



REPLACEMENT OF I-81 STRUCTURES 18942 & 18944  
OVER ROUTE 808 (HALLS BOTTOM ROAD) AND SINKING CREEK  
STATE PROJECT NO.: 0081-095-038

CONTRACT ID NO.: C00107116DB85

STATEMENT OF QUALIFICATIONS



VECELLIO  
& GROGAN, INC.



VECELLIO & GROGAN, INC.

Suril R. Shah  
Alternate Project Delivery Office  
Virginia Department of Transportation  
1401 East Broad Street  
Richmond, VA 23219

November 9, 2015

**Reference: Expression of Interest for the Replacement of I-81 Structures 18942 & 18944 over Route 808 (Halls Bottom Road) and Sinking Creek, State Project No.: 0081-095-038, Contract ID No.: C00107116DB85**

Dear Mr. Shah:

The proposed project will completely replace the existing bridges carrying I-81 over Route 808 (Halls Bottom Road) and Sinking Creek in Washington County near the I-81 Mile Marker 11 between Bristol and Abingdon. This includes conducting the associated approach work while minimizing impacts to the traveling public by:

- Maintaining two lanes of traffic in each direction of I-81 during construction
- Limiting construction within the existing right-of-way
- Avoiding impacts to other existing facilities

The scope of work includes the design and construction of the replacement structures and associated roadway approaches, surveying, environmental and geotechnical engineering, hydraulics, the design and installation of traffic control devices, the development and implementation of a comprehensive transportation management plan (TMP), utility work, public involvement/relations, quality assurance and quality control, construction engineering and inspection, and overall project management. The optimal design and construction approach will also incorporate context sensitive solutions where appropriate, as well as specific design features/special design elements to allow for future bridge widening.

**Vecellio & Grogan, Inc.** (V&G) is the Offeror. We regularly and reliably produce high-quality results to project owners throughout the Mid-Atlantic United States safely, on-time, and within budget. Every project contains some elements of risk. Our job, as your design-builder, is to proactively manage that risk to controllable levels such that the overall project goals are achieved. Specifically, we will:

1. Safely and efficiently **maintain traffic along I-81** during construction by implementing a multi-faceted TMP.
2. Address the challenging **karst geology** (highly variable rock surface elevation, zones soft clay above or within the rock, and voids, sinkholes, and caves) by using Schnabel Engineering Consultants, Inc. staff that understand the local geology and have experience developing local foundation design solutions.
3. Carefully analyze **construction scheduling/sequencing/median access** by:
  - Facilitating *regular coordination meetings* with VDOT and the contractor for the adjacent I-81 Exit 14 project, W-L Construction & Paving, Inc., to coordinate traffic-related issues
  - Fine-tuning the sequencing plan to develop the *safest and most cost-effective construction plan*
  - Introducing a *median construction access ramp* that allows construction trucks to access the median work zone from Route 808 (Halls Bottom Road) for the portion of the median located south of the bridge

V&G believes that working hand-in-hand with owners and designers is the key to exceeding project expectations. Our experience enables us to deliver the high quality and technically sound project VDOT expects. We have selected **STV Incorporated** (formerly Ralph Whitehead Associates in the southeastern US) (STV) as our lead designer. Since 1960, STV has designed nearly 1,000 bridges in the southeast. The firm has maintained a presence in Virginia since 1985, with a lengthy history of roadway and bridge design for VDOT. Additionally, STV has 34 individual design-build projects on its resume in the area, including the \$43 million I-581/Valley View Boulevard Interchange project (adjacent to Valley View Mall in Roanoke, VA), which has some similarities to this undertaking. More importantly, V&G and STV have a **substantial portfolio** of past project experience completed in conjunction with one another:

- STV designed and V&G constructed the \$50 million Bryan Boulevard Extension at the Piedmont Triad International Airport near Greensboro, NC. The project included roadway design to interstate standards and several complex bridges. STV also provided extensive construction phase services under contract to V&G.

- STV and V&G recently completed a value engineering proposal (VEP) for the redesign of the 4,000-foot long US 220 (Battleground Avenue) Bridge as part of the \$122 million Greensboro Western Loop. This VEP entailed an extensive redesign of the major bridge, essentially in a design-build atmosphere where designers and contractors collaborated on a cost effective re-engineering of the project.
- STV has performed dozens of construction-related assignments for V&G through an open-end contract.

Rounding out our team, **NXL Construction Services, Inc.** (NXL) will be responsible for the independent QA inspection and testing; **McCormick Taylor** will be responsible for hydraulics, environmental, and public outreach services; **Thompson & Litton** will be responsible for surveys and utilities; and **Schnabel Engineering Consultants, Inc.** (Schnabel) will be responsible for geotechnical engineering and pavement design.

We make the following required certifications.

**3.2.1** The full legal name and address of the Offeror is:

Vecellio & Grogan, Inc., 2251 Robert C. Byrd Drive, Beckley, WV 25801.

V&G is the legal entity who will execute the contract with VDOT. This letter is signed by our authorized representative.

**3.2.2** The Offeror's single point of contact is:

*Name:* Robert C. Williams

*Title:* Director of Engineering

*Address:* 2251 Robert C. Byrd Drive, Beckley, WV 25801

*Phone number:* (304) 252-6575 | *Fax number:* (304) 252-4131

*E-mail address:* rob.williams@vecelliogrogan.com

**3.2.3** The Offeror's principal officer is:

*Name:* Matthew A. Farley

*Title:* Vice-President, Structures

*Address:* See left

*Phone number:* (304) 252-6575 | *Fax number:* (304) 252-4131

*E-mail address:* matt.farley@vecelliogrogan.com

**3.2.4** V&G is a corporation licensed in 12 states and formed in West Virginia in 1938. V&G is the Offeror. As the contracting entity with VDOT, we will undertake the financial responsibility, provide 100% performance and payment bonding, and hold no liability limitations for same. Our proposed design-build team will be structured to provide VDOT with a single point of responsibility for completion of the project and performance of the team.

**3.2.5** The full legal name of the lead contractor for this project is **Vecellio & Grogan, Inc.** V&G is responsible for overall construction of the project and will serve as the legal entity who will execute the contract with VDOT. The full legal name for the lead designer for this project is **STV Incorporated dba STV Group Incorporated.** STV is the prime design consulting firm responsible for the overall design of this project.

**3.2.6** We provide the full legal name and address of all affiliated and/or subsidiary companies on Attachment 3.2.6. We are not submitting more than one statement of qualifications for this project.

**3.2.7** We have executed and returned the Certification Regarding Debarment Form(s) Primary Covered Transactions and Certification Regarding Debarment Form(s) Lower Tier Covered Transactions.

**3.2.8** V&G's VDOT prequalification number is V004 and our current VDOT prequalification status is active. The attachments section of this statement of qualifications contains a copy of our VDOT prequalification certificate.

**3.2.9** We include a letter from Friedlander Company in the attachments section, stating that V&G is capable of obtaining a performance and payment bond based on the current estimated contract value.

**3.2.10** Our team will comply with the law with regard to their organizational structure, any required registration with governmental agencies and/or entities, and any required governmental licensure. All business entities on our team are eligible to offer and to provide any services proposed or related to the project. We will satisfy all commercial and professional registration requirements. Full size copies of DPOR licenses and SCC registrations are included in the attachments and the additional required information is provided on Attachment 3.2.10.

**3.2.11** V&G is committed to achieving a 2% DBE participation goal using the services of firms certified in Virginia as DBEs. It is also our intention to take the necessary and reasonable steps to make sure SWaM firms have the maximum opportunity to compete for and perform services for this design-build contract.

In closing, we understand the processes and procedures that must be implemented to complete complex design-build projects for VDOT. You can be confident that we will mobilize the resources to provide on-time, on-budget completion while satisfying the requirements of this project. The enclosed statement of qualifications has been prepared in accordance with the terms of the RFQ dated September 25, 2015 and Addendum No. 1 dated October 15, 2015.

Sincerely,



Matthew A. Farley  
Vice-President, Structures



### 3.3 Offeror's Team Structure



### 3.3 Offeror’s Team Structure



As the offeror, V&G will undertake financial responsibility for the completion of this project. V&G’s role will involve managing the entire project, supervising construction, and performing major elements of the construction work.

The VDOT project manager can expect **partnership** and **open communication**. Our organizational structure includes staff to address QA and safety measures and is organized to facilitate sound decision-making and timely project delivery.

**Construction subcontractors** under subcontract to V&G will include our AASHTO-accredited QA lab, ECS Mid-Atlantic, LLC. STV will lead the design effort for all aspects of the project, will execute and manage the design effort, and will be responsible for design QA/QC. **Design subconsultants** are listed in the table below. Each firm supplements and enhances our team’s capabilities, while simultaneously allowing participation by SWaM and DBE firms in support of VDOT’s 2% DBE goal for this project.

#### 3.3.1 Key Personnel

We consider VDOT management and staff to be true project partners, working alongside the V&G team.

#### Design-Build Project Manager

Andy Jenkins will lead our team. He is responsible for the overall project, construction quality management, and contract administration. He will facilitate communication among team partners, monitor design efforts to proactively eliminate potential constructability issues prior to breaking ground, and delegate resources to deliver the project on time. He will be responsible for the overall project design and construction and has the expertise and experience to supervise and exercise control of the work, including quality management, contract administration, and other services. Mr. Jenkins also has extensive experience coordinating public outreach activities and facilitating public meetings.

Mr. Jenkins has project engineering and management experience leading bridge and roadway construction projects in Virginia, West Virginia, and North Carolina.

*All resources report directly to the design-build project manager.*

*Our key personnel and managers have existing professional relationships with VDOT.*

*Our team includes specialty subconsultants who know the project area and can help mitigate key project risks, such as the karst geology.*

As displayed in the organizational chart, the following key personnel will report directly to Mr. Jenkins, leading their respective groups.

#### Quality Assurance Manager (QAM)

Joseph Hamed, P.E., CCM, PMP (NXL) will serve as the single point of responsibility for the QA inspection and testing and monitoring of the contractor’s QC program. He is a registered, licensed Professional Engineer in Virginia. Mr. Hamed will act independently of the construction team and report directly to the design-build project manager. He will be responsible for QA inspection and testing of all materials used and work performed on the project, including the contractor’s QC program. He will verify that work and materials, testing, and sampling are performed in conformance with the contract requirements and approved plans and specifications.

Mr. Hamed has more than 20 years of experience in the transportation construction industry. As a former contractor and VDOT Area Construction Engineer, Mr. Hamed has a broad construction management background with extensive experience in contract management, bidability/constructability review, claims prevention/analysis, and QA/QC on bridge and roadway projects across the Commonwealth. In his current role, he serves as NXL’s QAM for design-build projects, making sure all contract requirements and specifications are appropriately administered and applied.

#### Design Manager

Ronald Briggs, P.E. (STV) will coordinate all design activities. He will work with the QAM, as well as each key design lead, to comply with the requirements of the QA/QC

Design Subconsultant	Services Provided and Benefit to VDOT
NXL (DBE/SWaM)	<ul style="list-style-type: none"> <li>The QAM is responsible for the QA inspection and testing and monitoring of the contractor’s QC program</li> <li>Malcolm Kerley, P.E., is NXL’s president; during his time as VDOT’s Chief Engineer, he was responsible for construction oversight of all VDOT projects</li> </ul>
McCormick Taylor	<ul style="list-style-type: none"> <li>Providing hydraulics, environmental, and public outreach services</li> <li>Knowledge of project constraints, risks and opportunities to fulfill all commitments included in the NEPA document and expedite the acquisition of water quality permits</li> </ul>
Thompson & Litton (SWaM)	<ul style="list-style-type: none"> <li>Performing surveys and conducting utility work</li> <li>More than 50 years of VDOT experience and headquartered in Virginia</li> </ul>
Schnabel	<ul style="list-style-type: none"> <li>Providing geotechnical engineering and pavement design services</li> <li>Developed the Geotechnical Data Report for this project; uniquely qualified to help proactively address the karst geology and associated soil and rock conditions underlying this site</li> </ul>

plan. Mr. Briggs has been involved with complex design-build projects, including VDOT's improvements to the I-581/Valley View Boulevard Interchange project in Roanoke, VA. He is well-versed in all aspects of design-build delivery, including design concept validation, value engineering, risk management, and project controls.

A lifetime resident of Virginia, Mr. Briggs' 40-year career includes eight years with the VDOT Structure and Bridge Division. Since 1985, he has led all design activities of STV's Richmond office, completing well over 50 VDOT projects.

Mr. Briggs will bring proven processes and will foster collaboration beginning on day one. His design portfolio includes the replacement of the I-95 bridges over Meherrin River, the widening of dual bridges on Route 58 over CSXT and Norfolk Southern in Suffolk, VA, and widening and superstructure replacement for Lynnhaven Parkway over London Bridge Creek in Virginia Beach, VA. Having been involved throughout the construction of numerous major projects, Mr. Briggs brings a keen insight into constructability issues, which will benefit the Department on this project as MOT and staging plans are developed to maintain traffic flows and to reduce impacts to the traveling public. For example, on the I-95 over Meherrin River project, Mr. Briggs oversaw the development of a detailed TMP to maintain traffic on heavily traveled roadway located just south of the existing US 58 interchange.

Mr. Briggs served as the lead structures engineer on the I-581/Valley View Boulevard Interchange Improvements project, where he was responsible for the design of all bridges and structures. The estimated \$43 million design-build project includes the widening and rehabilitation of the existing bridge carrying Valley View Boulevard over I-581, a shared use path bridge over I-581 and ramps W and X, three retaining walls, an extension of an existing box culvert, and more than 6,000 feet of sound barrier walls. One of the chief challenges on this project was designing the bridge foundations for the karst geology that was present. During construction several piles had to be abandoned and the foundations altered due to the highly variable rock surface elevation. **A design manger with interstate bridge replacement experience in similar geologic settings is critical to the success of this project.** Mr. Briggs offers directly relevant experience designing bridge foundations in karst geology through the I-581/Valley View Boulevard project, as well as the Route 340 over Hawksbill Creek bridge replacement project in Luray, VA.

### Construction Manager

Russell Lee will control day-to-day construction operations by providing direction to lower level managers and making subcontractors aware of the schedule to assure their availability to perform necessary functions. He will act as the construction liaison, discussing daily needs to facilitate on-time completion. Additionally, he will develop and manage the CPM schedule to anticipate and resolve potential delays.

Mr. Lee, **who will be on the project site for the duration of construction operations**, has previous experience managing the construction process, including all QC activities to make sure the materials used and work performed meet contract requirements and the approved construction plans and specifications. For example, Mr. Lee was responsible for management of all bridge and structure construction operations for V&G's \$45 million project to construct two multi-span bridges over environmentally-sensitive areas and residential traffic south of Madison and North of Davey Branch in Logan County, WV. His duties included coordination of labor, equipment, subcontractors, and materials. He was also responsible for daily interaction and coordination to ensure compliance with all specifications and contract requirements.

For construction activities, V&G will also assign full-time superintendents for both the roadway (Eddy Adkins) and structure components (Reggie Lee), both of whom report to our construction manager. Their primary duties include direct supervision of the construction crews, making sure assignments are completed safely and in accordance with the specifications. Dividing the superintendent responsibilities into these two positions advance the appropriate components' schedules in tandem to provide seamless and timely project delivery.

