

# STATEMENT OF QUALIFICATIONS

SUBMITTED | JUNE 2, 2017

A DESIGN-BUILD PROJECT **Warrenton Southern Interchange US 15/17/29** From: Route 15/17/29 & Route 15/17/29 Business To: 1.0 mile South of Route 15/17/29 & Route 15/17/29 Business





State Project No.: 0029-030-121, P101, R201, C501, B616 Federal Project No.: STP-032-7(032) Contract ID Number: C00077384DB100 SUBMITTED BY



## 3.2

## **Letter of Submittal**





June 2, 2017

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

Re: REQUEST FOR QUALIFICATIONS | A DESIGN-BUILD PROJECT | Warrenton Southern Interchange US 15/17/29 | From: Route 15/17/29 & Route 15/17/29 Business To: 1.0 mile South of Route 15/17/29 & Route 15/17/29 Business | Fauquier County, Virginia | State Project No.: 0029-030-121, P101, R201, C501, B616 | Federal Project No.: STP-032-7(032) | Contract ID Number: C00077384DB100

Dear Mr. Stevenson,

Branch Civil, Inc. (Branch), as the Offeror, hereby submits to the Virginia Department of Transportation (VDOT) this Letter of Submittal and accompanying Statement of Qualifications in response to the Request for Qualifications dated April 26, 2017 and Addendum #1 dated May 22, 2017 for the above-referenced project. For this pursuit, Branch has partnered with Whitman, Requardt & Associates, LLP (WRA) to furnish a product that exceeds expectations with respect to design, cost, and schedule.

- 3.2.1 Full legal name and address of the Offeror: Branch Civil, Inc. | 442 Rutherford Ave, NE, Roanoke, VA 24016
- 3.2.2 Point of Contact for the Offeror: Mr. Jason Hoyle, Vice President of Design-Build/Special Projects Address: 442 Rutherford Ave, NE Roanoke, VA 24016 Tel: (540) 982-1678 | Fax: (540) 982-4217 | Email: jason.hoyle@branchcivil.com
- 3.2.3 Principal Officer of the Offeror: Mr. Patrick Bartorillo, President Address: 442 Rutherford Ave, NE, Roanoke, VA 24016 Tel: (540) 982-1678 | Fax: (540) 982-4217 | Email: patrick.bartorillo@branchcivil.com
- 3.2.4 **Corporate Structure of the Offeror:** Branch is a registered corporation in the Commonwealth of Virginia. Branch will take full financial responsibility for the Project, and has no known liability limitations. Branch will provide a single 100% performance bond and single 100% payment bond.
- 3.2.5 Lead Contractor: Branch Civil, Inc. | Lead Designer: Whitman, Requardt and Associates, LLP
- 3.2.6 Affiliated and/or Subsidiary Companies Table (Attachment 3.2.6) is in the Appendix.
- 3.2.7 Certifications Regarding Debarment (Attachments 3.2.7(a) and 3.2.7(b)) are in the Appendix.
- 3.2.8 VDOT Prequalification: Branch's Vendor ID is B319; status is Active. See Appendix for Evidence.
- 3.2.9 Surety Letter is in the Appendix.
- **3.2.10 SCC and DPOR information are in Attachment 3.2.10** and supporting documentation is in the Appendix.
- 3.2.11 DBE Participation Goal: Branch is committed to achieving an eleven percent (11%) DBE participation goal for the entire value of the contract.

Branch and WRA are well-versed and respected within the Heavy Civil Construction industry, specifically with regard to Design-Build projects. Our team eagerly anticipates yet another successful delivery with this endeavor.

Respectfully Submitted,

Branel Civil, Ing

Patrick K. Bartorillo, President

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## 3.3

## **Offeror's Team Structure**





### **3.3 OFFEROR'S TEAM STRUCTURE**

**Branch Civil, Inc. (Branch)** will be responsible for managing the project in its entirety, supervising the construction, and performing major elements of the construction work. Branch will subcontract the bridge construction to *Fairfield-Echols, LLC (FE)*. Additional subcontractors for various specialty items such as signage, guardrail, and pavement striping will also be under direct subcontract to Branch. *Whitman, Requardt & Associates, LLP (WRA)* will lead the design effort for all aspects of the project and will be responsible for the design QA/QC. The Branch | WRA Design-Build Team includes highly qualified subconsultants that bring specific expertise to enhance the Team and ensure a quality project for VDOT. A listing of the Team follows and an organizational chart of the Team is included in Section 3.3.2.

### Branch Civil, Inc. (Branch) – Offeror, Legal Entity, Lead Contractor

**Branch** is committed to continuing its 75-year tradition of building enduring infrastructure projects in the Mid-Atlantic and Southeastern United States through design-builds, civil construction, and site development. **Branch** is an employee-owned (ESOP) company based out of Roanoke, Virginia, with regional divisions in Northern Virginia, Virginia Beach, and North Carolina. Branch **continuously ranks as a Top 400 Contractor** (#209) by ENR. As one of the largest Virginia-based contractors, Branch's experience includes managing designers, right-of-way acquisition, utility relocation and coordination, and environmental permit acquisition and monitoring on numerous successful Design-Build and PPTA projects. Branch has completed more than \$600M in Design-Build projects including several relevant projects with similar size and scope to the Warrenton Southern Interchange Project. Other similar projects include the \$25M Route 3 Widening Design-Build Project (Culpeper District), the \$36.7M I-95 Express Lanes Southern Terminus Extension Design-Build Project (Fredericksburg and Northern Virginia Districts), and the \$38.7M Southgate Drive Interchange Project Design-Build Project (Salem District).

#### Whitman, Requardt & Associates, LLP (WRA) – Lead Designer

WRA is a full service architectural and engineering firm that was founded over 100 years ago primarily serving state and local governments in the Mid-Atlantic region of the United States. WRA will serve as the Lead Designer for this project and will be responsible for the design QA/QC. In the last three years, WRA has worked on <u>ten</u> Design-Build projects in Virginia valued at over **\$225M** and as a firm has been a Design-Build leader in the Mid-Atlantic region working on over 50 Design-Build projects for Federal, State, and Local government entities as well as private Design-Build projects.

Branch and WRA have worked together on **multiple** Design-Build/PPTA projects over the last three years:

- *I-95 Express Lanes Southern Terminus Extension Design-Build* (\$36.7*M*) Branch is currently constructing the 2.2 mile extension of the I-95 Express lanes through the Garrisonville Road interchange with I-95. WRA is the lead designer for the project and is providing QAM services.
- *I-95 Safety Improvements at Route 3 Design-Build in the City of Fredericksburg (\$18.2M)* WRA is the lead designer for the project that will be constructed by Branch over the next year and a half.
- George Mason University (GMU) Campus Connector Design-Build (\$15.6M) Branch was the Lead Contractor for this project. WRA designed the Route 123 improvements, performed the geotechnical engineering and provided QAM services for all construction within VDOT right-of-way.
- **Route 636 Extension over CSXT Augusta County PPTA** (\$14M) WRA designed the Route 636 Bridge over CSXT, performed geotechnical engineering and provided QAM services for this Branch project for Augusta County. In addition, *Fairfield-Echols, LLC* constructed the bridge over CSXT as a subcontractor for Branch similar to what is proposed for this project.

The combined Design-Build experience noted above and our common goal to put the quality and schedule of the project first has proven to be successful on our previous Design-Build projects and will be for the Warrenton Southern Interchange project as well.

#### **Subconsultants and Subcontractors**

The Branch | WRA Design-Build Team is comprised of highly qualified design and QA/QC testing subconsultants that are extremely knowledgeable with VDOT policies and procedures and experienced with similar VDOT Design-Build projects. The following subs have been carefully selected based on their





relevant past experience and established working history of project success with VDOT, Branch, and WRA: **3B Consulting Services, LLC's (3B)** *Rick Lively*, will lead all right-of-way acquisition activities for the project. Rick has over 30 years of experience in the right-of-way industry including 15 years with VDOT and will report directly to the DBPM. 3B is a certified SWaM firm.

**Engineering & Materials Technologies, Inc. (EMT),** is a certified DBE firm and will provide QC Inspectors, Testing, and Lab Services for the project. Their in-house laboratory has been inspected and/or accredited by AASHTO Materials Reference Laboratory (AMRL), the Washington Area Council of Engineering Laboratories (WACEL), and the Cement and Concrete Reference Laboratory (CCRL).

**Fairfield-Echols, LLC (FE)** was founded in 1929 and is based in Fishersville, VA. Fairfield has been successfully building structures for VDOT and other clients since their inception. In 2015, Fairfield partnered with Branch to construct a bridge and MSE walls (both designed by WRA) carrying traffic on Route 636 over CSX. Fairfield will be a dedicated subcontractor to Branch to perform all structure construction on the project.

**Froehling & Robertson, Inc. (F&R)**, a SWaM-certified firm founded in 1881, will provide a Quality Assurance Lab for the project. F&R's in-house soil, materials, and asphalt laboratories are accredited by AASHTO (AMRL/CCRL), the US Army Corps of Engineers (USACE), and WACEL.

Land Planning and Design Associates, Inc.'s (LPDA), *Mark Lieberth* will lead all Landscape Architecture design services for the project. WRA and SWaM-certified LPDA have an excellent working relationship and recently collaborated on the Berkmar Drive Extension element of the Route 29 Solutions Design-Build project.

**Seventh Point, Inc. (SP),** specializes in providing public relations and communication expertise on high profile projects for VDOT including the Military Highway project with Branch. *Mike Carosi* will lead this effort as a <u>value added</u> team member bringing his 21 years of experience and will report to the DBPM.

**System Protection Services, Inc. (SPS),** specializes in Corrosion Engineering Services. *William Rivers* has been included as a <u>value added</u> team member to provide advice and guidance on the challenges related to the 20" natural gas transmission line. William has over 30 years of experience in the operation and maintenance of pipeline systems and is a recognized expert in corrosion prevention systems.

#### **3.3.1 KEY PERSONNEL**

The Branch | WRA Design-Build Team identifies and provides information about the Key personnel below. The job duties and responsibilities of Key Personnel will not be delegated to others for the duration of the Design-Build Contract. The resumes for the individuals identified as Key Personnel are included on **Attachment 3.3.1** located in Appendix 3.3.1. DB denotes team members with Design-Build experience.

### **Design-Build Project Manager: Jason Hoyle (Branch – 22 years of experience)**

**DB** Jason Hoyle (DBPM) will be responsible for the overall Project design and construction and has the expertise and experience required to supervise and exercise a degree of control of the work and will ultimately be the point of contact for VDOT and stakeholders. Jason will oversee the Project, to include the Design-Builder's design, construction, quality management, contract administration and other services required by the Contract Documents. This will include procuring and furnishing all materials, equipment, services and labor reasonably inferable from the Contract Documents, within a timely manner. Jason will be able to answer questions/inquiries relevant to the project and will be responsible for meeting the Design-Builder's obligations under the Contract while avoiding and resolving disputes. Jason, along with our value added position with Seventh Point, will coordinate public outreach and public meetings. In addition, he will facilitate partnering amongst the team and make sure that appropriate and consistent communication is maintained between all parties. The Design Manager, Construction Design Coordinator, Construction Manager, Right-of-Way Manager, Safety Manager, Quality Assurance Manager (QAM), and Lead Utility Coordinator, will all report directly to Jason. He is currently serving in a similar role, as the DBPM for the \$25M Route 3 Widening Project (Culpeper District) with Greg Suttle as Construction Manager, which will be complete prior to Notice to Proceed for this project. Jason has filled the role of DBPM for multiple NCDOT Design-Build projects where Alternative Technical Concepts (ATC's) were introduced and





incorporated into the Project's design.

### Quality Assurance Manager: Lenny Coleman, PE, CCM, LEED AP (WRA – 12 years of experience)

DB Leonard (Lenny) Coleman (QAM) will report directly to the DBPM and will have direct, independent access to VDOT. He is currently filling the role of the QAM for the I-95 Express Lanes Southern Terminus Extension and on the I-95 Safety Improvements at Route 3 for Branch. He served as Assistant QAM on the Fairfax County Parkway Interchange and Widening Design-Build project and held the role of QC Manager on the Fall Hill Avenue & Mary Washington Boulevard Extension VDOT Design-Build project in Fredericksburg, VA, and the Walney Road Widening VDOT Design-Build Project in Fairfax, VA. Lenny's experience includes QA level oversight as Prince William County's Construction Manager for the Capital Improvement Program which involved managing projects similar to the Warrenton Southern Interchange. Lenny will be responsible for the Quality Assurance program and will coordinate with VDOT, supervise project QA inspection staff, and coordinate with the QA Testing firm, F&R. He will ensure conformance with the Contract Documents including the "approved for construction" plans and specifications. Lenny will have overall responsibility for the development of and adherence to the Design-Build QA/QC Plan including coordination with the Design QA/QC Manager, Brad Stipes, PE. Lenny will report to the DBPM but will function independently from the Construction QC Manager, auditing and monitoring Branch's Quality Control Program. He will have the authority to stop construction activities, to ensure compliance with the specifications, and issue Non-Compliance Reports (NCRs) if necessary. In addition, Lenny will submit monthly written reports on the QA Program to both VDOT and the Branch | WRA Design-Build Team.

### Design Manager: Mike Russell, PE, DBIA (WRA – 28 years of experience)

DB Mike Russell, PE, DBIA (DM) will also report directly to the DBPM. Mike has 28 years of experience designing and managing major transportation projects for VDOT. He spent 14 years serving VDOT in various roles, most recently as the District Engineer of VDOT's Bristol District. He is currently the Design Manager on VDOT's I-81 Halls Bottom Road Bridge Replacement Design-Build project in Washington County, Virginia and was the Design Element Lead for the Berkmar Drive Extension element of the Route 29 Solutions Design-Build project. Mike has also worked with Branch on the I-95 Express Lanes Southern Terminus Extension and the I-95 Safety Improvements at Route 3. He will be responsible for providing a quality product, meeting all design milestones, continual Design-Build Team coordination, and ensuring the Design QA/QC Manager's oversight throughout the design phase. Mike is responsible for ensuring all design work is performed in accordance with current VDOT Policies, Procedures and Guidelines and the requirements of the VDOT Request for Proposals. He will manage all aspects of design including roadway, structures, hydraulics, traffic engineering, MOT, environmental, and geotechnical. He will assign resources as needed, oversee the design subconsultants, coordinate design and review schedules, develop and implement corrective measures if necessary, and ensure environmental compliance measures are integrated into the design. He will coordinate the design with the value added Construction Design Coordinator, Barry Frank, and will remain involved in the project once construction begins to oversee any plan modifications and shop drawing reviews, as well as review construction activities as work progresses.

### **Construction Manager: Greg Suttle (Branch – 28 years of experience)**

**DE** *Greg Suttle* will manage all on-site construction as well as scheduling, safety, environmental compliance, utilities, and MOT. Greg will supervise the Project Controls Manager, QC Manager, superintendents, and field staff. He will also manage the construction process, to include all Quality Control (QC) activities to ensure the materials used and work performed meet contract requirements and the "approved for construction" plans and specifications. He will play a key role in conjunction with the CDC and Design QA Manager in design constructability reviews, utility coordination, Right-Of-Way and MOT. Greg holds a Virginia Department of Environmental Quality (DEQ) Responsible Land Disturber (RLD) Certification and a VDOT Erosion and Sediment Control Contractor Certification (ESCCC). He will also work with WRA in coordinating the design and construction is performed safely and along with our QC Manager, that





materials and work are in conformance with the approved plans/contract documents. He will coordinate with the DM during construction for the accurate and timely issuance and review of any RFIs and shop drawings, as well as field visits, preparation of as-builts and plan revisions. He will be assigned to the Project and be on site full time. Greg is currently serving in a similar role for the \$25M Route 3 Widening Project (Culpeper District) and will be fully dedicated and available for this project prior to Notice to Proceed.

### **3.3.2 ORGANIZATIONAL CHART**

The Branch | WRA Design-Build Team Organizational Chart on Page 7 identifies key personnel members and depicts the reporting structure of the entire Team. **Solid lines** identify the **direct lines** of reporting relationships of our Team members from the DBPM to the Design, Construction and QA leads. **Dashed lines** represent **indirect** reporting relationships and obligations to the DBPM and the team members. Furthermore, the reporting structure shows a clear separation between the Construction Quality Control duties and the Quality Assurance (QA) duties. Each function will have independent materials testing laboratory services. As a continuation of the functional relationships for Key Personnel described in Section 3.3.1, the following narrative further defines the roles and functional relationships of the main team members.

### **Construction Design Coordination**

**DE** Construction Design Coordinator (CDC): *Barry Frank* has 7 years of overall experience in the heavy civil construction industry. Barry is currently serving in a similar <u>value added</u> role on the I-95 Express Lanes Southern Terminus Extension Project where he is responsible for working with WRA to monitor the design process for constructability and efficiency. Barry is well versed in the process of managing the design-construction process that is exclusive to Design-Build projects. Barry will report to the DBPM, and will utilize the partnering experience he has learned from the I-95 Express Lanes Southern Terminus Extension Project to support the timely review of plan submissions and advance construction activities.

**DE** Lead Utility Coordinator: *Paul Martin* has more than 27 years of experience in highway and bridge construction including 12 years specializing in utility relocations for VDOT and has become WRA's Design-Build lead for utility relocation and coordination on such projects as the I-95 Safety Improvements at Route 3 Design-Build and the I-95 Express Lanes Southern Terminus Extension Design Build Project. Paul will report to the DBPM and will interact closely with the DM and CM.

