



## Statement of Qualifications

# I-81 Bridge Replacement at Exit 114

## A Design-Build Project

From: 0.381 miles South of Christiansburg SCL  
To: 0.510 miles North of Christiansburg SCL  
Montgomery County / Town of Christiansburg, Virginia

State Project No.: 0081-154-733, P101, R201, C501, B601, B616

Federal Project No.: IM-081-2(992)

Contract ID Number: C00093074DB96



*A Statement of Qualifications from*

**Haymes  
Brothers**

&

**AMT**

September 6, 2017

Submitted to: **Virginia Department of Transportation**

1401 E. Broad Street  
Richmond, Virginia 23219

## **3.2 LETTER OF SUBMITTAL**



# Haymes Brothers, Inc.

General Contractors

440 Hawkins Road Chatham, Virginia 24531

Phone (434) 432- 8282

Fax (434) 432-2029

## 3.2- LETTER OF SUBMITTAL

September 6, 2017

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

RE: **I-81 Bridge Replacement at Exit 114 from: 0.381 mi. south of Christiansburg SCL to: 0.510 mi. north of Christiansburg SCL**  
**RFQ No.: C00093074DB96**

Dear Mr. Kindy:

**Haymes Brothers, Inc. (Haymes Brothers)** is pleased to submit to the Virginia Department of Transportation (VDOT) our Statement of Qualifications (SOQ) in response to your Request for Qualifications (RFQ) for the I-81 Bridge Replacement at Exit 114 from: 0.381 mi. south of Christiansburg SCL to: 0.510 mi. north of Christiansburg SCL, RFQ No.: C00093074DB96. We are confident that our SOQ presents a Team of superior experience and proven record in constructing and designing similar bridge replacement projects along heavily trafficked state roadways. In the recent past, **Haymes Brothers** has constructed several new and replacement bridges in Virginia and North Carolina and, in doing so, has successfully faced similar complexities in maintenance of traffic, bridge design, and geotechnical engineering in karst geology to this Design-Build project.

- 3.2.1 Offeror** - The full legal name and address of the Offeror is: Haymes Brothers, Inc., 440 Hawkins Road, Chatham, VA 24531
- 3.2.2 Point of Contact** – The Point of Contact for Haymes brothers, the offeror, is: Mr. Henry A. Haymes, Vice President, Haymes Brothers, Inc., 440 Hawkins Road, Chatham, VA 24531, 434.432.8282 (P), 434.432.2629 (F), [ahaymes@haymesbrothers.com](mailto:ahaymes@haymesbrothers.com)
- 3.2.3 Principal Officer** – The Principal Offeror for Haymes Brothers, the offeror, is: Mr. Henry A. Haymes. The address and telephone number are the same as provided above.
- 3.2.4 Corporate Structure** – Haymes Brothers is structured as a corporation. Haymes Brothers will undertake full financial responsibilities for the project and accept the risks and liabilities for the performance of the work.
- 3.2.5 Lead Contractor and Lead Designer** – The Lead Contractor for this Project is Haymes Brothers, Inc., and A. Morton Thomas and Associates, Inc. will be the Lead Designer.
- 3.2.6 Affiliated and/or Subsidiary Companies** – Attachment 3.2.6 is provided in the Appendices.
- 3.2.7 Certification Regarding Debarment** – Provided in Appendices.
- 3.2.8 VDOT Prequalification** – Haymes Brothers's prequalification number is H018 and current VDOT prequalification status is active. Evidence of our prequalification is included in the Appendices.
- 3.2.9 Bonding Capacity** – Evidence provided in Appendices.
- 3.2.10 SCC and DPOR Registration Requirements** – Provided in the Appendices.
- 3.2.11 DBE Participation Goal** – Haymes Brothers is committed to achieving or exceeding eight percent (8%) DBE participation goal for the entire value of the contract.

Thank you in advance for your detailed review of our SOQ. We trust that you will find our commitment to VDOT focused and our credentials impeccable. We look forward to partnering with you on this project.

Very Truly Yours,

  
Henry A. Haymes  
Vice President

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



**HAYMES BROTHERS, INC.**  
Construction & Project Management

**A. MORTON THOMAS AND ASSOCIATES, INC.**  
Lead Designer & Construction Quality Assurance

**A. Morton Thomas and Associates, Inc.**  
Roadway, Structures, H&HA/SWM, Drainage, Traffic Engineering, TMP, Environmental Permitting, E&SC, Utility Design/Coordination, Surveying, Subsurface Utility Locating, Construction Quality Assurance

**CTI Consultants, Inc.**  
Construction QC Management and Inspection

**ERM & Associates, LLC**  
Right of Way Acquisition

**Froehling & Robertson, Inc.**  
Construction QA Lab

**Haley & Aldrich, Inc.**  
Geotechnical Engineering

**Pulsar Advertising**  
Public Relations

**Traffic Signals Plus, PLLC**  
Lighting Design

### 3.3 OFFEROR’S TEAM STRUCTURE

#### Introduction

Haymes Brothers, Inc. (HBI) will be responsible for managing the project in its entirety, supervising the construction, and self-performing major elements of the construction work. A. Morton Thomas and Associates, Inc. (AMT) will lead the design effort for all aspects of the project and will be responsible for the design QA/QC. The HBI team includes excellent subconsultants who bring relevant knowledge and expertise, both enhancing the team and ensuring a quality project. A complete list of team members follows.

#### Haymes Brothers, Inc. - Offeror, Legal Entity, Lead Contractor



HBI is a family-owned general contracting business established in 1965. After 50 years of experience in private and public sector work, our areas of expertise include road and bridge construction. The company is now being managed by third- and fourth-generation highway contractors and experienced technicians. HBI has the expertise, personnel, equipment, and experienced projects managers to successfully oversee and construct this interstate bridge replacement project. We enjoy the work we do and take great pride in our clients’ satisfaction. We want to be VDOT’s DB Team of choice, and will commit all necessary personnel to ensure satisfactory completion of the project.

#### A. Morton Thomas and Associates, Inc. - Lead Designer, QAM



AMT, an *Engineering News-Record* “Top 250 Design Firm,” has been providing consulting engineering services to public and private clients since 1955. Services include transportation design and traffic engineering; structural design; utility design and coordination; boundary and topographic surveying; hydraulics and stormwater management; landscape architecture; and construction quality assurance management (QAM) and inspection. With over 500 employees, and operating from seven offices in Virginia (including Christiansburg, Verona and Abingdon), AMT’s focus has been on the Mid-Atlantic Region for over 60 years. Their experience on projects, such as VDOT’s Design-Build US 460 Connector Phase I in the Bristol District (design, QAM), VDOT’s Southgate Drive/US 460 Bypass Interchange in Blacksburg (design), and FHWA/VDOT’s Design-Build Route 1 in Fairfax (design, Construction QC) equips AMT with the know-how to deliver the I-81 Bridge Replacement Project on time and on budget.

#### Subconsultants

In addition to AMT, HBI has included subconsultants with specialized expertise for this project. The subconsultants are extremely knowledgeable in VDOT policies and procedures and experienced with similar VDOT Design-Build projects. These firms, listed alphabetically, are:

**CTI Consultants, Inc. (CTI)** will be a subconsultant to HBI, and will provide construction quality control management and inspection. In operation since 1984, CTI is a full-service engineering consulting firm with its corporate headquarters in Richmond, Virginia, and eight other office locations including one in Blacksburg. Projects undertaken encompass the entire construction experience and include bridges and highways, and associated infrastructure, including several I-81 projects.