### Qualified Staff for Significant Positions

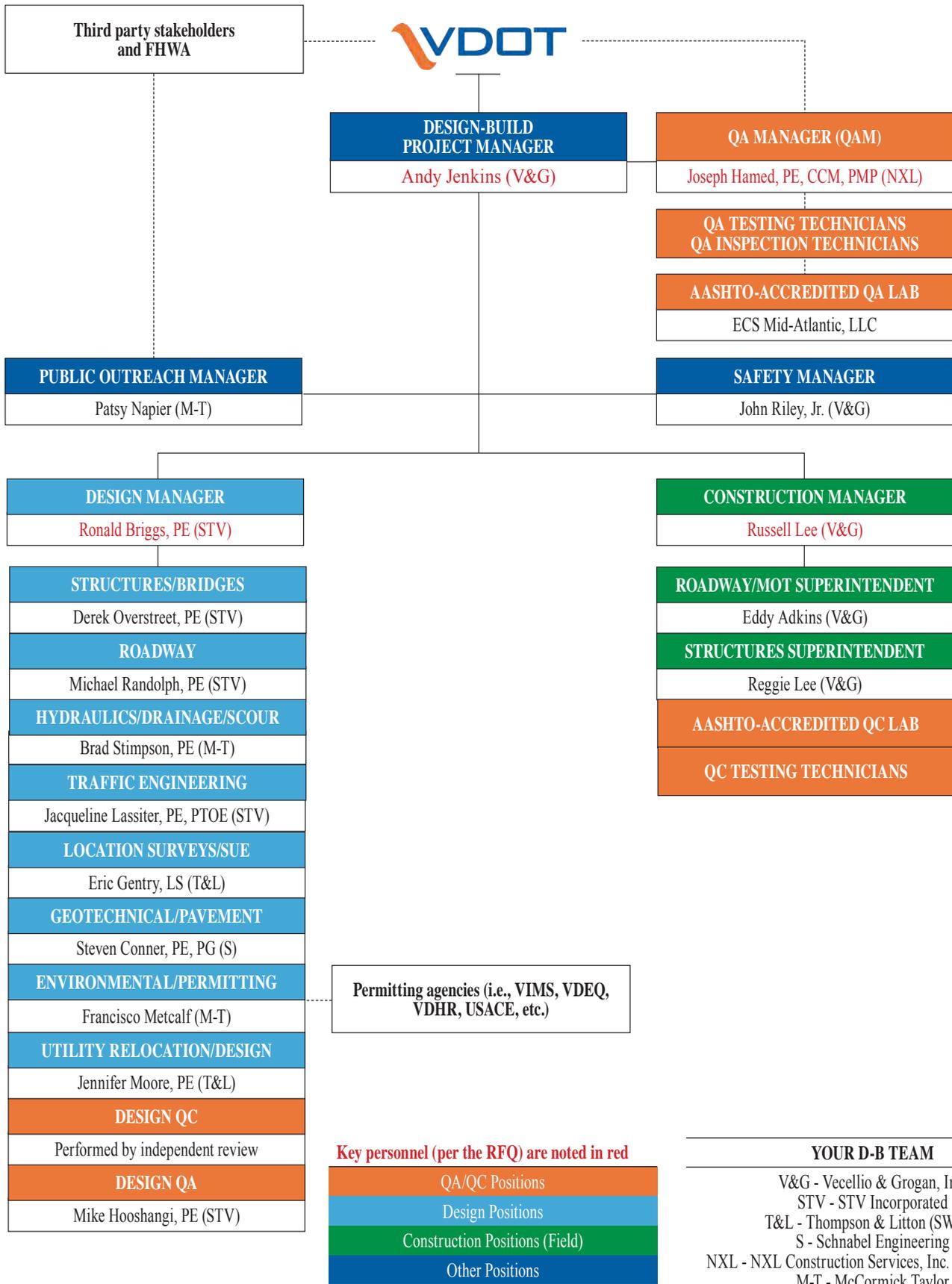
V&G is assigning John Riley, Jr., an experienced safety manager, to lead our **safety program**. This oversight assures that personnel involved in the day-to-day activities are safety trained and qualified to perform their respective duties. He will perform inspections to assist the on-site supervisors in maintaining a safe working environment. **Public involvement** is also a critical component of this project. Patsy Napier (McCormick Taylor) will help the project team keep the traveling public apprised of all construction operations.

### 3.3.2 Organizational Chart

Our relationships are effective, functional, and benefit from a common accountability initiative—to safely and soundly complete the project expeditiously.

Best management practices will be implemented under the direction of Mr. Jenkins to establish a collaborative partnership with VDOT. V&G and STV, both independently as well as through many successful projects together, are both experienced in developing and maintaining effective lines of communication within the project team. Though reporting relationships are rigid, the lines of communication within the team are fluid and flexible enough to meet the requirements of each individual project activity.

Our organizational chart is presented on the next page. The V&G team organization has a straightforward chain of command, with individual tasks and responsibilities clearly identified. Our organizational chart identifies key personnel and major functions to be performed for the successful design and construction of this project.



**Key personnel (per the RFQ) are noted in red**

QA/QC Positions
Design Positions
Construction Positions (Field)
Other Positions

**YOUR D-B TEAM**

V&G - Vecellio & Grogan, Inc.  
 STV - STV Incorporated  
 T&L - Thompson & Litton (SWaM)  
 S - Schnabel Engineering  
 NXL - NXL Construction Services, Inc. (DBE/SWaM)  
 M-T - McCormick Taylor



**3.4 Experience of Offeror's Team**



## 3.4 Experience of Offeror's Team



With headquarters in West Virginia and a division in North Carolina, V&G operates throughout the Mid-Atlantic and Southeastern United States and beyond. Our services include bridge construction, expert excavation, grading, utilities, and roadway construction.

Since our establishment in 1938, V&G has earned a reputation for quality and integrity. Even when tackling the most difficult projects, we distinguish ourselves through creative solutions and quality workmanship, often setting new standards for a rapidly changing industry.

Our long track record of success speaks for itself, providing a testimony of our ability to execute projects with skill, responsibility, and integrity.

V&G is one of the nation's Top 400 contractors, as ranked by *Engineering News-Record*. We've earned a positive reputation for the construction of bridges, retaining walls, and other concrete-related work. We have built bridges longer than 2,000-ft and over 130-ft wide. This includes split bridges, including one project with 13 individual bridges. On another project, we had exactly seven days and nights to lift, splice, and place 45 steel girders in 15 lines spanning 286-ft between abutments—and we made it with time to spare.

In addition to this vast and varied experience, VDOT will benefit from our extensive bonding capacity and one of the industry's most impressive safety records. V&G has a long history of partnering with VDOT on projects throughout

the western part of the Commonwealth. Recent experience includes VA Route 83 near Vansant, US Route 288 near Richmond, and the "Smart Road" roadway in Blacksburg. V&G's experience in Virginia, and throughout the Mid-Atlantic, qualifies us to lead this project.

STV will serve as lead designer under contract to V&G, managing the design efforts for all aspects of the project. Having provided services to VDOT on a continuous basis since 1985, STV has depth and breadth of qualified resources.

STV brings more than 103 years of experience providing well-conceived and cost-effective engineering services for bridge replacement and rehabilitation projects on high volume roadways. The firm presents a portfolio of projects that includes fixed and movable bridges, long-span and complex bridges, and simple structures and viaducts. The firm's expertise covers all aspects of bridge engineering, including condition inspection, planning and design, construction support, and resident engineering and inspection. With a combined total of more than 400 roadway, civil, and structural engineers, STV has the ability to meet compressed timeframes to achieve schedule goals. In addition, STV ranks among the premier design-build consultants in the industry, having provided design services for some of the largest design-build transportation projects ever built.

1. High Point West Hartley Drive (V&G and STV)
2. Greensboro Western Loop (V&G and STV)
3. Route 288 at US 60 (V&G)



The firm’s design-build experience, which encompasses large, complex design-build bridge and highway projects, spans a variety of roles ranging from lead designer and design consultant on design-build teams, to developer of bridging documents to help the owner establish base criteria for design-build projects and to identify and complete required environmental clearances.

More importantly, V&G and STV have a **substantial portfolio** of past project experience completed in conjunction with one another:

- STV designed and V&G constructed the \$50 million Bryan Boulevard Extension at the Piedmont Triad International Airport near Greensboro, NC. The project included roadway design to interstate standards and several complex bridges. STV also provided extensive construction phase services under contract to V&G.
- STV and V&G recently completed a value engineering proposal (VEP) for the redesign of the 4,000-ft long US 220 Bridge as part of the \$122 million Greensboro Western Loop. This VEP entailed an extensive redesign of the major bridge, essentially in a design-build atmosphere where designers and contractors collaborated on a cost-effective project re-engineering. Specifically, the VEP was a \$1 million VE (\$500,000 savings to NCDOT) for the reconfiguration of several piers to improve constructability and roadway alignment. V&G worked closely with NCDOT and STV to make sure the best possible design was incorporated into the project.

STV has also performed dozens of construction-related assignments for V&G through an open-end contract. In addition to the experience V&G and STV brings working together, STV brings award-winning design-build experience. The firm was recently awarded the *2015 Design-Build Project/Team Award* in the *Transportation* category by the Design-Build Institute of America for the I-485/I-85 turbine interchange in Charlotte, NC. The design-build process afforded STV and the contractor with the ability to propose an alternative technical concept for a modified interchange, saving \$30 million, with tremendous safety enhancements.

Both V&G and STV have worked on numerous projects where construction staging and sequencing were an integral part of maintaining public access during construction, which are presented in the table on the following page.

#### *Subconsultant Experience*

Working together closely, V&G and STV have carefully selected subconsultants to complement and supplement our in-house expertise, allowing the team to provide the necessary expertise for all the services presented in VDOT’s scope of services and meet the 2% DBE goal. Our final selection considered each subconsultant’s ability to work within the integrated team. Each firm has previous experience working

- 4. I-581/Valley View Boulevard Interchange D-B (STV)
- 5. I-95 over Meherrin River Bridge Replacement (STV)
- 6. I-485/I-85 Interchange Modification D-B (STV)

Project Experience		Limited Access	Staged Construction	Relevant Risk Factors		
				MOT	Geology	Schedule
	Knightdale Bypass (V&G and STV) \$131 million Wake County, NC	<input checked="" type="checkbox"/>				
	Greensboro Western Loop \$122 million (V&G and STV) Guilford County, NC	<input checked="" type="checkbox"/>				
	WV Route 10 \$45 million (V&G) Logan County, WV	<input checked="" type="checkbox"/>				
	Clay County Hartland Bridge \$6 million (V&G) Clay County, WV	<input checked="" type="checkbox"/>				
	I-581/Valley View Boulevard Interchange \$43 million (STV) Roanoke, VA	<input checked="" type="checkbox"/>				
	Route 1 over Main Line Blvd., CSXT, and WMATA \$43 million (STV) Alexandria, VA	<input checked="" type="checkbox"/>				
	I-77 Widening \$84 million (STV) Mecklenburg County, NC	<input checked="" type="checkbox"/>				
	I-485/I-85 Turbine Interchange \$95 million (STV) Charlotte, NC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
	I-85 Yadkin River Bridge \$137 million (STV) Rowan and Davidson Counties, NC	<input checked="" type="checkbox"/>				
	Fort Mill Southern Bypass \$50 million (STV) York County, SC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
	I-485 Widening from Rea Road to I-77 \$85 million (STV) Charlotte, NC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>

on a design-build team and was selected to provide specific technical expertise and staff resources.

### **NXL (DBE/SWaM)**

NXL will be responsible for the independent QA inspection, testing, and monitoring of the contractor's QC program. NXL is a professional construction management and surveying firm. With headquarters in Richmond, VA, NXL provides a wide range of services for various types of transportation and infrastructure projects, including bridges and highways.

NXL is currently working with STV on the I-581/Valley View Boulevard Interchange design-build project in Roanoke, VA. NXL is providing QA inspection and testing of all materials used and work performed. The firm's relevant design-build experience also includes roadway improvements for Wesleyan Drive in Norfolk and Virginia Beach. Wesleyan Drive serves as a major local thoroughfare and access point to Virginia Wesleyan College.

### **McCormick Taylor**

McCormick Taylor will be responsible for hydraulics, environmental, and public outreach services. Since 1946, McCormick Taylor has been providing environmental, engineering, planning, and communications services to transportation clients throughout the Mid-Atlantic region. With over 400 personnel in 13 offices, the firm's current staff has diverse strengths in environmental analysis, highway and bridge design, and construction inspection.

The firm's long list of successful accomplishments includes a wide range of high visibility, groundbreaking, and award-winning transportation planning, communications services and context sensitive design projects. McCormick Taylor has three Virginia offices located in Bristol, Richmond, and Staunton. The firm's recent experience includes the VDOT I-95 HOT Lanes design-build project in Stafford, Spotsylvania, and Prince William counties, VA, as well as the Route 460 Corridor PPTA project in Suffolk, VA.

### **Thompson & Litton (SWaM)**

Thompson & Litton will be responsible for surveys and utilities. The firm's corporate headquarters was established in Wise, VA in 1956 (and this is where it remains today). The firm also has branch offices in Radford, Tazewell, Mosheim, Chilhowie and Clintwood, VA and employs a staff of 124 professionals and support personnel. Thompson & Litton was an engineering member of the I-81/STARS team that has proposed improving 325 miles of I-81 throughout Virginia. Thompson & Litton was also a team member on the Coalfields Expressway project in Buchanan County, providing all field surveying and utility services for the initial 7.5-mile section of the project.

### **Schnabel**

Schnabel will be responsible for geotechnical engineering and pavement design. Schnabel specializes in geotechnical and geostructural engineering, dam and tunnel engineering, environmental services, and sustainable design. Schnabel

maintains in-house soil, materials, and asphalt laboratories that are accredited by AASHTO Materials Reference Laboratory and the US Army Corps of Engineers in their Newport News, Richmond, and Blacksburg offices. Schnabel has been a subconsultant on multiple design-build and public-private partnership support term contracts. VDOT has provided a geotechnical data report (GDR) with the request for qualifications on this project. **Schnabel performed this study.** This firm is in the best position to proactively identify and help develop solutions to mitigate additional costs that could result from foundations (due to a variable rock surface), the backfilling of sinkholes, and undercutting or modifying pavement subgrades.

**Schnabel is the foremost practitioner in karst topography in the eastern United States.** Specifically, the firm has:

- Performed over 2,300 subsurface investigations in karst terrains (primarily in VA, MD, and PA)
- Considerable karst experience with DOTs through a geophysics term contract with the Maryland State Highway Administration, where the sole purpose of a task order was evaluating karst
- An extensive list of relevant publications includes *High Capacity Micropiles in Karst, Challenges and Opportunities*

VDOT is very familiar with Schnabel's karst experience. Relevant projects include the Route 340 widening, where the firm evaluated the impacts of blasting and road construction on sensitive formations within commercial cave systems and on I-81 truck climbing lanes, where Schnabel identified an unknown cave structure under an existing road and recommended geofoam to prevent new embankment stresses on the cave ceiling.

#### **3.4.1 Work History Forms**

Attachment 3.4.1(a) identifies three relevant V&G projects, focusing on what we consider most relevant in demonstrating our qualifications to serve as the lead contractor for this project. Similarly, Attachment 3.4.1(b) identifies three relevant projects by STV, focusing on what we consider most relevant in demonstrating STV's qualifications to serve as the lead designer. **This includes STV's specific experience designing features to allow for future bridge widening (superstructure and substructure).**

Specifically, STV is providing professional engineering services for the design of all bridges and structures on the extension of Route 638 (Atlee Road) in Hanover County, VA. STV has worked closely with Hanover County and the VDOT Richmond District on this Locally Administered Project, which will extend Atlee Road approximately a half a mile north from its current termini to tie into Atlee Station Road on the north side of the Buckingham Branch Railroad. The design for the extension of Atlee Road is for a three lane roadway on an ultimate (future) four-lane divided, curb and gutter roadway.



### 3.5 Project Risks





*The proposed project will completely replace the existing bridges carrying I-81 over Route 808 (Halls Bottom Road) and Sinking Creek in Washington County near the I-81 Mile Marker 11 between Bristol and Abingdon. This includes conducting the associated approach work while minimizing impacts to the traveling public.*

Every project contains some elements of risk. Our job, as your design-builder, is to proactively manage that risk to controllable levels such that the overall project goals are achieved, with a high level of success. Based on our careful assessment of the nature of the I-81 bridge replacement project over Route 808 and Sinking Creek, we believe the three most critical risks are:

1. Safely and efficiently **maintaining traffic along I-81** during construction
2. Difficult **karst geology**
3. Construction **scheduling/sequencing/median access**

The following narrative provides our risk assessment, indicates the impact that the risk will have on the project, and discusses mitigation strategies we propose to implement. We also identify roles and responsibilities that VDOT and possibly other stakeholders to the project have in helping to resolve these risks. A risk summary table follows the detailed descriptions, with each risk element rated low, medium, or high and assigned a specific mitigation strategy.

