCTION MANAGER; 2009 - PRESENT:</b> Ms. Dickerson is responsible for management of construction inspection projects including the supervision of inspection personnel, QA activities including preparatory inspection meetings, and resolution of nonconformance issues to assure compliance with VDOT standards and client satisfaction. She works collaboratively with VDOT, engineers, and contractors to resolve design, construction, and quality issues. <b>VDOT, FREDERICKSBURG DISTRICT, AREA CONSTRUCTION ENGINEER; 2004 - 2009:</b> Ms. Dickerson was responsible for the direct oversight and management of contract construction for a wide range of projects related to highways, structures, drainage and maintenance in 11 counties. <b>VDOT, MATERIALS DIVISION, GEOTECHNICAL ENGINEER/ PROGRAM MANAGER; 2003 - 2004:</b> Ms. Dickerson managed operation of the geotechnical and soils lab. She also confirmed compliance with ASTM & Virginia Testing Methods. In addition, Ms. Dickerson provided guidance and direction to 9 district materials sections <b>VDOT, MAINTENANCE &amp; CONSTRUCTION DIVISIONS, IMMS PROJECT MANAGER; 1996 - 2003:</b> Ms. Dickerson identified and assigned work tasks to project team members. She developed and monitored budgets, schedules, and project plans, and prepared monthly reports. <b>SUMMARY OF RELEVANT EXPERIENCE</b> <table style="width: 100%; border: none;"><tr><td style="width: 33%;">▪ 25 Years of Experience</td><td style="width: 33%;">▪ QAM on 3 VDOT DB Projects</td><td style="width: 33%;">▪ VDOT QA/QC Procedures</td></tr><tr><td>▪ 10 Years supervisory experience of roadway and bridge construction projects</td><td>▪ QAM on 2 AI DB Projects</td><td>▪ Intersection Improvements</td></tr><tr><td></td><td></td><td>▪ Road Widening</td></tr></table>			▪ 25 Years of Experience	▪ QAM on 3 VDOT DB Projects	▪ VDOT QA/QC Procedures	▪ 10 Years supervisory experience of roadway and bridge construction projects	▪ QAM on 2 AI DB Projects	▪ Intersection Improvements			▪ Road Widening
▪ 25 Years of Experience	▪ QAM on 3 VDOT DB Projects	▪ VDOT QA/QC Procedures									
▪ 10 Years supervisory experience of roadway and bridge construction projects	▪ QAM on 2 AI DB Projects	▪ Intersection Improvements									
		▪ Road Widening									
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Virginia Polytechnic Institute and State University – Blacksburg, VA/B.S./1982/Civil Engineering Graduate courses in Systems Engineering, Civil Engineering, and Management at Virginia Tech., UVA, and VCU											
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 1990/Professional Engineer/#20588											
g. Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none"><li>1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i></li><li>2. <i>Note whether experience is with current firm or with other firm.</i></li><li>3. <i>Provide beginning and end dates for each assignment.</i></li></ol> <b>(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)</b> <b>VDOT MIDDLE GROUND BOULEVARD DESIGN-BUILD PROJECT – NEWPORT NEWS, VA (\$32.5M)</b> <ol style="list-style-type: none"><li>1. Ms. Dickerson is responsible for management of testing and inspection services to confirm that construction, material testing, and sampling performed by the D/B QC inspectors are in accordance with the contract requirements, including the VDOT IPD Design-Build Manual and the “approved for construction” plans and specifications. She manages the QA team and the QA/QC plan for the project. Her other responsibilities include the documentation of construction activities and acceptance of materials; verifying material certifications; monitoring and inspecting bridge beam, deck and substructure placements; and verifying that QC inspectors properly test engineering fills and complete submittal reviews. The project includes a new four-lane roadway connecting Jefferson Avenue to Warwick Boulevard, a bridge over the CSX Railroad, a turn lane and signal modifications, and traffic control installation.<table style="width: 100%; border: none;"><tr><td style="width: 60%;"></td><td style="border-left: 1px solid black; padding-left: 5px;"><b>Relevance to the Project</b><ul style="list-style-type: none"><li>✓ QAM for VDOT D/B project</li><li>✓ AI project</li><li>✓ Urban area bridge project</li><li>✓ Utility relocation</li></ul></td></tr></table></li><li>2. <i>Volkert; Quality Assurance Manager</i></li><li>3. <i>Aug.2012 – Anticipated Winter 2014</i></li></ol>				<b>Relevance to the Project</b> <ul style="list-style-type: none"><li>✓ QAM for VDOT D/B project</li><li>✓ AI project</li><li>✓ Urban area bridge project</li><li>✓ Utility relocation</li></ul>							
	<b>Relevance to the Project</b> <ul style="list-style-type: none"><li>✓ QAM for VDOT D/B project</li><li>✓ AI project</li><li>✓ Urban area bridge project</li><li>✓ Utility relocation</li></ul>										



**VDOT ROUTE 29 APPROACHES AND BRIDGE OVER TYE RIVER DESIGN-BUILD PROJECT – AMHERST AND NELSON COUNTIES, VA, (\$6.7M)**

1. Ms. Dickerson provided QA Management services during the design and construction of this new, 0.4-mile, 2-lane, prestressed-concrete girder bridge to replace a structurally deficient steel-girder bridge on the northbound lanes of Route 29. The project also raised the roadway profile to match the profile of the southbound bridge. Ms. Dickerson confirmed compliance with VDOT standards and developed the QA/QC plan, testing matrix, and inspection checklists for presentation to VDOT. She coordinated with VDOT's project manager and staff and IA/IV inspectors. To confirm compliance and avoid potential delays, Ms. Dickerson coordinated the required submissions, documents, and approvals well in advance of each work activity. Her responsibilities included preparation of the QA testing plan, review and approval of the QC testing plan, supervision of QA testing technicians, coordination with the testing laboratory, and review of testing results. She evaluated material documentation from suppliers to confirm compliance and worked with the construction QC team to anticipate and resolve field issues before schedule and budget were affected. Ms. Dickerson also prepared noncompliance reports, approved nonconformance recovery plans, and monitored corrective actions and retests.

**Relevance to the Project**

- ✓ QAM for VDOT D/B project
- ✓ AI project
- ✓ Bridge construction

2. *Volkert; Quality Assurance Manager*

3. *Feb. 2010 – April 2012*

**VDOT REPLACEMENT OF ROUTE 61 OVER THE NEW RIVER DESIGN-BUILD PROJECT – NARROWS, VA (\$22M)**

1. Ms. Dickerson is responsible for QA management during for the construction of this new, two-lane, pre-stressed concrete beam, Bulb-T bridge that is replacing a structurally deficient bridge. She developed the QA/QC plan, testing matrix, and inspection checklists and made presentation to VDOT. She coordinates with VDOT project manager and staff and OIA/OVST inspectors. She informs the contractor of required submissions, documents, and approvals and confirming compliance to help avoid potential delays and manages QA inspection and materials testing. Ms. Dickerson also evaluates material documentation from suppliers to confirm compliance with specifications, applies CT numbers, and tracks them. She also confirms accurate maintenance of testing documentation and leads QA meetings prior to major work activities. Working with the construction QC Team, she helps anticipate and resolve field issues before schedule and budget are affected. She also prepares noncompliance reports and approves nonconformance recovery plans, monitors corrective actions, and works with contractor on plan.

**Relevance to the Project**

- ✓ QAM for VDOT D/B project
- ✓ Developed overall QA/QC plan
- ✓ Bridge construction

2. *Volkert; Quality Assurance Manager*

3. *Jan. 2011 – Anticipated Oct. 2013*

**VDOT ROUTE 33 ELTHAM BRIDGE REPLACEMENT AND ROADWAY RECONSTRUCTION – WEST POINT, VA (\$95.6M)**

1. Ms. Dickerson managed the construction activities associated with the reconstruction of a 2.395-mile segment of a primary roadway through a downtown corridor as well as the replacement of the Route 33 Eltham Bridge over the Pamunkey River. The project included a new four-lane bridge and the widening and reconstruction of Route 33 through West Point from three to five lanes. Ms. Dickerson provided updates at the weekly town meeting, worked closely with the affected businesses, provided additional business location signage in the construction corridor, and provided media updates as construction phases changed. A partnering approach was used to build collaborative working relationships and establish a communication protocol to facilitate an efficient problem resolution process. She also monitored and analyzed schedules and budgets, coordinated with local and FHWA government officials and agencies, checked documentation.