**ERM & Associates, LLC** will be a subconsultant to AMT, and will provide right of way acquisition services. A VDOT Pre-Qualified ROW Consultant Firm, ERM brings 43 years of experience providing the full spectrum of land and easement acquisition services for infrastructure and development projects in Virginia. The firm is accustomed to facilitating the purchase of property, starting with conducting initial price analysis, the negotiation of the purchase price and ultimately the closing of the transaction. ERM has managed the upgrade of multiple highway improvement and enhancement projects and is currently working with AMT on highway projects in the City of Falls Church and the Town of Culpeper.

**Froehling & Robertson, Inc. (F&R)** will be a subconsultant to AMT, and will provide construction QA laboratory services. F&R is a SWaM-certified, minority-owned business as well as the oldest independent consulting engineering/testing firm in the United States. The firm’s core competencies are construction materials testing and geotechnical and environmental engineering. F&R maintains accredited construction material testing laboratories that are utilized by each of their dozen offices, including one in Roanoke. Their Roanoke office will provide the local resources needed to deliver the quick, efficient, and cost-effective services for the project.

**Haley & Aldrich, Inc. (H&A)** will be a subconsultant to AMT, and will provide geotechnical engineering and design. H&A has been providing these services in Virginia for more than 40 years and will bring knowledge of local geological conditions and common design solutions to the I-81 Bridges at Exit 114 interchange. The firm’s experience in the area is significant—having served as the geotechnical engineers who assisted with the design of the Route I-81/460 interchange. For that project, H&A provided geotechnical engineering recommendations for the design of 12 bridges, which included two new bridges on I-81, plus the widening of two others.

**Pulsar Advertising (Pulsar)** will be a subconsultant to AMT, and will provide public and stakeholder outreach services. A certified DBE founded in 1992, Pulsar is a premier communications and marketing agency specializing in transportation, transit, commuter rail, transportation demand management (TDM), highway construction mitigation, and public/private partnership projects. Pulsar is a full-service agency with proven experience in “translating” complex and sensitive planning/ engineering information for consumers in language that resonates, engages and motivates travelers and stakeholders, as well as experience in working in complex/politically sensitive multi-jurisdiction projects. Pulsar recently partnered with AMT on the Southgate Drive/US Route 460 Interchange Project.

**Traffic Signals Plus, PLLC (TSP)**, a certified DBE/SWaM firm, will be a subconsultant to AMT. The firm will provide lighting design and traffic engineering support. TSP was formed in 2010 by Earl Hughes, PE, PTOE, whose nearly 30 years of experience includes 15 years with VDOT and 14 years in the private sector. Lead Designer AMT has worked with TSP on a number of transportation design and traffic engineering projects in the Commonwealth. TSP also offers services in the areas of signing/marketing and work zone safety.

### 3.3.1 Design-Build Team Key Personnel

HBI has assembled highly-qualified and experienced individuals, and structured the Team for performance excellence. The following table introduces these Key Personnel. Key Personnel Resume Forms are included in Attachment 3.3.1 located in Appendix C.

ROLE	FIRM	NAME
<b>Design-Build Project Manager (DBPM)</b>	HBI	Henry Haymes
<b>Quality Assurance Manager (QAM)</b>	AMT	Chad McMurray, PE, PMP, CCM, DBIA
<b>Design Manager (DM)</b>	AMT	Laura Mehiel, PE
<b>Construction Manager (CM)</b>	HBI	Robert Kent Bishop



**Henry Haymes** will serve as the Design-Build Project Manager (DBPM) and will have complete authority over all project design and construction matters for the team. He will be VDOT's primary point of contact throughout the life of the project. He is responsible for managing the project from start to completion, including all contract management and administration. He has responsibility and authority for coordination, integration and direction of the entire design-build team: design, construction, quality assurance, MOT, utilities, ROW and public relations. He will supervise all personnel throughout the project. Henry will be involved through design, construction and project closeout. He will assist with constructability reviews and safety audits and will oversee the quality management program, purchasing and construction operations. Henry is intricately involved in managing projects with a value of up to \$50 million. Examples of his project work include the \$24M VDOT Route 58 Danville Bypass and Interchange with Highway 29 project in Pittsylvania County and the \$11M VDOT Route 130 Bridge over the Maury River project in Glasgow.



**Chad McMurray** reports to the DBPM and will have direct, independent access to VDOT. He will ensure work is performed in conformance with contract requirements as well as approved construction plans and specifications. He will be responsible for the development and adherence to the QA Plan, QA inspection and testing of materials used, and associated work performed. He will have the authority to stop construction, enforce compliance with all specifications, and issue and require resolution of all Non-Conformance Reports (NCRs). He will manage all aspects of the QA program including the QA inspector and independent QA testing firm and testing technicians. The QA team will conduct independent and concurrent tests and analysis of the work with the construction quality control team. Chad will maintain project quality records, and approve and submit pay estimates. He will visit the project site, attend all monthly progress meetings, and oversee the full-time on-site QA staff throughout construction. With AMT for the past six years, Mr. McMurray has over 25 years of construction quality assurance, quality control and engineering experience for significant highway and bridge projects. He is currently the QAM for I-81 over Halls Bottom Design Build in Washington County, VA, and he was QAM for the Route 460 Connector Phase I Design Build in Breaks, VA.



**Laura Mehiel** will report to the DBPM. She will manage all aspects of design including structural, roadway, hydraulic, traffic, MOT, environmental, and geotechnical. She will assign design resources as needed, oversee design subconsultants, coordinate design and review schedules, and be responsible for providing a quality product meeting all design milestones. Ms. Mehiel brings over 30 years of management and design experience for significant and complex design-build projects in the Commonwealth for VDOT. This experience has involved bridges and ancillary structures, roadway design, realignment projects, safety and corridor improvements, hydraulics design, complex maintenance of traffic design, traffic engineering including TMPs, signing and marking plans, and public meetings support. She has managed design, geotechnical investigations, landscape designs, utility design and support of plat preparation for right-of-way acquisition. Of special note is Laura's recent experience on the Route 1 Design Build project at Fort Belvoir (Lorton, VA) which included new (replacement) bridges, offset horizontal roadway alignment, major change in vertical alignment in select areas, eight stages of MOT, significant temporary drainage measures throughout construction, wetland/stream impact permits, ROW acquisition, public meetings, and addressing unexpected geotechnical conditions during construction.



**Kent Bishop** will also report directly to the DBPM. He will manage the efforts of the on-site construction team including the Construction QC Manager, Safety Manager, Superintendents, subcontractors/vendors, and all other trades. His duties will also include Environmental, Utility, and MOT management. He will be assigned to the project and on-site full time for the duration of construction operations. He will play a key role in constructability reviews as well as value engineering for all aspects of the design. Along with his staff, he will focus on ensuring that construction is performed efficiently and safely. He will coordinate with the DBPM, Henry Haymes, during construction for the timely issuance and review of RFI's and shop drawings, as well as field visits, preparation of as-builts and plan revisions. Kent graduated from Virginia Tech in 2007 with a B.S. in Civil Engineering. While at HBI, he has worked as Construction Manager on VDOT I-85 in Halifax County, Va., VDOT I-71 in Prince Edward County, Va., and VDOT I-60 in Pittsylvania County, Va. On these projects, he was responsible for contract administration, material procurement, subcontractor coordination, MOT, crew and equipment coordination and the overall safety, quality and budget.