**DB** Public Relations Manager: *Mike Carosi* has over 21 years of experience leading outreach on major transportation projects and ensuring robust public affairs, community outreach, marketing, advertising, and strategic public communications programs. Mike is currently serving in a similar role on Branch's Military Highway CFI Design-Build project and will report to the DBPM.

**Traffic Management Task Force:** A Task Force dedicated to traffic management is an effective method to manage the risks. This group will consist of Branch and WRA project staff, VDOT, and Third Party Stakeholders. The Task Force will meet routinely, at least monthly to review the current MOT plan and determine if any changes need to be made to address current concerns or upcoming activities.

### Design

**DB** Roadway Engineer: *Mark Vasco, PE* will report to the DM and lead the roadway design efforts for the project. Mark has more than 33 years of experience in the design of transportation projects. Mark recently served as the lead designer of the Fairfax County Parkway Interchange at Fair Lakes Parkway in Fairfax County, Virginia and the GMU Campus Connector Design-Build with Branch.

**DB** Bridge Engineer: Jeremy Schlussel, PE has 20 years of experience and reports to the DM. He will be in charge of structural engineering for the project including the bridge, retaining and noise walls. Jeremy has extensive experience designing bridge projects for the Department and managed the design of the Berkmar Drive Extension Design-Build Bridge in Albemarle County for the Culpeper District and designed the Route 123 Bridge over Campus Connector for Branch as part of the GMU Campus Connector Design-Build Project. Jeremy will review shop drawings and assist the DBPM, CM, and DM during construction.

DB Geotechnical Engineer: *Jeff Basford*, *PE* has over 16 years of experience in subsurface explorations,





geotechnical analysis, design of pavement sections and shallow and deep foundations, slope stability analysis, concrete and geosynthetic reinforced earth retaining structures, and in-situ testing and verification during construction. He has provided geotechnical expertise on Design-Build projects such as the Route 636 Extension and the GMU Campus Connector Design-Build, I-95 Express Lanes Southern Terminus Extension Design-Build and I-95 Safety Improvements at Route 3 Design-Build with Branch. Jeff will report to the DM and collaborate extensively with the CM and CDC.

**DB** MOT/Traffic Engineer (TMP): *Dana Trone, PE, PTOE* has over 20 years of experience in traffic engineering including development of transportation management plans and MOT design. Dana has developed TMPs for numerous VDOT Design-Build projects including the I-95 Express Lanes Southern Terminus Extension Design-Build and I-95 Safety Improvements at Route 3 Design-Build. Dana will report to the DM and collaborate with the *Traffic Control Coordinator, Matt Butler*.

**Destinage/Hydraulics Engineer:** *David Gertz, PE* will report to the DM and lead the design efforts for drainage and Stormwater Management (SWM). David has over 37 years of experience in roadway drainage design and SWM. He served as Lead Drainage/Hydraulics Engineer for the Berkmar Drive Extension of the Route 29 Solutions Design-Build, I-95 Express Lanes Southern Terminus Extension Design-Build and I-95 Safety Improvements at Route 3 Design-Build.

**Desting: Environmental Permitting: Taylor Sprenkle, PWD** will report to the DM and secure all environmental permits needed for the project. Taylor has over 12 years of experience working with regulatory agencies for environmental reviews and permitting required for transportation projects and will work closely with the **Environmental Compliance Manager, Matt Butler,** to ensure all permit requirements are fulfilled.

### **Design QA/QC**

**Design QA/QC Manager**, *Brad Stipes*, *PE* has 29 years of progressive experience in transportation system planning, design, and construction. He has been responsible for the design and management of a wide variety of projects for VDOT including six (6) projects in the Culpeper District. Two of these projects were along the Route 29 Corridor.

### **Construction QC**

**DB** Construction QC Manager: *Tom Franzino* has 6 years of Design-Build experience, 3 with Branch. Tom will report to the CM and will be responsible for managing all QC work for Branch, including the QC inspection staff and testing lab. Tom is very knowledgeable with all of the VDOT Construction requirements, specifications, and testing methods and will work closely with the QAM and the DBPM.

### Construction

**DB** Project Engineer: *Conrad Althoff* has 8 years of construction experience and will report to the CM and will be responsible for supporting construction operations managing subcontractors and material suppliers. Conrad is currently in a similar role working on the Route 3 Widening Design-Build project.

**DB** Bridge Superintendent: *Dwayne Bradley* will report to the CM and has 35 years of experience in the role of building bridge projects throughout Virginia. Dwayne has supervised construction of the Bent Creek Road bridge over Moore's Creek and the Black Cat Road (Route 616) bridge over CSX, both in the Culpeper District. He also gained Design-Build experience on Branch's Route 636 Bridge over CSX in Fishersville.

**DB** Grading/Roadway Superintendent: *Raymond Bruce* has 43 years of heavy civil construction experience in the role of Superintendent and will report to the CM. He has worked in the capacity of Grading/Roadway Superintendent on large-scale, high-profile projects, including Route 3 Widening (Culpeper District) and US Route 58, Hillsville Bypass (Salem District).

**DB** Executive Committee: *Patrick Bartorillo*, President of Branch, and *John Maddox*, Senior Vice President of WRA, will provide support for the project Team to ensure adequate resources are available for successful project completion. Both Patrick and John fully understand the desire of the Department to keep the key members of the team in place during the project and are fully committed to this.



## **3.3.2 ORGANIZATIONAL CHART**







## 3.4

## **Experience of Offeror's Team**





## **3.4 EXPERIENCE OF TEAM**

Please refer to Attachment 3.4.1 (a) Lead Contractor Work History Forms and Attachment 3.4.1 (b) Lead Designer Work History Forms, located in the Appendix of the SOQ for detailed relevant project experience.

#### **RATIONALE FOR WORK HISTORY PROJECT SELECTION**

As Lead Contractor and Offeror, Branch is proud to present the following projects that demonstrate experience and success with scope, magnitude, risks and associated mitigation that are similar to the Warrenton Southern Interchange US 15/17/29 Project:

*I-95 Express Lane Southern Terminus Extension Design-Build:* WRA and Branch are currently teamed on this \$36.7M, 2.2 mile extension of the I-95 Express Lanes. This Design-Build project is an excellent representation of the close working relationship that WRA has developed with Branch. Additionally, it shares many design issues such as a high traffic volume MOT, geotechnical constraints, drainage, and SWM regulations. By strategically developing work packages, the team was able to begin construction activities almost immediately upon NTP. This project also demonstrates the Branch | WRA Design-Build Team's ability to successfully partner with VDOT and third party stakeholders during the design and construction phases in order to provide expedited oversight and accelerate the construction schedule.

*Route 3 Widening Design-Build:* Branch is currently constructing this \$25M, 5.1 mile widening of Route 3 in Culpeper District. The management team for this project: DBPM, CM, Project Engineer, and Grading/Roadway Superintendent will continue working together to make the transition from Route 3 Widening to the Warrenton Southern Interchange project. The Route 3 Widening project is 25 miles from the Warrenton Southern Interchange project; therefore, we are familiar working in the region, as well as with the Culpeper District. The geotechnical challenges on this project are similar to the Warrenton Southern Interchange Project, where a significant amount of unsuitable soils were encountered. Utility coordination was a critical part of the construction schedule to address conflicts with several large diameter gas transmission lines.

*Southgate Drive Interchange:* This \$38.7M VDOT project in Blacksburg illustrates similar scope to the Warrenton Southern Interchange project. Branch is the prime contractor for this project that includes the construction of a new grade separated interchange at US 460 and Southgate Drive near the entrance of Virginia Tech. The intersection of US 460 and Southgate Drive currently experience significant queues, rear end collisions, and the need for an increased Level of Service. The improvements will allow traffic to flow freely along US 460 and Southgate Drive will be elevated over US 460 to make the connection with US 460 with full movement ramps. Traffic along US 460 and Southgate Drive is being maintained during construction. Southgate Drive is being upgraded with a roundabout near the new interchange to keep traffic flowing and reduce the current queue. Branch and WRA collaborated on this project to develop a successful Value Engineering proposal that resulted in total cost savings of \$1.4M.

As Lead Designer, WRA is pleased to present the following three projects to showcase definitive experience with *Interchange* Design, *Roundabout* Design, and *Design-Build* expertise.

*Route 29 Solutions Design-Build – Berkmar Drive Extension:* WRA was lead designer as part of the \$34.6M Berkmar Drive Extension Element of the Route 29 Solutions Design-Build project in Albemarle County. The project included a single lane roundabout at the intersection of Berkmar Drive and Hilton Heights Road. The design included providing supporting data including speed profiles and a turning movement analysis for each maneuver to ensure that vehicles and heavy truck traffic could maneuver the roundabout safely.

*Fairfax County Parkway Interchange at Fair Lakes Parkway:* This \$43.4M project in Fairfax County included a split diamond interchange with very high traffic volumes. WRA's expertise showcased by this interchange design and complex MOT is very similar to what will be required for the Warrenton Southern Interchange Project. The project also included two single span structures and extensive MSE retaining walls along the ramps to minimize adjacent property impacts.

**MD 210 Interchange at Kerby Hill Road/Livingston Road Design-Build:** This \$82.6M Design-Build project in Maryland is very similar in scope, size, and complexity to the Warrenton Southern Interchange. Kerby Hill and Livingston Road are currently signalized intersections that will be replaced with a grade separated interchange with very similar traffic volume and MOT complexities. The project includes two structures over MD 210 and utilizes median ramps and extensive MSE retaining walls to minimize impacts. Additionally, over 7,300 LF of high pressure gas main required relocation as part of the project along with water, sanitary sewer, electrical and communication utilities. This required extensive coordination with the utility owners.





## 3.5

## **Project Risks**





#### **3.5 PROJECT RISKS**

The combined  $150^+$  years of experience for the Branch / WRA Design-Build Team in the industry, including over \$825M in combined Design-Build projects has enabled each firm to build upon their ability to anticipate risks and determine mitigation strategies to manage/eliminate these risks. Branch's risk assessment and mitigation procedure is described briefly in the diagram below. It is based on concepts presented in the Breakthrough Project Leadership Institute created by two well-known construction management consultants, Mike Casten and Dave Peterson, owners of Construction Concepts and Sage Limited, respectively.



The cycle starts with choosing partners that complement your strengths and bring different perspectives to the table much like the Branch | WRA Design-Build Team has demonstrated on numerous endeavors. Working as a Team to evaluate the criteria and assess risks leads to effective solutions that are implemented into the project design. This implementation then leads to an evolving process that runs through the project cycle of performing, evaluating, and adjusting. The Branch | WRA Design-Build Team has enjoyed a great deal of success partnering with each other and the Department on the I-95 Express Lane Southern Terminus Extension as well as the I-95 Safety Improvements at Route 3. The partnering approach taken on these projects will be utilized to address the challenges of the Warrenton Southern Interchange project, in particular the risks identified below. This strong teaming environment combined with the opportunity to bring innovation to the project through the use of Alternative Technical Concepts (ATC) will ensure the success of the Warrenton Southern Interchange.

Risks most commonly present an impact to project schedule and/or budget. With the passing of HB2 (now Smartscale), project budgets are established very early in project development. Any risk item that causes an increase in cost places the project in jeopardy of having to be "rescored" which could mean as much as a year or two delay with the chance of completely losing all funding if the benefit no longer scores well relative to other projects being considered. Our approach to Risk Identification has held this relatively new policy close in mind. The Branch | WRA Design-Build Team has identified three top risks critical to the success of the Warrenton Southern Interchange project. Each of these risks requires a unique mitigation strategy. Our Team is pleased to provide the following risk descriptions and discussions:

#### **RISK #1: OPERATIONAL AND CONSTRUCTION SAFETY**

#### A. Define the Risk and Why it is Critical

Operational and Construction Safety is a key risk for this project. In studying the conceptual project design provided in the RFQ, our Team notes several operational and construction safety aspects that must be fully evaluated and addressed during detailed project design, and closely followed during construction to ensure a successful project completion. Each of these safety aspects includes uncontrollable risks, and collectively they constitute a top project risk. Operational and Construction Safety Risk is comprised of the following key safety aspects:

#### > Major Construction on a Highway with High-Volume, High-Speed Traffic

The very essence of this project is that a variety of heavy construction activities must be carried out in close proximity to high-volume, high-speed traffic. Safety risks increase as the space between *construction spaces* and *traffic spaces* decreases. Every realistic opportunity to keep these two spaces separated should be fully explored. Safety risks can be tightly controlled through a solid Maintenance





of Traffic Plan that reflects realistic construction spaces and sequences, and the design of safe, efficient and logical traffic flows through the work zone.

## > Maintaining Safe and Efficient Traffic Flow During Construction

The reality of maintaining high-volume, high-speed traffic flow through the work zone with changing traffic patterns (temporary and permanent configurations) at all times of day and night will be challenging on the Warrenton Southern Interchange. This challenge begins with developing a solid Maintenance of Traffic plan that is logical from a driver expectancy standpoint; provides for as much separation as possible between construction spaces and traffic spaces; factors in uncontrollable risk elements such as adverse weather; night time; holiday and non-working hour conditions; distracted driving; human error; and faulty equipment. The proposed reconstruction of the existing pavement will require development of a phased Temporary Traffic Control



*I-95 Southern Terminus Extension Project - Adequate separation between construction and traffic* 

Plan (TTCP) to maintain traffic. Multiple traffic shifts will be required to make the necessary improvements. Timely notice for advance warning and public education of work zone construction operations will help to reduce incidents and allow motorists to plan their trip. Speed differentials, temporary alignment changes, and congestion within the work zone contribute to potential work zone accidents.

The plans presented at the public hearing detail two temporary intersections along Route 15/17/29 Bypass to serve local traffic on Business Route 17/17/29 to the west and Lord Fairfax Drive to the east. This will introduce turning movements that are unfamiliar to the motorists and could potentially increase congestion along the corridor during construction.

### Incident Management

Adding to the intrinsic hazards of maintaining traffic through an active work zone are the additional safety risks that traffic accidents, equipment failures, or other unanticipated traffic flow interruptions pose. Additional safety risks extend to everyone within the work zone, and beyond, depending on resultant traffic queueing, etc. A current example of Incident Management planning is for the I-81 Bridge Replacements over the New River that WRA designed, and is also providing inspection services for. On this project, a key MOT design consideration that we incorporated was to provide Emergency Response Buffer Zones along the project to ensure that defined spaces are continually available to clear accidents or stalled vehicles and to stage emergency response vehicles and personnel.

### B. Impacts the Risk Will Have on the Project

*Safety* – The major impact of the combined risks described above is to the safety of the traveling public and to the construction workers. Secondary impacts are cost and schedule delays associated with any incidents that occur in the work zone that will have an impact on production. All temporary traffic maintenance strategies and controls must provide for adequate room for construction workers to safely prosecute their work, and provide the traveling public with clear, logical directions to navigate the work zone. The detailed project design must account for Incident Management scenarios, including accident access, vehicle maneuvering and storage, and traffic restoration strategies to name a few. Widespread public education of the project will be necessary in advance of construction, and will need to be continually updated and communicated to the public in order to educate of changing conditions.





The Branch | WRA Design-Build Team has extensive experience in developing MOT plans on Principal Arterial highways throughout the state, including the heavily congested roadways of Northern Virginia, Richmond and Hampton Roads where our well-planned MOT and Public Notification Programs have resulted in safer work zones for both the traveling public and construction workers.

*Public Notification/Relations* – Keeping the 44,000 motorists that travel the US 15/17/29 Corridor daily informed of the planned construction activities is a tall order due to the mixture of local traffic, commuters, and longer-distance travelers. As we have seen with many major construction projects, the trend is for more and more information to be pushed to the travelling public. Satisfying this desire for information can be difficult at times and requires a well thought out and methodically implemented plan that reaches out extensive distances to alert the travelling public to changing construction activities.

### C. Mitigation Strategies

Mitigation strategies for the defined risks are as follows:

The Branch/WRA Design-Build Team will prepare a thoroughly-detailed, logical Transportation Management Plan and Temporary Traffic Control Plans that comprehensively reflect project constructability; the safe and efficient navigation of the traveling public through the work zone; and incorporates special design features to facilitate timely and responsive Incident Management Strategies.

- Developing and Monitoring an Effective MOT Plan: Our Team will develop the MOT plan by reviewing the identified MOT/public safety challenges and then determining how the project can be constructed to reduce or minimize these issues. We will prepare a detailed Transportation Management Plan that will include a TTCP, Public Communications Plan and a Transportation Operations Plan. Dana Trone, PE, PTOE, MOT/Traffic Engineer, will lead the team in implementing the MOT plan and will be supported by Barry Frank, CDC, and Matt Butler, Traffic Control Coordinator. The design of the two temporary signalized intersections is critical to the project. Careful analysis of the two signals and change in traffic patterns will most certainly include a requirement for coordination of the signals to minimize congestion along Route 15/17/29 during construction. By using this approach, the design team will obtain input from construction operations allowing the opportunity for constructability reviews which help to tailor the MOT plan so that it addresses public safety and construction operations.
- Traffic Management Task Force: Representatives from Branch, WRA, VDOT and effected Third Party Stakeholders will be invited to attend monthly meetings to review the current challenges of MOT on the project. The Branch | WRA Design-Build Team will take input from all parties and incorporate any necessary changes into the MOT plan.
- Phased Construction and Adequate Separation Between Traveling Public and Construction: A phased traffic control plan will be required to construct the improvements. During the constructability reviews of the phased traffic control plan, attention will be given to limit the number of traffic shifts required to construct the project. A focus will also be placed on making any traffic shifts as gradual as possible. Where applicable, a temporary barrier will be provided to allow for a distinct separation between traffic and construction.
- Use of Lane Closures: The Branch | WRA Design-Build Team will evaluate current traffic volumes to determine when a lane closure will least impact traffic. This data will then be used to develop the project schedule to minimize the effects to the traveling public and provide guidance for construction activities. This information will also allow the Team to understand what the driving patterns are for the travelling public.