**Relevance to the Project**

- ✓ VDOT Project
- ✓ Urban area bridge project

2. *VDOT; Area Construction Engineer*

3. *Dec. 2004 – Feb. 2008*

**VDOT ROUTE 221 REALIGNMENT – ROANOKE, VA (\$20M)**

1. Ms. Dickerson managed the construction engineering inspections services for this ¾ mile widening project. Features include excavation and blasting, environmental, horizontal slope drains, concurrent construction of three bridges, temporary lane closures, and public outreach through five construction phases. Ms. Dickerson established partnering with VDOT, FHWA, local officials and utility providers. She oversaw materials testing; and monitored schedule, budget, work zone traffic controls, and compliance with federal regulations. Ms. Dickerson also oversaw documentation management and compliance to the FHWA's reporting requirements.

**Relevance to the Project**

- ✓ VDOT roadway widening project
- ✓ Coordinated extensive utility relocations

2. *Volkert; Construction Manager*

3. *Sept. 2010 – Anticipated Aug. 2013*



**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

<b>Brief Resume of Key Personnel anticipated for the Project.</b>	
a. Name & Title:	<b>JOHN MADDOX, P.E., SENIOR VICE PRESIDENT</b>
b. Project Assignment:	<b>DESIGN MANAGER</b>
c. Name of Firm with which you are now associated:	<b>WHITMAN, REQUARDT &amp; ASSOCIATES, LLP</b> 
d. Years experience: With this Firm <u>18</u> Years With Other Firms <u>10</u> Years Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.): <b>WHITMAN, REQUARDT &amp; ASSOCIATES, LLP, VARIOUS POSITIONS; 1995 - PRESENT:</b> Mr. Maddox has served as <i>Project Manager</i> on VDOT projects continuously from August 1997 to the present including: <ul style="list-style-type: none"> <li>• Route I-81 Bridge over the New River and Improvements to Exit 105 – Project Manager – 2011-Present (\$60M)</li> <li>• Route 123 and Route 1 Interchange – <b>NOVA District</b> Project Manager – 2007-Present (\$70M)</li> <li>• VDOT <b>NOVA District</b> Location and Design On-Call Contract – Contract Manager – 2008-Present</li> <li>• Fairfax County Parkway Widening and Interchange at Fair Lakes Parkway – <b>NOVA District</b> Project Manager – 2001-Present (\$44M)</li> <li>• VDOT Statewide Location and Design On-Call Contract – Contract Manager – 2008-2011</li> <li>• Route I-81 Widening and Bridge Replacement over Buffalo Creek – Project Manager – 1999-2007 (\$27M)</li> <li>• Route I-81 Widening and Bridge Replacement over Maury River – Project Manager – 1999-2006 (\$18M)</li> <li>• Route 29 Bypass Sweet Briar Interchange – Project Manager – 1996-2005 (\$35M)</li> </ul> <b>SUMMARY OF RELEVANT EXPERIENCE</b> <ul style="list-style-type: none"> <li>▪ 28 years of Bridge Design experience</li> <li>▪ 23 years of experience as Design Manager</li> <li>▪ Currently working on two Design-Build projects</li> <li>▪ VDOT NOVA District experience on complex projects with multi-discipline teams.</li> </ul>	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:	West Virginia Institute of Technology (is now a division of West Virginia University) – Montgomery, West Virginia/B.S./1985/Civil Engineering
f. Active Registration: Year First Registered/ Discipline/VA Registration #:	Professional Engineer/Virginia/1996/#026613
g. Document the extent and depth of your experience and qualifications relevant to the Project.	<ol style="list-style-type: none"> <li>1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i></li> <li>2. <i>Note whether experience is with current firm or with other firm.</i></li> <li>3. <i>Provide beginning and end dates for each assignment.</i></li> </ol> <p><b>(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)</b></p> <p><b>ROUTE 123 (OX ROAD) OVER CAMPUS DRIVE – FAIRFAX COUNTY, VA – GEORGE MASON UNIVERSITY DESIGN-BUILD (\$13M) – SUBCONSULTANT</b></p> <ol style="list-style-type: none"> <li>1. Mr. Maddox is the Project Manager for WR&amp;A’s portion of this Design-Build project that will connect the east and west campuses of GMU via a new connector road. He was responsible for managing the design of all roadway and bridge design elements on Route 123 including a four-lane on-site detour, roadway approaches, and shared-use path and the bridge. The bridge structure will be a 90-foot simple span VDOT Bulb-T bridge supported by semi-integral abutments with an aesthetic finish to fit the proposed structure into the campus setting. Mr. Maddox also managed the geotechnical design, utility coordination (Verizon, Dominion Power, Cox Communications, gas) for the entire project. Additionally, he provided oversight the construction Quality Assurance Management during construction.</li> </ol> <div style="border-left: 1px solid black; padding-left: 10px;"> <p><b>Relevance to the Project</b></p> <ul style="list-style-type: none"> <li>✓ <i>Design-Build</i></li> <li>✓ <i>Bridge Design</i></li> <li>✓ <i>Roadway Approaches</i></li> <li>✓ <i>Utility Coordination</i></li> </ul> </div> <ol style="list-style-type: none"> <li>2. <i>Whitman, Requardt &amp; Associates, LLP; Project Manager</i></li> <li>3. <i>Sept. 2012 – Est. July 2014 (Under Const.)</i></li> </ol> <p><b>VDOT FAIRFAX COUNTY PARKWAY (FCP) WIDENING AND INTERCHANGE AT FAIR LAKES PARKWAY – FAIRFAX COUNTY, VA (\$44M)</b></p>



1. Mr. Maddox is the Project Manager responsible for the design of a \$44 million project, which widens FCP from four to six lanes for 2.3 miles and provides an interchange at Fair Lakes Parkway and Monument Drive. The interchange includes two new bridges and over 43,000 sf of retaining walls. The project also required the design of over 70,000 sf of noise walls. The FCP Bridge over Route 50 was widened from four to six lanes. The project also includes an extensive MOT plan with multiple phases of construction for maintaining over 45,000 vpd during the construction of the project. The project included extensive hydraulic modeling of the Rocky Run Stream and tributaries. The triple 8'x10' box culvert was extended from an existing regional stormwater management pond and required extensive coordination with the owner, Fairfax County and DCR. DCR required a dam breach analysis for the regional pond since Fair Lakes Parkway was originally constructed on top of the dam. WR&A developed an innovative design to utilize the existing ponds for all stormwater management for the project. Mr. Maddox provides oversight and coordination for all elements of the project including roadway, hydraulic, SWM, structural, utility relocation, traffic engineering, environmental permits, traffic forecast and analysis, and public involvement. Mr. Maddox provided a leadership role in stakeholder outreach to the existing Homeowners' Associations, Fair Lakes League and the **Fairfax County Park Authority** to minimize right-of-way impacts, while provides aesthetic pedestrian access to the **Rocky Run Stream Valley Park**.