### 3.3.2 Organization Chart

The HBI DB Team Organizational Chart on Page 8 identifies key personnel and other significant team members, and depicts the reporting structure of the team. Solid lines identify the direct lines of reporting relationships of our team members from the DBPM to the Design, Construction, and QA team. Dashed lines represent indirect reporting relationships and frequent interaction and collaboration. Furthermore, the reporting structure for the Quality Assurance shows a clear separation between the Construction Quality Control Inspection and field/laboratory testing duties.

#### Organizational Chart Narrative – Noteworthy Personnel and Functional Relationships

As a continuation of the functional relationships for Key Personnel described in section 3.3.1, the following narrative further defines the roles and functional relationships of the additional team members. Each of these team members were carefully chosen based on their extensive experience and well-established working relationships on previous projects.

#### SAFETY

**Safety Manager – James Shelhorse** reports to the DBPM and serves as HBI's safety director. James has over nine years of experience as a safety professional and holds numerous safety certifications including: Certified Safety Professional, OSHA Authorized Construction Trainer, OSHA 510, OSHA 500, OSHA 30 Hour, Approved VDOT Traffic Control Trainer, ATSSA Traffic Control Supervisor, Certified Mobile Crane and Rigging Inspector, Qualified Rigger & Signal Person, NCDOT Flagging Instructor, and a current First Aid & CPR card. James makes periodic site visits to all projects to complete safety audits and offer assistance and guidance to all employees. James will be onsite at least once every week to review operations to ensure compliance with all safety regulations and verify safety documentation is completed timely and accurately. If issues arise the frequency of visits will increase until the issues are resolved.

#### DESIGN

**Structural/Bridge Engineer – Khoss Babaei, PE, SE**, will report to the DM and will be in charge of structural engineering, including bridge replacement design, bridge demolition, retaining wall, and foundations. He will be responsible for any other miscellaneous structural designs. He will lead production for structural engineering deliverables including plans, estimates, and specifications. He has 38 years of hands-on bridge design experience, including five (5) years with VDOT performing as consultant manager with an emphasis on bridge replacement. Khoss is fully familiar with VDOT requirements and procedures. He worked on the Design-Build Route 1 project in Ft. Belvoir and Route 460/Southgate with Laura Mehiel.

**Roadway Engineer – Keith Benedict, PE**, will report to the DM, and will be the backup point of contact for design. He has 11 years of experience in the design and management of significant highway improvement projects for VDOT and Virginia localities, including important roles in AMT’s Southgate Drive / US 460 Bypass Interchange (Blacksburg) and Route 1 at Fort Belvoir Design-Build projects. His expertise includes geometric design, planning studies, preparation of construction documents for transportation projects addressing roadway alignments, bridges and ramps, clear zones and roadside barrier design.

**Drainage/Hydraulics Engineer – Don Rissmeyer, PE, CFM**, will report to the DM. He will provide drainage design and stormwater management for this project. Don has over 27 years of experience in roadway drainage design, stormwater management, and floodplain studies. His experience includes I-64 HOV Widening in Chesapeake/Virginia Beach, the Oak Grove Connector and projects on Church Street, Waterside Drive, Hampton Boulevard, and Kempsville Road in Southside Hampton Roads. He also worked on Southgate Drive and the U.S. Route 1 Design-Build projects with Laura Mehiel, providing similar services to VDOT.

**MOT/Traffic Engineer – Charlie O’Connell, PE**, will report to the DM and collaborate with the Construction MOT Manager. He will be responsible for Traffic Control Devices design, to include signals, signs and pavement markings, along with temporary Maintenance of Traffic (MOT) plans for the various phases of construction. Charlie offers over 32 years of experience in traffic engineering, 11 of which were with VDOT.

**Geotechnical Engineer – David Schoenwolf, PE**, will report to the DM. With 38 years of experience, his areas of expertise include foundations involving driven piles, drilled piles, caissons, spread footings, mat foundations, load bearing elements, slurry wall construction; ground improvement techniques such as jet grouting and compaction grouting; wick drains and surcharging; and excavation support systems. He was the Principal Engineer for the design and construction of twelve bridges at the I-81/Route 460 Interchange in Christiansburg. He has also been the Principal Engineer for two other bridges on I-81 just north of the West Virginia/Virginia border. Because of these projects, Mr. Schoenwolf has experience with the design of structures in karst geology.

**Lighting Design – Earl Hughes, PE, PTOE** will provide lighting design for the project, also reporting to the DM. Earl has nearly 30 years of experience in roadway lighting design and traffic engineering experience. Prior to founding Traffic Engineering Plus, the majority of his career was with VDOT where he held positions of increasing skill, complexity, and responsibility. His specific areas of expertise include lighting design, signal design and traffic control device planning. Earl has recently worked with AMT on the VDOT Southgate Drive / US 460 Bypass Interchange project and the VDOT Route 1 Reconstruction in Chesterfield County.

**ROW Acquisition – Craig Anderson**, reporting to the DM, has more than 16 years of experience and is the President of the ERM & Associates, LLC. His responsibilities also include land and easement acquisitions, negotiation, relocation services, utility relocations, and related project management responsibilities. As a VDOT Prequalified ROW Acquisition Consultant, he is accustomed to the processes and requirements associated with highway improvement projects. He is currently working with AMT on projects in the City of Falls Church and the Town of Culpeper.

**Utility Design Engineer – Keith Sinclair, PE**, will report to the DM. Keith’s engineering experience, spanning 40 years, has been focused on utility engineering design and coordination. He has been an important resource for the utility design and coordination efforts of AMT’s work on the Route 1 at Fort Belvoir Design-Build and the VDOT Southgate Drive / US 460 Bypass Interchange projects. He is very familiar with VDOT’s Utility Manual of Instructions including the preparation of plans for the Utility Field Inspection (UFI) and the preparation of UT-9 and UT-9A forms that are used in the determination of cost responsibility for the relocation of utilities impacted by VDOT projects.

**Survey/SUE – John Claytor, LS**, will report to the DM. John’s 33 years of experience, both in the field and in a management role, has included comprehensive surveying efforts for bridge and roadway projects in the Commonwealth. His experience includes aerial and field-run topographic surveys, GPS and conventional survey control networks, GPS-RTK surveys, hydrographic surveys, environmental surveys, construction stakeout, utility surveys, supplemental field surveys for aerial base mapping, merging of aerial and field survey data into a

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seamless MicroStation or AutoCAD Civil 3D file, and creating digital terrain models (DTM's) using GEOPAK or AutoCAD software.

**Environmental Permitting** – *John Farrell, AICP, CEP*, will report to the DM. With nearly 20 years of environmental planning and permitting experience, John supports AMT's highway and bridge projects in the Commonwealth so that permitting requirements and associated review procedures and timelines are well planned and coordinated. He is fully versed in the NEPA and SERP processes. His work has included Route 1 at Fort Belvoir Design-Build and the VDOT Southgate Drive / US 460 Bypass Interchange projects.

**Erosion & Sediment Control** – *Matt Willems, PE*, will report to the DM. He has over 20 years of engineering experience with an emphasis on all aspects of stormwater management (SWM), erosion and sediment control (E/S), and roadway drainage design of culverts, storm drains, ditches, outfalls and channel stabilization. He is well-versed in the design and inspection for SWM facilities and E/S practices; H/H engineering and modeling; wetland and stream monitoring; work in the waterways; and VPDES permitting, reporting, and monitoring. Matt was responsible for designing these facilities for all five segments of the Route 1 at Fort Belvoir Design-Build project to address water quality, quantity, and channels stability.