Public Awareness: Expanding on the Communication Plan required by the TMP, the Branch | WRA Design-Build Team will work closely with the VDOT Culpeper District Public Affairs staff to provide regular project updates through public distribution of traditional paper media, social media, VDOT's project website, stakeholder meetings, etc. Traffic pattern changes, delays, and lane closures will be coordinated directly with the Regional Traffic Operations Center to provide motorists with real-time travel information through the Department's Virginia 511 traffic information web site and mobile app.

Furthermore, our Team will develop a comprehensive Public Awareness Plan to communicate project work zone information, updates on construction sequencing, construction activities that may impact traffic, and congestion notifications. This plan will incorporate *active* Driver Awareness measures approaching, and within, the work zone and may include the following:

- Rumble Strips
- Portable Changeable Message Signs (PCMS)
- Radar Speed Signs (a.k.a. Driver Feedback Signs)
- Law Enforcement Presence (the single most effective mitigation of all)



Due to the Branch | WRA Design-Build Team's extensive experience in designing, constructing, and maintaining VDOT's primary highways, we have the staff and experience to accurately assess how this project will be constructed, and to design safe and efficient MOT plans that support the necessary construction activities. Our extensive knowledge of traffic operations enables us to ensure VDOT that the design and construction of the Warrenton Southern Interchange project will be carried out in an efficient, logical and safe manner.

#### **D.** Role of VDOT or Other Agencies

Our Team will work closely with VDOT to address concerns through coordination meetings and reviews. We anticipate VDOT will play an active partnership role with our Team in communicating progress and real-time travel information that affect motorists and other stakeholders during construction.

### **RISK #2: GEOTECHNICAL**

### A. Define the Risk and Why it is Critical

Based on our Team's review of the site and the Draft Geotechnical Data Report (GDR), we feel that a second significant project risk is the suitability of the existing soils to support minimum pavement sections. Much of the site is underlain by fine grained, residual soils consisting of low and high plasticity clay (CL, CH) and high plasticity silt (MH). Left undisturbed, these soils appear to exhibit adequate strength to support the current pavement sections, likely due in part to their relic structure. The California Bearing Ratio (CBR) testing included in the Draft GDR indicate these soils have very low CBR values (on the order of 1) and are prone to having high shrink/swell potential. The identified pavement section is based on a CBR value of 5 to support the anticipated traffic.





Given the above, our Team feels there is significant risk in determining either the quantity of suitable offsite borrow to be hauled and placed as road subgrade material and/or remedial chemical stabilization of the onsite materials. Additional related geotechnical risk exists with determining an efficient means of successfully remediating both the cut subgrade, as well as the excavated material to be hauled and placed as road subgrade elsewhere on the project.

## B. Impacts the Risk Will Have on the Project

During the procurement, design, and construction phases of the project, our Team notes the following options to be considered that will impact overall cost and schedule:

- Treatment of Existing Material: Low CBR values of existing soils may be remediated by chemical stabilization or using geosynthetics.
- Suitable Borrow Material: Review of the draft GDR indicates the existing soil has low CBR values. Borrow material with a minimum CBR value of 5 will be required for the top 3' of subgrade.
- Modification of Pavement Section: An option to overcome the low CBR values of the existing soil is to increase the pavement section.
- Extensive Soils Testing: Additional testing can be performed to further evaluate the stability of the existing soils to determine the ability to support the pavement section.

### C. Mitigation Strategies

Our team must balance various mitigation strategies to ensure a quality construction project while still providing the Department a competitive price; maintain the desired construction schedule; and deliver a quality product that performs well over the anticipated life span of the pavement. The following are mitigation strategies that our Team intends to fully explore:

Treatment of Existing Material - Although the Draft GDR does not provide extensive test results for all subgrade areas along the site, the consistency between the samples tested indicates widespread treatment of the subgrade may be required prior to stone placement. Due to the consistently low CBR values, comprehensive subgrade treatment will be considered and placement of a stronger subgrade soil would be effective, but may be cost prohibitive in at-grade or cut areas. Geosynthetics may also be considered, though their effectiveness would still require that high-strength soils be placed over them to account for the extremely low CBR material



Soil Stabilization using kiln dust to increase subgrade strength

identified on site. Due to these factors, chemical stabilization using a lime constituent may be the most cost-effective way of preparing the at-grade and cut sections of the project to receive pavement. We will utilize our experience with lime and kiln dust stabilization projects to predict mixing ratios to achieve specific strength and plasticity characteristics that will perform successfully over the life of the project. We will also consider the cost implications for using chemical stabilization or geosynthetics and the time required.

Suitable Borrow Material – Our Team anticipates that offsite borrow material will be required to achieve the desired grades and cross sections on the project. We will utilize borrow sources that meet the requirements for the minimum pavement section provided and will use this higher quality borrow material in the top 3 feet of all embankments. The extent that this strategy is implemented will depend on the cut/fill balance that the final grading plan yields.





- Modification of Pavement Section Our Team will explore the possibility of increasing the proposed pavement section to offset the substandard CBR values of the existing soils. A detailed cost analysis will be required to further evaluate the viability of this option.
- Extensive Soils Testing A fourth strategy that our Team will explore will be to implement an extensive testing program for at-grade and cut subgrade locations. The goal of this will be to utilize the in-situ strength of the residual soils to their fullest extent. Such testing would consist of either Falling Weight Deflectometer or in-situ CBR testing. The Standard Penetration Test (SPT) results included in the draft GDR boring logs indicate much of the soils on site exhibit strength properties stemming from their relic structure and do not lose strength until disturbed. For roadway sections where final subgrade is situated within these native soils, testing will likely verify their ability to support the provided minimum pavement section. This approach would likely reduce the project cost, though an extensive testing program would be required to verify the required strength is



In situ CBR testing

present to mitigate the risk of having pavement constructed on subgrades which do not have sufficient strength. Remediation would still be required if/when pockets of weak material are encountered. The

cost savings of utilizing the minimum pavement section could then be balanced with the risks associated with testing and undercutting the localized area.

### D. Role of VDOT or Other Agencies

As with any Design-Build project, the burden is on the Design-Build Team to provide a design that meets the requirement of the contract and provide a durable product. The Departments role will be to stay informed of the conditions which are found along the project and approve planned mitigation measures as needed.



Bench testing of subgrade strengthening additives

### RISK #3: COLUMBIA GAS 20" TRANSMISSION LINE

## A. Define the Risk and Why it is Critical

Located just south of the intersection of Route 15/17/29 Business and Route 15/17/29 Bypass is an existing 20-inch steel coated, cathodically protected natural gas transmission line owned by Columbia Gas. Our Team has thoroughly researched the history of this gas line to gain insight on its potential impact to the project and understand the risk associated. The line was originally constructed in 1968, operates at 1000 psi, and is part of a major natural gas network that serves hundreds of thousands of customers in the Northern Virginia/Baltimore region as well as the Marine Corps Base Quantico. The line was installed when Route 15/17/29 was a two lane roadway under what is now the southbound lanes. It is buried approximately 14-feet beneath the southbound travel lanes, but rises to as little as 4-feet beneath the newer northbound lanes. With the potential undercut required for the project, the line could have as little as 2-feet of cover during certain operations. Given that the line is not presently encased with concrete, exposure of the line is a significant risk that could disrupt energy services to hundreds of thousands of customers during certain operations.





### B. Impacts the Risk Will Have on the Project

Potential impacts of this risk are as follows:

**Design** – The transmission line is part of a regional network supplying natural gas to the region and has limited redundancies. As a result, the line can only be taken out of service for a short period of time in the summer months only. No outage will be permitted during winter months when the demand for natural gas is much higher. While normal utility relocations are somewhat secondary to the design of a roadway project, in this case, the presence of a transmission line of this magnitude will drive certain components of the improvement alternatives. Additionally, the existing condition of the main is unknown making any determination of structural strength of the line virtually impossible without additional analyses being performed. This will undoubtedly have an impact on cost and schedule of the project. This line is cathodically protected and any impacts or relocations will require cathodic protection and coordination with the existing cathodic protection system.

*Construction* – Potential Alternative Technical Concepts may alter the impact of the construction to the transmission line, but the current RFQ Conceptual Plans indicate that the line will be exposed to have as little as 2' of cover and will then have additional fill placed on top of the line. Should the structural strength of the line be determined to be adequate, extreme caution will need to be exercised while performing construction operations near the gas line. This could also impact project schedule, cost, and inherent safety issues that are related to such a utility.

#### C. Mitigation Strategies

Our Team offers the following mitigation strategies that we will implement to mitigate the described risks:

**Design and Construction** – Our team has extensive experience with design of natural gas transmission lines and has also brought onto our team an expert in corrosion analysis and protection systems to assist in any future evaluations of the line that may be required. We are also aware that Columbia Gas is currently performing their own analysis of the condition of the line which will be extremely helpful in mitigating the risk. During the development of the design, Barry Frank, CDC, will work alongside WRA and Columbia Gas to understand what the impact of construction will have on the 20" transmission gas line. Our Team will explore alternatives where construction improvements will not impact the gas line. Conversations will be held with Columbia Gas to understand what constraints and precautions need to be taken to ensure the integrity of the gas line. Special details will be developed as needed to help reduce the stress induced on the line such as pressure dispersion slabs to minimize the additional load on the line and slit trenches to reduce shock waves being transmitted during pile driving operations.

Construction crews will clearly mark where the utility is located and will educate all employees working on the project of the location and sensitive nature of the gas line. If it is determined that impacts will be made to the gas line and additional casing or relocation will be required, our Team will work with Columbia Gas to minimize the impacts as much as possible. The construction schedule will be created to allow adequate time for the design and improvements associated with the gas line. Branch's construction management team for this project also dealt with gas line relocations and extension of gas line casings on the Route 3 Widening project and is well prepared to mitigate any impacts.

### D. Role of VDOT or Other Agencies

We anticipate VDOT will want to be involved in any discussions with Columbia Gas related to all issues associated with the transmission line. We do not expect VDOT to take any additional steps beyond the normal plan coordination to mitigate the risk other than to provide the pending Columbia analysis of the line as part of the RFP.





## Attachment 3.1.2

## **SOQ Checklist**



### ATTACHMENT 3.1.2

## Project: 0029-030-121, P101, R201, C501, B616 STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

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

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15- page limit?	SOQ Page Reference
Statement of Qualifications Checklist and Contents	Attachment 3.1.2	Section 3.1.2	no	Page A-1-3
Acknowledgement of RFQ, Revision and/or Addenda	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	Page A-4
Letter of Submittal (on Offeror's letterhead)				Page 1
Authorized Representative's signature	NA	Section 3.2.1	yes	Page 1
Offeror's point of contact information	NA	Section 3.2.2	yes	Page 1
Principal officer information	NA	Section 3.2.3	yes	Page 1
Offeror's Corporate Structure	NA	Section 3.2.4	yes	Page 1
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	Page 1
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	Appx. 3.2.6 Page A-5
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	Appx. 3.2.7 Page A-6-14
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	Appx. 3.2.8 Page A-15
Evidence of obtaining bonding	NA	Section 3.2.9	no	Appx. 3.2.9 Page A-16-18

### ATTACHMENT 3.1.2

## Project: 0029-030-121, P101, R201, C501, B616 STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15- page limit?	SOQ Page Reference
SCC and DPOR registration documentation (Appendix)	Attachment 3.2.10	Section 3.2.10	no	Appx. 3.2.10 Page A-19-21
Full size copies of SCC Registration	NA	Section 3.2.10.1	no	Appx. 3.2.10 Page A-22-59
Full size copies of DPOR Registration (Offices)	NA	Section 3.2.10.2	no	Appx. 3.2.10 Page A-22-59
Full size copies of DPOR Registration (Key Personnel)	NA	Section 3.2.10.3	no	Appx. 3.2.10 Page A-22-59
Full size copies of DPOR Registration (Non- APELSCIDLA)	NA	Section 3.2.10.4	no	Appx. 3.2.10 Page A-22-59
<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 1
Offeror's Team Structure				Page 2 – 7
Identity of and qualifications of Key Personnel	NA	Section 3.3.1	yes	Page 2 – 6
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	Appx. 3.3.1 Page A-60-61
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.2	no	Appx. 3.3.1 Page A-62-63
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.3	no	Appx. 3.3.1 Page A-64-65
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.4	no	Appx. 3.3.1 Page A-66-67
Organizational chart	NA	Section 3.3.2	yes	Page 7

### ATTACHMENT 3.1.2

## Project: 0029-030-121, P101, R201, C501, B616 STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15- page limit?	SOQ Page Reference
Organizational chart narrative	NA	Section 3.3.2	yes	Page 2 – 6
Experience of Offeror's Team				Page 8
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	Appx. 3.4.1 Page A-68-70
Lead Designer Work History Form	Attachment 3.4.1(b)	Section 3.4	no	Appx. 3.4.1 Page A-71-73
Project Risk				
Identify and discuss three critical risks for the Project	NA	Section 3.5.1	yes	Page 9 - 15



## Form C-78-RFQ

## Attachment 2.10

## Acknowledgement of RFP Revision and/or Addenda



Form C-78-RFQ

#### ATTACHMENT 2.10

#### COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION

RFQ NO. C00077384DB100

PROJECT NO.: 0029-030-121, P101, R201, C501, B616

#### ACKNOWLEDGEMENT OF RFQ, REVISION AND/OR ADDENDA

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

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

1. Cover letter of	RFQ – April 26, 2017 (Date)	
2. Cover letter of	RFQ Addendum #1- May 22, (Date)	2017
3. Cover letter of	(Date)	5 26 17 DATE
Patrick K. Ba	rtorillo	President
PRINTED NA	ME	TITLE



## Attachment 3.2.6

## **List of Affiliated and Subsidiary Companies**



## ATTACHMENT 3.2.6

## State Project No. 0029-030-121, P101, R201, C501, B616

## Affiliated and Subsidiary Companies of the Offeror

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

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

Relationship with Offeror (Affiliate or Subsidiary)	Full Legal Name	Address
Affiliate	The Branch Group, Inc.	P.O. Box 40004
(Parent Company to Branch)	The Draten Group, ne.	Roanoke, VA 24022
Δffiliate	Branch and Associates, Inc.	P.O. Box 40051
		Roanoke, VA 24022
Affiliate	G.J. Hopkins, Inc.	P.O. Box 12467
		Roanoke, VA 24025
Affiliate	Corman - E.V. Williams, a Joint Venture	12001 Guilford Road
		Annapolis Junction, MD 20701
Affiliate	Balfour Beatty Infrastructure, Inc./ E.V. Williams, Inc. JV	430 Eastwood Road
		Wilmington, NC 28403
Affiliate	Flatiron   Branch, a Joint Venture	385 Interlocken Crescent, Suite 900
		Broomfield, CO 80021
Affiliate	Affiliate Flatiron   Branch II, a Joint Venture	385 Interlocken Crescent, Suite 900
		Broomfield, CO 80021
Affiliate Corman - Branch JV	Corman - Branch JV	442 Rutherford Ave., N.E.
		Roanoke, VA 24016
Affiliate LMB Constructors	LMB Constructors	90 Fieldstone Court
		Cheshire, CT 06410



## Appendix 3.2.7

## **Debarment Forms**



#### **CERTIFICATION REGARDING DEBARMENT** PRIMARY COVERED TRANSACTIONS

#### Project No.: 0029-030-121, P101, R201, C501, B616

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

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

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

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

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

Where the prospective primary participant is unable to certify to any of the 2) 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.

6 5-26-17 Date

Signature

President Title

Branch Civil, Inc. Name of Firm

#### CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

**Project No.:** 0029-030-121, P101, R201, C501, B616

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.

11 5/25, Date

Senior Vice President

Whitman, Requardt & Associates, LLP Name of Firm

#### CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

**Project No.:** 0029-030-121, P101, R201, C501, B616

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.

<u>FIT/17</u> <u>President</u> Title Signature Date ONSLITTING Services

#### CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project No.: 0029-030-121, P101, R201, C501, B616

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.

5-17-17 Signature

Principal Engineer Title

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

#### CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

**Project No.:** 0029-030-121, P101, R201, C501, B616

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.

5-23-2017 President Signature Date Title

<u>Fairfield-Echols, LLC</u> Name of Firm

#### CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project No.: 0029-030-121, P101, R201, C501, B616

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.

5/18/2017 President Date Title Signature

Froehling & Robertson, Inc.

Name of Firm

#### CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project No.: 0029-030-121, P101, R201, C501, B616

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.

May 18, 2017 President Title Signature Date

Land Planning and Design Associates, Inc.

Name of Firm
### ATTACHMENT NO. 3.2.7(b)

### CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

**Project No.:** 0029-030-121, P101, R201, C501, B616

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

\_\_\_\_\_ 5/31/17 Date President Title

Seventh Point Transportation PR

Name of Firm

### ATTACHMENT NO. 3.2.7(b)

### **CERTIFICATION REGARDING DEBARMENT** LOWER TIER COVERED TRANSACTIONS

Project No.: 0029-030-121, P101, R201, C501, B616

The prospective lower tier participant certifies, by submission of this proposal, that 1) 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.