**Relevance to the Project**

- ✓ *Fairfax County Park Authority Coordination*
- ✓ *Bridge Design*
- ✓ *Roadway Design*
- ✓ *Detour of Traffic*

2. *Whitman, Requardt & Associates, LLP; Project Manager*      3. *Oct. 2001 – Est. July 2013 (Under Const.)*

**VDOT ROUTE 123 INTERCHANGE AT ROUTE 1– PRINCE WILLIAM COUNTY, VA – VDOT (\$70M)**

1. Mr. Maddox is the Project Manager responsible for the design of a \$70 million project, which includes a tight urban interchange at Route 123 and Route 1 and the widening from four to six lanes 1.7 miles of Route 1 and Route 123. The project requires three new bridges; Route 123 over Route 1, Route 123/Belmont Bay Drive over CSXT Railroad, and Route 1 over Marumsc Creek. Route 123 and the connecting ramps are elevated on MSE retaining walls to reduce the right-of-way impacts of the project. The replacement of the existing bridge over Marumsc Creek required a detailed analysis of the FEMA floodplain. Route 1 is currently overtopped by the five-year storm event and the design required the proposed roadway to not be overtopped by the 25-year storm event. This required Route 1 be raised 7 feet and the bridge lengthened from 20 ft. to 70 ft. to maintain the existing 100-year flood elevation. The HES RAS hydraulics analysis extended downstream to a major structure under the CXST Railroad and through a development that historically experiences flooding. This required extensive coordination with the County and project stakeholders to ensure the downstream 100-year flood elevation was not increased by the project design. A complex MOT plan is also required to maintain traffic operations during multiple phases of construction including a complete traffic analysis of each phase of construction. Mr. Maddox provides oversight and coordination for all elements of the design including surveys, roadway, hydraulics, SWM, structural, geotechnical, traffic engineering, ITS, TMP, traffic forecasting and analysis, permitting and public involvement.

**Relevance to the Project**

- ✓ *FEMA Floodplain Analysis*
- ✓ *Bridge Design*
- ✓ *Utility Relocation Design*
- ✓ *Roadway Design*

2. *Whitman, Requardt & Associates, LLP; Project Manager*      3. *Dec. 2007 – Dec. 2014 Advertisement*

**POPLAR TREE ROAD WIDENING – FAIRFAX COUNTY, VA (\$2.5M)**

1. Mr. Maddox served as the Project Director responsible for the management of the widening of Poplar Tree Road from an existing two-lane, open section roadway to a four-lane, divided roadway. The project included a 10-foot wide shared-use path on one side and a 5-foot wide sidewalk on the other side. The project included a detailed hydraulic analysis of the Round Lick Run, which is located in a floodplain easement. The crossing of Poplar Tree Road consisted of a triple 72" pipe culvert to ensure the roadway was not overtopped by the 10-year storm event and had no impact on the 100-year flood elevation. The elevation of Poplar Tree Road was raised approximately one-foot. The project also included the design of an offsite detour to allow for reconstruction of the roadway over Round Lick Run. The innovative approach to stormwater management for the project allowed all treatment to be achieved in existing stormwater management basins. Services include roadway, pedestrian, maintenance of traffic, drainage, erosion/sediment control, stormwater management design and public involvement.

**Relevance to the Project**

- ✓ *Designed for Fairfax County*
- ✓ *Roadway Design*
- ✓ *Complex Hydraulic Analysis*

2. *Whitman, Requardt & Associates, LLP; Project Director*      3. *April 2007 – April 2012*



## ATTACHMENT 3.3.1

### KEY PERSONNEL RESUME FORM

<b>Brief Resume of Key Personnel anticipated for the Project.</b>	
a. Name & Title: <b>PAUL W. FLATLEY, CONSTRUCTION MANAGER</b>	
b. Project Assignment: <b>CONSTRUCTION MANAGER</b>	
c. Name of Firm with which you are now associated: <b>AMERICAN INFRASTRUCTURE</b>	
	
d. Years experience: With this Firm <u>11</u> Years With Other Firms <u>2</u> Years Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.): <b>AMERICAN INFRASTRUCTURE, CONSTRUCTION MANAGER; 2002 – PRESENT:</b> Mr. Flatley is responsible for managing all aspects of construction on his projects including planning and scheduling work activities, submittals, pay estimates, coordination with owner, subcontractors, suppliers and other stakeholders, customer satisfaction, and safety for all phases of construction. Recent projects include Mulligan Road Phase1 at Fort Belvoir and Route 29 NBL Bridge Replacement over Tye River Design-Build project in Amherst/Nelson Counties. <b>GILBERT SOUTHERN CORPORATION, FIELD ENGINEER; 2001 – 2001:</b> Mr. Flatley performed the duties of a field engineer for bridge widening with barrier wall and power plant projects. Duties included conducting quality control, overseeing the construction of 18 – 34-foot concrete cast-in-place blast walls, overseeing crews, performing calculations for form work design, tracking costs and quantities, preparing schedules, material handling, and quantity tracking. <b>KIEWIT CONSTRUCTION COMPANY, ESTIMATING &amp; SURVEYING; 1999 – 2000:</b> Mr. Flatley conducted field surveys for buildings and tunnels; he performed survey calculations by hand as well as with computer programs. Mr. Flatley was also involved in performing quantity take-offs and creating estimates for bids in process.  <b>SUMMARY OF RELEVANT EXPERIENCE</b> <ul style="list-style-type: none"><li>▪ 13 Years Construction Experience</li><li>▪ 5 Years of NOVA Project Experience</li><li>▪ Design-build experience</li><li>▪ Construction QC management</li><li>▪ Complex MOT</li><li>▪ Roadway Widening</li><li>▪ Bridge Construction</li><li>▪ Utility Installation</li></ul>	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Virginia Polytechnic Institute and State University – Blacksburg, Virginia/B.S./2002/Civil Engineering	
f. Active Registration: Year First Registered/ Discipline/VA Registration #: OSHA 30 – 600098977 RLD and ESCCC certifications will be obtained prior to commencement of construction	
g. Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none"><li>1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i></li><li>2. <i>Note whether experience is with current firm or with other firm.</i></li><li>3. <i>Provide beginning and end dates for each assignment.</i></li></ol> <b>(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)</b>  <b>ROUTE 29 NBL BRIDGE REPLACEMENT OVER TYE RIVER DESIGN-BUILD – AMHERST, VA (\$6.8M)</b> <ol style="list-style-type: none"><li>1. Mr. Flatley was responsible for construction management of this \$6.8 million design-build project for VDOT. His responsibilities included oversight of day-to-day operations, coordination with VDOT, and customer satisfaction. The project replaced the existing structurally deficient northbound lane bridge with a 650' long, five-span, two-lane bridge approximately 55' high over the Tye River. To minimize the impacts of construction of two foundations and piers in the river, a temporary access bridge was installed for construction. This temporary bridge exceeded the environmental permitting requirements and eliminated the washing out of the causeway during high water events. Under Mr. Flatley's leadership, the temporary detour that shifted traffic to the Southbound bridge was removed</li></ol> <div style="border-left: 1px solid black; padding-left: 10px; margin-left: 20px;"><b>Relevance to the Project</b><ul style="list-style-type: none"><li>✓ VDOT Design-Build project</li><li>✓ Completed seven months ahead of schedule</li><li>✓ \$1M under VDOT's budget</li><li>✓ Bridge construction</li><li>✓ In-stream construction</li><li>✓ Closure to accelerate construction</li><li>✓ Concrete Bulb T's</li></ul></div>	



nine months ahead of schedule. Through daily MOT maintenance and an effective TMP plan, there were no traffic incidents throughout the duration of construction. VDOT's Lynchburg District Administrator presented the project at VTCA in April 2012 as an example of a design-build project where "All parties acted as a team with the project being placed ahead of individual interest."

2. *American Infrastructure; Construction Manager*

3. *Jan. 2011 – April 2012*

**BRIDGE REHABILITATION OVER LAKE ANNA ROUTE 208 – SPOTSYLVANIA, VA (\$4.8M)**

1. Mr. Flatley was responsible for the construction management of this \$4.8 million project. His responsibilities included oversight of day-to-day operations, coordination with VDOT, and customer satisfaction. The existing 930' long 13-span bridge was completely over water. The scope of work included phased removal and replacement of the existing bridge deck, replacement of bearings, and substructure repairs to existing pier columns and caps. Maintenance of traffic required temporary signals at both ends of the two-lane bridge, as well as management of boat traffic during substructure repairs. Mr. Flatley's focus on quality control during construction brought to VDOT's attention that reusing the existing girders would not meet the standard for bolsters. The proposed deck elevations were revised and Mr. Flatley's team was able to complete construction on-time despite the required redesign.