### DESIGN QA/QC

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**Design QA/QC Manager** – *Fred Wagner, PE*, will report to the DM. He will verify that checks and reviews are made prior to submissions, including review comment checking, contract conformance reviews, interdisciplinary reviews, and constructability reviews by HBI. He will arrange design quality control procedures per the Quality Control Plan. Fred has over 35 years of experience in transportation design projects, including design and traffic engineering elements, and knows VDOT's design manuals, IIMs, design standards, and criteria. Fred has been involved in highway, bridge replacement, and innovative interchange design projects in Virginia and Maryland as a designer and QA/QC Manager and served that role for the Design-Build Route 1 project at Fort Belvoir, the Route 460/Southgate Drive interchange project, and the US 460 P3 from Richmond to Norfolk.

### CONSTRUCTION QC

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**Construction QC Manager** – *Chuck Newman* will report to the CM. His experience in transportation construction quality control testing and inspection includes proficiency with Soil Compaction Testing, Soil Subgrade/Bearing Capacity Verification, Reinforcing Steel Inspection, Concrete Inspection, Masonry Inspection, Intermediate Work Zone Traffic Control Training, Guardrail and Asphalt Inspection. He has VDOT certifications for these, as well as ACI Concrete Field Certification Level I, ICC Certifications for masonry and concrete, OSHA Confined Space Entry, and Nuclear Density Gauge Operator. Chuck has been QC Manager on numerous recent VDOT projects, and recently served as Quality Manager on the I-77 ATSMS project at Fancy Gap Mountain.

### CONSTRUCTION

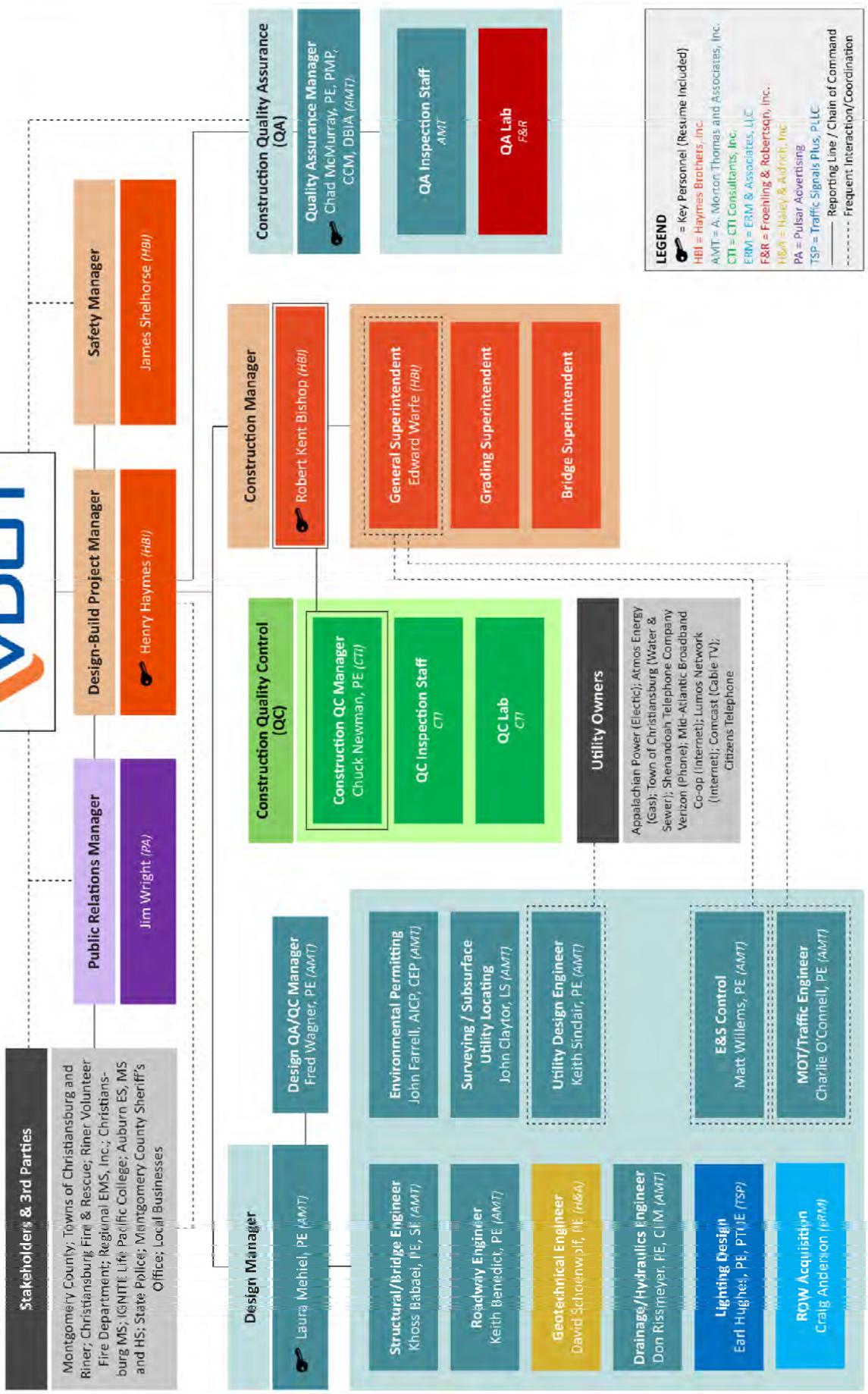
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**General Superintendent** – *Edward Warfe* will report to the CM, and will be responsible for all phases of on-site bridge demolition and construction, including materials coordination, personnel supervision and subcontractor management, job site safety, ensuring compliance with environmental regulations and permit requirements, developing and implementing girder erection plans, coordination with QA/QC inspectors, resolving on-site disputes, and coordination of utility marking and relocation. Eddie possesses current VA DEQ RLD, ESCCC, Intermediate Work Zone Traffic Control, and OSHA 30 hour certifications and is a certified crane operator. Eddie has worked on dozens of VDOT and NCDOT bridge construction projects in his 32-year long career, including VDOT I-60 Highway 29 over NSRR in Pittsylvania County and the Route 58 Bypass and Interchange in Danville.

### PUBLIC RELATIONS

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**Public Relations Manager** – *Jim Wright* will report to the DM, and will support outreach efforts. With 25 total years of experience, Jim not only leads Pulsar's East Coast team, but is also a seasoned and experienced strategic planner and trained facilitator. With a focus on public outreach, strategic planning and implementation specifically in the transportation sector, he has been responsible for messaging and the development of communications tools (media relations, web site, outreach and events, branding, marketing and advertising) that yielded positive results for VDOT projects like MegaProjects in Northern Virginia and Middle Ground Boulevard Extension in Newport News, as well as working with AMT on VDOT's Southgate Drive/US 460 Interchange.



**LEGEND**

- 🔑 = Key Personnel (Resume included)
- HBI = Haymes Brothers, Inc.
- AMT = A. Morton Thomas and Associates, Inc.
- CTI = CTI Consultants, Inc.
- ERM = ERM & Associates, LLC
- F&R = Froehling & Roberts, Inc.
- H&A = Haley & Aldrich, Inc.
- PA = Pulsar Advertising
- TSP = Traffic Signals Plus, PLLC
- Reporting Line / Chain of Command
- - - - - Frequent Interaction/Coordinator

## Organizational Chart Narrative – Team Integration and Interaction

The keys to the success of this Design-Build project will be early team integration as well as communication and coordination between all team members, VDOT, review agencies and stakeholders. Our team is structured to facilitate involvement of construction expertise during design and design expertise during construction. Of the four key personnel for the project, the two who will be in constant contact and collaboration are the Design Manager, Laura Mehiel, P.E. and the Construction Manager, Kent Bishop. The DBPM, Henry “Andy” Haymes will manage the project, ensure allocation of all appropriate resources, attend all progress meetings and make weekly visits to the project, at a minimum. He will also be actively engaged in overseeing the QA/QC program to ensure that VDOT receives a quality project.