Where the prospective lower tier participant is unable to certify to any of the statements 2) 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.

<u>Willia M. Ruier 5/18/17</u> <u>Vice President</u> Signature Date Title <u>System Protection Services INC.</u> Name of Firm

Page A - 14



# Appendix 3.2.8

## **Offeror's VDOT Prequalification Certificate**





## COMMONWEALTH OF VIRGINIA



## **CERTIFICATE OF QUALIFICATION**

## **BRANCH CIVIL, INC.**

Vendor Number: B319

In accordance with the Regulations of the Virginia Department of Transportation, your firm is hereby notified that the following Rating has been assigned to your firm:

## PREQUALIFIED

Your firm specializes in the noted Classification(s):

GRADING; MAJOR STRUCTURES; UNDERGROUND UTILITIES

Issue Date: February 28, 2017

Suzanne FR Lucas, State Prequalification Officer

This Rating and Classification will Expire: February 28, 2018

Don . Silies, Director of Contracts

It is not permissible to alter this document, use after posted expiration date, or use by persons or firms other than hose named on this certificate.



## Appendix 3.2.9

**Surety Letter** 



Employee Owned



10 Franklin Road SE, Suite 550 Roanoke, VA 24011 Tel (540) 343-8071 Fax (540) 224-1764 www.scottins.com

June 2, 2017

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

Re: Branch Civil, Inc.
Virginia Department of Transportation
Request for Qualifications
A Design-Build Project
Warrenton Southern Interchange US 15/17/29
From: Route 15/17/29 & Route 15/17/29 Business
To: 1.0 mile South of Route 15/17/29 & Route 15/17/29 Business
Fauquier County, Virginia
State Project No.: 0029-030-121,P101,R201,C501,B616
Federal Project No.: STP-032-7(032)
Contract ID Number: C00077384DB100

Dear Mr. Stevenson:

The Hartford, through its operating entities, has issued surety bonds to Branch Civil, Inc., a subsidiary of The Branch Group since 1995. During this time we have favorably considered projects up to \$150,000,000 with an aggregate program of \$850,000,000 for member companies of The Branch Group. Our experience with Branch Civil, Inc. has been excellent, and we highly recommend them to you.

As surety for Branch Civil, Inc., The Hartford will favorably consider providing a 100% Performance Bond and a 100% Labor and Materials Payment Bond for the referenced project in the anticipated cost of construction and said bonds will cover the Project and any warranty periods as provided for in the Contract Documents on behalf of the Contractor, provided a contract is awarded to, and executed by Branch Civil, Inc.

Please understand that any arrangement for any bonds is a matter between Branch Civil, Inc. and The Hartford and we assume no liability to third parties or you if, for any reason, we do not issue requested bonds.

The Hartford expressly reserves the right to review the terms and conditions of the contract, contract amount and bond form, evaluate pertinent underwriting data, and verify the adequacy of project financing prior to the issuance of bonds for the referenced project.

Branch Civil, Inc. bonds are issued through Hartford Fire Insurance Company which is listed on the U.S. Treasury Department List and has an A.M. Best Rating of "A+" with Financial Size Category: XV (\$2 Billion or greater). They are licensed to do business in the State of Virginia.

This letter will expire one hundred and eighty (180) days from the above date.

Sincerely, Theresa S. Stump, Attorney-In-Fact

cc: Branch Civil, Inc. Hartford Fire Insurance Company



# POWER OF ATTORNEY

Direct Inquiries/Claims to: THE HARTFORD BOND, T-12 **One Hartford Plaza** Hartford, Connecticut 06155 Bond.Claims@thehartford.com call: 888-266-3488 or fax: 860-757-5835

#### KNOW ALL PERSONS BY THESE PRESENTS THAT:

Agency Code: Agency Name:

14-730214 (MC), 14-730836, 14-731912 **JAMES A SCOTT & SON INC** 

X Hartford Fire Insurance Company, a corporation duly organized under the laws of the State of Connecticut Х Hartford Casualty Insurance Company, a corporation duly organized under the laws of the State of Indiana Hartford Accident and Indemnity Company, a corporation duly organized under the laws of the State of Connecticut X Hartford Underwriters Insurance Company, a corporation duly organized under the laws of the State of Connecticut Twin City Fire Insurance Company, a corporation duly organized under the laws of the State of Indiana Hartford Insurance Company of Illinois, a corporation duly organized under the laws of the State of Illinois Hartford Insurance Company of the Midwest, a corporation duly organized under the laws of the State of Indiana

Hartford Insurance Company of the Southeast, a corporation duly organized under the laws of the State of Florida

having their home office in Hartford, Connecticut, (hereinafter collectively referred to as the "Companies") do hereby make, constitute and appoint, up to the amount of unlimited:

Christi Horn, Lisa M. Battista, B. Jones III of Franklin TN; Stephen B. Dolin, Joanna M. Carson, Barbara Dawn Martin, Melissa L. Viar of Lynchburg VA; Stacey W. Hall, Nancy L. Adams, James J. Roberts, III, Stacey Boyle of Richmond VA; Robert M. Coon of Greensboro NC, Windy Lovelady of Raleigh NC; Tambri Doby of Charlotte NC; Sherrie B. Denison, Bethany Murphy, Deanna W. Sparks, Theresa S. Stump

of Roanoke, VA

their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign its name as surety(ies) only as delineated above by 🛛, and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

In Witness Whereof, and as authorized by a Resolution of the Board of Directors of the Companies on May 6, 2015 the Companies have caused these presents to be signed by its Senior Vice President and its corporate seals to be hereto affixed, duly attested by its Assistant Secretary. Further, pursuant to Resolution of the Board of Directors of the Companies, the Companies hereby unambiguously affirm that they are and will be bound by any mechanically applied signatures applied to this Power of Attorney.



### STATE OF CONNECTICUT

Hartford SS. COUNTY OF HARTFORD

On this 11th day of January, 2016, before me personally came M. Ross Fisher, to me known, who being by me day short, did depose and say: that he resides in the County of Hartford, State of Connecticut; that he is the Senior Vice President of the Companies, the corporations described in and which executed the above instrument; that he knows the seals of the said corporations; that the seals affixed to the said instrument are such corporate seals; that they were so affixed by authority of the Boards of Directors of said corporations and that he signed his name thereto by like authority.



Kathleen T. Waynard Kathleen T. Maynard

Notary Public My Commission Expires July 31, 2021

I, the undersigned, Assistant Vice President of the Companies, DO HEREBY CERTIFY that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is still in full force effective as of June 2, 2017 Signed and sealed at the City of Hartford.



Kevin Heckman, Assistant Vice President



## Appendix 3.2.10

## **SCC and DPOR Information**



### ATTACHMENT 3.2.10

### State Project No. 0029-030-121, P101, R201, C501, B616

### **SCC and DPOR Information**

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

SCC & DPOR INFORMATION FOR BUSINESSES (RFQ Sections 3.2.10.1 and 3.2.10.2)							
	SCC Information (3.2.10.1)		DPOR Information (3.2.10.2)				
Business Name	SCC Number	SCC Type of Corporation	SCC Status	DPOR Registered Address	DPOR Registration Type	DPOR Registration Number	DPOR Expiration Date
Branch Civil, Inc.	0295618-3	Corporation	Active/ Good Standing	PO Box 40004 Roanoke, VA 24022-0004	Class A Contractor Classifications H/H	2701029434	03-31-2019
				801 South Caroline St. Baltimore, MD 21231	Business Entity, ENG, LS, LA, ARC	0407001676	12-31-2017
				9300 Stony Point Pkwy, Suite 220 Richmond, VA 23235	Business Entity Branch Office, ENG	0411000133	02-28-2018
Whitman, Requardt & Associates, LLP (WRA)	K000382-4	Limited Liability Partnership	Active	1700 Kraft Dr., Suite 1200, Blacksburg, VA 24060	Business Entity Branch Office, ENG	0411000608	02-28-2018
				3701 Pender Drive, Suite 450 Fairfax, VA 22030	Business Entity Branch Office, ENG	0411000134	02-28-2018
				100 5 <sup>th</sup> St, Suite L2000 Bristol, TN 37620	Business Entity Branch Office, ENG	0411001228	02-28-2018
3B Consulting Services, LLC	S4231561	Limited Liability Company	Active	140 Hilltop Avenue Lebanon, VA 24266	Appraisal Business	4008001843	06-30-2017

### ATTACHMENT 3.2.10

### State Project No. 0029-030-121, P101, R201, C501, B616

### SCC and DPOR Information

Engineering & Materials Technologies, Inc.	04786331	Corporation	Active	7857 Coppermine Dr. Manassas, VA 20109	Business Entity, ENG	0407005994	12-31-2017
Fairfield-Echols, LLC	S1665795	Limited Liability Company	Active	PO Box 479 Fishersville, VA 22939	Class A Contractor Classifications H/H	2705116070	07-31-2017
Froehling &	00272112	Corporation	Activo	3015 Dumbarton Rd. Richmond, VA 23228	Business Entity, ENG	0407000098	12-31-2017
(F&R)	00272112	D272112CorporationActive10909 Houser Dr.HFredericksburg, VAEnt22408Of	Business Entity Branch Office, ENG	0411000050	02-28-2018		
Land Planning and Design Associates, Inc.	01425545	Corporation	Active	1006 E Jefferson St #B Charlottesville, VA 22902	Business Entity, LA	0407001789	12-31-2017
Seventh Point, Inc.	02675411	Corporation	Active	N/A	N/A	N/A	N/A
System Protection Services, Inc.	05929054	Corporation	Active	500 Westwood Office Park Fredericksburg, VA 22401	Class A Contractor Classifications ENV	2705075211	04-30-2017

### ATTACHMENT 3.2.10

### State Project No. 0029-030-121, P101, R201, C501, B616

### **SCC and DPOR Information**

	DPOR	R INFORMATION FOR IN	<b>DIVIDUALS (RFQ Sectio</b>	ns 3.2.10.3 and	3.2.10.4)	
Business Name	Individual's Name	Office Location Where Professional Services will be Provided (City/State)	Individual's DPOR Address	DPOR Type	DPOR Registration Number	DPOR Expiration Date
Whitman, Requardt & Associates, LLP (WRA)	Michael A Russell	Bristol, TN	17282 Cleveland Rd. Abingdon, VA 24211	Professional Engineer	0402024814	02-28-2018
Whitman, Requardt & Associates, LLP (WRA)	Leonard Keelon Deshae Coleman	Fairfax, VA	12764 Lockleven Lane Woodbridge, VA 22192	Professional Engineer	0402051494	05-31-2019
Whitman, Requardt & Associates, LLP (WRA)	Taylor Sigmund Sprenkle	Richmond, VA	1233 Windsor Avenue, Richmond, VA 23227	Professional Wetland Delineator	3402000097	09-30-2018
3B Consulting Services, LLC	H. Richard Lively	Lebanon, VA	101 Millbrook Terrace Forest, VA 24551	General Real Estate Appraiser	4001001989	10-31-2017



## **Branch Civil, Inc.**

## **SCC and DPOR**



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™ 4 R R S S	42 RUTHERFORD AVE NE DANOKE VA 24016 DANOKE CITY 217 ratus: Active fective Date: 1/11/2008		
Screen ID	: e1000 ional information? Contact sccinfo@scc.virginia.gov Website	questions? Contact: webmaster@scc.vii	rqinia. qov

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# Commonwealth F Hirginia



# State Corporation Commission

### CERTIFICATE OF GOOD STANDING

### I Certify the Following from the Records of the Commission:

That Branch Civil, Inc. is duly incorporated under the law of the Commonwealth of Virginia;

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

That the period of its duration is perpetual; and

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

Nothing more is hereby certified.



Signed and Sealed at Richmond on this Date: January 16, 2017

Joel H. Peck, Clerk of the Commission





## Whitman, Requardt & Associates, LLP

## **SCC and DPOR**







# 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 foreign registered limited liability partnership was filed in the Clerk's Office of the Commission by Whitman, Requardt & Associates, LLP, a Maryland 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: July 7, 2016

Joel H. Peck, Clerk of the Commission

CIS0357



## S TATE 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:

Heck Clerk of the Commission



### COMMONWEALTH OF VIRGINIA STATE CORPORATION COMMISSION

### Office of the Clerk

June 14, 2016

CT CORPORATION SYSTEM 4701 COX ROAD, SUITE 285 GLEN ALLEN, VA 23060

### RECEIPT

RE: WHITMAN, REQUARDT & ASSOCIATES, LLP

ID: K000382 - 4

DCN: 16-06-14-0536

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 June 14, 2016.

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 CISCCJ



DPOR-PC (05/2015)















\*Mr. Sprenkle is no longer with EEE - current DPOR records reflect this and screen capture of the updated records follow on the next page.

## DPOR License Lookup License Number 3402000097

### License Details

Name	SPRENKLE, TAYLOR SIGMUND
License Number	3402000097
License Description	Professional Wetland Delineator Certification
Rank	Professional Wetland Delineator
Address	RICHMOND, VA 23227
Initial Certification Date	2008-09-05
Expiration Date	2018-09-30

The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform DPOR so that appropriate action may be taken.

DPOR License Lookup build 1,192 (built 2016-06-23 09:13:05).

http://dporweb.dpor.virginia.gov/LicenseLookup/LicenseDetail



## **3B Consulting Services, LLC**

## **SCC and DPOR**



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	Date of Formation/Registration: 9/20/2012	File a principal office ad	foress change
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	CRYSTAL L BREEDING		
	140 HILLTOP AVENUE		
	LEBANON VA 24266		
	RUSSELL COUNTY 183		
	Status: Active		
	Effective Date: 9/20/2012		
	Screen ID: e1000		





# State Corporation Commission

### CERTIFICATE OF FACT

### I Certify the Following from the Records of the Commission:

That 3B Consulting Services, LLC is duly organized as a limited liability company under the law of the Commonwealth of Virginia;

That the date of its organization is September 20, 2012; and

That the limited liability company is in existence in the Commonwealth of Virginia as of the date set forth below.

Nothing more is hereby certified.



Signed and Sealed at Richmond on this Date: March 14, 2017

Joel H. Peck, Clerk of the Commission





## **Engineering & Materials Technologies, Inc.**

## **SCC and DPOR**



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	7857 COPPERMINE DR			
	MANASSAS VA 20109			
	PRINCE WILLIAM COUNTY 176			
	Status: Active			
	Effective Date: 7/20/2006			
c	Screen ID: e1000			

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# STATE CORPORATION COMMISSION

Richmond, January 29, 1997

This is to Certify that the certificate of incorporation of

ENGINEERING & MATERIALS TECHNOLOGIES, INC.

was this day issued and admitted to record in this office and that the said corporation is authorized to transact its business subject to all Virginia laws applicable to the corporation and its business. Effective date:

January 29, 1997



State Corporation Commission

Unlian J. Budge





# **Fairfield-Echols, LLC**

# **SCC and DPOR**



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SCC eFile > Entity Search > Entity Detai	ls		Login   Create an Account
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SCC eFile	Fairfield-Echols, LLC		
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Business Entity Search Certificate Verification FAQS Contact Us Give Us Feedback Business Entities	SCC ID: S1665795 Entity Type: Limited Liability Company Jurisdiction of Formation: VA Date of Formation/Registration: 9/27/2005 Status: Active	File a registered agent File a registered office Resign as registered a File a principal office a Pay annual registration Order a certificate of f	<u>change</u> <u>address change</u> <u>gent</u> <u>ddress change</u> <u>n fee</u> <u>act of existence</u>
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N	leed additional information? Contact <u>sccinfo@scc.virginia.gov</u> Website que	stions? Contact: webmaster@scc.vir	rginia.gov

Alert to corporations regarding unsolicited mailings from VIRGINIA COUNCIL FOR CORPORATIONS is available from the Bulletin Archive link of the Clerk's Office websit

5/25/2017



# STATE CORPORATION COMMISSION

Richmond, September 27, 2005

This is to certify that the certificate of organization of

### Fairfield-Echols, LLC

was this day issued and admitted to record in this office and that the said limited liability company is authorized to transact its business subject to all Virginia laws applicable to the company and its business. Effective date: September 27, 2005



State Corporation Commission Attest:

	the second se	
DEPARTME	NT OF PROFESSIONAL AND OCCUP COMMONWEALTH OF VIRGI	ATIONAL REGULATION
O7-31-2017	9960 Mayland Dr., Suite 400, Richmond, VA Telephone: (804) 367-8500	23233 2705116070
	BOARD FOR CONTRACTORS CLASS A CONTRACTOR *CLASSIFICATIONS* H/H	
FA PC FIS	IRFIELD-ECHOLS LLC 9 BOX 479 9 HERSVILLE, VA 22939	
ALTERATION OF THIS DOCUMENT, USE AFTER EXPIRATION, OR US THAN THOSE NAMED MAY BESULT IN CRIMINAL PROSECUTION UN	SE BY PERSONS OR FIRMS OTHER	Jan W. De Barer Jay W. DeBoer, Duector

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



# Froehling & Robertson, Inc.

# **SCC and DPOR**



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Business Entity Search Certificate Verification FAQs Give Us Feedback       SCC ID: 00272112         Business Entities       Entity Type: Corporation Jurisdiction of Formation: VA Date of Formation/Registration: 10/11, Status: Active         UCC or Tax Liens       Shares Authorized: 1100000	/1924 File a registered agent of File a registered office agent of Resign as registered agent Pay annual report Order a certificate of goo Submit a PDF for process	hange Idress change nt ee id standing sing (What can I submit?)
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Screen ID: e1000 Need additional information? Contact <u>sccinfo@scc.virgir</u>	ia.qov Website questions? Contact: <u>webmaster@scc.virqir</u>	<u>hia.qov</u>

Alert to corporations regarding unsolicited mailings from VIRGINIA COUNCIL FOR CORPORATIONS is available from the Bulletin Archive link of the Clerk's Office websit

5/25/2017

# Commonwealth F Hirginia



# State Corporation Commission

### CERTIFICATE OF GOOD STANDING

### I Certify the Following from the Records of the Commission:

That FROEHLING & ROBERTSON, INCORPORATED is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is October 11, 1924;

That the period of its duration is perpetual; and

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

Nothing more is hereby certified.