### **3.5.1 Risk #1 — Maintaining Traffic**

I-81 serves as a major transportation corridor between the southwest and northern regions of the state, and is one of the nation's leading conduits for freight and goods movement. The section of I-81 located between Bristol and Abingdon is also a heavily traveled corridor for local traffic. Impacts to traffic for any construction project are always a concern, but even greater when it involves a major corridor such as I-81. Recognizing the importance of the safe and efficient movement of people and goods through the project, the V&G team has identified maintenance of traffic as a key risk that will be associated with the design and construction of this project.

#### **a. Why is the risk critical and what impact will the risk have on the project?**

The following design issues are significant:

- Average daily traffic (ADT) on I-81 is shown as 46,066 vehicles per day (Year 2012 data) and 72,000 vehicles per day (Year 2041 data), with a design hourly volume (DHV) of 50% and average daily truck traffic (ADTT) of 22%
- There is an approximately 4-foot grade raise of I-81 at the proposed bridges



View of I-81 looking south from the entrance to Braeland Meadows, note the sag curve.



Looking north along I-81 NB lanes, 30-foot roadway width on existing dual bridges.

- I-81 is in a horizontal curve and a sag vertical curve at the bridge crossing; the future sag curve’s low point is near the south end of the bridges

The risks associated with maintenance of traffic are numerous:

- Inattentive motorists entering the construction work zone pose a safety hazard to both motorists and construction workers
- Shifting traffic patterns during staged construction will introduce alignment shifts, which are a safety concern
- Traffic congestion during construction heightens the risk for rear-end collision accidents as traffic slows down; once such an accident occurs, there is the risk of extensive delays as traffic comes to a sudden stop

**b. What mitigation strategies will our team implement to address the risk?**

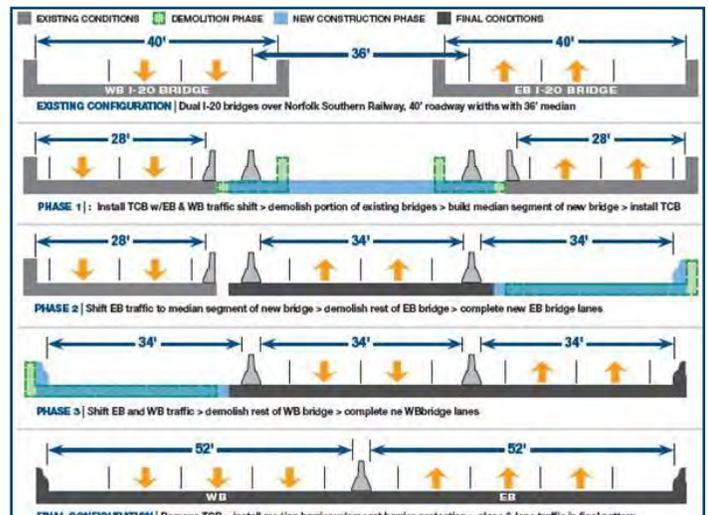
Our team proposes to incorporate our vast experience, lessons learned from prior work, and proven systems to facilitate a broad, multi-faceted TMP to facilitate a smooth TMP for the project duration. Examples of risk mitigation strategies we intend to incorporate include:

1. Immediately upon contract award, the V&G team will conduct an initial **partnering meeting** with VDOT and interested stakeholders to review project requirements and discuss traffic (and other) issues related to construction of the project. From this initial meeting we will develop a checklist of responsibilities and timelines for successfully achieving mutually agreeable activities/goals for a successful TMP.
2. We intend to devise a **construction staging plan** that minimizes the number of traffic shifts necessary to replace the existing bridges while raising the roadway profile, with careful attention given to separating the work zone from travel lanes.
3. Each *Release for Construction* (RFC) work package will **address the maintenance of traffic implications** posed by that element of the work.
4. Our TMP will give careful consideration to **advance warning signage**, and our TMP supervisor will continually

patrol the project corridor to see that maintenance of traffic devices are working properly.

5. A potential mitigation strategy for traffic control is to design the temporary construction (i.e., shifting tapers, etc.) for a minimum design speed of 75 mph in anticipation that people will not slow down. We can also schedule shifts during off-peak times of year. STV will study the traffic counts to determine the optimal time of year to schedule major activities such as tie-ins, lane closure work, or shifts (if the schedule allows).

6. If agreeable (and/or if required) by the RFP, our team will prepare a **comprehensive incident management plan** (IMP) for our TMP, as we have done on several recent similar projects. A comprehensive IMP will address critical issues such as (a) plan for notification of the Virginia State Police/Safety Service Patrol as soon as a traffic incident occurs, (b) potential detour routes if a complete shut-down of I-81 is necessary, (c) scheduled “highway rovers” to patrol the corridor during particularly heavily travelled periods of time, if necessary, such as before/after major events at the Bristol Motor Speedway. We can also include provisions for an emergency tow wrecker service, as we will likely have no



Similar staging concept example from an STV-developed interstate bridge replacement project.

shoulders in portions of the work zone during various stages of construction.

7. Given that a modest amount of fill material will need to be brought in to raise the roadway profile, we will devise a plan for **safely hauling borrow material to the work zone**, including the potential to access the work zone off of Route 808 from the median (such that trucks do NOT have to mix with highway traffic as they deliver fill material to the work zone).

8. The TMP will follow the **new** Revision 1 VWAPM and the maintenance of traffic designer will be **certified** in VDOT's *Advanced Work Zone Traffic Control Training*.

**c. What role does VDOT or other agencies play in addressing this project risk?**

VDOT's role pertaining to this risk primarily involves the enforcement of traffic laws and incident management during construction.

**3.5.2 Risk #2 — Geology**

Our team has reviewed existing geologic data and information for this site, geological mapping, and the *Geotechnical Data Report* (GDR) that was produced by our geotechnical engineer, **Schnabel Engineering**, and provided by VDOT with the RFQ for this project. Based on our review of this information and our experience with transportation and other projects in the vicinity with similar subsurface conditions, we believe that the karst geology and associated soil and rock conditions underlying this site have the potential to affect several key aspects of design and construction of the project including the bridge foundations, pavements, excavation, and stormwater management structures; all of which could influence both cost and project scheduling.

**a. Why is the risk critical and what impact will the risk have on the project?**

The primary risks associated with the karst geology at the project site include the following:

1. *Highly variable rock surface elevation.* The original borings included in the GDR indicate rock elevations are relatively consistent at Abutment A ranging from El. 1,928 feet to 1,932 feet. However, at Abutment B, the rock surface is more variable ranging from El. 1,930 to 1,943 feet. Accordingly, a variable rock surface is anticipated at this site at Abutment B. For driven pile foundations, this variable rock surface can present challenges during installation. If pinnacles exist or the rock is severely inclined the pile can easily be damaged if it begins to slip along the surface of the rock, which can lead to the abandonment of the pile and potential redesign of the foundation element.

2. *Zones of epi-karst (soft clay) above or within the rock.* The recent borings in the GDR also indicate the presence of epi-karst in two of the borings. These layers were less than 5 feet thick and the soils were relatively soft with *Standard Penetration Test* N values from 4 to 5 blows per foot.

3. *Solution features such as voids, sinkholes, and caves.* A review of the *Wyndale and Holston Valley Quadrangle* and the *Selected Karst Features of the Southern Valley and Ridge Province* indicate a high density of sinkholes in the immediate site vicinity. A cave opening was noted in the northwest area of the site. Further, voids may be present in the rock at the abutments and pier locations.



*A cave opening was noted in the northwest area of the site.*

4. *Pavements.* The *California Bearing Ratio* (CBR) test performed for the pavement design exhibited a relatively high swell during the test of up to 1.1%. In addition, the existing fill soils behind the existing abutments are soft moderately to highly plastic clays and elastic silts. These materials will not be suitable for pavement subgrade and will likely need to be undercut or modified.

5. *Availability of embankment fill materials.* A large volume of fill will be needed for the improvements to the roadway approaches. Accordingly, there is some risk associated with identifying off-site borrow sources suitable for embankment fill.

**b. What mitigation strategies will our team implement to address the risk?**

We will complete a detailed karst evaluation. Measures will be incorporated into the design to mitigate the long-term effects of these features on the performance of the roadways, structures, and stormwater management structures. These measures may include locating stormwater management structures away from areas of concern, the use of synthetic or clay liners for stormwater management basins, reducing capacities of driven pile foundations, increasing redundancy in the foundation design, or identifying multiple suitable borrow sources.

During construction, our geotechnical engineer will be an integral member of the construction team. Our geotechnical engineer will visit the site to review all earthwork and foundation operations and verify that the work is being completed consistent with the geotechnical recommendations and modify the recommendations, if needed, based on conditions encountered. During pile installation operations, our bridge engineers will be on-call or present during the work should any substructure foundations need to be modified due to the variable rock conditions.

**d. What role does VDOT or other agencies play in addressing this project risk?**

We believe the RFP for the project will include a scope validation period to enable the design-builder to identify scope issues that will materially impact the design-builder's price or time to perform the work. During this scope validation period the design-builder will be afforded the opportunity to complete additional geotechnical evaluations to verify and validate our design concept and assumptions.

VDOT's role will also be to review the results of the geotechnical investigations and recommendations made by our team and ultimately approve our designs for construction. Should our geotechnical recommendations need to be modified at any time during construction, we would expect VDOT to review any modifications to our design within seven calendar days to reduce impacts to the project schedule.

**3.5.3 Risk #3 — Construction Scheduling/Sequencing/ Median Access**

With respect to the construction of the I-81 Structures over Route 808 and Sinking Creek project, there are a few scheduling/sequencing factors which should be carefully analyzed during the final design-build development phase.

**a. Why is the risk critical and what impact will the risk have on the project?**

1. *VDOT I-81 Interchange Project C00097856C01, Order H93 at Exit 14 (Jonesboro Road).* This interchange reconstruction project, located approximately three miles to the north, was let as an "A + B" bid on October 28, 2015. Though W-L Construction & Paving, Inc. is the apparent low bidder, it is not currently clear how much of their \$34 million bid is attributable to their proposed construction duration. However, it is known that there will be some risk to the traveling public having two major construction projects on I-81 mainline ongoing concurrently. This risk is heightened in the event of a traffic incident.

2. *Sequencing of new construction.* The conceptual design for the project involves sequential construction, such as the hypothetical shown on the next page. Staged construction introduces risk, primarily in the form of changing traffic patterns and the close proximity of new construction work to



An STV design concept for a temporary median access ramp on a similar interstate design-build widening project, prior to the placement of gravel.

interstate traffic passing through the project site at 70 miles per hour.

3. *Median access.* The proposed work requires a grade raise of approximately 4 feet at the bridges, and includes work in the median of I-81, which is approximately 40-ft wide at the bridge location. Because I-81 is in both a horizontal and vertical curve at this location, the mixing of construction and normal highway traffic at this location would pose safety risks to both construction forces and the traveling public.

**b. What mitigation strategies will our team implement to address the risk?**

Examples of risk mitigation strategies we intend to incorporate for this component of the work include:

1. A commitment to regular coordination meetings with VDOT and the contractor for the adjacent I-81 Exit 14 project, W-L Construction & Paving, Inc., to discuss inter-related issues, particularly TMP and IMP strategies.

2. Fine-tuning the sequencing plan included on the following page to develop the safest and most cost-effective construction plan for replacing the dual bridges (and raising the I-81 profile by as much as 4 feet at the bridges), all while maintaining two lanes of traffic in each direction.

3. Introducing a median construction access ramp, whereby our construction trucks could access the median work zone from Route 808 (Halls Bottom Road) via a temporary gravel roadway in the median. We envision that this ramp/roadway would have a 10-12% grade upward, starting from edge of pavement from Halls Bottom Road and passing between the existing bridges (illustrated below). For this concept to work, there will be a need for temporary sheeting and/or earth retaining devices to allow for separation between new construction and I-81, but this should be a minor feature of the design given the low fill heights involved.

**d. What role does VDOT or other agencies play in addressing this project risk?**

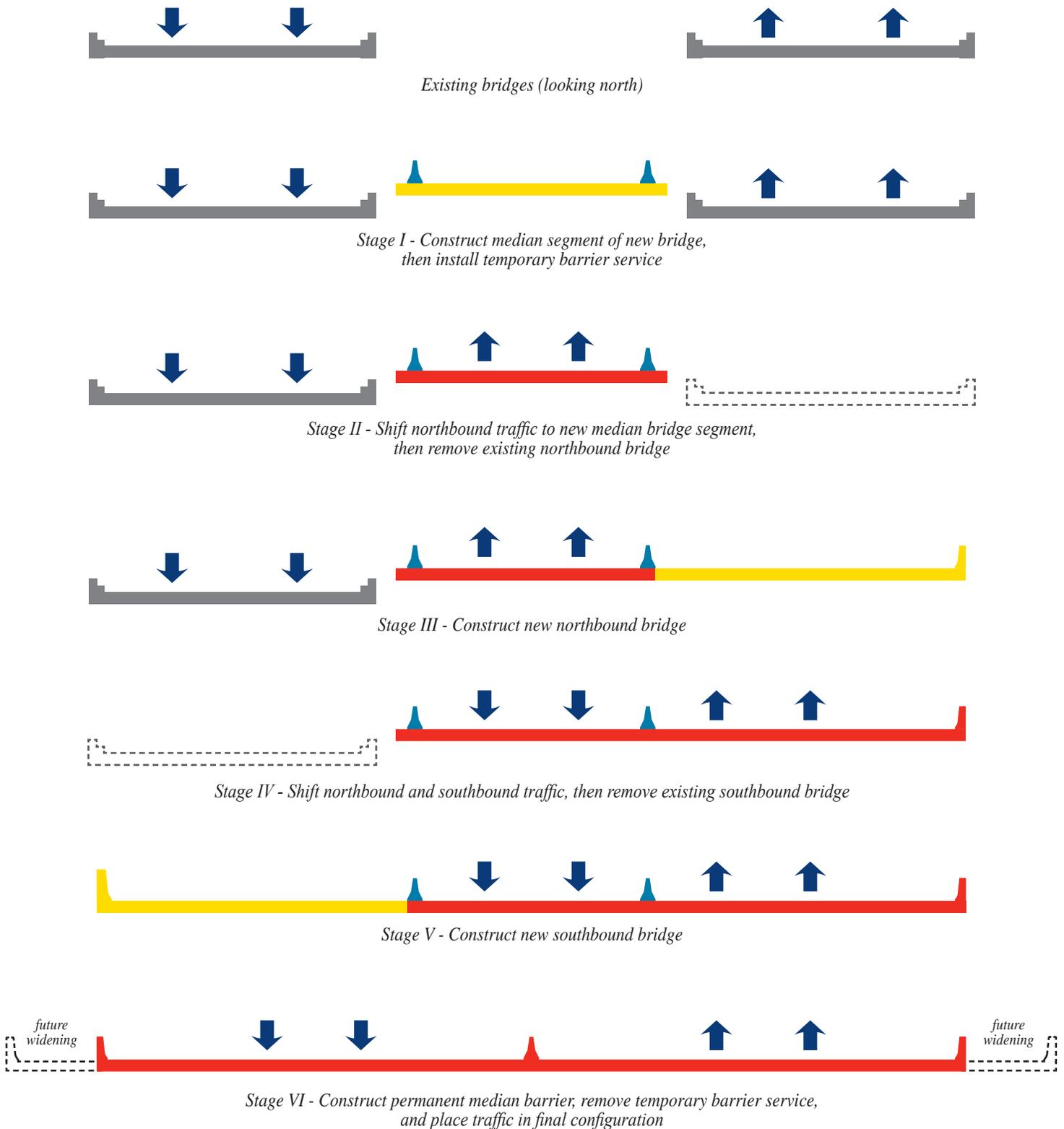
Our needs of VDOT pertaining to this risk primarily involve prompt review/approval of our submittals for these work items, and cooperation relative to law enforcement of maintenance of traffic systems.



The clearance between the existing I-81 bridges over Route 808 (approximately 40-ft clear) is more than sufficient for a temporary construction access ramp.