On the HBI DB Team, not just the key personnel, but multiple construction staff and design staff will be integrated into a complete project team, fostering information sharing and knowledge transfer while ensuring consistency and quality in design and construction. Having personnel with roles in both design and construction allows us to quickly adjust priorities, understand and develop appropriate levels of detail, explore design ideas, and streamline project development. Tools to facilitate team and specialty integration include:

- Weekly Task Force (discipline based) meetings between design team members and the Construction Manager to discuss contract requirements, constructability, and value engineering concepts throughout the life of the project. Once construction begins, participants will be reduced to the key design personnel and design disciplines leads. Other construction personnel will be added to the meetings as construction is underway.
- Weekly internal design meetings with all disciplines to discuss current priorities, latest updates to design which can impact other disciplines, design/permit status, and action items
- Inter-disciplinary design reviews prior to milestones to ensure design disciplines are coordinated
- In addition to design QA/QC, HBI constructability reviews of design prior to submission to VDOT
- A robust project collaboration and Document Control system, giving team members access to the same master files (design, RFI's, etc.), tracking progress, and avoiding duplicate or outdated information
- Construction weekly schedule meetings to review the previous work and develop the two week look ahead
- Monthly scheduling meetings to review CPM progress and re-prioritize design as needed

**Construction Staff Involvement in Design:** The Construction Manager and Superintendents will provide over-the-shoulder reviews of design during project design development. Their reviews will focus on phasing, optimizing MOT sequencing, minimizing the construction impacts, constructability, and maximizing available roadway cross section for maintenance of traffic. Here our collaboration will result in optimizing personnel, equipment, and material resources to ensure efficient construction activities and the limiting of impacts to residents, the traveling public, and emergency responders. **The continuity of having the Construction Manager engaged with the design team long before construction starts and then in turn have the key design leads involved throughout construction create a true design build approach that will be the key to a successful project.**

**Design Staff Involvement in Construction:** AMT will assist HBI in addressing field issues, participate in progress meetings, interact with stakeholders, and remain a part of the DB Team until project completion. This relationship will expedite the RFI process and ensure all parties are informed throughout the process, including shop drawing review, environmental and permit compliance, MOT implementation, and public outreach. During construction, design staff will be heavily involved via regular field visits, continuous communication with construction staff, and regular *Partnering* Meetings. AMT and other design subconsultants, such as Pulsar, will also support and participate in Pardon Our Dust meetings that may be held for the project. AMT will prepare the As-Built plans.

## **3.4 EXPERIENCE OF OFFEROR'S TEAM**

## 3.4 TEAM EXPERIENCE

### HBI/AMT Design-Build Team

The HBI DB Team members already know each other, and have established trust and effective working relationships. Individuals from HBI and AMT have had great success partnering together, along with VDOT, on projects such as the Salem Districtwide Bridge Repair Contract (Salem District), the Route 130 Glasgow Bridge (Staunton District), the US Route 29 Madison Heights Bypass (Lynchburg District), and the I-81 Truck Climbing Lanes (Staunton District). These project experiences have established excellent working relationships and a level of respect amongst members of the design team and the construction team. Additionally, HBI and AMT have worked with the subconsultants in a variety of configurations on projects in the Commonwealth and throughout the region. For example, AMT was the prime consultant and lead designer for VDOT's Southgate Drive / US 460 Bypass Interchange project on which Pulsar Advertising provided public outreach and Traffic Signals Plus provided lighting design. Working history and established relationships such as these will enhance our team's ability to identify, openly discuss and resolve issues as they arise.

### 3.4.1 Lead Contractor and Lead Designer

#### Lead Contractor

**Haymes Brothers, Inc. (HBI)** is an established and respected family-owned construction business specializing in the construction of highways, bridges, box culverts, dams, and reservoirs, in addition to site preparation work and utility installation in Virginia and North Carolina. Originally formed in the early 1900's, the founding company ceased operations in the 1950s and was re-established in 1965 as the company that continues to build VDOT's roads and bridges today.

HBI has built countless bridges and highway improvement projects, with examples such as I-77 Bridge over Route 613 and Laurel Creek in Bland County, Virginia, and U.S. Route 29 South over Norfolk Southern Railroad in Pittsylvania County, Virginia. HBI's recent work on bridge replacements along I-81 in the Salem District has given them an excellent perspective on the constraints, complexities, and key issues related to such bridge replacement construction – such as careful phasing for maintenance of traffic, heavy truck volumes, and existing bridge condition challenges.

#### Lead Designer

**A. Morton Thomas and Associates, Inc. (AMT)**, has been a respected provider of transportation design and construction management/inspection in Virginia and the Mid-Atlantic, including Design-Build projects, for over 60 years. AMT has demonstrated success on highway bridges, roadways, and interchange projects for capacity and safety improvements, including interstates and major state highways and local roads, throughout Virginia and regionally. The firm's staff has provided services on some of the most visible VDOT projects in the Commonwealth including the Woodrow Wilson Bridge, multiple I-81 system preservation and improvements projects, the US 460/Southgate Drive Diverging Diamond Interchange in Blacksburg, to name but a few.

AMT has successfully delivered over \$1.2 billion of Design-Build, roadway and bridge projects, many of similar scope and complexity to this project including those for VDOT, NCDOT, DDOT and Maryland SHA. AMT has consistently earned outstanding performance scores due to dedicated and skilled professionals. The firm's projects and personnel have also received numerous letters of commendation as well as industry awards such as VDOT's 2015 Best Overall Project of the Year – Staunton District and the American Council of Engineering Companies-Virginia 2014 Honor Award for Clifton Forge Design-Build Route 60.

## **3.5 PROJECT RISKS**

## 3.5 PROJECT RISKS

Having reviewed available project information and visited the project site, our design and construction team members evaluated and discussed the project risks and offer strategies for mitigation herein.

### Risk 1 Maintenance of Traffic During Construction

The Design Public Hearing plans provided by VDOT specify that the bridge clearance is to be increased, requiring geometric revisions to the Interstate to achieve a higher vertical alignment. To achieve this result, the existing I-81 lanes must be shifted horizontally as well as vertically, since traffic must remain active throughout construction. During construction, these planned modifications to I-81 will temporarily impact commuters, truck traffic, vacation travelers, and other users -- not only on I-81 mainline but on Route 8 below. These improvements may require the use of lane shifts, reduced lane widths, travel-ways adjacent to concrete barrier, temporary pavement, temporary lane closures, and other restricted traffic movements during construction.

#### Why this Risk is Critical

Narrowed lanes and changes in traffic patterns can be confusing, which increases the probability of accidents on roadways under construction. The temporary traffic patterns require advance notification to local residents, commuters, businesses, police/fire/EMS, schools, major stakeholders, and motorists so that unexpected situations can be avoided. Since this section of I-81 has significant truck traffic volumes, the safety risk during construction could be even greater, if not handled properly. Traffic shifts to accommodate construction phasing can present significant challenges and confusion to travelers, particularly those unfamiliar with current traffic patterns or who may not drive the corridor regularly. In addition, phased construction activities can reduce the existing roadway capacity which will increase congestion and impact users outside of established work zones. These traffic pattern changes pose a significant safety concern not only within the limits of the work zone but leading into the work zone as well.