Signed and Sealed at Richmond on this Date: March 28, 2017

Joel H. Peck, Clerk of the Commission





(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)



# Land Planning and Design Associates, Inc.

# **SCC and DPOR**



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/e Us Feedback	Date of Formation/Registration: 12/21/1972	File an annual repo	nt
ness Entities	Status: Active	Pay annual registra	ation fee
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	CHARLOTTESVILLE VA22902		
	Registered Agent/Registered Office		
	RICHARD G RASMUSSEN III		
	250 F HIGH ST		
	CHARLOTTESVILLE CITY 203		
	Status: Active		
	Effective Date: 2/5/2009		
	Screen ID: e1000		

5/25/2017



# STATE CORPORATION COMMISSION

# Richmond, March 24, 2008

This is to certify that the certificate of incorporation of

## LAND PLANNING AND DESIGN ASSOCIATES, INC.

was issued and admitted to record in this office and that the said corporation is authorized to transact its business subject to all Virginia laws applicable to the corporation and its business. Effective date: December 21, 1972



State Corporation Commission Attest:





# Seventh Point, Inc.

# SCC



Alert to corporations regarding	g unsolicited mailings from VIRGINIA COUNCIL FOR CORPORAT	TONS is available from the Bulle	tin Archive link of the Clerk's Office webs
		Home   Site Map   About SCC   Co	ontact SCC   Privacy Policy
SCC eFile > Entity Search > Entity	Details		Login   Create an Account
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SCC eFile	Seventh Point, Inc.		
SCC eFile Home Page Check Name Distinguishability	General	Select an action	
Business Entity Search	SCC ID: 02675411	File a registered agent	change
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Contact Us Give Us Feedback	Jurisdiction of Formation: VA	Resign as registered ac	gent
	Date of Formation/Registration: 3/4/1985	File an annual report	
Business Entities	Status: Active	Pay annual registration	<u>n fee</u>
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	VIRGINIA BEACH VA23462	New Search Home	
	Registered Agent/Registered Office		
	4705 COLUMBUS ST		
	VIRGINIA BEACH VA 23462		
	VIRGINIA BEACH CITY 228		
	Status: Active		
	Effective Date: 3/24/1998		
	Screen ID: e1000		
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### Page A - 53



STATE CORPORATION COMMISSION

Richmond, March 4, 1985

This is to Certify that the certificate of incorporation of

HAMBRIGHT, CALCAGNO & DOWNING, INC.

was this day issued and admitted to record in this office and that the said corporation is authorized to transact its business subject to all the laws of the State applicable to the corporation and its business.



State Corporation Commission

Long N. Mult

### ARTICLES OF AMENDMENT FOR THE ARTICLES OF INCORPORATION OF HAMBRIGHT, CALCAGNO & DOWNING, INC.

I.

The name of the corporation is Hambright, Calcagno & Downing, Inc.

### II.

The Amendment adopted is to change Article I of the Articles of Incorporation to change the corporation's name such that Article I, as amended, will read that: The name of the corporation is Seventh Point, Inc.

### m.

The foregoing amendment was adopted on January 24, 2008.

#### IV.

The amendment was adopted by the unanimous consent of the shareholders and directors.

### v.

This Certificate of Amendment shall become effective at the time such Certificate is issued by the State Corporation Commission.

The undersigned President declares that the facts herein stated are true as of the 24th day of January, 2008.

AGNO & DOWNING, INC. HAMBRIGHT. By: Christopher A. Calcagno, President

### COMMONWEALTH OF VIRGINIA STATE CORPORATION COMMISSION

AT RICHMOND, FEBRUARY 1, 2008

The State Corporation Commission has found the accompanying articles submitted on behalf of

Seventh Point, Inc. (formerly HAMBRIGHT, CALCAGNO & DOWNING, INC. )

to comply with the requirements of law, and confirms payment of all required fees. Therefore, it is ORDERED that this

### CERTIFICATE OF AMENDMENT

be issued and admitted to record with the articles of amendment in the Office of the Clerk of the Commission, effective February 1, 2008.

The corporation is granted the authority conferred on it by law in accordance with the articles, subject to the conditions and restrictions imposed by law.

STATE CORPORATION COMMISSION

Christie Bγ

Commissioner

08-01-28-0084 AMENACPT CIS0436



# **System Protection Services, Inc.**

# **SCC and DPOR**



		Home   Site Map   About SCC   C	Contact SCC   Privacy Policy
eFile > Entity Search > Entity Deta	ails		Login   Create an Accour
CC eFile	Busines	SCC eFile s Entity Details	? Help
	System Protection Services, Inc.		
C eFile CC eFile Home Page	General	Select an action	
Istinguishability usiness Entity Search ertificate Verification AQs iontact US isve US Feedback Siness Entities C or Tax Liens urt Services ditional Services	SCC ID: 05929054 Entity Type: Corporation Jurisdiction of Formation: VA Date of Formation/Registration: 3/11/2003 Status: Active Shares Authorized: 240 Principal Office 500 WESTWOOD OFFICE PARK FREDERICKSBURG VA22401 Registered Agent/Registered Office WANDA J. CHIASSON 502 WESTWOOD OFFICE PARK FREDERICKSBURG VIRGINIA VA 22401 FREDERICKSBURG CITY 206 Status: Active Effective Date: 1/14/2011	File a registered agent File a registered office Resign as registered a File an annual report Pay annual registratio Order a certificate of o Submit a PDF for proc View eFile transaction Manage email notifica	t change address change agent in fee good standing tessing (What can I submit?) history tions
c	Screen ID: e1000		
	Need additional information? Contact <u>sccinfo@scc.virginia.gov</u> Website We provide external links throughout	questions? Contact: <u>webmaster@scc.vi</u>	irginia.gov

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# Commonwealth & Hirginia



# State Corporation Commission

### CERTIFICATE OF GOOD STANDING

## I Certify the Following from the Records of the Commission:

That System Protection Services, Inc. is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is March 11, 2003;

That the period of its duration is perpetual; and

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

Nothing more is hereby certified.



Signed and Sealed at Richmond on this Date: August 29, 2011

Joel H. Peck, Clerk of the Commission





# Appendix 3.3.1

# **Key Personnel Resumes**



### ATTACHMENT 3.3.1

### KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title:
Jason Hoyle   vice President of Design-Build/Special Projects
Design-Build Project Manager
c. Name of all Firms with which you are employed at the time of submitting SOQ. In addition, please denote
the type of employment (Full time/Part Time) :
Branch Civil, Inc.   Full Time
2. Employment History: With this Firm 2 Years with Other Firms 20 Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):
Branch Civil, Inc.Vice President of Design-Build/Special Projects03/2017 – Present
General Responsibilities   Focuses primarily on Design-Build and other alternative procurement projects. As this plays a very important role for the organization, Design-Build projects represent a growing sector of opportunities, Jason uses his expertise to identify unique risks and rewards, as such they must be managed differently. Jason manages and has the competencies to be the Design-Build Project Manager for large, complex construction projects, as well as providing oversight and direction for Design-Build procurement/construction processes and operations. His responsibilities include development of Branch's procurement process for Design-Build projects, developing and overseeing management practices, and reporting for Branch's ongoing Design-Build projects. With over twenty years of experience, Jason's proven track record of success, work ethic and professionalism align directly with our company's core values.
Branch Civil, Inc. Director of Procurement 02/2016 – 03/2017
General Responsibilities   Managing large, complex construction projects, as well as providing oversight and direction of the company's design-build procurement/construction process and operations. Responsibilities include development of company's procurement process for design-build projects, developing and overseeing management practices and reporting for company's ongoing design-build projects. Project management responsibilities include serving as the primary point of contact with the owner and local public entities, oversight and management including both the construction knowledge and requirements associated with right-of-way acquisitions, environmental permitting and mitigation, as well as utility relocations both in-house and those associated with third-party utility owners.
Blythe Development CompanyDivision Manager06/2010 - 02/2016
General Responsibilities   Responsible for all aspects of heavy highway and civil improvement projects in the Greensboro, NC and Virginia area. Oversaw the safety program, pursuit and construction of all Blythe Development projects for this region. Responsible for all design-build projects for the company including selecting design-build projects to pursue, developing responses to RFQs, preparing technical and price proposals and managing construction operations from award to acceptance.
Blythe Development CompanyProject Manager04/2003 - 06/2010
General Responsibilities   Project Manager for multiple NCDOT heavy highway projects. These projects include new location, improving existing infrastructure and replacing existing structures. Design-Build Project Manager for two NCDOT design-build projects: NC73 and Macy Grove Road. BDC is a joint venture partner on the I-73/PTI project for NCDOT and he has fulfilled the role of Assistant Design-Build Project Manager.
Blythe ConstructionProject Manager06/1995 - 4/2003
General Responsibilities   Project Manager for several NCDOT projects near Charlotte, NC. Responsible for all
construction aspects of new location, widening and bridge replacement projects. Bridge construction included new
<ul> <li>Education: Name &amp; Location of Institution(s)/Degree(s)/Year/Specialization:</li> <li>University of North Carolina at Charlotte   Charlotte   North Carolina   BS   1997   Civil Engineering</li> </ul>
f. Active Registration: Year First Registered/ Discipline/VA Registration #:
None
<ul> <li>g. Document the extent and depth of your experience and qualifications relevant to the Project.</li> <li>1. Note your role, responsibility, and specific job duties for each project, not those of the firm.</li> <li>2. Note whether experience is with current firm or with other firm.</li> <li>3. Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</li> </ul>

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

Project Name | Route 3 Widening, DB, Culpeper, Virginia Project Role | Design-Build Project Manager Client | VDOT Dates | 03/2016 – Present With Current Firm | Yes Cost | \$25M

**Responsibility/Specific Job Duties** | Design-Build Project Manager responsible for coordination and oversight for overall project management. This includes serving as the authorized representative for contractor, construction quality, management and contract administration. Responsible for planning and scheduling of all project activities, design coordination, ROW acquisitions, utility relocation activities, permitting and environmental monitoring, QA/QC procedure and implementation and construction management. Similar to Warrenton Southern Interchange, this project will improve the serviceability and safety of the Route 3 Corridor for the traveling public by widening the existing roadway, as well as adding new travel lanes. Leads the Branch Team in partnering with VDOT and third-party stakeholders and will additionally be responsible for subcontractor and vendor procurement, project tracking and reporting. Working with Construction Manager Greg Suttle on this Route 3 project.

**Relevancy** | VDOT Design-Build, FHWA guidelines and requirements, secondary road alignment/widening, ROW acquisition, utility relocations including gas transmission lines, wetland and stream mitigation, geotechnical challenges/mitigation including unsuitable material, Traffic Management Plan development and execution, public involvement/communications, QA/QC coordination

Project Name   I-73/PTI, DB, Greensboro, North Carolina	Dates   03/2013 – 01/2016
Project Role   Design-Build Project Manager	With Current Firm   No
Client   NCDOT	Cost   \$181M

**Responsibility/Specific Job Duties** | As Blythe Development's representative in the joint venture, led the company's interest in pursuing the project, responded to the RFQ, prepared the technical and price proposals, introduced over 20 ATC's, and oversaw the project as the Assistant Design-Build Project Manager. Responsibilities included administering the contract, communicating with the Owner, document control, ensuring adequate resources for the project and monitoring the project schedule. Project consists of widening 1.5 miles of existing NC 68 (phased construction and MOT) and 9.4 miles of new location construction of I-73. New grade separated interchanges were constructed. The development of the technical proposal and design led to multiple approved ATC's with innovative interchanges that resulted in lower cost and early completion. The ATC's included concepts that resulted in less impacts to right-of-way, minimal utility impacts and simplifying MOT.

**Relevancy** | DOT Design-Build, FHWA guidelines and requirements, interstate secondary road alignment/widening, new interchange construction, bridge construction, ROW acquisition, utility relocations, wetland and stream mitigation, environmental monitoring, geotechnical challenges/mitigation including unsuitable material, Traffic Management Plan, public involvement/communications, QA/QC coordination, ATC's.

Project Name   Macy Grove Road, DB, Kernersville, North Carolina	Dates   06/2012 – 09/2015
Project Role   Design-Build Project Manager	With Current Firm   No
Client   NCDOT	Cost   \$38M

**Responsibility/Specific Job Duties** | Design-Build Project Manager responsible for the overall design and construction of the project, as well as the contract administration and partnering with NCDOT. This responsibility as DBPM also included managing the procurement process including proposing several ATC's. This project provides a new interchange with I-40 Business and Macy Grove Road to improve safety, access and capacity along I-40 Business and Macy Grove Road. To construct the new interchange and maintain the 55,000vpd along I-40 Business an efficient MOT plan was developed and implemented in order to construct the project in two construction seasons while keeping 4 active lanes of traffic. Extensive utilities including the relocation of three 30" + diameter high pressure gas transmission lines required a detailed plan for utility coordination and construction. Roadway improvements consisted of construction of new ramps, realignment of Macy Grove Road, widening of several other secondary roads, and construction of a roundabout. Three bridges were constructed utilizing MSE walls to span over I-40 Business, East Mountain Street and Norfolk Southern's railroad.

Relevancy | DOT Design-Build, FHWA guidelines and requirements, primary and secondary road widening, ROW acquisition, utility relocations including gas transmission lines, wetland and stream mitigation, environmental monitoring, geotechnical challenges/mitigation, Traffic Management Plan development and execution, public involvement/communications, QA/QC coordination, new interchange, bridge construction, MSE walls, roundabout, ATC's.

\* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.
 h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment.
 Not Applicable

### ATTACHMENT 3.3.1

### KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.		
a. Name & Title: Leonard Coleman PE CCM LEED AP   Senior Construction Manager		
b. Project Assignment:		
Quality Assurance Manager		
c. Name of all Firms with which you are employed at the time of submitting SOQ. In addition, please denote		
the type of employment (Full time/Part Time): Whitman Requardt & Associates LLP   Full Time		
<ul> <li>d. Employment History: With this Firm <u>2.5</u> Years With Other Firms <u>10</u> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):</li> </ul>		
Whitman, Requardt & Associates, LLPSenior Construction Manager10/2014 – PresentGeneral Responsibilities  Manages Quality Assurance and Quality Control staff, leading quality management teamson Design-Build and Design-Bid-Build roadway, brige and utility projects. Serves as Quality Assurance Manager andQuality Control Manager on over \$90 million worth of VDOT Design-Build projects, and manages QA inspection staffon over \$50M worth of construction and maintenance for both ferally and state funded VDOT and Locally Administeredprojects. Develops and implenent QA/QC plans and ensures compliance with plans and specifications.		
Prince William County DOTConstruction Manager03/2012 - 10/2014		
<b>General Responsibilities</b>   Served as County's Project Construction Manager for the Capital Improvement Division on two PPTA projects valued at over \$90 million and two Design-Bid build projects valued at over \$75M. In an Independent Assurance role, oversaw QA staff and the quality program, and ensured testing and inspection frequencies in accordance with QA/QC Plan.		
McDonough Bolyard Peck, Inc.Lead Engineer01/2006 – 03/2012General Responsibilities   Assistant Quality Assurance Manager on \$150M VDOT Design-Build project, assisting in developing and implementing the quality management program, including overseeing QA staff and testing and inspection frequencies. Also served as Project Controls Engineer on multiple projects, including constructability review, cost estimating, CPM schedule review, claim analysis, material testing review and overseeing project record keeping systems.		
Engineering GroupeLand Development Engineering Intern05/2005 – 08/2005General Responsibilities   Computed hydraulic grade lines, conducted construction estimates, calculated storm water management pond volumes, calculated elevations spot shots for retaining walls, created numerous storm sewer and waterline profiles, and performed field inspections of construction sites for bond reductions.		
FHWA - Eastern Federal Lands DivisionEngineering Student Trainee11/2004 - 05/2005General Responsibilities   Bridge Inspection Program member performing load ratings and inspections of structures.		
English Construction, Inc.Engineering-In-Training06/2004 – 11/2004General Responsibilities   Project Engineer performing grade work, carpentry work, and other construction tasks.		
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: George Mason University – Fairfax County, Virginia   B.S.   2009   Civil Engineering		
<ul> <li>f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2013   Professional Engineer   VA Registration #0402051494; Certified Construction Manager (#3392); LEED AP; VDOT Certifications: Adv. WZ Traffic Control w/ LEO (4/2020), Soil/Aggr. Field Compaction (12/2018), Asphalt Field Level I &amp; II (12/2018), Hyd. Cement Concrete Field (12/2017), Pavement Marking (12/2018), GRIT Inspector (4/2019), Slurry Seal (12/2018), Surface Treatment (12/2018); ACI Grade I Testing Tech (8/2017); DEQ E&amp;SC Inspector (5/2019); Nuclear Gauge Safety Training; OSHA 10-Hour Safety; NASSCO PACP (1/2018)</li> </ul>		
<ul> <li>g. Document the extent and depth of your experience and qualifications relevant to the Project.</li> <li>1. Note your role, responsibility, and specific job duties for each project, not those of the firm.</li> <li>2. Note whether experience is with current firm or with other firm.</li> <li>3. Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</li> </ul>		
(List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)		

Project Name   I-95 Express Lanes Southern Terminus Extension	DB, Stafford, VA
Project Role   Quality Assurance Manager Client   VDOT	Dates   05/2016 – Present With Current Firm   Yes Cost   \$36.7M
<b>Responsibility/Specific Job Duties</b>   <i>Quality Assurance Manager</i> fit to construct a 2.2 mile reversible lane from the current southern end creation of new northbound and southbound ramps between the express includes mass excavation, deep drainage structures, intelligent traffic structures and the surger structures and specifications (DBT), and coordination with VDOT, traffic control Quality Assurance Manager on a VDOT MegaProjects L traffic structures and structures	For the \$36.7 Million VDOT Design-Build Project d of the I-95 Express Lanes. Project includes the ss lanes and the general purpose lanes. The project systems (ITS), overhead sign structures, guardrail, nt treated aggregate subbase, and asphalt paving. certifying that all work and materials, testing, and ents, the approved QA/QC Plan, and the "approved developing and maintaining the QA/QC Plan in Design-Build Projects manual, conducting all staff(s), maintaining project as-built drawings and nance reports (NCR) for deficiencies, reviewing certifying monthly payment applications. He is T standards, approval of inspector reports and test Transurban, and the Contractor. Design-Build project, major project with extensive d implementing OA/OC Plan Non-compliance
reports and resolving quality issues, managing staff; coordination with Design-Builder, Quality Control and VDOT;	
Materials Book certification and oversight; working with Branch.	