**Relevance to the Project**

- ✓ VDOT Bridge Project
- ✓ Completed On-Schedule and Within Budget
- ✓ In-stream Construction
- ✓ Challenging Vehicular / Pedestrian Traffic
- ✓ Roadway Construction

2. *American Infrastructure; Construction Manager*

3. *Jan. 2011 – Dec. 2012*

**MULLIGAN ROAD PHASE I – FORT BELVOIR, VA (\$13.5M)**

1. Mr. Flatley was responsible for construction management of this \$13.5 million project. His responsibilities included oversight of day-to-day operations, coordination with VDOT, and customer satisfaction. The project constructed 1.62 miles of new four-lane commuter connector road through Fort Belvoir between Richmond Highway (US Rt. 1) and Telegraph Road (VA Rt. 611) to help to alleviate congestion on Telegraph Road and improve access to Fort Belvoir. The scope of work included two new steel-beam single-span bridges, one over Piney Run and one over Kingman Road. The construction site was adjacent to a dozen environmental conservation areas. Mr. Flatley's team utilized strict storm water pollution prevention measures throughout the project site to minimize any environmental impacts. Under Mr. Flatley's leadership, construction was completed with zero recordable incidents during the 51,619 self-performed man-hours. The project scope of work was substantially completed in December 2010. However, FHWA retained AI through March of 2012 to maintain E&S controls on the project.

**Relevance to the Project**

- ✓ NOVA Project
- ✓ Bridge Construction
- ✓ In-stream Construction
- ✓ Roadway Construction

2. *American Infrastructure; Construction Manager*

3. *Oct. 2009 – Sept. 2011*

**GEORGE MASON UNIVERSITY ROUNDABOUT AND SITE GRADING – FAIRFAX, VA (\$3.0M)**

1. Mr. Flatley was responsible for construction management of this project, including oversight of day-to-day operations and coordination of the construction schedule with the owner. The project scope of work included construction of a new connector road and roundabout; installation of new sanitary sewer, storm sewer, and waterline; and site grading for the expansion of the existing PE building. Mr. Flatley managed the construction schedule to complete the roadway and roundabout during the University's summer break to minimize impacts on vehicular and pedestrian traffic.

**Relevance to the Project**

- ✓ NOVA Project
- ✓ Utility Relocations
- ✓ Challenging Vehicular / Pedestrian Traffic
- ✓ Closure to Accelerate Construction
- ✓ Roadway Construction

2. *American Infrastructure; Construction Manager*

3. *Aug. 2008 – Dec. 2009*



# ATTACHMENT 3.3.1

## KEY PERSONNEL RESUME FORM

<b>Brief Resume of Key Personnel anticipated for the Project.</b>							
a. Name & Title:	<b>DAN SELI, P.E., SENIOR VICE PRESIDENT</b>						
b. Project Assignment:	<b>LEAD UTILITY COORDINATION MANAGER</b>						
c. Name of Firm with which you are now associated:	<b>WHITMAN, REQUARDT AND ASSOCIATES, LLP</b> 						
d. Years experience: With this Firm <u>25</u> Years With Other Firms <u>0</u> Years Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.): <b>WHITMAN, REQUARDT &amp; ASSOCIATES, LLP, VARIOUS POSITIONS; 1988 - PRESENT:</b> Mr. Seli has served as <i>Project Manager</i> and <i>Contract Manager</i> on VDOT utility projects continuously from 1994 to the present including: <ul style="list-style-type: none"><li>• VDOT Utility Coordination and U.F.I. Services On-Call Contract Statewide – Contract Manager – 2012-Present</li><li>• VDOT Utility Relocation On-Call Contract Statewide – Contract Manager – 2011-Present</li><li>• VDOT Utility Relocation On-Call Contract NOVA &amp; Culpeper Districts – Contract Manager – 2008-2011</li><li>• VDOT Utility Relocation On-Call Contract Statewide – Contract Manager – 2008-2011</li><li>• VDOT Utility Relocation On-Call Contract NOVA &amp; Culpeper Districts – Contract Manager – 2005-2008</li><li>• VDOT Utility Relocation On-Call Contract NOVA District – Contract Manager – 2001-2004</li><li>• VDOT Utility Relocation On-Call Contract NOVA District – Contract Manager – 1998-2001</li><li>• VDOT Utility Relocation On-Call Contract NOVA District – Contract Manager – 1996-1998</li><li>• VDOT Utility Relocation On-Call Contract NOVA District – Project Manager – 1994-1996</li></ul> As Contract Manager Mr. Seli served as Lead Utility Coordination Manager on task assignments made under the contracts. <b>SUMMARY OF RELEVANT EXPERIENCE</b> <ul style="list-style-type: none"><li>▪ 25 years of experience in Utility Design</li><li>▪ 19 years in Project Management for VDOT NOVA Utility Coordination and Relocation Design projects</li><li>▪ Currently managing the utility coordination of one Design-Build project in Fairfax County.</li><li>▪ Project Manager for VDOT Statewide Utility Field Inspection/Utility Coordination Contract</li><li>▪ Utility Design Experience VDOT</li><li>▪ Relevant Expertise</li></ul>							
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:	University of Delaware – Newark, DE/B.S./1998/Civil Engineering						
f. Active Registration: Year First Registered/ Discipline/VA Registration #:	1992/Professional Engineer/Virginia #023410						
g. Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none"><li>1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i></li><li>2. <i>Note whether experience is with current firm or with other firm.</i></li><li>3. <i>Provide beginning and end dates for each assignment.</i></li></ol> <b>(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)</b> <b>ROUTE 123 (OX ROAD) OVER CAMPUS DRIVE – FAIRFAX COUNTY, VA – GEORGE MASON UNIVERSITY DESIGN-BUILD (\$13M) – SUBCONSULTANT</b> <ol style="list-style-type: none"><li>1. Mr. Seli served as the Lead Utility Coordination Manager for the coordination of utility relocations for the George Mason University West Campus Connector design-build project. His responsibilities included the coordination of the utility relocations, determining utility conflicts and cost responsibilities, UT-9 development, reviewing utility plan and estimates and all required project documentation. Utilities on this project included Washington Gas, Verizon, Dominion Virginia Power, Zayo Communications and Cox Cable.<table border="0"><tr><td style="vertical-align: top;"><b>Relevance to the Project</b></td><td>✓ <i>Cost Responsibility Determination</i></td></tr><tr><td></td><td>✓ <i>UT-9 Development</i></td></tr><tr><td></td><td>✓ <i>RUMS updates</i></td></tr></table></li></ol>		<b>Relevance to the Project</b>	✓ <i>Cost Responsibility Determination</i>		✓ <i>UT-9 Development</i>		✓ <i>RUMS updates</i>
<b>Relevance to the Project</b>	✓ <i>Cost Responsibility Determination</i>						
	✓ <i>UT-9 Development</i>						
	✓ <i>RUMS updates</i>						



2. *Whitman, Requardt & Associates, LLP; Lead Utility Coordination Manager*      3. *Sept. 2012 – Est. July 2014 (Under Const.)*

**VDOT ROUTE 1/600 ROADWAY IMPROVEMENTS – DINWIDDIE COUNTY, VA (\$4.7M)**

1. Mr. Seli is the Project Manager for the Utility Coordination and Utility Field Inspection services. His responsibilities included the coordination of in-plan and out of plan utility relocations, conducting U.F.I. meetings, reviewing utility plan and estimates, UT-9 development, determining conflicts and relocation cost responsibilities, review of required easements and all required documentation. Project will also include oversight of utility relocations during construction. Utilities included on this project were Dinwiddie County Water and Sanitary Sewer, Columbia Gas, Verizon, Level 3 Communications, Comcast, Mid-Atlantic Broad Band and Dominion Virginia Power.

- Relevance to the Project**
- ✓ Utility Field Inspection
  - ✓ Cost Responsibility Determination
  - ✓ UT-9 Development
  - ✓ RUMS

2. *Whitman, Requardt & Associates, LLP; Project Manager*      3. *May 2012 – Est. Dec. 2014*

**VDOT ROUTE 460 BRIDGE REPLACEMENT AND ROADWAY IMPROVEMENTS – NOTTAWAY COUNTY, VA (\$6M)**

1. Mr. Seli is the Project Manager for the Utility Coordination and Utility Field Inspection Services. His responsibilities included the coordination of the in-plan and out of plan utility relocations, determining utility conflicts and relocation cost responsibilities, UT-9 development, conducting U.F.I. meetings, reviewing utility plan and estimates, review of required easements and all required documentation. Project will also include oversight of utility relocations during construction. Utilities included on this project were Century Link Communications, Southside Electric Cooperative and Mid-Atlantic Broad Band Cooperative.