**Figure 1. Potential/Sample Construction Sequencing Schematic**

With approximately 30 feet clear between the bridges, the median appears to be a suitable work zone concept, and will provide added safety to traveling motorists during construction. In the illustration below, **gray** refers to the existing bridge, **gold** refers to the current stage of construction, **blue** refers to temporary barrier service, and **red** refers to completed construction under traffic.



Risk	Mitigation Strategies
<p><b>#1. Maintaining traffic</b></p> 	<ul style="list-style-type: none"> <li>• Initial partnering workshop for TMP</li> <li>• Simplified, efficient construction phasing</li> <li>• Each RFC package addresses TMP</li> <li>• Advance warning signage</li> <li>• Comprehensive IMP and emergency tow wrecker service</li> <li>• Separating construction trucks from I-81 traffic</li> </ul>
<p><b>#2. Geology</b></p> 	<ul style="list-style-type: none"> <li>• Complete a detailed karst evaluation</li> <li>• Incorporate measures to mitigate the long-term effects of karst features on the performance of the roadways, structures, and stormwater management structures, which may include locating stormwater management structures away from areas of concern, the use of synthetic or clay liners for stormwater management basins, reducing capacities of driven pile foundations, increasing redundancy in the foundation design, or identifying multiple suitable borrow sources</li> <li>• During construction, our geotechnical engineer will be an integral member of the construction team</li> <li>• During pile installation operations, our bridge engineers will be on-call or present during the work should any substructure foundations need to be modified due to the variable rock conditions</li> </ul>
<p><b>#3. Construction scheduling/ sequencing/ median access</b></p> 	<ul style="list-style-type: none"> <li>• Close coordination with I-81/Exit 14 project</li> <li>• Effective staging concept to facilitate safety</li> <li>• Potential use of temporary median access ramp</li> </ul>

### 3.5.4 Concluding Remarks

This project requires a team that understands how to maximize the design-build process to deliver the project on time and within budget through a comprehensive risk mitigation plan. Successful completion of this project will require the V&G team to systematically address several project specific issues, summarized in the table below.

Our team did investigate and identify other project features that pose some form of risk, such as environmental issues posed by the Northern Long-Eared Bat and Sinking Creek, as well as concern over the severely deteriorated state of the existing bridge (particularly the pier caps). The V&G team offers directly relevant experience mitigating these additional risks.

For example, STV was engaged by VDOT to provide professional engineering services for the design of the replacement structures and roadway approaches for a \$22 million project to replace the existing bridges carrying I-95 over Meherrin River to correct functionally obsolete shoulder widths. STV completed the final design of the replacement of the 540-ft long dual bridges, as well as the final roadway plans. The Northern Long-Eared Bat, which is a federally threatened species, was found to inhabit the wooded areas within the project limits.

A special provision for a Time of Year Restriction (TOYR) was incorporated into the contract documents prohibiting the removal of any trees measuring 3-inches or greater in diameter at breast height between April 15 and September 15. The existing bridges were inventoried and no signs of bat usage were found on the existing bridges. VDOT is delaying notice to proceed on the project until March 1,

2016 so that the remainder of the private utilities can be relocated. Recognizing that this delayed notice to proceed combined with the TOYR for tree clearing activities could have a significant impact on the project schedule, a special provision was incorporated into the contract documents that allows the contractor to perform tree clearing work this fall/winter.

As the project progresses and more project details are defined, additional risks may be discovered, known risks may be completely mitigated or eliminated because they didn't occur or because sufficient information became available. Risk management strategies will be developed and implemented through the design-build project lifecycle. We will implement comprehensive risk response control procedures for documenting risks, developing and implementing risk strategies, and responding to changes in risk during the life of a project.



Attachments



# Attachments

This section includes the following attachments, as prescribed by VDOT's RFQ:

- Attachment 3.1.2 SOQ Checklist
- Attachment 2.10 Form C-78-RFQ
- Attachment 3.2.6 List of Affiliated and Subsidiary Companies
- Attachment 3.2.7(a) and Attachment 3.2.7(b) Debarment Forms
- Offeror's VDOT Prequalification Certificate
- Surety Letter
- Attachment 3.2.10 SCC and DPOR Information Table
- SCC and DPOR Supporting Registration/License Documentation
- Attachment 3.3.1 Key Personnel Resume Forms
- Attachment 3.4.1(a) and Attachment 3.4.1(b) Work History Forms

**Attachment 3.1.2 SOQ Checklist**

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**ATTACHMENT 3.1.2**

**Project: 0081-095-038, Contract ID#: C00107116DB85**

**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

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

<b>Statement of Qualifications Component</b>	<b>Form (if any)</b>	<b>RFQ Cross reference</b>	<b>Included within 15-page limit?</b>	<b>SOQ Page Reference</b>
<b>Statement of Qualifications Checklist and Contents</b>	Attachment 3.1.2	Section 3.1.2	no	17 to 19
<b>Acknowledgement of RFQ, Revision and/or Addenda</b>	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	20
<b>Letter of Submittal (on Offeror's letterhead)</b>				1 to 2
Authorized Representative's signature	NA	Section 3.2.1	yes	2
Offeror's Point of Contact information	NA	Section 3.2.2	yes	2
Principal Officer information	NA	Section 3.2.3	yes	2
Offeror's corporate structure	NA	Section 3.2.4	yes	2
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	2
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	21
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	22 to 34
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	35 to 36
Evidence of obtaining bonding	NA	Section 3.2.9	no	37

**ATTACHMENT 3.1.2**

**Project: 0081-095-038, Contract ID#: C00107116DB85  
STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
<b>SCC and DPOR registration documentation (Appendix)</b>	Attachment 3.2.10	Section 3.2.10	no	38 to 40
Full size copies of SCC Registration	NA	Section 3.2.10.1	no	41 to 59
Full size copies of DPOR Registration (Offices)	NA	Section 3.2.10.2	no	41 to 59
Full size copies of DPOR Registration (Key Personnel)	NA	Section 3.2.10.3	no	41 to 59
Full size copies of DPOR Registration (Non-APELSCIDLA)	NA	Section 3.2.10.4	no	41 to 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	2
<b>Offeror's Team Structure</b>				3 to 5
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	60 to 61
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.2	no	62 to 63
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.3	no	64 to 65
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.4	no	66 to 67
Organizational chart	NA	Section 3.3.2	yes	5
Organizational chart narrative	NA	Section 3.3.2	yes	4
<b>Experience of Offeror's Team</b>				6 to 9
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	68 to 70

ATTACHMENT 3.1.2

Project: 0081-095-038, Contract ID#: C00107116DB85  
STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
Lead Designer Work History Form	Attachment 3.4.1(b)	Section 3.4	no	71 to 73
<b>Project Risk</b>				
Identify and discuss three critical risks for the Project	NA	Section 3.5.1	yes	10 to 15
				10 to 15

**Attachment 2.10 Form C-78-RFQ**

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**ATTACHMENT 2.10**

**COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF TRANSPORTATION**

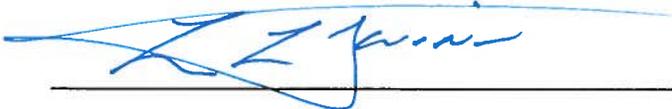
**RFQ NO.**                    C00107116DB85  
**PROJECT NO.:**        0081-095-038

**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 09/25/2015  
(Date)
- 2. Cover letter of RFQ Addendum No. 1 10/15/2015  
(Date)
- 3. Cover letter of \_\_\_\_\_  
(Date)



SIGNATURE

November 2, 2015

DATE

L.L. Gwinn

PRINTED NAME

Secretary & Treasurer

TITLE

## **Attachment 3.2.6 List of Affiliated and Subsidiary Companies**

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**Attachment 3.2.7(a) and Attachment 3.2.7(b) Debarment Forms**

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**ATTACHMENT NO. 3.2.7(a)**

**CERTIFICATION REGARDING DEBARMENT  
PRIMARY COVERED TRANSACTIONS**

Project No.: 0081-095-038  
Contract ID#: C00107116DB85

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

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

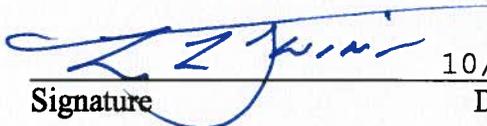
b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under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

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

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

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

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

  
\_\_\_\_\_  
Signature

10/19/15  
\_\_\_\_\_  
Date

Secretary & Treasurer  
\_\_\_\_\_  
Title

Vecellio & Grogan, Inc.  
\_\_\_\_\_  
Name of Firm

**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0081-095-038  
Contract ID#: C00107116DB85

- 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

10/19/15  
\_\_\_\_\_  
Date

Asst. Secretary & Treasurer  
\_\_\_\_\_  
Title

Vecellio Group, Inc.  
\_\_\_\_\_  
Name of Firm

**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0081-095-038  
Contract ID#: C00107116DB85

- 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

10/19/15  
\_\_\_\_\_  
Date

Secretary & Treasurer  
\_\_\_\_\_  
Title

Sharpe Brothers  
\_\_\_\_\_  
Name of Firm

**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0081-095-038  
Contract ID#: C00107116DB85

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\_\_\_\_\_  
Signature

10/19/15  
\_\_\_\_\_  
Date

Secretary & Treasurer  
\_\_\_\_\_  
Title

White Rock Quarries  
\_\_\_\_\_  
Name of Firm



**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0081-095-038  
Contract ID#: C00107116DB85

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\_\_\_\_\_  
Signature

10/19/15  
\_\_\_\_\_  
Date

Secretary & Treasurer  
\_\_\_\_\_  
Title

South Florida Materials Corp.  
\_\_\_\_\_  
Name of Firm

**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0081-095-038  
Contract ID#: C00107116DB85

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\_\_\_\_\_  
Signature

10/19/15  
\_\_\_\_\_  
Date

Secretary & Treasurer  
\_\_\_\_\_  
Title

South Florida Petroleum Services, LLC  
\_\_\_\_\_  
Name of Firm

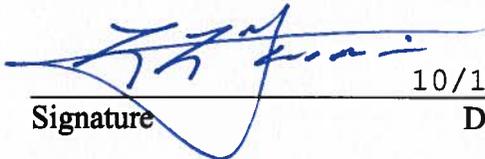
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\_\_\_\_\_  
Signature

10/19/15  
\_\_\_\_\_  
Date

Asst. Secretary & Treasurer  
\_\_\_\_\_  
Title

Vecenergy Resources, LLC  
\_\_\_\_\_  
Name of Firm

**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0081-095-038  
Contract ID#: C00107116DB85

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.



November 9, 2015

Vice President

Signature

Date

Title

STV Incorporated dba STV Group Incorporated

Name of Firm

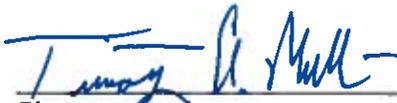
**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0081-095-038  
Contract ID#: C00107116DB85

- 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.

	10-29-15	Associate
Signature	Date	Title

Thompson & Litton, Inc.  
Name of Firm

**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0081-095-038  
Contract ID#: C00107116DB85

- 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.

	10/28/2015	Sr. Vice President
Signature	Date	Title
Steven E. Conner, P.E.		
Schnabel Engineering Consultants, Inc.		
Name of Firm		

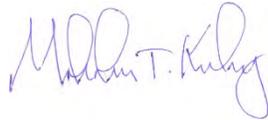
**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0081-095-038  
Contract ID#: C00107116DB85

- 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.



November 2, 2015

President

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title

\_\_\_\_\_  
NXL Construction Services, Inc.  
Name of Firm

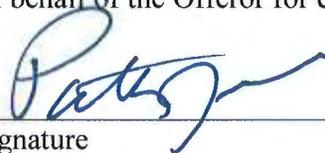
ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0081-095-038  
Contract ID#: C00107116DB85

- 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.

	10/29/15	Chief Visitation Officer
Signature	Date	Title

McCormick Taylor

---

Name of Firm

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

---



COMMONWEALTH OF VIRGINIA



# CERTIFICATE OF QUALIFICATION

## VECELLIO & GROGAN, INC.

Vendor Number: **V004**

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; ASPHALT CONCRETE PAVING**

**Issue Date:** August 11, 2015

Suzanne FR Lucas, State Prequalification Officer

**This Rating and Classification will Expire:** October 31, 2015

Don E. Silles, Director of Contracts

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



Vendor ID: V004

Vendor Name: **VECELLIO & GROGAN, INC.**

Prequal Exp: **10/31/2016**

-- PREQ Address --

P. O. BOX 2438

BECKLEY, WV 25802-2438

Phone: 304-252-6575

Fax: 304-252-4131

Work Classes (Listed But Not Limited To)

002 - GRADING

003 - MAJOR STRUCTURES

004 - ASPHALT CONCRETE PAVING

Bus. Contact: WIKEL, MICHELE

Email: MICHELE.WIKEL@VECELLIOGROGAN.COM

-- DBE Information --

DBE Type: N/A

DBE Contact: N/A

## **Surety Letter**

---

# Friedlander Company



## **Bonds & Insurance**

1566 Kanawha Blvd. East 25311  
PO Box 2466 Charleston, WV 25329  
Telephone: 304/357-4520 Fax: 304/345-8724



October 7, 2015

**CONFIDENTIAL**

Suril R. Shah  
Alternate Project Delivery Office  
Virginia Department of Transportation  
1401 East Broad Street  
Richmond, VA 23219

***Re: Vecellio & Grogan, Inc., Beckley, WV; Replacement of I-81 Structures 18942 & 18944 over Rte.  
808 Halls Bottom Rd and Sinking Creek, RFQ No.: C00107116DB85***

Dear Suril Shah,

It has been the privilege of our agency to provide surety bonds on behalf of Vecellio & Grogan, Inc. (V&G), including its Divisions and Subsidiaries since their formation in 1938. The Travelers Companies have extended surety credit to V&G since 1959.

In the opinion of this agency and the Surety, V&G remains properly financed, capably managed and well equipped to perform any and all construction projects of interest to them; V&G is capable of obtaining 100% Performance Bond and 100% Labor and Materials Payment Bond in the amount of the \$13,000,000 anticipated cost of construction for this project. Said bonds will cover the Project and any warranty periods as provided for in the Contract Documents, in the event that V&G is the successful bidder and enters into a contract for this Project.

The surety, Travelers Casualty and Surety Company of America has A.M. Best Financial Strength Rating A++ and Financial Size Category XV.

As always, Friedlander Company and the Travelers Companies reserve the right to perform routine underwriting at the time of any bond request, including without limitation review and approval of relevant contract documents, bond forms, and project financing. We assume no liability to the Virginia Department of Transportation, or to third parties, if for any reason we do not provide surety bonds.