Project Name   Fall Hill Avenue Widening & Mary	Washington Boulevard Extension DB, Fredericksburg, VA
	<b>Dates   11/2014 – Present</b>
Project Role   Quality Control Manager	With Current Firm   Yes
Client   VDOT	Cost   \$44M

**Responsibility/Specific Job Duties** | *Quality Control Manager* on this VDOT Design-Build project to widen Fall Hill Avenue and extend Mary Washington Blvd. Includes a 5-span bridge over I-95, bridge support of excavation, MSE walls, soil nail walls, stream diversions, soundwalls, a precast double cell box culvert, earthwork, shared use path, sidewalk, storm drainage and a multi-phase MOT plan. Responsibilities include coordinating with Design-Build Project Manager and Quality Assurance Manager to ensure Quality Control services are in compliance with the approved QA/QC Plan, coordinating all inspections and testing to frequencies required by the Plan, managing and assigning QC inspection staff and the QC laboratory, facilitating meetings, review and acceptance of material testing reports, and reviewing field issues and recommending solutions. He is also responsible for revising and updating the QA/QC Manual for the project, overseeing the compliance of the VDOT Materials Book, maintaining an electronic project documentation system, reviewing and approving contractor material submittals, reviewing work for compliance with plans and specifications. *Relevancy: VDOT Design-Build, large project with traffic control on I-95, Quality Management duties, implementing QA/QC Plan, Non-compliance reports and resolving quality issues, managing staff; coordination with Design-Builder, Quality Team and VDOT; Materials Book certification and oversight. Similar project features include sound walls, geology in the project area, roadway alignment/widening, new connector road, utility relocations, environmental, geotechnical, hydraulics, traffic control devices, TMP, public involvement/communications, QA/QC.* 

Project Name   Fairfax County Parkway Interchange and	Widening DB, Fairfax County, VA
	Dates   08/2009 – 03/2012
Project Role   Assistant Quality Assurance Manager	With Current Firm   No
Client   VDOT	Cost   \$150M

Responsibility/Specific Job Duties | Assistant Quality Assurance Manager providing Quality Assurance oversight on an Eastern Federal Lands (EFLHD) Design-Build project for 2 miles of new roadway, six new bridges, widening of an existing bridge and three interchanges. The project included gravity retaining walls, overhead sign structures, roadway lighting, soundwalls, stormwater management facilities, pedestrian facilities, major excavation and filling of embankment, subgrade stabilization, in-plan utility relocations, rock blasting, and earthwork for the future Saratoga Park and Ride Lot. He assisted the QAM in overseeing the QA/QC program for the project by ensuring that all work and materials, testing, and sampling were performed in conformance with the contract requirements, the QA/QC Plan, and the "approved for construction" plans and specifications. He verified QC and QA staff frequencies of inspection and material testing were performed in accordance to the approved project QA/QC Manual. He conducted hold-point and preconstruction meetings, reviewed Contractor submittals, identified and created non-conformance reports (NCR) for deficiencies, and maintained Issue and NCR Logs. He maintained all project documentation records including a Materials Book to VDOT standards, issuing Design-Build Tracking (DBT) numbers, as-built project records, and material test result data. Responsible for reviewing and approving contractor C-25s, monitoring site activities on a daily basis, review and initial approval of all inspector daily diaries, creating and maintaining a project punchlist, reviewing contractor quantities for owner's review of pay applications, and coordination with FHWA, EFLHD, and VDOT. Relevancy: VDOT Design-Build project, major project with extensive traffic control, Quality Assurance Manager duties, implementing QA/QC Plan, Non-compliance reports and resolving quality issues, managing staff; coordination with Design-Builder, Quality Control and VDOT; Materials Book certification and oversight. On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment. **Not applicable.** 

### ATTACHMENT 3.3.1

### KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project	
a. Name & Title:	
Mike Russell, PE, DBIA   Vice President	
b. Project Assignment:	
Design Manager	200 la addition places depote
the type of employment (Full time/Part Time).	SOQ. In addition, please denote
Whitman, Requardt & Associates, LLP   Full Time	WRA
d. Employment History: With this Firm 2 Years With Other Firms 26 Years	
Please list chronologically (most recent first) your employment history, p	osition, general responsibilities,
and duration of employment for the last fifteen (15) years. (NOTE: If you have	e less than 15 years of
shall be included in Section (a) below):	Project specific experience
	10/2014 D
Ceneral Responsibilities   Mr. Russell is currently a Vice-President with Whitman	12/2014 – Present Requardt & Associates LIP where
he is primarily responsible for managing transportation projects in Central and So	thwestern Virginia. He currently
serves as WRA's Design Manager on major Design-Build projects and Project Mar	ager on major interstate and other
transportation projects in the region.	
Virginia Department of Transportation District Administrator	01/2011 - 12/2014
General Responsibilities   Mr. Russell became the Bristol District Administrator	r in 2011 and provided executive
leadership and direction to the Department's 623 employees in the 12 county Bristol	District. He served as an extension
of the Commissioner's Office with direct oversight of a Six-Year construction prog	ram valued at over \$500M and an
oversight and design of key projects in the District providing design guidance and	construction claim resolution He
worked proactively with staff to resolve design and construction issues to ensure	the advancement of the District's
program. The major highlights of the construction program were the \$2.8B Coal:	fields Expressway and Corridor Q
programs.	
Virginia Department of Transportation PE Manager/PIM	12/2007 - 01/2011
General Responsibilities   Mr. Russell became the Salem District Assistant Dist	rict Administrator for Preliminary
Engineering, Planning, and Investment Management in 2008 and led the Distri- including Location & Design Environmental and Right of Way sections. He was	ct's Preliminary Engineering staff
functions to ensure compliance with all state and federal transportation and enviro	nmental standards and policies. In
addition to the P.E. Manager role, he led the District's Planning & Investment Man	agement staff including Land Use,
Land Development, Planning, and Programming.	
Virginia Department of Transportation Location & Design Engin	eer 11/2004 – 12/2007
General Responsibilities   Mr. Russell became the Salem District Location & Design	Engineer in 2005 and subsequently
led and managed design staff responsible for the preparation of highway, right of wa	y and construction plans, including
survey, roadway and nyuraunc design. He coordinated with right of way, environm sections to ensure a cohesive and collaborative design for all projects. He provide	ental, bridge, traffic, and materials
projects were developed in accordance with applicable state and federal standards.	As District L&D Engineer he was
responsible for the design of multiple projects from small projects costing less than \$	51 million to very complex projects
costing \$100 million. His collaborative and hands on approach to project manager	nent and design guided the design
teams to significantly improve the on-time and on-budget performance of the	District's projects and Dashboard
performance measures while maintaining a problem solving mindset of the team.	
Virginia Department of Transportation Resident Engineer	11/2003 - 11/2004
construction and maintenance activities in Wythe and Grayson Counties. In addition	n 2004. He was responsible for all to having geographic responsibility
for all VDOT activities in Wythe and Grayson counties, he served as the Department	's Responsible Charge Engineer for
construction activities and ensured compliance with plans, specifications, environ	mental requirements and contract
documents. He reviewed and accepted independent work order estimates and analysis	s while focusing on successful field
resolution of disputes by providing technical analyses of issues, and negotiating a	and implementing partnering with
Virginia Department of Transportation Transportation Engineer	07/2000 - 11/2003
project manager for a number of major projects in the Salem District.	ignicer, bit where he served as

e. Education: Name & Location of Institution(s)/Degree(s)/Year,	Specialization:
f. Active Registration: Year First Registered/ Discipline/VA Rec	s, VA   D.S.   1969   Civil Engineering
1994   Virginia Professional Engineer   #0402024814	
<ul> <li>g. Document the extent and depth of your experience and quali</li> <li>1. Note your role, responsibility, and specific job duties for</li> <li>2. Note whether experience is with current firm or with other</li> </ul>	ifications relevant to the Project. each project, not those of the firm. er firm.
<ol> <li>Provide beginning and end dates for each project; project considered for evaluation.</li> </ol>	ects older than fifteen (15) years will not be
(List only three (3) relevant projects* for which you have per projects are shown in excess of three (3), the SOQ may be read the first three (3) projects listed will be evaluated.)	erformed a similar function. If additional ndered non-responsive. In any case, only
Project Name   I-81 Halls Bottom Road Bridge Replacement DB, W	Vashington County, VA
Project Role   Design Manager Client   VDOT	Dates   05/2016 – 09/2019 With Current Firm   Yes Cost   \$11.2M
<b>Responsibility/Specific Job Duties</b>   As <b>Design Manager, Mr. Russ</b> replacement of two bridges on I-81 over Halls Bottom Road in Wash roadway design, coordinating all individual design elements, ensu requirements and delivering the project in accordance with the project? within existing right-of-way requiring a complex MOT plan utilizing th southbound traffic while the existing bridges are replaced. The efficient of with 140 single span structures utilizing a "true MSE" abutment desi schedule allowing construction to begin only 3.5 months after NTP. <i>Relevancy: VDOT Design-Build; roadway; survey; structures and bria</i> <i>traffic control devices; TMP; public involvement/relations; QA/QC; comanagement</i>	<b>Sell</b> is responsible for all design elements of the ington County, Virginia. He is responsible for tring that the design conforms with contract s QA/QC plan. The project is being constructed e existing median to temporarily carry north and design replaces the twin 3-span 220' long bridges gen. Mr. Russell managed an aggressive design dges; environmental; geotechnical; hydraulics; ponstruction engineering and inspection; project
Project Name   Route 29 Solutions DB – Berkmar Avenue Extensio	n Albemarle County VA
Project Role   Project Manager/Element Design Lead Client   VDOT	Dates   12/2014 – 10/2017 With Current Firm   Yes Cost   \$32M
<b>Responsibility/Specific Job Duties</b>   As <b>Project Manager, Mr. Rus</b> coordinating all design elements of the Berkmar Avenue Extension p Project. His role on the project is Design Element Lead responsible roadway including a 716' long bridge over the South Fork of the Riv delivered on an accelerated schedule with right-of-way plans comple approved in December of 2015. Mr. Russell accelerated design efforts VSMP permits to allow clearing activities to occur before the time of y which was listed as endangered after the award of the contract. All dest the project's QA/QC plan and Construction Engineering support includ <i>Relevancy: VDOT Design-Build; roadway; survey; structures and briatraffic control devices; TMP; public involvement/relations; QA/QC; comanagement</i>	<b>ssell</b> is responsible for roadway design and for portion of the Route 29 Solutions Design-Build for the design of the 2.5-mile Urban Connector anna River. The Design-Build project is being eted in just six months and construction plans needed to advanced right-of-way approvals and ear restrictions of the Northern Long-Eared Bat, sign activities were delivered in accordance with ed review of all shop drawings. <i>dges; environmental; geotechnical; hydraulics;</i> <i>ponstruction engineering and inspection; project</i>
Project Name   I-81 Bridge Replacement over the New River and R	oute 232 over I-81, Montgomery County, VA
Project Role   Project Manager Client   VDOT	With Current Firm   Yes Cost   \$98M
<b>Responsibility/Specific Job Duties</b>   As <b>Project Manager, Mr. Russ</b> coordination of all design disciplines for the project, which includes 1	<b>sell</b> was responsible for the roadway design and .72 miles of improvements to the existing I-81,
replacement of the existing two-lane bridges over the New River wi replacement of the Route 232 overpass bridge at Exit 105. The I-81 br 80 feet above the river. I-81 will be widened to provide deceleration a of the mainline bridges and the associated MOT also require the repla Russell is providing oversight and coordination for all elements of the SWM, structural, geotechnical, and traffic engineering, ITS, TMP, envi <i>Relevancy: VDOT project, roadway; survey; structures and bridges; et</i>	th three-lane bridges in each direction and the ridges are approximately 1,600 feet long and are nd acceleration lanes along I-81. The widening accement of the Route 232 Bridge over I-81. Mr. design including surveys, roadway, hydraulics, ronmental permits and utility design. <i>nvironmental; geotechnical; hydraulics; traffic</i>
<i>control devices; TMP; ROW; utilities; public involvement/relations; Q</i> * On-call contracts with multiple task orders (on multiple projects)	<i>QA/QC; project management</i> ) may not be listed as a single project.

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment. Not applicable.

### ATTACHMENT 3.3.1

### KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title:
Greg Suttle   Construction Manager
D. Project Assignment:
Construction Manager
the type of employment (Full time/Part Time):
Branch Civil Inc   Full Time
d. Employment History: With this Firm 26 Years With Other Firms 2 Years
Please list chronologically (most recent first) your employment history, position, general responsibilities and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):
Branch Civil, Inc.Construction Manager06/1998 – Preser
General Responsibilities   Greg is responsible for project construction including Quality Control (QC), executes
work in accordance with "approved for construction" plans/specifications, and is accountable for compliance with
material and construction requirements. Additional responsibilities include planning, scheduling, and allocation of
manpower/equipment resources. He also manages owner, subcontractor, and supplier contracts. Greg supports EEO
compliance, enforcement, and adheres with corporate safety regulations and training. Greg has performed similar work
on three Design-Build and multiple Design-Bid-Build widening projects, including interstate, primary and secondary
road widening/relocations, as well as interchange construction for various state and local departments of transportation
federal agencies, and private corporations. Greg's role includes partnering with VDOT to address Public Outreach and
stakeholder concerns. Additionally, Greg is responsible for resolving challenging geotechnical concerns and working
around environmentally sensitive areas. Greg places an emphasis on workplace safety and training while meeting or
exceeding owner's expectations. His daily involvement with the project operations creates a solid foundation for his
understanding and working knowledge of the impacts associated with geotechnical challenges, MOT, environmental
concerns, and utility relocation issues.
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
West Virginia Institute of Technology   Montgomery, West Virginia   BS   1987   Mining Engineering
f. Active Registration: Year First Registered/ Discipline/VA Registration #:
2003   Virginia DEQ Responsible Land Disturber   RDL03021
1995   VDOT Erosion Sediment Control Contractor Certification (ESCCC)   1-01135
1999   Virginia Blaster – Unrestricted   E269250
2013   ACI Concrete Certification   01273969
<ul> <li>g. Document the extent and depth of your experience and qualifications relevant to the Project.</li> <li>1. Note your role, responsibility, and specific job duties for each project, not those of the firm.</li> <li>2. Note whether experience is with current firm or with other firm.</li> </ul>
3 Provide beginning and end dates for each project: projects older than fifteen (15) years will not b
considered for evaluation
(List only three (3) relevant projects* for which you have performed a similar function. If additional
projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, onl
the first three (3) projects listed will be evaluated.)
, , , , , , , , , , , , , , , , , , ,
Project Name   Route 3 Widening, DB Culpeper, Virginia Dates   10/2015 – 09/2017
Project Role   Construction Manager With Current Firm   Yes
Client   VDOT Cost   \$25M
<b>Responsibility/Specific Job Duties</b>   During the design phase of this five-mile section of road widening from a two to
a four-lane divided highway on Route 3. Greg worked with the design team to perform constructability reviews.
provided input on MOT design, presented guidance for working around environmentally sensitive areas, and
contributed to the development of solutions to geotechnical issues. During construction, Greg worked closely with
VDOT and their project staff to coordinate scheduling and work flow as various stages of the project became
accessible for construction activities. One critical responsibility has been the coordinating of extensive utility
relocations throughout the entire corridor, including Verizon, AT&T, Level 3, Owest, Century Link, Dominion
Virginia Power, Transco/Williams Gas, and Columbia Gas. Greg successfully led the construction team in working
around the stream impacts (1 500) and watland areas. Substratial south shired issues resulting from unwitchle soil

rock, and highly plastic clays and the mitigation strategy have been one of Greg's primary focuses. Maintaining effective communication with residents and local commercial, agricultural, and industrial businesses has also been an important consideration in Greg's strategy to effectively manage shareholder impacts. It can be anticipated that Greg's Construction Manager duties on the Warrenton Southern Interchange Project will be similar to the Route 3 Widening Project including managing MOT and multiple traffic shifts, ensuring environmental compliance and stewardship, providing timely resolution of geotech concerns, managing overall construction and complying with QA/QC requirements.