#### Risk Impact to Project

Should issues associated with properly maintaining an effective TMP and the associated public safety concerns along the project corridor not be addressed, the following impacts may occur:

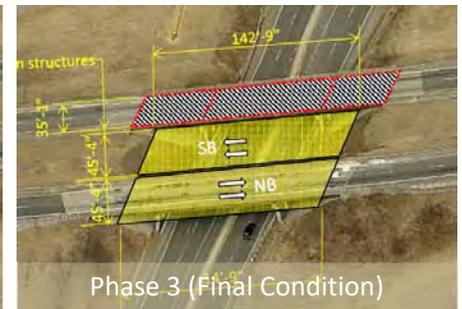
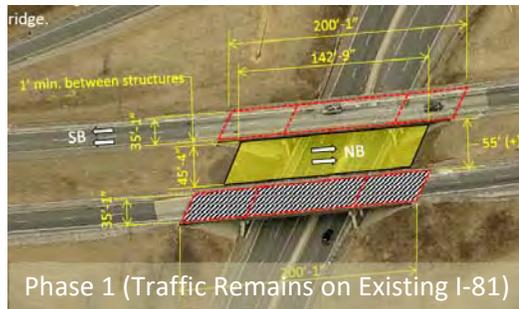
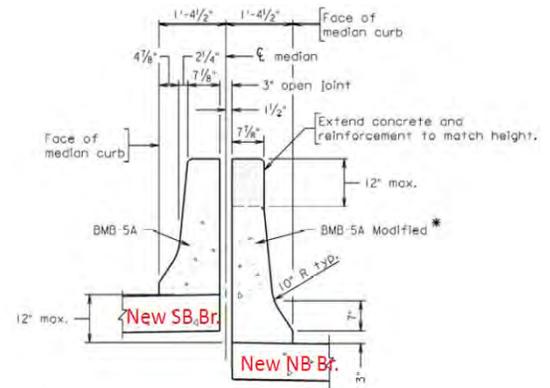
- Diminished safety for the traveling public and construction personnel.
- Further delays in driver commutes.
- Negative impacts to project stakeholders, businesses, and local attractions.
- Limited shoulder access could prevent emergency responders from traveling through the work zone and would not allow a place of refuge for disabled vehicles.
- Entering and exiting the median work zone from I-81 could cause accidents or backups.
- Loss of public support should public outreach not be clearly and properly conducted.

#### Mitigation Strategies

This risk can be effectively managed by first developing an effective Transportation Management Plan (TMP). The HBI team will develop a TMP, which includes Maintenance of Traffic (MOT) and Sequence of Construction (SOC) Plan with a major focus on the safe passage of vehicular traffic and maintaining adequate access for vehicles, especially trucks, during each phase of construction. We will emphasize stakeholder involvement when developing the TMP and develop a defined schedule for outreach activities. Additionally, we will systematically implement the MOT/SOC plans and clearly define traffic movements for each phase of construction. Below are key strategies to mitigate risk associated with safety of the traveling public, and workers, in the work zone.

1. The number one mitigation strategy is **avoiding or minimizing the use of narrowed lane widths**, combined with **keeping lane shifts and number of phases to the absolute minimum** necessary.

- The geometric layout of I-81 will be established so that we can minimize the number of phases/traffic shifts and streamline construction. Our preliminary design approach is to shift Southbound I-81 entirely into the existing 55' wide median of I-81, a slightly larger shift than the current VDOT concept design. This approach, combined with using back-to-back bridge barriers along the median side of the bridges, will allow for a two-phased construction with only one major traffic switch prior to the ultimate configuration. The alignment is compatible with the future widening of I-81, in that the widening of the bridge can occur to the outside.



- Construction scheduling that recognizes there are certain times of the day when Exit 114 is heavily travelled. Promoting safe passage through the construction zone during these peak periods will be achieved through the careful development and review of the MOT plans to ensure the highest safety and efficiency of the work zone. Temporary guide signs, advance warning signs with flashing beacons, temporary pavement markings and illuminated night-time work zones (if applicable) will be provided along the interstate and/or Route 8 as per the approved TMP, and checked frequently for effectiveness and proper placement/maintenance. Variable message signs will display updated information in advance of the work zone(s) to inform the traveling public.
- Proper maintenance of the work zone controls is critical to the flow of traffic. The HBI DB Team will perform reviews of the work zone throughout the day to ensure all controls are in place and functioning as intended. If concern areas are noted where users seem to be having issues maintaining a normal flow of traffic, the HBI DB Team will investigate the issues and adapt the MOT plans where necessary to improve the operation of the work zone. This flexibility helps mitigate the risk of MOT by adapting the plans to account for the users reactions to changes in traffic patterns.
- Provisions for Incident Management are an integral part of the TMP. HBI will have the necessary equipment and tools onsite to handle traffic incidents if they occur.
- We envision partnering with VDOT, major stakeholders and affected property owners to solicit input on construction sequencing, MOT and access alternatives that impact both I-81 and Route 8, and the most effective means in getting the word out on traffic pattern changes and planned improvements.
- The TMP will include project-specific details and strategies to allow the project to be constructed in phases. Potential examples include full-depth shoulders to facilitate the shifting of traffic away from active work-zones, temporary drainage structures/pipes/ditches to ensure adequate pavement or off-site drainage during phased construction, and the location of temporary shoring where the new roadway is adjacent to, but higher or lower than, the existing roadway. The location of construction entrances will be addressed in the TMP to ensure safe ingress/egress to/from work zones. Details like these will allow the TMP to function as an effective and complete document.
- HBI personnel hold Basic, Intermediate and Advanced Level Work Zone Certifications, to implement and monitor all traffic control devices and ensure compliance with MUTCD and VA WAPM.
- Raising public awareness of traffic pattern changes must occur early-on and continue throughout the project. Travelers that use I-81 and Route 8 during construction will need real-time traffic data and information on

upcoming traffic switches, delays, temporary traffic stoppages for setting beams, and emergency operations. Technology-based public outreach tools, including social media, are extremely effective elements of our team’s communication plan. The HBI DB Team will stay in communication with VDOT Southwest Regional Operations and VDOT Public Affairs, so that they can continually maintain social media such as Facebook, Twitter, project website, or other electronic outreach tools such as mass email blasts to travelers that have expressed a desire to receive such information. Pardon our Dust meetings can also be scheduled.

10. The HBI DB Team will evaluate each phase of construction against the MOT Plan to determine if any field adjustments are needed. HBI will take an active role early in the development of the TMP and will work closely with the Design Team regarding preferred construction sequencing and means and methods.

**Role of VDOT and Other Agencies:** VDOT will review and approve the TMP/MOT Plans, and take the lead in public communications such as the project website and social media updates.

## **Risk 2      Poor Condition of Existing Bridges**

### **Why the Risk is Critical**

The existing bridges on I-81 at Exit 114 were built in 1964 and have reached the end of their service life. The most recent VDOT inspection has given them a rating of 4 out of 9 for the deck and superstructure, which translates to minimum tolerable condition to be left in place. Over the past six (6) years there have been thirteen (13) separate deck repairs requiring the interruption of interstate traffic, such that the existing decks have a significant amount of spalled/patched concrete. The condition of the existing bridge decks presents a risk for maintaining the I-81 traffic on the bridges during the construction due to the potential for additional damage and the resulting need for lane closures on I-81, which could conflict with the temporary maintenance of traffic plans. The poor condition of the bridge decks also presents a risk to the safety of the traffic on Route 8 during the deck removal. With the poor condition of the existing deck slabs, it may NOT be possible to remove the slab by saw cutting in one piece. Therefore, the slab has to be broken up in place for removal. Breaking up the deck over traffic has the inherent risk that pieces of concrete could “fall through the cracks” onto the roadway below.