Sincerely yours;  
FRIEDLANDER COMPANY

Richard L. Higginbotham  
Attorney-in-Fact for Surety

## **Attachment 3.2.10 SCC and DPOR Information Table**

---

**ATTACHMENT 3.2.10**

**State Project No. 0081-095-038, Contract ID#: C00107116DB85**

**SCC and DPOR Information**

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

<b>SCC &amp; DPOR INFORMATION FOR BUSINESSES (RFQ Sections 3.2.10.1 and 3.2.10.2)</b>							
<b>Business Name</b>	<b>SCC Information (3.2.10.1)</b>			<b>DPOR Information (3.2.10.2)</b>			
	<b>SCC Number</b>	<b>SCC Type of Corporation</b>	<b>SCC Status</b>	<b>DPOR Registered Address</b>	<b>DPOR Registration Type</b>	<b>DPOR Registration Number</b>	<b>DPOR Expiration Date</b>
Vecellio & Grogan, Inc.	F008386-7	Foreign Corporation	Active	PO Box 2438 Beckley, WV 25802	Class A Contractor	2705046593	10/31/2016
STV Incorporated dba STV Group Incorporated	F025345-2	Foreign Corporation	Active	10800 Midlothian Turnpike, Suite 302 Richmond, VA 23235	ENG	0411000462	02/29/2016
STV Incorporated dba STV Group Incorporated	F025345-2	Foreign Corporation	Active	2722 Merrilee Drive, Suite 350 Fairfax, VA 22031	ENG, ARC	0411000661	02/29/2016
Thompson & Litton, Inc.	01314111	Corporation	Active	103 East Main Street PO Box 1307 Wise, VA 24293	ARC, ENG	0407003869	12/31/2015
Schnabel Engineering Consultants, Inc.	07126741	Corporation	Active	1901 South Main Street Suite 11 Blacksburg, VA 24060	ENG	0411000697	02/29/2016
NXL Construction Services, Inc.	03497427	Corporation	Active	114 East Cary Street, Suite 200 Richmond, VA 23219	ENG, LS	0407003031	12/31/2015
NXL Construction Company, Inc	03497427	Corporation	Active	110 Wenn Drive Christiansburg, VA 24073	ENG	0411001067	02/29/2016
McCormick Taylor, Inc.	F129691-4	Foreign Corporation	Active	2426 Lee Highway, Suite 208 Bristol, VA 24202	ENG	0411001043	02/29/2016
McCormick Taylor, Inc.	F129691-4	Foreign Corporation	Active	North Shore Commons A, 4951 Lake Brook Drive, Suite 275 Glen Allen, VA 23060	ENG	0407004111	12/31/2015

**ATTACHMENT 3.2.10**

**State Project No. 0081-095-038, Contract ID#: C00107116DB85**

**SCC and DPOR Information**

SCC & DPOR INFORMATION FOR BUSINESSES (RFQ Sections 3.2.10.1 and 3.2.10.2)							
Business Name	SCC Information (3.2.10.1)			DPOR Information (3.2.10.2)			
	SCC Number	SCC Type of Corporation	SCC Status	DPOR Registered Address	DPOR Registration Type	DPOR Registration Number	DPOR Expiration Date
McCormick Taylor, Inc.	F129691-4	Foreign Corporation	Active	111 Mill Place Parkway, Unit 105 Verona, VA 24482	ENG	0411000771	02/29/2016



## **SCC and DPOR Supporting Registration/License Documentation**

---

# Commonwealth of Virginia



## State Corporation Commission

### CERTIFICATE OF GOOD STANDING

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

That VECELLIO & GROGAN, INC., a corporation incorporated under the law of West Virginia, is authorized to transact business in the Commonwealth of Virginia;

That it obtained a certificate of authority to transact business in Virginia from the Commission on June 6, 1949; and

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

Nothing more is hereby certified.



*Signed and Sealed at Richmond on this Date:*

*November 16, 2011*

*Joel H. Peck*

*Joel H. Peck, Clerk of the Commission*

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

EXPIRES ON  
10-31-2016

NUMBER  
2705046593

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

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

**VECELLIO & GROGAN INC  
PO BOX 2438  
BECKLEY, WV 25802-2438**



*John W. DeBoer*  
John W. DeBoer, Director

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

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

(POCKET CARD)

COMMONWEALTH OF VIRGINIA  
CLASS A BOARD FOR CONTRACTORS  
CONTRACTOR

\*CLASSIFICATIONS\* H/H  
NUMBER: 2705046593 EXPIRES: 10-31-2016

**VECELLIO & GROGAN INC  
PO BOX 2438  
BECKLEY, WV 25802-2438**



(DETACH HERE)

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

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# Commonwealth of Virginia



## State Corporation Commission

### CERTIFICATE OF GOOD STANDING

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

That STV GROUP INCORPORATED (USED IN VA. BY: STVINCORPORATED), a corporation incorporated under the law of New York, is authorized to transact business in the Commonwealth of Virginia;

That it obtained a certificate of authority to transact business in Virginia from the Commission on August 9, 1999; and

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

Nothing more is hereby certified.



*Signed and Sealed at Richmond on this Date:*

*February 17, 2012*

*Joel H. Peck*

*Joel H. Peck, Clerk of the Commission*

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

**EXPIRES ON  
02-29-2016**

**NUMBER  
0411000462**

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

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

**PROFESSIONS: ENG**

**STV INCORPORATED DBA STV GROUP INC  
STV GROUP INC  
10800 MIDLOTHIAN TNPK SUITE 302  
RICHMOND, VA 23235**



*Nick A. Christner*  
Nick A. Christner, Interim Director

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

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

**COMMONWEALTH OF VIRGINIA  
BOARD FOR APELSCIDLA  
BUSINESS ENTITY BRANCH OFFICE REGISTRATION  
NUMBER: 0411000462 EXPIRES: 02-29-2016  
PROFESSIONS: ENG  
STV INCORPORATED DBA STV GROUP INC  
STV GROUP INC  
10800 MIDLOTHIAN TNPK SUITE 302  
RICHMOND, VA 23235**



(DETACH HERE)

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

(FOLD)

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

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

EXPIRES ON  
02-29-2016

NUMBER  
0411000661

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

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

PROFESSIONS: ENG, ARC

STV INCORPORATED  
STV GROUP INCORPORATED  
2722 MERRILEE DR SUITE 350  
FAIRFAX, VA 22031



*Nick A. Christner*  
Nick A. Christner, Interim Director

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

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

(POCKET CARD)

**COMMONWEALTH OF VIRGINIA**  
BOARD FOR APELSCIDLA  
BUSINESS ENTITY BRANCH OFFICE REGISTRATION  
NUMBER: 0411000661 EXPIRES: 02-29-2016  
PROFESSIONS: ENG, ARC  
STV INCORPORATED  
STV GROUP INCORPORATED  
2722 MERRILEE DR SUITE 350  
FAIRFAX, VA 22031



(DETACH HERE)

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

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

**EXPIRES ON**  
06-30-2017

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

**NUMBER**  
0402011415

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

RONALD C BRIGGS  
14413 CLIPPER COVE CT  
MIDLOTHIAN, VA 23112



*Jay W. DeBoer*  
Jay W. DeBoer, Director

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

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



CISM0180

CORPORATE DATA INQUIRY

11/02/15

11:31:09

CORP ID: 0131411 - 1 STATUS: 00 ACTIVE STATUS DATE: 05/27/08

CORP NAME: THOMPSON & LITTON, INC.

DATE OF CERTIFICATE: 04/08/1971 PERIOD OF DURATION: INDUSTRY CODE: 00  
STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK  
MERGER IND: CONVERSION/DOMESTICATION IND:  
GOOD STANDING IND: Y MONITOR INDICATOR:  
CHARTER FEE: 250.00 MON NO: MON STATUS: MONITOR DTE:  
R/A NAME: LEONARD D ROGERS

STREET: 401 BIRCHFIELD RD AR RTN MAIL:  
PO BOX 1097

CITY: WISE STATE : VA ZIP: 24293-0000

R/A STATUS: 4 ATTORNEY EFF. DATE: 02/04/11 LOC : 197

ACCEPTED AR#: 215 08 0033 DATE: 05/01/15 WISE COUNTY

CURRENT AR#: 215 08 0033 DATE: 05/01/15 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEE	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
15	820.00					125,000

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA

EXPIRES ON  
12-31-2015

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

NUMBER  
0407003869

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

PROFESSIONS: ARC, ENG

THOMPSON & LITTON INC  
103 E MAIN ST  
PO BOX 1307  
WISE, VA 24293



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

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

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

# Commonwealth of Virginia



## State Corporation Commission

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

Schnabel Engineering Consultants, Inc. is a corporation existing under and by virtue of the laws of Virginia, and is in good standing.

The date of incorporation is August 12, 2009.

Nothing more is hereby certified.



*Signed and Sealed at Richmond on this Date:  
November 17, 2009*

*Joel H. Peck*  
Joel H. Peck, Clerk of the Commission

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA

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

EXPIRES ON  
02-29-2016

NUMBER  
0411000697

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

PROFESSIONS: ENG

SCHNABEL ENGINEERING CONSULTANTS, INC  
1901 SOUTH MAIN ST.  
SUITE 11  
BLACKSBURG, VA 24060



*Nick A. Christner*  
Nick A. Christner, Interim Director

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

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

(POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR APELSCIDLA  
BUSINESS ENTITY BRANCH OFFICE REGISTRATION  
NUMBER: 0411000697 EXPIRES: 02-29-2016  
PROFESSIONS: ENG  
SCHNABEL ENGINEERING CONSULTANTS, INC  
1901 SOUTH MAIN ST.  
SUITE 11  
BLACKSBURG, VA 24060



(DETACH HERE)

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

(FOLD)

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

# Commonwealth OF Virginia



## State Corporation Commission

### *CERTIFICATE OF GOOD STANDING*

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

That NXL Construction Co., Inc. is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is November 17, 1989;

That the period of its duration is perpetual; and

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

Nothing more is hereby certified.



*Signed and Sealed at Richmond on this Date:  
October 30, 2014*

*Joel H. Peck*  
\_\_\_\_\_  
*Joel H. Peck, Clerk of the Commission*

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA

EXPIRES ON

12-31-2015

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

NUMBER

0407003031

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

PROFESSIONS: ENG, LS

NXL CONSTRUCTION CO INC  
NXL CONSTRUCTION SERVICES INC  
114 E CARY ST STE 200  
RICHMOND, VA 23219



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

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

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

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA

EXPIRES ON  
02-29-2016

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

NUMBER  
0411001067

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

PROFESSIONS: ENG

NXL CONSTRUCTION COMPANY INC  
110 WENN DRIVE  
CHRISTIANSBURG, VA 24073



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

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

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

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

EXPIRES ON  
02-29-2016

NUMBER  
0402039327

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

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

JOSEPH ROY HAMED  
110 WENN DRIVE  
CHRISTIANSBURG, VA 24073



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

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

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

# Commonwealth OF Virginia



## State Corporation Commission

### *CERTIFICATE OF GOOD STANDING*

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

That McCORMICK TAYLOR, INC., a corporation incorporated under the law of Pennsylvania, is authorized to transact business in the Commonwealth of Virginia;

That it obtained a certificate of authority to transact business in Virginia from the Commission on June 2, 1997; and

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

Nothing more is hereby certified.



*Signed and Sealed at Richmond on this Date:*

*August 5, 2014*

*Joel H. Peck*

*Joel H. Peck, Clerk of the Commission*

# Commonwealth of Virginia



## State Corporation Commission

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

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

Nothing more is hereby certified.



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

*Joel H. Peck*  
\_\_\_\_\_  
*Joel H. Peck, Clerk of the Commission*

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA

EXPIRES ON

02-29-2016

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

NUMBER

0411001043

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

PROFESSIONS: ENG

MCCORMICK TAYLOR INC  
2426 LEE HIGHWAY  
SUITE 208  
BRISTOL, VA 24202



*Nick A. Christner*  
Nick A. Christner, Interim Director

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COMMONWEALTH OF VIRGINIA

BOARD FOR APESCIDLA  
BUSINESS ENTITY BRANCH OFFICE REGISTRATION  
NUMBER: 0411001043 EXPIRES: 02-29-2016  
PROFESSIONS: ENG  
MCCORMICK TAYLOR INC  
2426 LEE HIGHWAY  
SUITE 208  
BRISTOL, VA 24202



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

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

EXPIRES ON  
12-31-2015

NUMBER  
0407004111

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

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

PROFESSIONS: ENG

MCCORMICK TAYLOR INC  
NORTH SHORE COMMONS A  
4951 LAKE BROOK DR SUITE 275  
GLEN ALLEN, VA 23060



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

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COMMONWEALTH OF VIRGINIA  
BOARD FOR APELSCIDLA  
BUSINESS ENTITY REGISTRATION  
NUMBER: 0407004111 EXPIRES: 12-31-2015  
PROFESSIONS: ENG  
MCCORMICK TAYLOR INC  
NORTH SHORE COMMONS A  
4951 LAKE BROOK DR SUITE 275  
GLEN ALLEN, VA 23060



(DETACH HERE)

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

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

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

**EXPIRES ON  
02-29-2016**

**NUMBER  
0411000771**

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

**PROFESSIONS: ENG**

**MCCORMICK TAYLOR INC  
111 MILL PLACE PARKWAY  
UNIT 105  
VERONA, VA 24482**



*Jay W. DeBoer*  
Jay W. DeBoer, Director

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**COMMONWEALTH OF VIRGINIA**

**BOARD FOR APELSCIDLA  
BUSINESS ENTITY BRANCH OFFICE REGISTRATION  
NUMBER: 0411000771 EXPIRES: 02-29-2016  
PROFESSIONS: ENG  
MCCORMICK TAYLOR INC  
111 MILL PLACE PARKWAY  
UNIT 105  
VERONA, VA 24482**



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

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## **Attachment 3.3.1 Key Personnel Resume Forms**

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## ATTACHMENT 3.3.1

### KEY PERSONNEL RESUME FORM

<b>Brief Resume of Key Personnel anticipated for the Project.</b>	
a. Name & Title:	Andy Jenkins, Structure Operations Engineer
b. Project Assignment:	Design-Build Project Manager
c. Name of Firm with which you are now associated:	Vecellio & Grogan, Inc.
d. Employment History: With this Firm <u>7</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):	<p><b>Vecellio &amp; Grogan, Inc., Structure Operations Engineer (2008 to Present)</b> Responsible for structures construction operations including reviewing bid estimates, developing and maintaining construction schedules and budgets, monitoring field production, supporting field supervision, managing administrative and reporting duties, as well as communication with project owners and representatives.</p> <p><b>Fort Chiswell Construction Corp., Project Engineer/Estimator (1999 to 2008)</b> Estimated commercial building and heavy highway construction in Virginia and West Virginia. Mr. Jenkins was the project engineer for VDOT highway and bridge projects. He developed project schedules, tracked production, and coordinated subcontractors and major material suppliers.</p>
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:	Bluefield State College (Bluefield, WV)/Bachelor of Science/2001/Civil Engineering Technology
f. Active Registration: Year First Registered/ Discipline/VA Registration #:	All required registrations will be acquired upon award of contract.
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> <b>(List at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.)</b>	<ol style="list-style-type: none"><li><b>1. NCDOT Greensboro Western Loop - Project Manager</b> Performing project management duties for a \$123 million project to construct 3.8 miles of a 6-lane portion of the Greensboro Western Loop. The project includes 1.1 million cubic yards of excavation, construction of eight bridges, two box culverts, two MSE walls, and a sound wall; as well as construction of a single point urban diamond interchange with Route 220. The project structures are constructed over an environmentally-sensitive area and required the development and construction of over 11,000 LF of temporary work bridge. Given its proximity to residences and traffic, the project also required that Mr. Jenkins oversee a complex MOT plan. Mr. Jenkins was also integral in the development and approval of a major value engineering proposal which resulted in a savings to NCDOT of approximately \$500,000. (2013 to Present)</li><li><b>2. VDOT Big Walker and East River Mountain Tunnel Rehabilitation - Project Engineer</b> Developed cost estimates, coordinated submittals, and managed subcontractors and material suppliers for this \$16 million rehabilitation project in southwestern Virginia on I-77. The project involved phased construction and work in/around heavy traffic. Work used 24-hour continuous operations to minimize the overall construction impact to the traveling public. (2005 to 2008)</li><li><b>3. Giles County Route 670 Walkers Creek Bridge Design-Build - Project Engineer</b> Developed cost estimates, coordinated submittals, managed subcontractors and material suppliers, and oversaw concrete QC testing for this \$4 million design-build project. The project included demolishing the existing bridge and constructing a 200' long (approx.) bridge on new alignment over Walkers Creek. To prevent impacts to the stream, a temporary work bridge was used during bridge construction. (2006 to 2007)</li></ol>

**4. Pulaski County Route 643 - Project Engineer**

Developed cost estimates and coordinated submittals, subcontractors, and material suppliers. The project involved the demolition of existing and construction of a new bridge over Big Reed Island Creek in Pulaski County on new alignment. (2004 to 2005)

**5. VDOT Route 11 Bridge Replacement over I-81 - Project Engineer**

Developed cost estimates and coordinated submittals, subcontractors, and material suppliers for this bridge replacement project over I-81. Mr. Jenkins' responsibilities extended beyond this project as Fort Chiswell Construction Corp. had three projects of similar size/scope ongoing contemporaneously. The replacement of these structures involved phased construction and temporary lane closures on I-81 during nighttime hours, shifting traffic away from overhead construction. To prevent impacts on the traveling public, overhead protection was used during superstructure work. (2004 to 2008)