- Relevance to the Project**
- ✓ Utility Field Inspection
  - ✓ Cost Responsibility Determination
  - ✓ UT-9 Development
  - ✓ RUMS

2. *Whitman, Requardt & Associates, LLP; Project Manager*      3. *July 2012 – Est. Aug. 2014*

**VDOT FAIRFAX COUNTY PARKWAY INTERCHANGE AT FAIR LAKES PARKWAY – FAIRFAX COUNTY, VA (\$44M)**

1. Mr. Seli has served as Project Manager for the Utility Relocations including gravity sewer lines due to the interchange modifications. The new design involved installation of a long jack and bore under the existing parkway that ultimately resulted in a 35' cover over the pipe.

- Relevance to the Project**
- ✓ Conflict Determination
  - ✓ Utility Relocation Design
  - ✓ Utility Relocation Coordination
  - ✓ Cost Estimating/Responsibility
  - ✓ Minimized Conflicts

2. *Whitman, Requardt & Associates, LLP; Project Manager*      3. *Oct. 2001 – Est. July 2013 (Under Const.)*

**VDOT I-95/395/495 SPRINGFIELD INTERCHANGE – SPRINGFIELD, VA (\$676M)**

1. Mr. Seli served as Project Manager responsible for the development of in-plan Utility Adjustment Plans for wastewater relocations required as part of the Springfield Interchange project. The work involved the relocation design of 3,500 LF of 8", 1,900 LF of 12", 15", 18" and 6,700 LF of 30" sanitary sewers. In addition to plan design, the work included pipeline profiles, easement determination, plan notes/specifications, special provisions, quantities and services during construction.

- Relevance to the Project**
- ✓ Conflict Determination
  - ✓ Utility Relocation Design
  - ✓ Utility Relocation Coordination
  - ✓ Cost Estimating/Responsibility
  - ✓ Minimized Conflicts

2. *Whitman, Requardt & Associates, LLP; Project Manager*      3. *June 1997 – May 2005*



**ATTACHMENT 3.4.1(a)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: <b>MULLIGAN ROAD PHASE I</b>  Location: <b>Fort Belvoir, Fairfax County, VA</b>	Name: <b>HDR Engineering</b>	Name of Client / Owner: <b>FHWA</b> Phone: <b>703-285-0137</b> Project Manager: <b>Douglas Nair</b> Phone: <b>703-285-0137</b> Email: <b>douglas.nair@fhwa.dot.gov</b>	<b>APRIL 2011</b>	<b>MAY 2011</b> The change was caused by additional scope of work added by the owner.	<b>\$11,917</b>	<b>\$13,517</b> The change in contract value was caused by approved change orders.	<b>\$13,517</b>

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.

**VERIFIABLE EVIDENCE OF GOOD PERFORMANCE**

- Zero recordable incidents in 51,619 self-performed man hours.
- Exceeded permit requirements in minimizing impact to 12 adjacent environmental conservation areas and Piney Run Creek.

**PROJECT DESCRIPTION** - Construction of 1.62 miles of new 4 lane commuter connector road through Fort Belvoir between Richmond Highway (US Rt. 1) and Telegraph Road (VA Rt. 611) to help to alleviate congestion in one of the busiest corridors in the DC area (Telegraph Road) and improve access to Fort Belvoir, VA. It replaces surface streets closed by the Department of Defense after the events of 9/11/01. Project scope included 38 acres of clearing, E&S controls including 500 TN of class 1 rip, 250,000 CY of mass excavation, installation of over 12,000 lf of drainage systems including several types of U-drain systems from spring boxes to UD-4, two bridges with main spans over 150 lf long that required the erection of over 600,000 lbs of steel, over 15, 000 lf of concrete pile driving operations (24", 18", and 12"), and a major bypass of a sanitary main line to allow for the removal and relocation of the encased sanitary lines. The construction site was adjacent to a dozen environmental conservation areas, in addition to the two bridges installed at stream crossings, which required AI to utilize strict storm water pollution prevention measures throughout the project site. The bridge construction was steel beam single span with concrete decks, medians and rails. American Infrastructure utilized an advanced robotic grading system to successfully place more than 30,000 TN of sub-base material on grade in preparation for completion of the roadway in Phase 2 of the project. AI's project team was able to maintain schedule on the project through difficult winter conditions while minimizing impact to 12 adjacent environmental conservation areas. This project was completed with an exemplary safety record. AI provided QA/QC services with support from an external testing firm (CTI).

**Scope of Work Similar to Walney**

- ✓ NOVA project
- ✓ DOT Design-Build project
- ✓ Bridge construction
- ✓ In-stream construction
- ✓ Utility Coordination and Relocation
- ✓ Stormwater management
- ✓ Environmental stewardship



*Bridge over Piney Run*



*In stream construction*

**LESSONS LEARNED**

- **Communication** – Communication and early involvement of FHWA in our operation planning was a key to addressing any potential issues prior to starting an operation. Prior to the start of any major work operation, we held coordination meetings with FHWA to discuss our planned means and methods, the specifications, and their expectations. This prevented potential delays in planned operations by making sure everyone was involved in the plan.
- **Coordination** – With several major work operations subcontracted (piles and bridges), subcontractor coordination was critical to our success on this project. Preconstruction meetings were held with the owner prior to a new subcontractor starting work on the site to make certain we were all aligned on progressing work in a manner that was for the overall success of the project. Weekly subcontractor coordination meetings were held to review work progress, upcoming work, quality control, and safety.
- **Quality Control** – Daily quality control checks were conducted in the field with subcontractors to make certain work was proceeding according to specifications.

***"I found the AI staff at Mulligan Road to be very professional and extremely cooperative."***

*– Douglas Nair, VDOT Design-Build Project Manager, (AI Customer Satisfaction Survey)*



**ATTACHMENT 3.4.1(a)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: <b>I-95 AT CONTEE ROAD INTERCHANGE DESIGN-BUILD</b>  Location: <b>Prince George County, MD</b>	Name: <b>Wallace, Montgomery &amp; Associates</b>	Name of Client.: <b>MSHA</b> Phone: <b>301-513-7300</b> Project Manager: <b>Mark Dougherty</b> Phone: <b>301-710-7342</b> Email: <b>mdougherty2@sha.state.md.us</b>	<b>MAY 2014</b>	<b>MAY 2014</b>	<b>\$30,700</b>	<b>\$34,000</b> The change in contract value was caused by owner approved changes.	<b>\$34,000</b>

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.

**VERIFIABLE EVIDENCE OF GOOD PERFORMANCE**

- There have been no traffic incidents with the travelling public during construction.
- Completion is anticipated 6 months ahead of the schedule advertised by MSHA and the Interim Milestone for bridge removal was completed 4-weeks early.
- An Interim MOT Phase added due to a water main betterment that conflicted with the proposed road alignment allowed the project to maintain the Interim Schedule Milestone.
- The Project has received an average E&S Quality Assurance Rating of "A".
- The Partnering Mission Statement developed by the Project Team, which included MSHA representatives, utility owners, subcontractors, and the Design-Builder states "The Contee Interchange Team is committed to designing and building a quality project for the citizens of Maryland in an incident-free and cost-effective manner that will be capable of achieving recognition at the highest level through a safe working environment, proactive communication, coordination with adjacent stakeholders, completion on-schedule, environmental stewardship, minimizing public inconvenience, mutual respect, and innovation.

- Scope of Work Similar to Walney**
- ✓ DOT Design-Build project
  - ✓ Bridge construction
  - ✓ Utility Coordination and Relocation
  - ✓ Coordination with adjacent business owners
  - ✓ Stormwater management



*Detour of I-95 for Steel Girder Erection*

**PROJECT DESCRIPTION** - This project adds a new bridge and interchange on I-95 between MD198 and the Inter-County Connector – MD200. It includes one-mile of approach roadways connecting to an adjacent Prince George's County contract. The project also includes Ramps to/from the I-95 C-D Roads being added by the ICC Contract D/E. The new bridge completion and old overpass bridge demolition is required by August 2013 for the ICC Contract D/E to complete C-D road construction. The bridge is 58' wide by 520' long and includes 3 piers with aesthetic archway features, architectural finishes on piers, parapets, & abutments, and structural steel girders.