Relevancy | VDOT Design-Build, FHWA guidelines and requirements, primary roadway widening, ROW acquisition, utility relocations including gas transmission lines, environmental permitting and monitoring, geotechnical challenges/mitigation including unsuitable materials, Traffic Management Plan development and execution, public involvement/communications, QA/QC coordination.

Project Name | 95 Express Lanes, DB, Prince William/Stafford Counties, Virginia Dates | 08/2011 – 05/2015 Project Role | Construction Manager Client | VDOT Cost | \$46M

**Responsibility/Specific Job Duties** | Branch was a key subcontractor for the concessionaire and Greg functioned as the Construction Manager for the project which included coordinating all roadway activities (including Branch's self-perform work and other roadway subcontractors) for the concessionaire over the nine miles of new I-95 HOT Lanes, including 1.5+ miles of interstate widening. Greg and the Branch Project Team successfully mitigated similar geotechnical, environmental, and MOT challenges as can be expected on the Warrenton Southern Interchange Project. Greg was involved with developing the construction sequencing, MOT plans, interstate widening access points, and laydown areas within the I-95 corridor. Greg's involvement with the placement of access points for construction materials and efficient movement of vehicles through the work zone. The scope of work Greg oversaw consisted of clearing and grubbing, over 550,000cy of onsite excavation, 400,000cy of borrow material, undercut excavation, chemical stabilization, storm drainage and erosion control installation and maintenance. Greg coordinated all roadway activities with the other trades which included construction of five new bridges, three widened bridges, 15 bridge/ramp repairs, more than 1,000,000sf of sound walls, retaining walls, box culvert extensions, and ITS installation.

Relevancy | VDOT Design-Build, FHWA guidelines and requirements, roadway alignment/widening, bridge construction, ROW acquisition, utility relocations, environmental monitoring, geotechnical challenges/mitigation, Traffic Management Plan development and execution, public involvement/communications, QA/QC coordination.

Project Name   Route 15, James Madison Highway I	<b>DB</b> , Haymarket, Virginia <b>Dates</b>   02/2007 – 12/2009
Project Role   Construction Manager	With Current Firm   Yes
<b>Client   Prince William County</b>	Cost   \$55M

Responsibility/Specific Job Duties | As Construction Manager/Project Superintendent for this project, Greg directed the project team, including three area superintendents along with foremen, project engineers and staff. Greg's duties included constructability reviews during the design phases for the five distinct roadway segments adjacent to the I-66/US-15 Interchange, including five bridge structures, which comprised this project. He was also instrumental in developing and enforcing the Quality Control Program prior to and during construction, much as he will do for the Warrenton Southern Interchange Project. Coordinating with DEQ and USACE, Greg created and executed Construction Sequencing Plans that allowed for early starts to construction activities in each segment of the project. These plans included MOT coordination with VDOT and Prince William County. This 22 lane-mile project had utility relocations throughout. Greg scheduled Branch crews and clearing to expedite initial critical relocation activities, such as pole installations and underground conduits/trenching. Another similar and significant feature of this project to the Warrenton Southern Interchange Project, involves geotechnical challenges and associated remedies. There were intermittent segments of highly plastic, light and/or saturated soils and rock in all five segments and each required a unique approach for mitigation. These approaches included removal and replacement, mechanical manipulation and chemical stabilization. Greg's duties also required him to meet with local businesses, communities and developers through public outreach and simple face-to-face communications to address concerns and create a team atmosphere with shareholders.

**Relevancy** | Design-Build, roadway alignment/widening, bridge construction, ROW acquisition, utility relocations, environmental permitting and monitoring, stream mitigation, geotechnical challenges, Traffic Management Plan development and execution, public involvement/communications, QA/QC coordination

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

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

Greg is currently working on the Route 3 Widening Project and will be available and 100% dedicated to the construction of the Warrenton Southern Interchange Project prior to commencement of construction.



# Appendix 3.4.1

# **Work History Forms**



### ATTACHMENT 3.4.1(a)

# BRANCH

### LEAD CONTRACTOR - WORK HISTORY FORM

### (LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design	c. Contact information of the Client or	d. Contract	e. Contract	f. Contract Value (in thousands)		g. Dollar Value of Work
	consulting firm responsible for the	Owner and their Project Manager who	Completion	Completion	Original Contract	Final or Estimated	Performed by the Firm identified
	overall project design.	can verify Firm's responsibilities.	Date	Date (Actual	Value	Contract Value	as the Lead Contractor for this
			(Original)	or Estimated)			procurement.(in thousands)
Name:	Name:	Name of Client/ Owner: VDOT (Mega					
I-95 Express Lanes	Whitman, Requardt and Associates,	Projects)				\$36,700	
Southern Terminus	LLP	Phone: (703) 259-2362	09/2019	08/2018	\$21,000	*Increased due to	\$26 700
<b>Extension Design-Build</b>		Project Manager: Paul Nishimoto	00/2010	00/2010	\$ <b>51,000</b>	owner directed scope	\$50,700
Location:		Phone: (571) 419-0504				changes	
Stafford, VA		Email: paul.nishimoto@vdot.virginia.gov					

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.

#### **PROJECT IS CURRENTLY 4 MONTHS AHEAD OF SCHEDULE**

### **Project Narrative**

**Relevancy to the Warrenton** 

**Southern Interchange** 

**VDOT Design-Build Project** 

Maintenance of Existing Lanes

Safety, Congestion Concerns

**Environmental Permitting** 

Geotechnical Constraints

Stakeholder Coordination

Public Involvement/Relations

Traffic Control Devices

Utility Relocation

Noise Mitigation

(Permitting)

Innovative Approach

High Traffic Volumes

Complex MOT **Road Widening** 

 $\checkmark$ 

 $\checkmark$ 

 $\checkmark$ 

 $\checkmark$ 

 $\checkmark$ 

The I-95 Express Lanes Southern Terminus Extension Project will extend the existing express lanes further south to alleviate the congestion challenges at the current merge point and entry in Stafford County. The project consists of constructing 2.2 miles of a reversible lane beginning at the current southern end of the I-95 Express Lanes (located north of Garrisonville Road), and will include the creation of new northbound and southbound ramps between the express lanes and the general purpose lanes. The improvements will reduce delays and queues for the northbound general purpose lanes during AM peak, reduce delays and queues for the southbound express lanes during PM peak, improve overall safety and decrease rear-end collisions by reducing vehicles weaving to enter and exit the lanes causing the accident rate to be significantly high, and increase capacity while reducing congestion within the existing right-of-way.

### **Project Scope**

- **Permitting Approach** | Prior to contract award, VDOT took an innovative approach and obtained the VPDES and Water Quality permits for the project. VDOT worked with Branch and WRA during design development along with the permitting agencies to transfer the permits to Branch. During the design development and permit transfer stage, Branch proceeded at-risk with clearing and grubbing, grading and drainage installation to accelerate the construction schedule. This proactive permitting approach has allowed construction to begin with 45 days of the Notice to Proceed.
- Roadway Widening | A new left entrance south of the Garrisonville Road overpass (Route 610) is being constructed to accommodate Northbound traffic entering the express lanes. Southbound traffic using the express lanes will be able to merge into the general purpose lanes at a new exit point approximately 1 mile south of Garrisonville Road. The new reversible lane being constructed is requiring the movement of 100,000cy of material, placing 60,000tn of cement treated aggregate and 100,000tn of asphalt.
- Noise Mitigation | A final noise report has been completed by the Design-Build Team indicating that noise mitigation would be required. Parallel to the ramp carrying traffic from Garrisonville Road to southbound I-95 and along I-95 southbound, a sound wall is being constructed.
- Maintenance of Traffic and Traffic Management Plan (TMP) | High traffic volume, similar to the Warrenton Southern Interchange Project, which increases during peak hours creates the importance of safe and well-marked access and egress points. Safety and flow of the motoring public are critical elements as the TMP was revised.



### **Branch's Role**

Branch is the prime contractor for this design-build project overseeing all aspects of design and construction. Branch is selfperforming all mass grading, erosion control, MOT, drainage, fine grading and base stone placement activities while providing contract administration and coordination with QA/QC. In order to streamline the design process and expedite construction. Branch is utilizing the Construction Design Coordinator (CDC) role to perform constructability reviews during the design development. Branch's close coordination with WRA and VDOT is allowing the construction schedule to be accelerated. Construction challenges that have been mitigated and successfully overcome by Branch include unsuitable soils, coordination with Transurban and maintaining existing lanes of traffic during construction.

### Verifiable Evidence of Good Performance

- the project being ahead of schedule.

Ahead of Schedule | Current schedule review from VDOT indicates the project is 135 days ahead of schedule.

Partnering | Even though formal Partnering is not required, Branch is taking a Partnering approach to include WRA, VDOT, Transurban and other third party stakeholders early in design development in order to review plans at various stages and to reduce the amount of time required for review. This coordination is proving successful as evidenced by

Additional Work | VDOT and Branch successfully negotiated to add another \$5.6M in additional work to the project. This additional work will be able to be constructed within the same timeline as the original scope of work.

### ATTACHMENT 3.4.1(a)

### LEAD CONTRACTOR - WORK HISTORY FORM

# BRANCH

### (LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design	c. Contact information of the Client or	d. Contract	e. Contract	f. Contract Value (in thousands)		g. Dollar Value of Work
	consulting firm responsible for the	Owner and their Project Manager who	Completion	Completion	Original Contract	Final or Estimated	Performed by the Firm identified
	overall project design.	can verify Firm's responsibilities.	Date	Date (Actual	Value	Contract Value	as the Lead Contractor for this
			(Original)	or Estimated)			procurement.(in thousands)
Name:	Name:	Name of Client/ Owner: VDOT					
Route 3 Widening	Johnson, Mirmiran & Thompson,	Phone: (434) 906-7979				\$25.028	
Design-Build	Inc.	Project Manager: Greg Cooley, PE	05/2017	00/2017	\$22.502	*Increased due to	\$25,028
Location:		Phone: (434) 906-7979	05/2017	09/2017	\$23,393	owner directed scope	\$23,020
Culpeper, VA		Email: gregory.cooley@vdot.virginia.gov				changes	

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.

**VDOT DESIGN-BUILD PROJECT IN CULPEPER** DISTRICT (25 MILES FROM WARRENTON SOUTHERN **INTERCHANGE**)

- **Relevancy to the Warrenton Southern Interchange**
- **VDOT Design-Build Project**
- Located in Culpeper District
- Same Management Team
- High Traffic Volumes  $\checkmark$
- $\checkmark$ Complex MOT
- $\checkmark$ Road Widening
- Maintenance of Existing Lanes  $\checkmark$
- Phased Construction Plan  $\checkmark$
- Safety, Congestion Concerns  $\checkmark$
- **Environmental Permitting**
- Low Existing Soil CBR Values  $\checkmark$
- Traffic Control Devices
- Utility Relocations
- Gas Line Conflicts
- Stakeholder Coordination Public Involvement/Relations
- $\checkmark$ Noise Mitigation
- $\checkmark$ Similar Size of Project

**Project Narrative** 

**Project Scope** 

maintain progression.

extended for gas transmission lines owned by Williams.

and keep the traveling public safe.

The Route 3 Widening project is located in Culpeper, VA and is a VDOT Design-Build project that reconstructs and widens approximately 5 miles of existing Route 3 to a four-lane divided highway between Culpeper and Lignum, VA. This construction will mark the final section of a large improvement plan aimed to increase the capacity and safety along the Route 3 corridor between Culpeper and Fredericksburg by increasing the size of the existing two-lane highway to four lanes. This project is being constructed in phases and consists of moving 140,000cy of material on site, hauling in 90,000cy of borrow material, removing 180,000cy of unsuitable material, installing over 13,000lf of storm drain and placing 80,000tn of asphalt. Utility coordination is extensive and includes working with Columbia Gas to relocate a 4" gas line and Williams to extend the casings for a 30", 36" and 42" gas transmission line. Other utility coordination includes relocation of Verizon communication lines throughout the project corridor as well as four individual fiber communication lines which are grouped into a single ductbank within the right-of-way.

**Roadway Widening** | The construction of the project is divided into three areas in order to manage the

design and construction as well as right-of-way acquisition and utility relocation. Careful coordination of

right-of-way acquisition and utility relocation has been required to allow for road widening to begin and

Geotechnical Concerns | A substantial portion of the subgrade is within stratums of existing soil which has

CBR values below minimum requirements. In order to achieve a suitable subgrade, multiple solutions to

improve the existing soil conditions have been utilized: undercut and backfill, use of geosynthetics and

in their use within the roadway prism, which forces the project team to utilize offsite borrow when necessary.

Utility Coordination | Overhead and underground utilities need to be relocated to accommodate the

improvements. Right-of-way coordination is prioritized based on the utility conflicts with construction. A

4" gas line owned by Columbia Gas has been relocated along with several large diameter casings that were

Maintenance of Traffic and Traffic Management Plan (TMP) | Two lanes of traffic need to be maintained

during construction therefore, multiple traffic shifts are required to construct the improvements. A phased

construction plan has been developed to allow appropriate space to make the improvements, maintain traffic,

A substantial amount of borrow material has been obtained from overburden from the nearby quarry.



### **Branch's Role**

Branch is the prime contractor for this design-build project overseeing all aspects of design and construction. Branch is selfperforming all activities associated with erosion control, mass grading, fine grading, storm drain, base stone and traffic control. With 58 parcels impacted by construction, Branch has taken an active role in working with the adjacent property owners to let them know when construction operations would affect them. Branch is partnering with VDOT to keep the travelling public informed of upcoming traffic shifts and construction activities.

#### Verifiable Evidence of Good Performance

- borrow material, and chemical stabilization. The CH/MH type soils within the excavation are then restricted converted to the desired wetland condition at completion of the project.

  - AT&T, and Level3 will be valuable while working on the Warrenton Southern Interchange Project.

Successful Environmental Stewardship During the Project | Within the project limits, 12 distinct wetland areas (4.99 acres in total) have been identified as being impacted due to construction. The project team is working within the tight constraints to ensure that the temporary impacted areas will not be damaged during construction and be returned or

Working with Culpeper District | Branch is working with VDOT to address the local citizens and property owner issues. Branch is also partnering with VDOT to overcome low CBR values. Several techniques have been used to overcome this geotechnical challenge: chemical stabilization, geosynthetics and undercut. The same management team on this Route 3 Widening project will stay intact and are shown on the Org Chart for the Warrenton Interchange project.

Experience Working with Utility Companies | Branch has developed relationships will all of the utility companies having facilities on the project including Columbia Gas and Williams as well as a better understanding of their concerns during design and construction. The experience of the project team in coordinating with companies like Verizon, Fiberlight,
### 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	c. Contact information of the Client or	d. Contract	e. Contract	f. Contract Value (in thousands)		g. Dollar Value of Work
	consulting firm responsible for the	Owner and their Project Manager who	Completion	Completion	Original Contract	Final or Estimated	Performed by the Firm identified
	overall project design.	can verify Firm's responsibilities.	Date	Date (Actual	Value	Contract Value	as the Lead Contractor for this
			(Original)	or Estimated)			procurement.(in thousands)
Name:	Name:	Name of Client/ Owner: VDOT					
Southgate Drive	A. Morton Thomas & Associates,	Phone: (540) 387-5488					
Interchange	Inc.	Project Manager: Duane Mann, PE	12/2018	12/2018	\$38 700	\$38 700	\$38 700
Location:		Phone: (540) 381-7195		12/2010	φ <b>υσ</b> ,που	φ.0,700	φ
Blacksburg, VA		Email: m.mann@vdot.virginia.gov					

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.

#### **Project Narrative**

The existing at-grade intersection of US 460 and Southgate Drive functions as the gateway to Virginia Tech. The intersection experiences significant queues during the AM and PM peak hours as well as during major events on campus. This hampers through movements along US 460 and creates a safety concern with rear end collisions. This project provides a grade separated intersection in a new location southeast of the existing intersection. Project improvements include 3.6 miles of roadway improvements, construction of two roundabouts, 175,000cy of excavation, and 163,000cy of borrow embankment. Structure construction includes two bridges, three pedestrian underpasses, and two MSE retaining walls.

#### **Project Scope**

- **Structures** | The new intersection is grade separated requiring a diverging diamond bridge design to carry traffic along Southgate Drive over US 460. Over 1,100lf of retaining walls is being constructed to keep the improvements within VDOT right-of-way. There are three 3-sided box culvert pedestrian underpasses being constructed as part of this project to improve pedestrian safety.
- Roadway Improvements | The new intersection with US 460 and Southgate Drive is being constructed approximately 1,500lf east of the existing intersection along US 460. 3.6 miles of new roadway is being built, two at-grade intersections are being improved with the introduction of roundabouts, and the existing trail will be improved or realigned including two grade-separated trail crossings. Overhead signs will be installed to guide drivers through the new intersection.
- Geotechnical Challenges | Extensive adjustments to proposed structure foundation designs are necessary due to the inconsistent competent rock elevations relative to the original plans. As a result, a mixture of driven pile, pre-bored pile, and spread footings are being utilized to provide proper bearing.
- Public Relations | Branch is partnering with VDOT and Virginia Tech to keep the public informed of planned improvements and current progress.
- Maintenance of Traffic and Traffic Management Plan (TMP) | The existing intersection at US 460 and Southgate Drive is remaining active during construction. A phased traffic control plan is being followed to maintain traffic on US 460, which carries 40,000VPD, and Southgate Drive. Time restrictions are in place to limit disruptions to the travelling public. Intermediate completion dates and durations are in place to construct the project in areas where new construction overlaps with existing.