\* 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

<b>Brief Resume of Key Personnel anticipated for the Project.</b>	
a. Name & Title:	Joseph Hamed, P.E., CCM, PMP, Quality Assurance Manager
b. Project Assignment:	Quality Assurance Manager (QAM)
c. Name of Firm with which you are now associated:	NXL Construction Services, Inc.
d. Employment History: With this Firm <u>4</u> Years With Other Firms <u>25</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):	<p><b>NXL Construction Services, Inc., Quality Assurance Manager (2011 to Present)</b> Responsibilities include independent QAM roles for joint design-build projects, making sure that all contract requirements and specifications are appropriately administered and applied, all required quality control testing and independent QA is carried out in accordance with applicable requirements and construction quality standards are met and payments appropriately processed.</p> <p><b>VDOT, Area Construction Engineer (2005 to 2006 and 2011)</b> Managed the delivery of the construction program in the Salem District Southern Construction Area. Mr. Hamed's responsibilities included identifying and communicating with project stakeholders and encouraging team members to communicate, identifying the need for extra work, reviewing and negotiating work order prices, and providing responsible charge oversight to ensure that each project was constructed in conformance with the plans, specifications, and standards.</p> <p><b>VDOT, Program Delivery Engineer (2006 to 2011)</b> Provided oversight of all southwest regional operations project delivery in all project phases, including planning, programming, project development and construction. Mr. Hamed identified funding sources for chosen projects, requested funding transfers, and initiated projects in the Department's system. He also provided oversight of the project engineering process to make sure that projects were developed in accordance with VDOT processes.</p> <p><b>VDOT, Project Manager (2004 to 2005)</b> Provided constructability, erosion and sediment control, and safety reviews for several projects in various phases including design and construction. Mr. Hamed also provided project management and engineering analysis on a variety of projects.</p> <p><b>HNTB, Corporation, Resident Engineer (2004)</b> Mr. Hamed's duties included documenting progress, providing reports to various stakeholders, including VDOT, the prime contractor (Branch Highways), and the design office of HNTB.</p> <p><b>Louis Berger Group, Project Manager/Project Engineer (1999 to 2004)</b> Mr. Hamed's primary duty was to document that the project was constructed in accordance with the plans, specifications and the contract. He monitored the contractor's activities with respect to schedule, cost and quality.</p>
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:	University of Idaho/Bachelor of Science/1990/Civil Engineering
f. Active Registration: Year First Registered/ Discipline/VA Registration #:	2004/Professional Engineer /#0402039327
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> <b>(List at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.)</b>  1. <b>I-581/ Valley View Boulevard Interchange Improvements Design-Build - Quality Assurance Manager</b> Providing QA inspection and testing and monitoring of the Contractor's QC program. QA and QC processes	

are monitored and documented to verify compliance with the contract requirements. Mr. Hamed's responsibilities included preparation, maintenance, and submission of associated project documentation, including diaries, EEO, materials notebook/documentation, and monthly pay documents including verifying and approving monthly pay packages. He attended monthly progress meetings and documented non-conforming work, making sure that non-conforming work was addressed through approved methods of correction. This \$43 million project will complete an existing interchange that serves a major shopping center. The design-build team's scope of work includes design, right-of-way services, environmental permitting, paving, grading, drainage, sound walls, lighting, traffic signals, bridge repair/ construction, and pedestrian trails/bridges. The project's innovative approach provides a diverging diamond interchange that reduces right-of-way acquisition and environmental impacts. (2013 to Present)

**2. VDOT I-81 Corridor Safety Improvements (Truck Climbing Lanes) Design-Build - Quality Assurance Manager**

Provided independent QA in accordance with the Department's design-build specifications. The QA staff provided ongoing observation of construction and QC processes to verify adherence to the relevant plans, specifications, and standards. Mr. Hamed's responsibilities included preparation, maintenance, and submission of associated project documentation, including diaries, EEO, materials notebook/documentation, as-built sketches, monthly pay documents including verifying and approving monthly pay packages, and preparation and submission of final records. He attended monthly progress meetings and documented non-conforming work, making sure that non-conforming work was addressed through approved methods of correction. This \$75 million project in Montgomery County, VA provided an additional interstate southbound lane through five miles of mountainous terrain. The contractor's scope of work included design, right of way services, drilling, blasting, grading, drainage, paving, multiple bridge construction, demolition of existing structures, environmental permitting, MOT, and retaining walls. (Completed in 2013)

**3. VDOT Route 60/Main Street Bridge Rehabilitation Design-Build - Quality Assurance Manager**

Provided QA services in accordance with VDOT requirements. The QA staff provided constant oversight of construction and the QC processes to verify compliance with contract requirements. This \$3.6 million dollar project in Clifton Forge, VA replaced an existing concrete bridge in an urban environment. Since the bridge deck provides access to businesses on both sides of the street, maintaining access to businesses during construction was a key aspect of this project. The design-build team's scope of work included design, environmental permitting, demolition of existing structure, maintaining constant access to businesses, bridge construction, drainage, paving, light electrical, traffic signal, and signage. (2011 to 2012)

**4. VDOT Route 58 PPTA - Resident Engineer**

Duties included documenting progress, providing reports to various stakeholders, including VDOT, the prime contractor, and the design office. Mr. Hamed performed erosion and sediment control inspections, recommended erosion and sediment control preventive measures, coordinated problems and permits with DEQ, the U.S. Army Corps of Engineers, and VDOT, and also collected and forwarded data required by DEQ and the U.S. Army Corps of Engineers, including pH, temperature, and dissolved oxygen. He documented that the work met the proper VDOT specifications and standards, and documented, logged, tracked and forwarded any nonconforming items. Mr. Hamed provided interpretation and clarification of plans and specifications by coordinating closely with the design engineer. He also provided engineering support and analysis for a wide range of problems with varying degrees of complexity, including undercut depths, drilled shaft modifications, and additional under drain requirements. This \$17 million PPTA project in Patrick County, VA, was the first of its kind in the Salem District, and included 12 lane miles of new roadway, including drainage, paving, box culverts, and one concrete arch bridge. (Completed in 2004)

**5. VDOT Region 3 Multiple Bridge Rehabilitation Design-Build Projects - Quality Assurance Manager**

Performed QA testing and inspection in accordance with VDOT's *Design-Build Guidelines* and the project's approved *Quality Assurance and Quality Control Plan*, the preparation, maintenance and submission of associated project documentation including but not limited to diaries, EEO, ARRA, materials notebook/documentation, as-built sketches, monthly pay documents including verifying and approving monthly pay packages, and preparation and submission of final records. Mr. Hamed attended monthly progress meetings, documented non-conforming work, making sure that non-conforming work was addressed through approved methods of correction. He also coordinated with the QC manager, construction manager, and project managers on a variety of issues related to quality, schedule, and payment. This regional VDOT/ARRA design-build bridge rehabilitation project included 23 bridges located in three VDOT Districts (Staunton, Culpeper, and NOVA) with a duration of approximately 22 calendar months of construction-related activities requiring QA inspection and testing. (2011 to 2012)

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**

<b>Brief Resume of Key Personnel anticipated for the Project.</b>	
a. Name & Title:	Ronald Briggs, P.E., Project Manager, Senior Associate
b. Project Assignment:	Design Manager
c. Name of Firm with which you are now associated:	STV Incorporated dba STV Group Incorporated
d. Employment History: With this Firm <u>30</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):  <b>STV, Group Leader/Project Manager, Senior Associate (1985 to Present)</b> Coordinates the work of diverse specialists covering a multitude of disciplines for major bridge design projects that include roadway interfaces, environmental compliance, and permitting. Mr. Briggs oversees feasibility studies and load rating analyses for bridge structures, including plan checking and review of structural plans. He also oversees hydrologic and hydraulic analyses and scour analyses. He is responsible for coordinating individual design disciplines and making sure overall project design is in conformance with contract documents. He establishes and oversees QA/QC programs for all pertinent disciplines involved in design, including the review of designs, working plans, shop drawings, specifications, and constructability.
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:	University of Virginia (Charlottesville, VA)/Master of Science/1981/Civil Engineering Virginia Polytechnic Institute and State University (Blacksburg, VA)/Bachelor of Science/1975/Civil Engineering
f. Active Registration: Year First Registered/Discipline/VA Registration #:	1979/Professional Engineer/#0402011415
g. Document the extent and depth of your experience and qualifications relevant to the Project.	<ol style="list-style-type: none"><li>1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i></li><li>2. <i>Note whether experience is with current firm or with other firm.</i></li><li>3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i></li></ol> <p><b>(List at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.)</b></p> <ol style="list-style-type: none"><li>1. <b>VDOT I-581 and Valley View Boulevard Interchange Improvements Design-Build - Lead Structures Engineer</b> Responsible for the design of all bridges and structures associated with the Phase II construction of the I-581 and Valley View Boulevard interchange in Roanoke, VA. The estimated \$43 million design-build project includes the widening and rehabilitation of the existing bridge carrying Valley View Boulevard over I-581, a shared use path bridge over I-581 and ramps W and X, three retaining walls, an extension of an existing box culvert, and more than 6,000 feet of sound barrier walls. The bridge carrying Valley View Boulevard is a 2-span 240-foot continuous steel plate girder bridge and is being modified to eliminate deck joints by using deck slab extensions. The existing superstructure is being modified and strengthened to meet current LRFD design requirements. Staged construction is being implemented to complete the bridge widening, modification, and rehabilitation work. The bridge carrying the shared use path is a 2-span 251-foot continuous steel plate girder bridge with a composite reinforced concrete deck and mechanically stabilized earth retaining walls. Mr. Briggs is responsible for plan checking and review of structural plans. He is responsible for coordinating structural design with other disciplines and making sure the structural design is in conformance with contract documents. He is responsible for overseeing QC for the structural design, including the review of designs, working plans, shop drawings, specifications, and constructability. (2013 to Present)</li></ol>

**2. VDOT I-95 Bridge Replacement over Meherrin River - Project Manager**

Managing the design for the replacement of the functionally obsolete 540-foot-long dual bridges carrying I-95 over the Meherrin River in the City of Emporia, VA, for VDOT. Mr. Briggs oversaw the preparation of a bridge concept study, preliminary field inspection plans, public hearing plans, Stage I report, preliminary bridge plans, and final bridge and roadway plans. Eight staged construction concepts and alignments were developed for the bridge concept study to address construction of the new bridges to limit disruptions to traffic on the interstate. The project includes a total of approximately 1.1 miles of roadway reconstruction. Mr. Briggs met with key project stakeholders and affected property owners during the project development process. He is responsible for coordinating individual design disciplines and making sure overall project design is in conformance with the contract documents. He establishes and oversees QA/QC programs for all pertinent disciplines involved in design, including the review of designs, specifications, and constructability. (2012 to Present)

**3. VDOT Limited Services Term Contract for New Design Plans of Highway Structures and Bridges in the Salem District - Project Manager**

Managing the limited services term contract to provide engineering design services on a task order basis for new design plans of highway structures and bridges in the VDOT Salem District. The firm has received two bridge replacement task orders to date. The first is for the replacement of the bridge carrying Route 634 (Hardy Road) over the Roanoke River (Smith Mountain Lake) in Bedford and Franklin counties. The second task order is for the replacement of the bridge carrying Route 43 over the Big Otter River in Bedford County. Mr. Briggs is managing each assignment for the VDOT Salem District as individual turn-key design projects, following VDOT's project development process. Mr. Briggs is also overseeing preparation of the design of the replacement bridges and roadway approaches for both task orders. He is responsible for coordinating individual design disciplines and making sure overall project design is in conformance with contract documents. He establishes and oversees QA/QC programs for all pertinent disciplines involved in design, including the review of designs, specifications, and constructability. (2012 to Present)

**4. VDOT I-264 Bridge Widening over Abandoned Railroad (Future HRT Light Rail Corridor) - Project Manager**

Managing the structural design services for the widening and rehabilitation of the bridge carrying I-264 EBL over an abandoned railroad (future HRT light rail corridor). Mr. Briggs's responsibilities include the development of alternatives to eliminate the existing joints at the piers and abutments as well as preliminary plan development. He is responsible for coordinating individual design disciplines and making sure overall project design is in conformance with contract documents. He establishes and oversees QA/QC programs for all pertinent disciplines involved in design, including the review of designs, specifications, and constructability. (2009 to Present)

**5. City of Alexandria Route 1 Bridge Replacement over Main Line Boulevard, CSXT, and WMATA - Project Manager**

Managed the design and construction phase services for this \$15 million (bridge only) design-build project with Shirley Contracting under contract to a private developer for the replacement of the existing bridge carrying Route 1 over Main Line Boulevard, CSXT, and WMATA. Mr. Briggs was responsible for evaluating two alternatives for the replacement of the existing bridge to improve the alignment of Route 1, alleviate congestion, and improve connectivity between the communities on both sides of the CSXT corridor. Final plans were subsequently developed for the new bridge, which consisted of a 4-span continuous horizontally curved steel plate girder bridge with span lengths of 169'-241'-241'-184'. He coordinated with four individual utility owners during design in order to develop a relocation plan for the utilities that were located on the existing bridge. Working with the contractor and utility owners, Mr. Briggs oversaw the development of a staged construction concept for the replacement bridge to facilitate the relocation of the existing utilities to the new bridge. During design, Mr. Briggs also worked closely with project stakeholders including the City of Alexandria, VDOT, a private developer, CSXT, and several community organizations. The bridge features include wide sidewalks separated from vehicular traffic by a special design parapet/railing, lighting along the sidewalks/roadway, enhanced pedestrian fencing, and lighting below the bridge. (2005 to 2007)

\* 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**

<b>Brief Resume of Key Personnel anticipated for the Project.</b>	
a. Name & Title: Russell Lee, Superintendent	
b. Project Assignment: Construction Manager	
c. Name of Firm with which you are now associated: Vecellio & Grogan, Inc.	
d. Employment History: With this Firm <u>2</u> Years With Other Firms <u>21</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):  <b>Vecellio &amp; Grogan, Inc., Bridge Superintendent (2013 to Present)</b> Responsible for managing project structure construction operations. Responsibilities include daily planning, management of labor and equipment resources, monitoring of project cost, maintaining project schedule, as well as overseeing quality control testing and monitoring to make sure that the work performed exceeds contract requirements and the plans and specifications approved for construction.  <b>Beaver Excavating, Inc., Project Superintendent (2007 to 2013)</b> Responsible for managing construction processes, including all QC activities to make sure the materials used and work performed meet contract requirements and the plans and specifications approved for construction.  <b>Smith &amp; Johnson Construction, Project Superintendent (2004 to 2006)</b> Responsible for managing construction processes, including all QC activities to make sure the materials used and work performed met contract requirements and the plans and specifications approved for construction.  <b>CJ Mahan Construction, Project Superintendent (2003 to 2004)</b> <b>Smith &amp; Johnson Construction, Project Superintendent (2001 to 2003)</b> <b>Jones Brothers Construction, Project Superintendent (1999 to 2001)</b>	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Eastern Kentucky University (Richmond, KY)/1986 to 1988/Not completed Russell High School (Russell, KY)/1986/Diploma	
f. Active Registration: Year First Registered/ Discipline/VA Registration #: Will obtain VEQ Responsible Land Disturber Certification and VDOT Erosion and Sediment Control Contractor Certification prior to commencement of construction.	
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> <b>(List at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.)</b>  <b>1. West Virginia Division of Highways South of Madison to North of Davey Branch - Bridge Superintendent</b> Responsible for management of all bridge and structure construction operations. Mr. Lee's duties include coordination of labor, equipment, subcontractors, and materials for construction of two multi-span bridges over environmentally-sensitive areas and residential traffic for this \$45 million project in Logan County, WV. The project includes two four-lane bridge structures (350' and 550') over environmentally-sensitive streams/areas and residential traffic. Mr. Lee is responsible for daily interaction and coordination with the West Virginia Division of Highways to verify compliance with all specifications and contract requirements. (2013 to Present)	

**2. West Virginia Division of Highways Hartland Bridge - Bridge Superintendent**

Responsible for management of all bridge and structure construction operations. Mr. Lee's duties included coordination of labor, equipment, subcontractors, and materials for construction of a 698-ft, 4-span continuous steel girder bridge over an active railroad and the Elk River in Clay County, WV. The project also included necessary tie-in and roadways realignment work as well as phased construction to maintain traffic on State Route 16 during construction. Mr. Lee was responsible for daily interaction and coordination with the West Virginia Division of Highways to verify compliance with all specifications and contract requirements for this \$6 million project in Clay County, WV. (2014)

**3. City of High Point West Hartley Drive - Bridge Superintendent**

Responsible for management of all bridge and structure construction operations. Mr. Lee's duties included coordination of labor, equipment, subcontractors, and materials for construction of a 4-lane, 3-span bridge over Rich Fork Creek, along with sound and retaining walls. He was also responsible for facilitating coordination with the prime contractor (Sharpe Brothers – a Division of Vecellio & Grogan, Inc.) and compliance with all specifications and contract requirements for this \$14 million project in High Point, NC. This project involves the widening, enhancement, and extension of West Hartley Drive (US311 N Main Street to Westover Drive). The project consisted of a 1,850-lf of roadway widening work (improved from a two lane roadway to a four lane divided roadway), a 254-ft long concrete bridge, and 3,650-lf of new 4-lane divided roadway. (2013)

**4. Spencer County, OH Bridge Operations - Project Superintendent**

Responsible for management of all bridge operations. Mr. Lee's duties included coordination of labor, equipment, subcontractors and materials for the \$5 million construction of four bridges, two of which were four span and crossed over a creek; the other two were over railroad crossings set on tube pile. His other responsibilities included overseeing job site safety, interaction and coordination with the owner, and monitoring compliance with all specifications. (2004 to 2006)

**5. Athens, OH Route 33 - Project Superintendent**

Responsible for management of all bridge operations. Mr. Lee's duties included the coordination of labor, equipment, subcontractors, and materials for the \$13 million construction of eight bridges with a mixture of footers, drilled shafts, H-pile and tube pile substructure. His other responsibilities included monitoring job site safety, interaction and coordination with the owner, and monitoring compliance with all specifications. (2001 to 2003)

\* 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.