Utilities being relocated under the contract include Verizon, Comcast, BGE gas, BGE electric, and WSSC 42", 30", 24", & 16" water mains. The stormwater management work includes 10,000 LF of bio-swales, 7 detention basins/ponds, and 8,000 lf of drainage pipe. The pavement section requires 35,000 tn of GAB, 75,000 tn of HMA, 26,000 lf of curb and gutter, and 18,000 lf of underdrain. Other work includes 55,00 SY of sidewalk, 18,000 lf of guardrail, 11,000 landscape plantings, 3 signalized intersections, roadway lighting, and signage. The project also includes one dynamic message sign to be integrated in the ITS network of the ICC Project.

**LESSONS LEARNED**

- **Stormwater Management** – The advertised stormwater management plan was optimized during the design phase eliminating the need for two basins through the use of bio-swale and bio-retention treatment facilities. The Design-Builder and MSHA relationship allowed initial discussions and further refinement of the stormwater management plan while meeting the performance specifications. Consideration of additional adjacent existing facilities assisted refinement of the plan that was approved by the Owner.
- **Innovative Design** – AI's Alternative Technical Concept shortened the bridge over I-95 by 82 feet to 519 feet in length. The shortening of the bridge was coordinated with the adjacent design-build contract to construct the I-95 C-D Road under the over pass. Coordination of an expedited design resulted in completion of the new bridge four weeks ahead of schedule. The design and construction of the bridge was on the critical path of the Project CPM Schedule.
- **Third-Party Coordination** – Coordination of design and relocation of several private utilities was required during site rough grading operations and prior to final roadway grading. This was a key component to meeting the early interim milestone for Bridge Construction proposed by AI. The project also occurred in conjunction with adjacent construction and development projects with different stakeholders at each interface of the project. The Inter-County Connector interfaces with Contee Road at the four ramps and a Prince George's County project to extend Contee Road at both the East and West interfaces. Utilities were designed and relocated to accommodate future town center site development project by Konterra adjacent to the roadway.



*One of Five Stormwater Management Basins*



**ATTACHMENT 3.4.1(a)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: <b>ROUTE 29 APPROACHES AND BRIDGE OVER TYE RIVER DESIGN-BUILD</b> Location: <b>Amherst and Nelson Counties, VA</b>	Name: <b>DEWBERRY</b>	Name of Client./ Owner: <b>VDOT</b> Phone: <b>434-856-8255</b> Project Manager: <b>TODD BOLLING</b> Phone: <b>434-856-8255</b> Email: <b>TODD.BOLLING@VDOT.VIRGINIA.GOV</b>	<b>SEPTEMBER 2012</b>	<b>APRIL 2012</b>	<b>\$6,670</b>	<b>\$6,818</b>	<b>\$6,818</b>

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.

**VERIFIABLE EVIDENCE OF GOOD PERFORMANCE**

- The bridge opened to traffic nine months ahead of schedule, with final completion seven months ahead of schedule.
- Project completed approximately \$1M under VDOT's budget.
- AI and VDOT worked together to minimize environmental impacts from the causeway, exceeding permit requirements.
- The project was presented by VDOT's Lynchburg District Administrator at VTCA in April 2012. As detailed in the presentation, "All parties acted as a team with the project being placed ahead of individual interests."

**Scope of Work Similar to Walney**

- ✓ VDOT Design-Build project
- ✓ Bridge construction
- ✓ In-stream construction
- ✓ Closure to accelerate construction

**PROJECT DESCRIPTION**

The Route 29 Bridge over Tye River is located near Charlottesville in Amherst and Nelson Counties, Virginia. The purpose of this project was to replace the existing structurally deficient bridge with a new two-lane bridge and reconstruct the approaches on both ends of the structure. The elevation of the roadway profile was increased to match the existing Southbound lanes bridge. The length of the project is approximately 0.4 miles beginning 650 feet from the south end of the existing bridge and ending 900 feet from the north end of the existing bridge.

The project consisted of complete demolition and removal of the existing Northbound lane bridge and replacement with a 650' long, five-span, two-lane bridge that is approximately 55' high over the Tye River. The project included the construction and maintenance of a temporary detour to switch all traffic to the Southbound bridge; construction and maintenance of a causeway for access across the river; driving of 12x63 steel piles; rock excavation; construction of two foundations and piers in the river; erection of 77" concrete Bulb-T's weighing approximately 65 tons each; placement of approx. 2,100 CY of concrete; placement of approx 344,000 lbs of reinforcing steel; approx. 7,000 CY of import; and placement of approx. 4,600 tons of asphalt.



*Setting bridge beams at night.*

**LESSONS LEARNED FOR THE WALNEY ROAD PROJECT**

- **Environmental Stewardship** –AI and VDOT partnered to install a temporary access bridge to minimize impacts of construction to the river during Time of Year Restrictions and exceeded permit requirements. Brad Bushey, who performed all environmental inspections and maintained the Stormwater Pollution Prevention Plan (SWPPP), will be performing the roles of Environmental Compliance and Field Utility Coordinator for Walney.
- **Safety** –The temporary detours shifting traffic to the Southbound bridge were removed nine months ahead of schedule. Through daily MOT maintenance and an effective TMP plan, there were no traffic incidents throughout the duration of construction. Ben Bushey, who managed the long-term traffic pattern to detour traffic around the workzone and the short-term pattern for shutdowns to allow for girder erection, will be the MOT Coordinator and Schedule Manager for Walney.
- **Hydraulic Conditions** –Construction of two piers in the river required coffer dams and stable access. The most severe high water event should be anticipated to prevent challenges similar to a causeway washing out experienced on this project.

*"AI was committed to providing a quality product for the owner and worked very hard during the course of this project to provide it through their QC process." – Thomas B. Hall, VDOT Design-Build Project Manager Designee, NXL Construction Services (AI Letter of Recommendation)*



*Northbound traffic switched to southbound bridge during the approach and deck pour.*



*Erection of concrete Bulb-T's over the Tye River*



**LEAD DESIGNER - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract 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)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: <b>FAIRFAX COUNTY PARKWAY INTERCHANGE AT FAIR LAKES PARKWAY</b>  Location: <b>Fairfax County, VA</b>	Name: <b>Shirley Contracting Company LLC</b>	Name of Client.: <b>VDOT</b> Phone: <b>703-259-1723</b> Project Manager: <b>Mr. Nassre Obeed</b> Phone: <b>703-259-1723</b> Email: <b>Nassre.Obeed@VDOT.Virginia.gov</b>	<b>2013</b>	<b>2013</b> <b>(Currently Under Construction)</b>	<b>\$43,961</b>	<b>\$43,961</b> <b>(Est) Under Construction</b>	<b>\$3,736</b>

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.

**Relevance to the Walney Road Project**

- ✓ Coordination with Fairfax County Park Authority
- ✓ Roadway
- ✓ Retaining Walls
- ✓ Bridge
- ✓ Box Culverts
- ✓ Environmental Permits
- ✓ Hydraulics and SWM
- ✓ Traffic Control Devices
- ✓ Complex TMP
- ✓ Utilities Design
- ✓ Public Involvement
- ✓ Coordination with Park Authority
- ✓ Design QA/QC
- ✓ Construction Engineering
- ✓ Project Management

**PROJECT DESCRIPTION**

Whitman, Requardt and Associates, LLP was selected as the prime designer to provide engineering services to VDOT for the study and final design of an interchange at the Fairfax County Parkway and Fair Lakes Parkway/Monument Drive intersection. WR&A completed approximately 90% of the design services from our Richmond, Virginia office. The project was partially funded with ARRA funding for construction, which required extensive coordination with FHWA. The project features include:

**Roadway Reconstruction and Widening** – 2.3 miles of Fairfax County Parkway was widened into the median increasing the number of lanes from 4 to 6 and 0.7 miles was completely reconstructed to facilitate raising FCP up and over Fair Lakes Parkway and Monument Drive. Over 3,000 feet of Fair Lakes Parkway was widened/reconstructed to provide additional turn lanes.