**Branch's Role** 

Branch is the Prime Contractor for the project which includes overseeing all aspects of construction. Branch is self-performing all activities associated with erosion control, mass grading, fine grading, storm drain, water/sewer, base stone, and traffic control installation and maintenance. Branch is managing all subcontractors on the project including the construction of the diverging diamond bridge, box culverts, overhead signs and asphalt paving. Branch is partnering with VDOT and Virginia Tech to participate in Public Outreach and education opportunities about the construction and the diverging diamond intersection.

#### Verifiable Evidence of Good Performance

- improvements being constructed.
- viable path forward to maintain scheduled progress.
- schedule.
- wall with a cut slope resulting in \$1.4M in project savings.



NEW GRADE SEPARATED

**INTERSECTION AND** 

**ROUNDABOUTS – PROJECT IS** 

**6 MONTHS AHEAD OF** 

**SCHEDULE** 

**Relevancy to the Warrenton Southern Interchange** 

Maintenance of Existing Lanes

Safety, Congestion Concerns

Grade Separated Interchange

Geotechnical Constraints

Roundabout Construction

Traffic Control Devices

Stakeholder Coordination

Public Involvement/Relations

Bridge Construction

Overhead Signs

Value Engineering

High Traffic Volumes

Complex MOT

**Road Widening** 

 $\checkmark$ 

V

 $\checkmark$ 

 $\checkmark$ 

~

**Public and Stakeholder Outreach** | Branch is taking an active role in partnering with VDOT and Virginia Tech. Branch has hosted public outreach meetings to educate the industry, general public, and Virginia Tech affiliates on the

Geotechnical Challenges | Branch is proactively working with VDOT to mitigate impacts from the differing site conditions presented by the variations in rock discovered at all major structure locations and is assisting with establishing the most

Meeting Milestone Dates | Branch has successfully constructed two roundabouts at Research Center Drive and Duck Pond Drive. Branch worked with VDOT to reduce the number of phases to construct the Duck Pond Drive roundabout effectively reducing the overall schedule and improving the quality and constructability. The project is currently 6 months ahead of

Value Engineering | Branch and WRA have teamed up to provide a Value Engineering Proposal that replaced a soil nail

#### 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	c. Contact information of the Client and	d. Construction	e. Construction	f. Contract Valu	e (in thousands)	g. Design Fee for the Work
	contractor responsible for overall	their Project Manager who can verify	Contract Start	Contract	Construction	Construction	Performed by the Firm identified
	construction of the project.	Firm's responsibilities.	Date	Completion	Contract Value	Contract Value	as the Lead Designer for this
				Date (Actual	(Original)	(Actual or	procurement.(in thousands)
				or Estimated)		Estimated)	
Name: Route 29 Solutions	Name:	Name of Client.: <b>VDOT</b>					
Design-Build – Berkmar	LANE/Corman JV	Phone: (434) 529-6310		10/2017	\$116 746	\$116 746	
<b>Drive Extension</b>		Project Manager: Mr. Dave Covington	02/2017	(Design	(Berkmar: \$34 625)	(Berkmar: \$34 625)	\$2,200
Location: Albemarle County, VA		Phone: (434) 529-6310 Email:Dave.Covington@VDOT.Virginia.gov		Completed: 12/2015)	(2011)	(2011)	

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.

WRA's Role | WRA is currently part of the Route 29 Solutions LANE/Corman JV Design-Build Team contracted by VDOT to design and construct three project elements under one **Relevancy to the Warrenton** contract in Albemarle County to alleviate congestion on the heavily traveled Route 29 corridor. WRA is designing the Berkmar Drive Extension Project as a subconsultant to the lead Southern Interchange design firm. WRA completed approximately 90% of the design services from the Virginia offices. The project construction is expected to be complete next month (June 2017). ✓ VDOT Design-Build **Project Description/Narrative:** ✓ Roadway Roadway | WRA designed the Berkmar Drive Extension, a 2.5-mile Urban Connector roadway on new location. The typical section consisted of two travel lanes with bike lanes, a 5' ✓ Bridge Construction sidewalk on the west side, a 10' shared use path on the east side and includes extensive landscaping along the corridor. The project provides right-of-way for an ultimate four-lane ✓ Utility Relocations Design divided roadway with a 16' raised median. The alignment of Berkmar meanders through a greenfield area, providing a context sensitive curvilinear alignment connecting to the (Water & Sewer) roundabout at Town Center Drive. The final alignment avoided impacts to several cultural resource sites and minimized impacts to wetlands and stream crossings. The earthwork for ✓ Shared-use path the project was designed to be balanced, thereby reducing project costs, though embankments and cut slopes exceeded 40 feet in height in some locations. ✓ Roundabout Design ✓ Hydraulics Roundabout | The project begins at the existing intersection at Berkmar Drive and Hilton Heights and replaces the existing intersection with a single-lane roundabout to allow the free ✓ Complex MOT flow of traffic onto the new north/south route, while providing a context sensitive and traffic calming element at the intersection. ✓ Pedestrian Accommodations ✓ Public Bridge | Structural design services included a three-span continuous structural steel bridge 716 feet long and 53-foot wide, jointless structure using Virginia-Style abutments on a 10-Involvement/Communications degree skew. Unique design elements include long spans up to 270 ft. in length and 6'-6" diameter drilled shafts supporting the two multi-column piers. Additionally, one ✓ QA/QC abutment utilized an MSE wall to support the Virginia-Style abutment integrated with reinforcing straps in the abutment to resist all overturning forces, with a total abutment ✓ Construction Engineering height over 35 feet. Designs were closely coordinated with the geotechnical design to ensure overall stability and long-term performance. Hydraulic Analysis and Design |: A major element of the project design was the storm drainage and storm water management for a "greenfield" project. WRA Verifiable Evidence of Good Performance designed eight enhanced storm water management basins along the corridor for both water quality and quantity requirements, and utilized the purchase of water quality Accelerated Design and VPDES credits to minimize the environmental impacts of the project. The project is one of the first greenfield project designed to meet the new DEQ Part II-D SWM Permitting to allow grading south of Regulations requiring an innovative approach to SWM. There are eight stream crossings of the project requiring a detailed H&H analysis to ensure the proposed the river to begin in conjunction with roadway embankment would not increase the 100-year storm elevation on private property at the crossing. Route 29 Widening. Quality design allowed roadway and WRA, as part the Route 29 Solutions Team, designed water main and collection sewer relocations including in-kind replacements of 930 feet of 24-inch diameter bridge construction to be completed water main and 700 feet of 18-inch diameter water main. In addition 8,760 feet of 12-inch diameter water main was upgraded to a 24-inch diameter water main and well ahead of schedule.

Authority (RWSA) and the sewer upgrade was a project betterment for the Albemarle County Service Authority (ACSA).

The project was designed on an accelerated schedule for right-of-way plans in six months and construction plans in nine months, which paved the way for construction to stay well ahead of schedule and deliver this long-anticipated project to the region in advance of initial estimates.



### ATTACHMENT 3.4.1(b)

## **LEAD DESIGNER - WORK HISTORY FORM**

impacts and costs.

Early public outreach resulted in true

# (LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general	c. Contact information of the Client and	d. Construction	e. Construction	f. Contract Valu	e (in thousands)	g. Design Fee for the Work
	contractor responsible for overall	their Project Manager who can verify	Contract Start	Contract	Construction	Construction	Performed by the Firm identified
	construction of the project.	Firm's responsibilities.	Date	Completion	Contract Value	Contract Value	as the Lead Designer for this
				Date (Actual	(Original)	(Actual or	procurement.(in thousands)
				or Estimated)		Estimated)	
Name: Fairfax County	Name: Shirley Contracting	Name of Client.: VDOT					
Parkway Interchange at	Company, LLC	Phone: (703) 259-1723					
Fair Lakes Parkway		Project Manager: Mr. Nassre Obeed	10/2010	12/2013	\$43 961	\$43,372	
Location: Fairfax County,		Phone: (703) 259-1723	10/2010	12/2015	ψ13,701	Owner changes	\$3,736
VA		Email: Nassre.Obeed@vdot.virginia.gov				in Scope	

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.

WRA's Role | Whitman, Requardt & 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 **Relevancy to the Warrenton** intersection of the Fairfax County Parkway and Fair Lakes Parkway/Monument Drive intersection. WRA completed approximately 90% of the design services from our Virginia offices. Southern Interchange The project was partially funded with ARRA funding for construction, which required extensive coordination with FHWA. The project features include: ✓ Interchange Project Description/Narrative: Roadway Reconstruction and Widening | 2.3 miles of Fairfax County Parkway (FCP) was widened into the median increasing the number of lanes from ✓ Roadway Widening 4 to 6 and 0.7 miles was totally reconstructed to facilitate raising FCP up and over Fair Lakes Parkway and Monument Drive. Over 3,000 feet of Fair Lakes Parkway was ✓ Utility Relocations Design widened/reconstructed to provide additional turn lanes. (Water and Sewer) Interchange Design | The project included the design of a Split-Diamond Interchange to provide access to both Fair Lakes Parkway and Monument Drive. The four ramps intersected with ✓ Traffic signal both Fair Lakes Parkway and Monument Drive at coordinated signalized intersections with multi-lane approaches. ✓ Intersection Design ✓ Geotechnical 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 ✓ Hydraulics 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 ✓ Traffic Control Devices Parkway are located on dams for regional stormwater management lakes, which are regulated by DEO. The dam was being modified by the project, and a new stormwater outfall was ✓ TMP extended into the existing lake to provide water quality requirements for the project. This required WRA to complete a dam break analysis and coordination for review of the dam modification with DEQ and Fairfax County. ✓ Complex MOT 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 ✓ Public Involvement/ 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 Communications design included under bridge lighting for the sidewalks and pedestrian movements. The project also included widening the Fairfax County Parkway Bridge over Route 50 by ✓ QA/QC 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 ✓ Construction Engineering aesthetically similar to the existing piers. 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 Verifiable Evidence of Good Performance Community. The geotechnical design efforts included an evaluation of all of the walls and the final design of bridge foundations. The retaining wall featured a two-Detailed traffic analyses of each phase tier soil nail wall, which was one of the first soil nail walls utilized by VDOT. of construction resulted in improved Traffic Control Devices | The project included freeway overhead signing for the I-66, Fair Lakes Parkway and Route 50 interchanges including ITS facilities. Signals traffic operations during construction. were designed for 7 intersections with coordinated signal timing plans to ensure the efficient flow of traffic through the project. Innovative approach to stormwater management reduced right-of-way

TMP Plans | The project consisted of multiple phases of construction with a complex TMP analyzing each phase. The design required the detour of existing turning movements.

Public Involvement | Since the 1980s, the Fair Lakes Community has maintained the VDOT right-of-way with landscaping, decorative signage, mowing, and enhancements to the final project. reserved the right-of-way for the future interchange project. WRA 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. Resulting in significant cost savings to the project. The finished project enhanced the community and provided significant improvements to traffic operations. WRA also developed materials for both a Citizens' Information Meeting and a Design Public Hearing.

Fairfax Parkway Interchange at Fair Lakes Parkway



## 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	c. Contact information of the Client and	d. Construction	e. Construction	f. Contract Valu	e (in thousands)	g. Design Fee for the Work
	contractor responsible for overall	their Project Manager who can verify	Contract Start	Contract	Construction	Construction	Performed by the Firm identified
	construction of the project.	Firm's responsibilities.	Date	Completion	Contract Value	Contract Value	as the Lead Designer for this
				Date (Actual	(Original)	(Actual or	procurement.(in thousands)
				or Estimated)		Estimated)	
Name: MD 210 Interchange	Name: Concrete General	Name of Client: Maryland State Highway					
at Kerby Hill		Administration		08/2019			
<b>Road/Livingston Road</b>		Phone: 410-545-0379	00/2015	Adjusted by owner	<b>\$93 (00</b>	<b>\$93 (00</b>	¢ 4 500
Design-Build		Project Manager: Mr. Jason Stolicny	08/2015	for right-of-way	\$82,000	\$82,000	\$4,500
Location: Prince		Phone: 410-545-0379		acquisition			
George's County, MD		Email: jstolicny@sha.state.md.us					

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	WRA Role   WRA is the Lead Design firm for the	he MD 210 at Kerby Hill/Livingston Road Design-Build project. The WRA Baltimore office is completing			
Relevancy to the Warrenton	the final construction documents in May 2017.	The project reconstructs MD 210 and provides a grade-separated interchange of MD 210 with Kerby Hill			
Southern Interchange	Road/Livingston Road. SHA had identified MD	210 (Oxon Hill Road) from I-95/I-495 (Capital Beltway) to MD 228 (south of Kerby Hill Road/Livingston			
✓ Design-Build	Road) as a highly congested corridor and propos	ed overpasses at each main signalized intersection. The interchange at Kerby Hill Road/Livingston Road is			
✓ Interchange	the first of several projects to relieve traffic conge	estion.			
✓ Roadway Widening	Roadway Design   The project converts MD 210	to an urban freeway with projected traffic volumes of 102,000 ADT in 2035. The project improves 1.9 miles			
✓ Utility Relocations Design	of MD 210 to a six-lane urban freeway. The Kirb	y Hill Road/Livingston Road innovative interchange incorporates median ramps in lieu of the standard outer			
(Water and Sewer)	ramps. Kirby Hill Road/Livingston Road were re	constructed and elevated over MD 210 and the project provides service roads along MD 210.			
✓ Intersection Design	Hydraulic Analysis   The project required the h	ydrology/hydraulics analysis for the proposed bridge over Carey Branch including stream assessment and			
✓ Geotechnical	relocation analysis and design. The design include	ded developing an innovative SWM plan to contain the various and SWM facilities within the constrained			
✓ Hydraulics	right-of-way. SWM design included a total of five	e bio-swales, three wet-swales, two submerged wetlands, and ten micro-bioretention facilities for quality and			
✓ Traffic Control Devices	quantity control facilities. The project also requir	e major culvert extensions requiring a full hydraulic analysis.			
✓ TMP	Geotechnical Engineering   WRA provided geo	technical design for all roadway and structural elements of the project including foundation design for box			
✓ MOT	culvert extensions, retaining walls, bridges, and noise walls, sign, embankments with reinforced soil slopes to minimize right of way impacts and analysis of				
✓ Public Involvement/	undercut and pavement design.				
Communications	Structural Design   The design includes two new bridges over MD 210, (136 ft. long two span and 111 ft. single span, both bridges have complex geometry				
✓ QA/QC	to accommodate the signalized intersection) and a new bridge over Carey Branch 74 ft. long single span. The ramps in the median are supported on MSE				
✓ Construction Engineering	retaining walls requiring a detailed analysis of c	onstructability within a narrow median. The extension of the box culverts require special design details to			
	account for settlement due to the poor soil condit	ions at the project site.			
Verifiable Evidence of Good Perform	ance	Traffic Engineering   A complex TMP with multiple phases of construction minimizes impacts to traffic			
<ul> <li>WRA developed a Design Qualit</li> </ul>	v Control Plan to ensure the overall quality of	operation during construction with a major focus on construction access within the median of MD 210. The			
design and provide design submit	tals that met or exceeded the RFP requirements.	extensive MOT includes temporary roadway connections utilizing proposed service roads to maintain			
<ul> <li>The DB Team meet with utility c</li> </ul>	companies and utility designers regularly during	access to Livingston Road and Kerby Hill Road from/to MD 210. The plans were developed to allow the			
design and relocation to resolve is	sues and conflicts.	main signalized intersection to remain operational as long as possible to minimize the duration of detours			
<ul> <li>An advanced pavement patch program was performed to rehabilitate select</li> </ul>		for the turning movements affected during subsequent construction phases. The project includes new			
deteriorated pavement prior to the	actual scheduled work.	signing, new traffic signal at the intersection of the MD 210 median ramps, pavement markings, ITS			
<ul> <li>Public outreach program extende</li> </ul>	d from a project-wide stakeholder meetings to	facilities and interchange and intersection lighting.			
individual community groups.	1 5 0	Utility Relocation   The project requires the relocation of electrical, communication, cable and fiber optic being			
<ul> <li>Partnering meetings with the owner</li> </ul>	vner, the contractor and WRA are expediting	sewer and gas (7,300 LF of 12 <sup>th</sup> high pressure gas main) performed by the Design-Build team. A key componen			
critical issues to maintain the sche	edule critical project.	concurrent with construction. Monthly utility coordination meetings with utility owners, SHA and the DB team a			
		design and construction. Conflicts between the proposed utility design and the roadway design were identified ear			
	Coordination   Dublic outroach for the MD 210 nm	to the project schedule and cost. The Design-Build team worked with the utility relocation personnel to prioritize re			

Public Involvement and Stakeholder Coordination | Public outreach for the MD 210 project includes a formal public meeting, and attendance and presentations at several community associations.



design and relocated by utility owners and the relocation of water, sanitary of the project was to coordinate and relocate existing utilities prior to and re a priority to coordinate the proposed utility relocations with the roadway ly and changes to the design implemented quickly to avoid potential impacts locations, which benefitted the utility owner and the construction schedule.