West Virginia Division of Highways South of Madison to North of Davey Branch - Bridge Superintendent (through June 2016)

**Attachment 3.4.1(a) and Attachment 3.4.1(b) Work History Forms**

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**ATTACHMENT 3.4.1(a)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: Greensboro Western Loop  Location: Greensboro, NC	Name: STV	Name of Client/Owner: NCDOT Phone: (336) 375-1774 Project Manager: Brian Smith, Resident Engineer Phone: (336) 375-1774 Email: bvsmith@ncdot.gov	09/2017 (estimated)	09/2017 (estimated)	\$122,110	\$121,887 (ongoing)	\$121,887 (ongoing)

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.

<p align="center"><b>SIMILARITIES IN SCOPE AND COMPLEXITY</b></p> <ul style="list-style-type: none"> <li>• Bridge construction</li> <li>• Roadway construction</li> <li>• Survey</li> <li>• Environmental</li> <li>• Geotechnical</li> <li>• Hydraulics</li> <li>• Traffic control devices</li> <li>• Transportation management plan</li> <li>• Utilities</li> <li>• Public involvement/relations</li> <li>• Quality assurance and quality control</li> </ul>
<p align="center"><b>KEY PERSONNEL PROPOSED FOR I-81 STRUCTURES</b></p> <ul style="list-style-type: none"> <li>• Andy Jenkins, Design-Build Project Manager</li> </ul>

**PROJECT SCOPE**

This major construction project was a \$122 million contract for the North Carolina Department of Transportation and included the construction of 3.8 miles of a 6-lane portion of the Greensboro Western Loop to improve the traffic flow within the city of Greensboro, NC, and to help provide a more direct route to the Piedmont Triad International Airport. The dual bridges carry the loop over Drawbridge Parkway, Horsepen Creek, and Battleground Avenue, which includes an interchange with two ramp bridges connecting to the mainline dual bridges. Additionally, two independent bridges make up the east side of the interchange.

**PROJECT DESCRIPTION**

The freeway project included 1.1 million cubic yards of excavation, construction of eight bridges, two box culverts, two MSE walls, a sound barrier wall, soil nail wall, along with the construction of an single point urban diamond interchange (SPUD) with Route 220. The project featured a complex MOT plan to maintain traffic on US Route 220, and I-840 along with several side roadways that crossed the projects alignment.

Early in the initial phase of the project V&G successfully submitted and received acceptance of a value engineering proposal (VEP) for the project. The VEP lowered the overall costs of the construction of two of the mainline bridge structures by altering the pier and girder configurations in both the left and right mainline bridges. This change also facilitates the simplification of the deck and joint construction of 4 spans from trapezoidal configurations to 90 degree radial configurations. The VEP will improve the delivery of the project as it simplifies a complicated element of the work.

The project had identified 14 different environmentally sensitive areas which included clearing restrictions of the wetland areas. The wetlands required us to construct the majority of the two 4,200' mainline bridges, including the ramps off of a temporary work bridge while avoiding any impacts to the wetlands.

**STV was the lead designer.** STV was responsible for the bridge design and construction plans for the I-840 interchange with US 220. This location is adjacent to and crosses the Horsepen Creek Floodplain, its associated wetlands, Drawbridge Parkway, and the Colonial Pipeline Corridor.

**PROJECT BENEFITS**

Through permit modifications, V&G was able to reduce the needed work bridge /trestle footage by approximately 20% of its originally planned footage. During this permit revision, we were able to reduce the total impact areas as well, which allowed us to make additional temporary impact revisions. These revisions helped in

fascinating temporary impacts such as stream crossings and access points to construct fills without the initial planned MOT, and allow unrestricted daytime construction which accelerated the ramp embankment schedule.

The sites numerous crossing elements and adjacent features required the design to address variable span lengths, variable skews, variable superelevations within the bridge limits. Drainage systems were also designed to convey deck drainage across the environmental features and roadways beneath to discharge into acceptable locations. Temporary access work bridges were laid out and permitted given the environmentally sensitive site. Drilled shaft foundations, and where possible, pile footing foundations were used. Straddle bents were used at the Drawbridge Parkway crossing to simplify superstructure geometry, minimize span lengths, and reduce overall constructions costs. Foundations within/adjacent to the pipeline corridor were designed for the excavation of surrounding soils to allow the installation of future pipelines and maintenance of the existing lines. Furthermore the structures were required to accommodate screening/sound barrier walls mounted to the bridges to minimize project impacts to the adjacent communities.



\*For a project with multiple phases or multiple contracts, only one phase or one contract will be considered. If additional phases or contracts are shown under the same Work History Form, only the first phase or contract listed will be evaluated.

**ATTACHMENT 3.4.1(a)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: West Hartley Drive Extension  Location: High Point, NC	Name: STV	Name of Client/ Owner: City of High Point Phone: (336) 883-3197 Project Manager: Keith Pugh Phone: (336) 883-3194 Email: keith.pugh@highpointnc.gov	12/2013	04/2014	\$9,558	\$14,914	\$3,015

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.

**SIMILARITIES IN SCOPE AND COMPLEXITY**

- Bridge construction
- Roadway construction
- Survey
- Environmental
- Geotechnical
- Hydraulics
- Traffic control devices
- Transportation management plan
- Utilities
- Public involvement/relations
- Quality assurance and quality control

**KEY PERSONNEL PROPOSED FOR I-81 STRUCTURES**

- Russell Lee,  
Construction Manager

Note: This work was performed by a subsidiary with the offeror as a major subcontractor. Sharpe Brothers, a Division of Vecellio & Grogan, Inc. was the prime contractor for this project. Vecellio & Grogan, Inc. performed the bridge, sound barrier wall, and retaining wall construction work as a major subcontractor to Sharpe Brothers.

**PROJECT SCOPE**

To create an improved route linking North Main Street and residential areas in High Point, NC, the 1.1-mile widening, enhancement, and extension of West Hartley Drive included several roadway realignments and intersections, as well as associated structures, including retaining walls and a 254-foot-long, 3-span, 4-lane concrete girder bridge with drilled shafts over the Rich Fork Creek. The project included the mass grading of approximately 140,000 cubic yards of dirt (42,000 cubic yards of waste dirt). This project also included 7,500-lf of storm drainage; 3,500-lf of water line; 1,100-lf of sewer line; 34,000 tons of asphalt; 13,000-lf of curb and gutter; 6,000 square yards of concrete sidewalk; the installation of a new signalized intersection; a concrete panel retaining wall; and a sound barrier wall, as well as a 1,850-lf road widening from a 2-lane road to a 4-lane divided roadway and 3,650-lf of new 4-lane divided roadway.

**PROJECT DESCRIPTION**

Our team hit the ground running on this project. We were able to break the project into three parts—one part of the project being a road widening of existing roadway, one part being the new roadway, and the last part being the bridges and retaining walls. We were able to place enough personnel on the project to install utilities, install storm drainage, move dirt, and build the bridges and retaining walls in all three areas at the same time (not counting the crews for the subcontractors).

The existing 1,800-foot, 2-lane segment of Hartley Drive was expanded to 4 lanes to match the 4,250-foot-long, 4-lane extension of new roadway. In addition, 400 feet of Westover Drive was realigned to create a new T-intersection with Hartley Drive, and Ingleside Drive was realigned with Hartley Drive for approximately 300 feet to create a new 4-way intersection.

The project required several new structures, including a 3-span, 253-foot-long, concrete bridge with a severe skew across Rich Fork Creek. The post-and-beam substructures are founded on drilled shafts. STV also designed three retaining walls, the longest of which stretches 300 feet along Hartley Drive and is topped by a

sound barrier wall to reduce highway noise.

**PROJECT BENEFITS**

The coordination of all of the crews was the key to the success of this project. **Due to this approach, the project was completed six months early.** The City of High Point was so impressed with our work, performance, and quality that they awarded Sharpe Brothers two additional roadway projects for a combined \$6.4 million as an additive change order to the original contract.

**STV was the lead designer.** The project faced several design challenges, including the need for innovative erosion control design along the narrow construction route, which contained several creeks, steep slopes, and ravines. Other considerations included wetland impacts and proximity to residential subdivisions. Addressing these issues while maintaining the project schedule and budget required extensive coordination with the North Carolina Department of Environment and Natural Resources. Along with roadway/bridge design, STV's services included traffic analysis, a public involvement program, environmental screening/permitting, geotechnical exploration, stream modeling, utility coordination, and construction phase support.



\*For a project with multiple phases or multiple contracts, only one phase or one contract will be considered. If additional phases or contracts are shown under the same Work History Form, only the first phase or contract listed will be evaluated.

**ATTACHMENT 3.4.1(a)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: Route 288 Construction at US 60 Interchange  Location: Chesterfield County, VA	Name: Dewberry & Davis	Name of Client/ Owner: VDOT Phone: (804) 524-6000 Project Manager: Shane Mann Phone: (804) 720-4229 Email: shane.mann@vdot.virginia.gov	07/2003	10/2005	\$47,637	\$60,427	\$60,427

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.

**SIMILARITIES IN SCOPE AND COMPLEXITY**

- Bridge construction
- Roadway construction
- Survey
- Environmental
- Geotechnical
- Hydraulics
- Traffic control devices
- Transportation management plan
- Utilities
- Public involvement/relations
- Quality assurance and quality control

**PROJECT SCOPE**

This major project began as a \$47 million contract with VDOT, but quickly expanded to include two additional subcontracts for portions of the adjoining projects. Ultimately, due to numerous plan revisions required to accommodate the adjoining Route 288 PPTA project, this grew to become a \$60 million project. The project included 3.3 million cubic yards of excavation, construction of seven bridges, and construction of an interchange with Route 60 (Midlothian Turnpike). The project featured a complex MOT plan to provide for maintenance of traffic on Route 60 and several other roadways that crossed the new alignment of Route 288.

**PROJECT DESCRIPTION**

This project had unplanned changes to the work from the very start. Notice to proceed with construction of several major bridges was delayed to allow time for VDOT to re-design them. This re-design was necessary to provide wider bridges that would accommodate the traffic from the adjoining PPTA project. Additionally, numerous slides throughout the length of the project affected progress. Most of these slides were nuisances and were removed or repaired without significantly affecting the completion date of the project. However, one major slide was located at the base of a major electric transmission tower. Designing and constructing the fix for this slide significantly delayed the project. The re-design raised the profile grade for a long section of the new mainline to protect the transmission tower. Additionally, repair of the slide was accomplished in small increments to avoid affecting stability of the tower, but this method dramatically affected productivity. Ultimately, the project was complete and opened to traffic at about the same time as the adjoining PPTA project.

**PROJECT BENEFITS**

Though this project was a traditional design-bid-build, V&G gained considerable design-build-like experience on this project. The adjoining PPTA project necessitated a significant re-design of many of the bridge structures on the project immediately after the project was awarded to V&G. Then, when grading operation were nearing completion, a major slide below an electrical transmission tower necessitated a complete re-design of the roadway finished grade through a large portion of the project.

During the course of this project, the V&G team developed its skill of maintaining progress and productivity while dealing with a constant barrage of changes. Additionally, an outside consultant performed the construction engineering and inspection work on this major project for VDOT. These two facts helped V&G hone some of the skills necessary to effectively manage a design-build project.



\*For a project with multiple phases or multiple contracts, only one phase or one contract will be considered. If additional phases or contracts are shown under the same Work History Form, only the first phase or contract listed will be evaluated.

**ATTACHMENT 3.4.1(b)**

**LEAD DESIGNER - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime/general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: I-581/Valley View Boulevard Interchange Improvements Phase II  Location: Roanoke, VA	Name: The LANE Construction Corporation	Name of Client.: VDOT Phone: (540) 387-5353 Project Manager: Bobby Phlegar Phone: (540) 378-5083 Email: r.phlegar@vdot.virginia.gov	May 2014	2016 (estimated)	\$38,475	\$39,450 (estimated)	\$3,489

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.

**SIMILARITIES IN SCOPE AND COMPLEXITY**

- Design-build
- Project management
- Bridge and structure design
- Roadway design
- Traffic control devices/MOT/TMP
- Survey
- Environmental
- Geotechnical
- Hydraulic/hydrologic analyses
- Utilities
- QA/QC
- Public involvement/relations

**KEY PERSONNEL PROPOSED FOR I-81 STRUCTURES**

- Ronald Briggs, P.E., Design Manager
- Joseph Hamed, P.E., CCM, PMP Quality Assurance Manager

**PROJECT SCOPE**

STV is the **lead designer** providing professional engineering services to complete a current partial interchange to provide better local access to the regional Valley View Mall and relieve congestion along Hershberger Road. During the design-build procurement of this \$39.4 million project, the STV team proposed a diverging diamond interchange (DDI) to improve the existing partial interchange. The DDI provided many advantages over the PARCLO B interchange proposed in the RFP document. The DDI reduced the overall footprint of the interchange, reduced the required width of the bridge carrying Valley View Boulevard over I-581 by 37.5 feet, and reduced the southbound I-581 deceleration lane by 900 feet. The DDI also eliminated over 900-lf of stream relocation work, significantly reduced impacts to existing utilities, and entirely eliminated the need for the acquisition/demolition of five residential structures, which significantly reduced project risk. **STV's offices in Fairfax, VA and Richmond, VA performed the design work.** This project was designed to allow for the extension of Valley View Boulevard in the future. This includes the design and construction of stub-outs for the interchange ramps and installing conduits on the bridge and under the roadway for future traffic signals.

**PROJECT DESCRIPTION**

**Structures:** STV developed design plans for the widening and rehabilitation of the bridge carrying Valley View Boulevard over I-581, a shared use path bridge over I-581 and ramps W and X, three retaining walls, an extension of an existing box culvert, and more than 6,000-ft of sound barrier walls. Staged construction is being implemented to complete the bridge widening, modification, and rehabilitation work on the bridge while maintaining traffic throughout construction.

**Difficult geology:** The project is underlain by two geologic formations susceptible to karst formations. A detailed karst evaluation was completed during the geotechnical investigation and development of the final geotechnical engineering report. Recommendations and appropriate methods of mitigation were incorporated into the design, such as the use of clay liners for the stormwater management basins. During construction, the team encountered challenges when driving piles on the project, due to the highly variable rock surface. By having our geotechnical engineer on-site during the pile installation work and STV's bridge engineers on-call, we were able to redesign two foundation elements in a matter of hours so that the contractor could get equipment onto the next foundation element.