**Interchange Design** – The project included the design of a split-diamond interchange to provide access to both Fair Lakes Parkway and Monument Drive. There are four ramps with over 7,000 feet in length which intersect Fair Lakes Parkway and Monument Drive at coordinated signalized intersections with multi-lane approaches.

**Fairfax County Park Authority Coordination** – WR&A assisted VDOT in coordinating the design of the project with the Park Authority for constructing a drainage outfall of a major concrete box culvert into the park using a complex stream restoration design using a series of step pools. The design also included connecting the pedestrian facilities to the Rocky Run Stream Valley Trail in the Park. The design of the trail through the interchange was of significant concern to the Park Authority.

**Hydraulic Analysis** – The project contained a major drainage outfall to the Rocky Run Stream through an 800-foot long triple 8'x10' box culvert under Ramps B and C and Fairfax County Parkway. The project also included a single 400-foot long 7'x 8' box culvert under Ramp B and C and Fairfax County Parkway. Additionally, Fairfax County Parkway and Fair Lakes Parkway are located on dams for regional stormwater management lakes, which are regulated by DEQ. The dam is being modified by the project and a new stormwater outfall was extended into the existing lake to provide water quality requirements for the project. This required WR&A to complete a dam break analysis and coordination for review of the dam modification with DEQ and the County of Fairfax.

**Structural Design** – The bridge design efforts included the complete design of two single-span structures consisting of precast bulb tee beams spanning 116' and 142', each with a width of 124'. Abutments consisted of semi-integral concrete seats on steel piles with MSE retaining walls imprinted with an architectural finish of ashlar stone. The project also included widening the Fairfax County Parkway bridge over Route 50 by adding two additional travel lanes in the median. The bridge widening consisted of two span structural steel plate girders totaling 220' in length set on a new concrete pier. The design included over 43,000 sf of retaining walls including MSE, Pile Panel, Soil Nail and over 70,000 sf of sound barriers. The ashlar stone finish from the bridge abutments was carried through to all wall elements to create an appealing appearance to this gateway to the Fair Lakes Community.

**Traffic Control Devices** – The project included freeway overhead signing for the I-66, Fair Lakes Parkway and Route 50 interchanges including ITS facilities. Signals were designed for 7 intersections with coordinated signal timing plans to ensure the efficient flow of traffic through the project.

**Traffic Management Plans** – The project consisted of multiple phases of construction with a complex sequencing of traffic. The first major phase was the construction of the Ramps, while maintaining traffic on existing Fairfax County Parkway. This required a complex sequencing for the construction of the box culverts under the ramps. During construction, through and left turn movements at the intersection of Fairfax County Parkway and Fair Lakes Parkway were detoured onto Fair Lakes Circle. WR&A completed a detailed traffic analysis for each shift in traffic patterns and provided all signal timing plans to the Contractor.

**Public Involvement** – Since the 1980s, the Fair Lakes Community has maintained the VDOT right-of-way with landscaping, decorative signage, and mowing and reserved the right-of-way for the future interchange project. WR&A led a series of meetings with the Fair Lakes League that resulted in the acceptance of the project, donation of right-of-way/easements and utilization of existing private regional stormwater management facilities for the project. WR&A also developed materials for both a Citizens' Information Meeting and a Design Public Hearing.

**LESSONS LEARNED FOR THE WALNEY ROAD PROJECT**

- **Traffic Management Plans** – Detailed traffic analysis of each construction phase is essential to a quality Transportation Management Plan.
- **Stormwater Management** – Innovative approach to stormwater management is required to minimize right-of-way impacts.
- **Public Outreach** – Early public outreach results in true enhancements to the final project.
- **Stakeholder Partnering** – Reaching out to Fairfax County Park Authority resulted in enhancement to both the Park and the proposed project.



Rendering



Under Construction

**WR&A Team Advantage**  
WR&A is proposing the same Project Manager for the Walney Road project ensuring a proven integrated team approach to the project, which will allow the Lessons Learned to be applied directly to the project.

**ATTACHMENT 3.4.1(b)**

**LEAD DESIGNER - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract 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)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: <b>DESIGN-BUILD GMU CAMPUS DRIVE CONNECTOR</b>  Location: <b>Fairfax County, VA</b>	Name: <b>Branch Highways, Inc.</b>	Name of Client.: Branch Highways Phone: <b>540-982-1678</b> Project Manager: Billy Myers Phone: 571-379-5603 Email: billy.myers@branchhighways.com	<b>July 2014</b>	<b>July 2014 (Currently under construction)</b>	<b>\$13,000 +/-</b>	<b>\$15,600 (Under construction)</b>	<b>\$655</b>

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.

<p><b>Relevance to the Walney Road Project</b></p> <ul style="list-style-type: none"> <li>✓ Design Build</li> <li>✓ Bridge Design</li> <li>✓ Maintenance of Traffic</li> <li>✓ Utility Coordination</li> <li>✓ Geotechnical Design</li> <li>✓ Construction Management</li> <li>✓ Design QA/QC</li> <li>✓ Retaining Wall</li> <li>✓ Pedestrian/Bike Accessibility</li> <li>✓ Hydraulics</li> <li>✓ E&amp;S Plans</li> </ul>	<p><b>PROJECT DESCRIPTION</b></p> <p>Whitman, Requardt and Associates, LLP (WR&amp;A) is a subconsultant retained for the design of the 0.25 miles of Route 123 roadway improvements, including the bridge over Campus Drive, and retaining walls. WR&amp;A efforts also included providing geotechnical engineering and utility coordination and shared-use path for the entire project. The project was designed in our Richmond office with support from our Fairfax office. WR&amp;A is also providing Quality Assurance Management for the construction of the project located within VDOT right-of-way.</p> <p><b>Roadway Reconstruction</b> – The existing four-lane divided roadway approaches to the bridge over Campus Drive was reconstructed for 0.25 miles including a Shared-Use Path, storm drainage modifications and installation of traffic control devices.</p> <p><b>Geotechnical and Pavement Analysis/Design</b> – The geotechnical report included the 1.1 miles of Campus Drive, Route 123 and Braddick Road improvements. Additionally, the project included the evaluation of constructing Campus Drive over an existing dam to a regional stormwater management facility, parking lots and minor building structures. The geotechnical efforts included the evaluation and design of the bridge and retaining wall foundations.</p> <p><b>Utility Coordination and Relocations</b> – WR&amp;A provided utility coordination for all private utilities along the project, which included extensive coordination with Dominion Power, Verizon, gas, and several cable and fiber optic facilities. The fiber optic facility relocation work included a deep (30-foot) directional drill installation of a fiber optic cable on the east side of the Route 123 bridge, and temporary and permanent relocations of a fiber optic cable duct bank on the west side of the bridge. The temporary duct bank relocation included 2 aerial installation alternatives.</p> <p><b>Bridge and Retaining Wall Design</b> – A pair of bridges is proposed to carry Route 123 over Campus Drive consisting of single span prestressed concrete girders spanning 90'. They are 38' and 53' wide with an open median between them. The northbound lane bridge carries the shared use path running along Route 123. Due to the proximity to campus, aesthetic treatments were incorporated including drystack stone formliners for the parapets and decorative metal fencing. The bridge was designed to accommodate a future four lane facility for Campus Drive.</p> <p><b>Quality Assurance Management</b> – WR&amp;A serves as the Quality Assurance Manager on the project for all work within the VDOT right-of-way, providing the Quality Assurance Manager (QAM) and a full time QA Inspector for the duration of the project construction. Duties of the QAM start with developing, maintaining, and ensuring adherence to the QA/QC Plan during the life of the project, with consideration for the project features, including: bridge construction, utility avoidance and relocation, aesthetic features, and the safety and public relations requirements of a project on a university campus. Duties also include performing constructability and value engineering reviews during the design phase, conducting hold point preparatory meetings, defining and administering the QA program to oversee QC testing and inspection and the required QA testing and inspection, and ensuring compliance with construction agreements, permits and requirements. During construction, perform regular field inspections to accept or reject work, and coordinate with VDOT and the Owner as needed. Special scheduling consideration is given to GMU events and other events having an effect on traffic flow around the project. Communicate with Contractor, QC organization, and Owner to report results, resolve field issues, and plan and coordinate the work. Oversee correction of nonconforming work. Maintain the project Materials Book, recording and certifying the materials used as required. Provide feedback to Design-Build Project Manager regarding lessons learned during construction. Develop a punch list at project completion, and certify to the Owner that the project is complete. QA Inspector duties include the inspection and testing necessary to assure the project is constructed according to plans and specifications. Maintain daily documentation, including diaries, inspection reports, testing reports, materials invoices and documentation, and non-compliance paperwork. Perform QA testing of all materials at required frequencies, and coordinate off-site testing with the QA laboratory. Oversee QC testing and inspection process to confirm QC Plan is followed. Communicate with Design-Build Project Manager, QC organization, and Owner to report results, resolve field issues, and plan and coordinate the work. Communication with GMU and VDOT officials includes providing project progress updates.</p> <p><b>LESSONS LEARNED FOR THE WALNEY ROAD PROJECT</b></p> <ul style="list-style-type: none"> <li>■ <b>Utility Relocation</b> – Construction inspection of private utility relocations is critical to the project success.</li> <li>■ <b>Partnering</b> – Early coordination with project stakeholder will result in a project that fits into the context of the project site.</li> <li>■ <b>Innovative Bridge Design</b> – Construction of alternative bridge results in providing a cost effective and low maintenance bridge.</li> </ul>	 <p><i>Rendering of the Route 123 Bridge over Campus Drive</i></p>	<p align="center"><b><u>WR&amp;A Team Advantage</u></b></p> <p align="center"><i>WR&amp;A is proposing the same Project Manager for the Walney Road project ensuring a proven integrated team approach to the project, which will allow the Lessons Learned to be applied directly to the project.</i></p>
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**ATTACHMENT 3.4.1(b)**