*Existing I-81 Bridges*

### **Risk Impact**

The impact is primarily related to travel time on I-81 and safety of the traveling public and workers on Route 8. If the continued deterioration of the existing bridge decks causes spalling and potholes in the deck to the extent that it is deemed unsafe to use, the traveling public that utilize I-81 would be forced to take a detour, or to be reduced to one lane, until the bridge deck is repaired and safe to use. This could conflict with the temporary maintenance of traffic plans that are in place for the replacement bridge construction. Considering the ADT of about 25,000 on each bridge with 25% truck traffic, any lengthy alterations of the traffic on I-81 will have a significant impact on the travel time and ultimately user cost.

Additionally, the condition of the existing bridges has the potential to create hazardous conditions during demolition. If the saw-cut slab removal method for deck demolition is not feasible due to the deck’s condition, there will be a possibility that construction debris will bypass the protective measures put in place above the Route 8 travel lanes, falling into areas of traffic below. While this condition would be temporary and only during construction, if it were to happen, it would cause major impacts to the public.

### **Mitigation Strategies**

**HBI has previously repaired these bridges**, and knows how to safely and efficiently repair the existing structures if needed. Mitigation to minimize or eliminate the risk on I-81 traffic flow from the continued deterioration of the existing bridge decks starts with periodic monitoring inspection of the existing bridge decks during construction. HBI crew will follow a periodic and systematic schedule and monitor the condition of the

bridge decks, before it gets to the point that will interrupt the traffic flow. This proactive effort will allow patching of the smaller size spalls quickly during the night hours with minimal interruption to traffic. **HBI will make an experienced emergency deck repair crew available** to address bridge repairs for which our team is responsible.

Mitigation to minimize safety concerns on Route 8 traffic from the deck slab demolition begins with an evaluation of the existing deck slab to determine the best and safest way to demolish and remove the concrete. Demolition options include (1) Sectional saw cutting of the slab between girder flanges and removal by hoisting sections from core, and (2) Jack hammering or hoe-ramming of the deck slab with equipment positioned on top of the bridge deck while material is captured below in a shielded dumpster truck. At the same time a safe procedure will be necessary to protect the Route 8 traffic from falling debris. Possible solutions include (1) placing protective shielding between existing girders, (2) placing a netting system under the existing bridge to catch any falling debris, or (3) temporarily stopping Route 8 traffic for short durations during overnight hours when critical elements are being demolished and removed.

In addition to the specific methods and solutions described above, key mitigation strategies may include:

- **HBI currently holds the Salem Bridge Repair Contract**, which includes the I-81 Bridges at the Exit 114 interchange. As such, whether a bridge repair operation is part of the I-81 Exit 114 Contract or the On-Call Contract, the repairs of the bridge will be efficiently and quickly addressed. HBI will prepare clear record keeping for all labor and materials used in repairs, and allocate them to the correct contract.
- Partner with VDOT to develop specific criteria for deck condition that would trigger the need for additional repairs prior to removing traffic from the bridge.
- Daily or weekly monitoring of the bridge deck by HBI, for damage or deterioration requiring temporary repair measures.
- Develop and have “at the ready” site specific repair details that are not otherwise in place (e.g. aside from Type A, B or C patching) – such as for parapet, guardrail, or other areas that may be damaged.
- Contingent MOT plans and materials ready and on-site to make repairs immediately as necessary.
- Develop and institute coordination and communication plans with VDOT in the event a lane closure is required to make emergency repairs.
- AMT’s plans for accelerated design combined with our streamlined, 2-phase construction will allow the bridge to be built earlier, and the duration of construction to be minimized. Any repairs to the existing bridges would therefore be reduced by shortening the overall project duration.
- A quality contractor that can safely perform the work is important to eliminating the risks associated with demolition and construction of the bridge. HBI has a proven track record for safety on their projects.

**Role of VDOT and Other Agencies:** We anticipate VDOT will be responsible for inspections of the bridge deck during construction according to the structures’ current inspection schedule, and for review and approval of HBI’s submissions for the following: Emergency deck repair materials and procedure; Methods of deck removal and equipment used; Methods of shielding the Route 8 traffic from falling debris; Methods of temporary traffic control.

### **Risk 3      Potential Karst Conditions**

#### **Why this Risk is Critical**

The subsurface conditions of the New River Valley consist of carbonate bedrock and fault zones. Zones of this carbonate bedrock tend to dissolve creating solution cavities, sinkholes, rock shelves, and conduits for groundwater flows. The test borings drilled for the design of the bridges may not encounter Karst conditions, but that doesn’t mean they don’t exist at the site. The design should include mitigation plans to foundation construction if a Karst feature is discovered during foundation construction. If well thought out solutions are not prepared in advance, encountering Karst could cause a project delay while a solution is devised and implemented.

## Risk Impact

These Karst features have the potential to cause sudden and potential catastrophic failures such as the collapse of a bridge or a section of roadway, and their unpredictability can wreak havoc with proposed design plans. Karst features introduce a significant risk to the project because they can remain dormant below, shielded by soils or a thin layer of rock and be undetectable at the ground surface with the naked eye and even through conventional soil borings. Encountering an unknown karst feature during construction could introduce the need for design modifications that could impact traffic operations, construction budget and completion of the project on schedule.

## Mitigation Strategies

With our detailed knowledge of the Karst features and their potential impact, our intent is to prepare detailed mitigation and contingency plans during project design to address the significant potential of encountering karst geologic features during construction:

1. **Soil Borings:** Soil borings identify generalized subsurface conditions at discrete locations when they are advanced, not just to the top of rock, but several feet into rock beyond the influence zone of the proposed structure. From our review of the Geotechnical Data Report it appears that several of the soil borings were advanced in this manner. The risky part of only drilling soil borings in this geologic setting is that Karst features are irregular and can vary significantly between the soil borings.
2. **Electrical Resistivity** To provide a more thorough characterization of the soil and rock at the project site, our team will use geophysics to explore a wider view of the subsurface. Water filled voids and highly fractured rock are indicated by low resistance zones, whereas hard rock provides a signature of high resistance. Air filled voids also provide high resistance, but can be identified based on the surrounding soil response. If a feature is identified and it is in an area which could potentially affect the planned construction, H&A would investigate it further through soil boring(s) or air track probe holes.
3. **Mitigation Designs.** The HBI team of geotechnical, structural, and highway engineers is well versed in remediating the potential karst conditions. Below are examples of mitigation via design modifications:
  - **Modify Roadway Alignment:** In cases where there is flexibility in the structure or road alignment, we shift the roadway alignment and foundation away from the karst feature; be it a thin rock shelf, a cavity, or a soft soil filled void. We do not anticipate that right-of-way will be a problem due to the median location of the new bridges, so alignment shifts may be achieved without resorting to retaining walls.
  - **Reverse Filters:** In situations where the embankment or foundation elements cannot be shifted away from a cavity or sinkhole, the AMT design team will evaluate utilizing reverse filters, which involves excavating the potential sinkhole to an identifiable throat then the backfilling with riprap and stone varying from a large size at the bottom to small at the top before transitioning to an aggregate suitable for paving or placement of a geotextile filter.
  - **Grouting:** Another method to remediate the karst condition is to utilize pressure grouting and high strength geogrids to stabilize the cavity. The grouting operation involves drilling a pattern of small diameter holes and injecting various viscosity grouts into the subsurface. The higher cost of the pressure grouting will be taken into consideration before selecting this option.
  - **Increased number of piles:** In situations where specific foundations are influenced by karst features, the number of piles may be increased to satisfy the actual bearing capacity of the rock. Consequently, many low capacity piles may be driven to support the bridge foundation.
  - **Drilled Shafts:** Another approach is to install drilled shafts socketed several feet to a safe depth into rock below the karst feature. It is noted that this technique is not suitable at the integral abutments. However, they are compatible with semi-integral abutments.
  - **Micropiles:** Another potential approach could be micropile foundation when faced with supporting the structure over a complicated karst feature. The advantage of micropiles is their flexibility in terms of access and insensitivity of reinforcement to depth. Casing lengths, grouting sequences, and penetration depth can be modified during construction. Similar to drilled shafts, micropiles will require semi-integral abutment.