**Maintenance of traffic:** I-581 is a critical linkage between I-81 and the City of Roanoke. STV developed a detailed TMP, which involved extensive coordination and input from various design disciplines, members of the construction team, VDOT, FHWA, the City of Roanoke, and other stakeholders. Integrating the construction and widening of the bridges and retaining wall structures was a critical component to the development of the Sequence of Construction (SOC) plans. Construction activities also required coordination with an adjacent bridge replacement project that was taking place concurrently on I-581 at Elm Avenue.

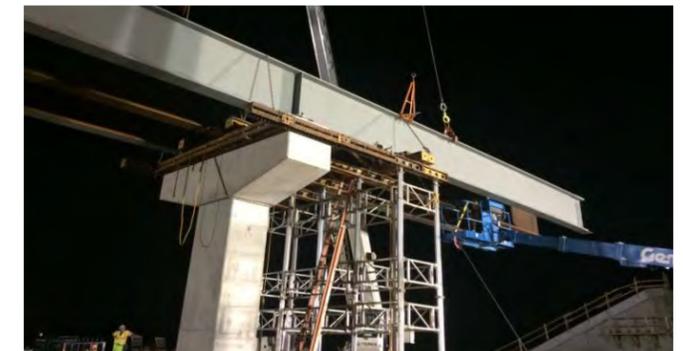
**Roadway:** The project includes approximately 1.3 miles of roadway construction (the construction of auxiliary lanes along I-581 between the Hershberger Road and Valley View Boulevard interchanges, the construction/reconstruction of several interchange ramps, and the reconstruction of a portion of Valley View Boulevard).

**Context-sensitive solutions:** As part of the interchange improvements, STV incorporated several community/city themes into the bridges, retaining walls, and sound barrier walls on the project. For the MSE walls located at the bridge abutments, the standalone retaining walls, and sound barrier walls, a Rustic Ashlar architectural treatment was specified. The architectural treatment was also specified to be integrally colored grey and brown to resemble the limestone that is commonly encountered in the Roanoke, VA area. Landscaping was incorporated into the portions of the Lick Run Greenway that were realigned as a result of the interchange modifications.

**Stakeholder coordination:** The change from a PARCLO B interchange to a DDI required additional stakeholder coordination with FHWA, the City of Roanoke, impacted property owners, and the public. In December 2013, STV held a Citizen's Information Meeting (CIM) on the new interchange concept. During the CIM, STV had two VISSIM simulations continuously playing on a large screen so the public could see how traffic will flow through the DDI.

**KEY PERSONNEL**

**Ronald Briggs, P.E.** (STV) was the lead structures engineer, responsible for the design of all bridges and structures associated with the project. **Joseph Hamed, P.E.** (NXL) is currently serving as the QAM, responsible for the QA inspection and testing of all materials used and work performed on the project, including the monitoring of the contractor's QC program. Construction of the I-581/Valley View Boulevard Interchange project is scheduled to be completed in mid-2016, which will not interfere with the design and construction of the I-81 structures project.



\*For a project with multiple phases or multiple contracts, only one phase or one contract will be considered. If additional phases or contracts are shown under the same Work History Form, only the first phase or contract listed will be evaluated.

**ATTACHMENT 3.4.1(b)**

**LEAD DESIGNER - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime/general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: Route 638 (Atlee Road) Extension  Location: Hanover County, VA	Name: Not applicable	Name of Client: Hanover County Phone: (804) 365-6176 Project Manager: Joseph Vidunas Phone: (804) 365-6176 Email: jevidunas@hanovercounty.gov	2016 (estimated)	2018 (estimated)	\$12,384	\$12,384	\$368

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant.

**PROJECT SCOPE**  
STV is providing professional engineering services as a **subconsultant** for the design of all bridges and structures on the extension of Route 638 (Atlee Road) in Hanover County, VA. STV has worked closely with Hanover County and the VDOT Richmond District on this Locally Administered Project, which will extend Atlee Road approximately a half a mile north from its current termini to tie into Atlee Station Road on the north side of the Buckingham Branch Railroad (BBRR). The design for the extension of Atlee Road is for a 3-lane roadway on an ultimate (future) four-lane divided, curb and gutter roadway. **STV's office in Richmond, VA performed the design work.**

**PROJECT DESCRIPTION**  
*Structures:* STV was responsible for the design of all bridges and structures on the extension of Route 638 (Atlee Road) in Hanover County, VA. The project included the following bridges and structures:

- Atlee Road over Buckingham Branch Railroad: STV designed a new 139-foot single-span bridge to carry Atlee Road over the BBRR. The bridge was designed to allow for a future bridge widening (superstructure and substructure). The initial construction of the bridge is designed to carry two travel lanes, one turn lane, and a sidewalk. The future bridge widening will accommodate a total of four travel lanes (two lanes in each direction), a raised median, and sidewalks along both sides of the bridge. During the early stages of design STV recognized that the vertical profile of Atlee Road needed to take into consideration the future widening of the bridge. The profile had to be set high enough such that when the structure is widened in the future a minimum of 23-feet of vertical clearance would be provided over the BBRR tracks. A transverse section for the future bridge widening was developed for the project. A steel girder design was also completed that would accommodate the future bridge widening such that a depth of the future superstructure could be established for setting the vertical profile. An allowance for future track surfacing (track raises) was taken into consideration when setting the roadway profile.  
  
To reduce the required length of the bridge, MSE walls were used at both abutments. The walls were set just outside the BBRR's right of way, which enabled the use of a single span bridge with no substructure elements located within the railroad's right of way. A "U-back" MSE wall configuration was selected for the MSE walls located along the side of the bridge that will be widened in the future to avoid conflicts with widening the substructure and installing piles in the future. The abutments were also designed to facilitate the future bridge widening. During the execution of the geotechnical exploration program soft ground conditions were identified in areas of planned fill at both abutments. STV worked closely with the project geotechnical engineer to design the bridge foundations. The final design includes a detailed construction procedure for installing the driven pile foundations, constructing the MSE walls and abutments, and monitoring settlement during construction. The bridge is located in a horizontal curve and the abutments are located on a 45 degree skew. In lieu of using horizontally curved steel plate girders, tangent (straight) steel plate girders were selected to accommodate a deck slab extension to make the structure entirely jointless. Unpainted weathering steel was used for all of the structural steel. The interior girders were also designed to carry the future raised median for the ultimate four-lane divided, curb and gutter roadway.
- Atlee Road over Cool Spring Connector: To provide access to two residential properties that will have their access removed when the at-grade railroad crossing at existing Cool Spring Road is removed with the project, STV designed a buried structure to carry Atlee Road over Cool Spring Connector. The structure will consist of a proprietary precast arch system, a retaining wall foundation for the arch system that is supported by prestressed concrete piles, and MSE wingwalls. The structure will provide a minimum roadway width of 20-feet and a minimum vertical clearance of 14' -6". A VDOT Standard MB-7F barrier is being used along both sides of the roadway to protect the abutments and MSE wingwalls. The main barrel of the buried structure will be approximately 128-feet long and will contain a lighting system. The future widening of Atlee Road was also accounted for in the design of the structure.
- MSE Retaining Wall: STV designed a 430-foot-long standalone MSE retaining wall for the associated roadway improvements along Atlee Road near the intersection with Atlee Station Road. This retaining wall will retain the fill slopes of Atlee Road and provide an area in front of the wall to accommodate an access road to several residential properties. The wall also reduces impacts to the front yards of these same residential properties and also eliminates the need for steep driveway entrance grades. The retaining wall features a traffic railing and an Ashlar Stone architectural treatment. The architectural treatment was specified on the MSE wall to improve the walls appearance adjacent to several residential properties.

*Accommodations for future widening:* The bridge carrying Atlee Road over the BBRR and the buried structure on Atlee Road over Cool Spring Connector were designed to allow for future widening (superstructure and substructure).

*Difficult geology:* The presence of soft ground conditions was identified during the geotechnical exploration program. These soft ground conditions were located in areas of planned fill at both abutments. STV worked closely with the project geotechnical engineer to design the foundations. The final design includes a detailed construction procedure for installing the driven pile foundations, constructing the MSE walls and abutments, and monitoring settlement during construction.

*Context-sensitive solutions:* As part of the planned roadway improvements, STV specified an Ashlar Stone architectural finish on a standalone MSE retaining wall that was located adjacent to several residential properties.

*Stakeholder coordination:* STV coordinated and met individually with several project stakeholders throughout the project development process. These project stakeholders included the BBRR, VDOT, and several adjacent property owners. STV also assisted Hanover County during the Public Hearing process.

**SIMILARITIES IN SCOPE AND COMPLEXITY**

- Project management
- Bridge and structure design
- **Allows for future widening**
- Geotechnical
- Public involvement/relations

**KEY PERSONNEL PROPOSED FOR I-81 STRUCTURES**

- Ronald Briggs, P.E.,  
Design Manager

**KEY PERSONNEL**  
**Ronald Briggs, P.E.** (STV) was the **lead structures engineer** responsible for the design of all bridges and structures associated with the extension of Route 638.

\*For a project with multiple phases or multiple contracts, only one phase or one contract will be considered. If additional phases or contracts are shown under the same Work History Form, only the first phase or contract listed will be evaluated.

**ATTACHMENT 3.4.1(b)**

**LEAD DESIGNER - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime/general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: I-95 Bridge Replacement over Meherrin River  Location: Emporia, VA	Name: G.A. & F.C. Wagman, Inc.	Name of Client.: VDOT Phone: (757) 494-5485 Project Manager: Ty Lee Phone: (757) 494-5485 Email: nelson.lee@vdot.virginia.gov	03/2016 (estimated)	2019 (estimated)	\$22,245	\$22,245 (estimated)	\$1,750

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.

**SIMILARITIES IN SCOPE AND COMPLEXITY**

- Project management
- Bridge and structure design
- Roadway design
- Geotechnical and hydraulics
- Traffic control devices/TMP
- Public involvement/relations

**KEY PERSONNEL PROPOSED FOR I-81 STRUCTURES**

- Ronald Briggs, P.E.  
Design Manager

**PROJECT SCOPE**

STV is the **lead designer** providing engineering services for the replacement of the 540-foot-long dual bridges and associated approaches on I-95 over the Meherrin River. The existing bridges were built in 1959 and have been recommended for replacement to improve safety by correcting the functionally obsolete shoulder widths and to correct the low sufficiency ratings of the existing structures. STV's scope of services includes bridge and structure design, roadway design, traffic control devices, transportation management plans, hydraulics, scour analysis, geotechnical, and public involvement/relations. **STV's offices in Fairfax and Richmond, VA performed the design work.**

**PROJECT DESCRIPTION**

Prior to preparing preliminary field inspection plans for the roadway approaches, STV prepared a bridge concept study to evaluate alignment alternatives for the replacement of the existing structures. STV evaluated eight alignment alternatives, applying different strategies to maintain traffic on the interstate, including the construction of the new bridges off alignment, implementing staged construction, constructing wider bridges than was necessary to accommodate traffic during construction, using temporary detour bridges, and using accelerated bridge construction (ABC) techniques. Varying factors were considered for each alternative, including construction cost, constructability, impacts to the horizontal/vertical alignment of I-95, lifecycle costs, and hydraulic impacts. VDOT accepted STV's recommendation to construct a new southbound structure on a new alignment west of its present location while the northbound structure will be reconstructed along its present alignment. This allows the construction to be completed quickly while not impacting safety or traffic operations along the interstate. It also provides a high degree of safety for workers. The MOT scheme employs shifting southbound traffic to the new southbound bridge once completed, shifting northbound traffic to the former southbound bridge so that the northbound bridge can be demolished and reconstructed to its ultimate section along the same horizontal alignment. **Ultimately, the southbound I-95 alignment was shifted west, which provided VDOT two new bridges with adequate typical section to address current safety deficiencies as well as provide for ample space to widen the bridges in the future.** The final design of the structures and associated roadway approaches were completed on an accelerated schedule to meet the scheduled July 2015 advertisement.

*Structures:* The new bridges were each designed as five-span, 540-foot structures using prestressed concrete 61-inch deep bulb-T beams made continuous for live load with semi-integral abutments. Two different stand patterns were developed and incorporated into the plans for the prestressed concrete beams, which allow the contractor to use either 0.5-inch diameter strands or 0.6-inch diameter strands. The new structures are also entirely jointless, and required a deck drainage system. The piers for each bridge consist of two hammerhead piers adjacent to the river and two multi-column piers in the floodplain. Two foundation designs were developed for Pier 1 on each bridge, which allows the contractor the option to construct either a spread footing foundation or a drilled shaft foundation system. Pier 2 on each bridge is supported by drilled shaft foundations while all of the other substructure elements are supported by steel H-piles driven to refusal.

*Difficult geology:* Soft ground conditions were identified in the vicinity of the northern approach to the southbound bridge in planned fill areas. To improve the conditions, densified aggregate piers (DAPs) were incorporated in the design. The location of the DAPs was coordinated with the deep foundations for the northern bridge abutment. The steel H-piles were designed using plumb piles to avoid damage to the DAPs and due to the potential for down drag forces acting on the piles.

*Maintenance of traffic:* STV developed a detailed TMP to maintain traffic on this section of heavily traveled roadway, which is located just south of the existing US 58 interchange. One phase of construction requires southbound I-95 to be reduced to a single lane to facilitate the tie-in work along the realigned portion of southbound I-95. STV and VDOT studied traffic counts during various portions of the year and determined that the southbound lane closure needed to occur during the months of January, February, and March to avoid excessive queues (during the summer months the queues were estimated to be approximately two miles). A temporary work zone speed reduction is being implemented during select phases of construction where it was not possible to design the shifting tapers and other MOT elements for a minimum design speed of 70 mph. In these select phases of construction, STV designed all of the shifting tapers and MOT elements for a minimum design speed of 70 mph to the greatest extent possible as a mitigation strategy against motorists who may not slow down through the work zone.

*Roadway:* The project includes a total of approximately 1.1 miles of interstate roadway reconstruction. The existing bridges were located in a sag vertical curve, which did not meet a minimum design speed of 70 mph and the low point was also located on the south end of the existing bridges. To meet a minimum design speed of 70 mph and locate the low point in the sag vertical curve off of the new bridges, the roadway profile was raised by approximately 4-feet. One of the chief challenges of the project that was identified early during plan development was that the existing concrete pavement on I-95 within the project had been overlaid with approximately 9-inches of flexible pavement and/or had been entirely removed. Recognizing that the removal of the existing concrete pavement could have a substantial impact on the construction cost of the project, including the anchoring of concrete barrier service, STV coordinated with VDOT to complete a series of pavement cores within the project limits to map/identify the makeup of the existing pavement sections.

*Environmental:* The **Northern Long-Eared Bat**, which is a federally threatened species, was found to inhabit the wooded areas within the project limits. A special provision for a *Time of Year Restriction (TOYR)* was incorporated into the contract documents, prohibiting the removal of any trees measuring 3-inches or greater in diameter at breast height between April 15 and September 15. The existing bridges were inventoried and no signs of bat usage were found. VDOT is delaying NTP on the project until March 1, 2016 so that the remainder of the private utilities can be relocated. Recognizing that this delayed NTP, combined with the TOYR for tree clearing activities, could have a significant impact on the project schedule, a special provision was incorporated into the contract documents that allows the contractor to perform tree clearing work this fall/winter.

*Stakeholder coordination:* STV coordinated and met individually with several project stakeholders throughout the project development process, including FHWA, the City of Emporia, Greensville County, adjacent property owners, the owners of four billboards, and the owner of a nearby truck stop facility.

**KEY PERSONNEL**

**Ronald Briggs, P.E.** (STV) was the **project manager** responsible for the design. He oversaw the preparation of the bridge concept study, preliminary field inspection plans, public hearing plans, Stage I report, preliminary bridge plans, and final bridge and roadway plans.

\*For a project with multiple phases or multiple contracts, only one phase or one contract will be considered. If additional phases or contracts are shown under the same Work History Form, only the first phase or contract listed will be evaluated.