**LEAD DESIGNER - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract 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)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: <b>DESIGN-BUILD MD 237 FROM MD 235 TO PEGG ROAD</b>  Location: <b>St. Mary's County, MD</b>	Name: <b>Lane Construction Company</b>	Name of Client.: <b>Maryland State Highway Administration (MSHA)</b> Phone: <b>410-545-8814</b> Project Manager: <b>Mr. Jeff Folden</b> Phone: <b>410-545-8814</b> Email: <b>j.folden@sha.state.md.us</b>	<b>11/2010</b>	<b>10/2011 Substantially Complete (Schedule extension by MSHA for 1 year delay in providing NTP to Lane)</b>	<b>\$35,872</b>	<b>\$38,435 (Increase done to client modification)</b>	<b>\$3,022</b>

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.

<p><b>Relevance to the Walney Road Project</b></p> <ul style="list-style-type: none"> <li>✓ Design-Build</li> <li>✓ Field Survey</li> <li>✓ Roadway</li> <li>✓ Environmental Compliance</li> <li>✓ Geotechnical</li> <li>✓ Pavement</li> <li>✓ Hydraulics and SWM</li> <li>✓ E&amp;S Plans</li> <li>✓ Box Culvert</li> <li>✓ Noise Wall</li> <li>✓ Traffic Control Devices</li> <li>✓ Complex TCP</li> <li>✓ Utility Design</li> <li>✓ Utility Coordination</li> <li>✓ Landscaping</li> <li>✓ Public Involvement</li> </ul>	<p><b>PROJECT DESCRIPTION</b></p> <p>Whitman, Requardt &amp; Associates, LLP was the prime design firm for this design-build project responsible for preparing final engineering design documents and approvals for the dualization of 2.88 miles of MD 237 from MD 235 to Pegg Road in St. Mary's County, Maryland. The project was designed in our Baltimore, Maryland office with support from the Richmond, Virginia office. The project widened MD 237 from a two-lane open section roadway to a four-lane divided highway incorporating pedestrian and bicycle facilities. The project features include:</p> <p><b>Roadway Reconstruction</b> – Existing two-lane open roadway was completely reconstructed to a four-lane closed-section divided roadway with left turn lanes at select intersections. The reconstructed roadway incorporated 5' bike lanes, a raised landscape median, and 5' pedestrian walkways throughout the entire limits of the project. Improved horizontal and vertical geometrics were enacted to meet current design criteria including raising the roadway profile 12' for a 2,200 LF vertical realignment at a major stream crossing for replacement of undersized pipes with a twin-cell box culvert.</p> <p><b>Intersection Reconstruction</b> – Sixteen intersecting side streets required reconstruction including two with complete realignments.</p> <p><b>Hydraulic Analysis and Stormwater Management (SWM)</b> – The new closed storm drain system consisted of over 13,500 LF of drainage pipes. Eight new SWM ponds were constructed, initially constructed as sediment traps then converted over to landscaped SWM facilities as construction progressed.</p> <p><b>Noise Analysis and Noise Barrier Design</b> – Three noise walls, totaling over 1,700 LF were installed along residential communities. Noise walls were supported on reinforced concrete drilled shafts. The noise wall consisted of reinforced concrete noise posts and panels with a simulated brick finish.</p> <p><b>Geotechnical and Pavement Analysis/Design</b> – Foundation design was provided for the noise wall and twin-cell box culvert. A temporary fabric wall was designed to maintain traffic at the culvert replacement to accommodate the raised roadway grade while maintaining traffic on the existing pavement. Roadway geotechnical and pavement design services included designing new roadway cuts/fills and new pavement</p> <p><b>Jarboeville Run Culvert Replacement</b> – Undersized existing culverts at a significant stream crossing were replaced with a twin-cell box culvert to eliminate flooding of the existing roadway. The design included a stone stream grade control structure to promote fish passage while maintaining upstream hydrology needed for the preservation of existing wetlands. The new box culvert was supported on 'H' piles with one cell passing the normal flow and a second cell used as an animal passage and floodplain overflow. Jarboeville Run has a defined FEMA floodplain and the project required a detail HEC-RAS analysis to ensure the design did not increase the 100-year floodplain.</p> <p><b>Utility Relocation Design and Coordination</b> – Utility relocation consisted of designing and installing over 10,000 LF of 12" ductile iron water pipe, 6,000 LF of 6" and 8" gas line, 350 feet of low pressure sanitary sewer with grinder pumps and coordination with utility companies for the relocation of aerial electric, telephone and cable television.</p> <p><b>Maintenance of Traffic</b> – Extensive multi-phase maintenance of traffic plans were required to maintain traffic along all roadways and access to driveways/entrances. The project was divided into four distinct construction zones based on maintaining drainage within each zone. Temporary cross-overs from newly constructed pavement to the existing pavement were necessary as each portions of the project were completed.</p> <p><b>Traffic Control Devices</b> – Traffic Engineering services included the design and installation of five new traffic signals, signal interconnect, relocation of school flasher, new signing and pavement markings, and new intersection lighting.</p> <p><b>Environmental Compliance</b> – Construction occurred in an environmentally sensitive area requiring strict compliance with all permit conditions.</p> <p><b>Public Involvement</b> – A public meeting was held to continue MSHA's public involvement campaign and to inform the community of the final design elements and upcoming construction activities. Public information materials and advanced notification of traffic impacts were provided to MSHA on a continual basis to keep the public informed throughout construction.</p> <p><b>Partnering During Design and Construction</b> – WR&amp;A participated in a partnering agreement, which set goals and objectives during the early stages of work.</p> <p><b>LESSONS LEARNED FOR THE WALNEY ROAD PROJECT</b></p> <ul style="list-style-type: none"> <li>■ <b>Utility Relocation</b> – Early and continued coordination with utility companies is necessary to ensure utility relocations are compatible with construction sequence and operations.</li> <li>■ <b>Partnering</b> – Early and continued coordination between all members of the Design-Build Team and owner are a necessity to develop constructible plans and resolved construction issues expediently.</li> <li>■ <b>Utility Coordination</b> – Substantial lead time needs to be provided to obtain power feed hook-ups for traffic signals; therefore, design of the signals need to be advanced early.</li> </ul>	
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