**Role of VDOT and Other Agencies:** VDOT's role will be to stay informed of the conditions which are found along the project and approve planned mitigation measures, as needed.

# APPENDICES

## *3.1.2 SOQ Checklist*

**ATTACHMENT 3.1.2**

**Project: 0081-154-733**

**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	Appendix
<b>Acknowledgement of RFQ, Revision and/or Addenda</b>	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	Appendix
<b>Letter of Submittal (on Offeror's letterhead)</b>				
Authorized Representative's signature	NA	Section 3.2.1	yes	1
Offeror's point of contact information	NA	Section 3.2.2	yes	1
Principal officer information	NA	Section 3.2.3	yes	1
Offeror's Corporate Structure	NA	Section 3.2.4	yes	1
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	1
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	Appendix
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	Appendix
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	Appendix
Evidence of obtaining bonding	NA	Section 3.2.9	no	Appendix

**ATTACHMENT 3.1.2**

**Project: 0081-154-733**

**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

<b>Statement of Qualifications Component</b>	<b>Form (if any)</b>	<b>RFQ Cross reference</b>	<b>Included within 15-page limit?</b>	<b>SOQ Page Reference</b>
<b>SCC and DPOR registration documentation (Appendix)</b>	Attachment 3.2.10	Section 3.2.10	no	Appendix
Full size copies of SCC Registration	NA	Section 3.2.10.1	no	Appendix
Full size copies of DPOR Registration (Offices)	NA	Section 3.2.10.2	no	Appendix
Full size copies of DPOR Registration (Key Personnel)	NA	Section 3.2.10.3	no	Appendix
Full size copies of DPOR Registration (Non-APELSCIDLA)	NA	Section 3.2.10.4	no	Appendix
<b>DBE statement within Letter of Submittal</b> confirming Offeror is committed to achieving the required DBE goal	NA	Section 3.2.11	yes	1
<b>Offeror's Team Structure</b>				
Identity of and qualifications of Key Personnel	NA	Section 3.3.1	yes	3-5
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	Appendix
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.2	no	Appendix
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.3	no	Appendix
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.4	no	Appendix
Organizational chart	NA	Section 3.3.2	yes	8
Organizational chart narrative	NA	Section 3.3.2	yes	5-7, 9

**ATTACHMENT 3.1.2**

**Project: 0081-154-733**

**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

<b>Statement of Qualifications Component</b>	<b>Form (if any)</b>	<b>RFQ Cross reference</b>	<b>Included within 15- page limit?</b>	<b>SOQ Page Reference</b>
<b>Experience of Offeror's Team</b>				
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	Appendix
Lead Designer Work History Form	Attachment 3.4.1(b)	Section 3.4	no	Appendix
<b>Project Risk</b>				
Identify and discuss three critical risks for the Project	NA	Section 3.5.1	yes	11-15

## *2.10 Form C-78-RFQ*

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

RFQ NO. C00093074DB96  
 PROJECT NO.: 0081-154-733, P101, R201, C501, B601, B616

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

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

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

1. Cover letter of RFQ – July 12, 2017  
(Date)
2. Cover letter of RFQ Addendum No. 1 – August 23, 2017  
(Date)
3. Cover letter of \_\_\_\_\_  
(Date)

  
 \_\_\_\_\_  
 SIGNATURE

8-25-17  
 \_\_\_\_\_  
 DATE

HENRY A. HAYMES  
 \_\_\_\_\_  
 PRINTED NAME

VICE PRESIDENT  
 \_\_\_\_\_  
 TITLE

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



## *3.2.7 Debarment Forms*

**ATTACHMENT 3.2.7(a)**

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

**Project No.: 0081-154-733**

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

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

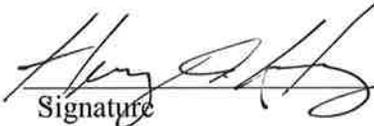
b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under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

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

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

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

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

 Signature	<u>09/06/2017</u> Date	<u>Vice President</u> Title
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Haymes Brothers, Inc.  
Name of Firm

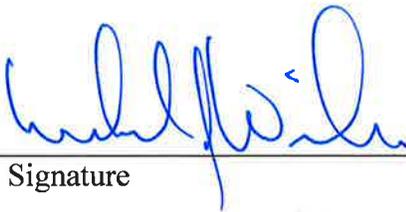
**ATTACHMENT 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

**Project No.: 0081-154-733**

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

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



\_\_\_\_\_

Signature

September 1, 2017

\_\_\_\_\_

Date

Principal

\_\_\_\_\_

Title

A. Morton Thomas and Associates, Inc.

\_\_\_\_\_

Name of Firm

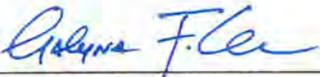
ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS

**Project No.: 0081-154-733**

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

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

 _____	<u>08/30/2017</u> _____	<u>CONTRACTS MANAGER</u> _____
Signature	Date	Title

CTI CONSULTANTS, INC.  
\_\_\_\_\_

Name of Firm

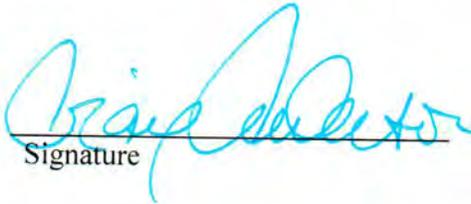
ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS

**Project No.: 0081-154-733**

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

	8/30/2017	President
Signature	Date	Title

ERM & Associates, LLC

\_\_\_\_\_  
Name of Firm

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS

**Project No.: 0081-154-733**

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

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



\_\_\_\_\_  
Signature

August 30, 2017  
Date

Branch Manager  
Title

Froehling & Robertson, Inc.  
Name of Firm

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS

Project No.: 0081-154-733

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

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



30 August 2017

Senior Vice President

Signature

Date

Title

Haley & Aldrich, Inc.

Name of Firm

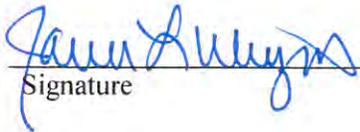
ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS

**Project No.: 0081-154-733**

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

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

  
Signature

8/28/17  
Date

Partner  
Title

Pulsar Advertising, Inc.  
Name of Firm

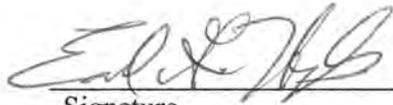
ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS

**Project No.: 0081-154-733**

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

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

  
\_\_\_\_\_  
Signature

August 1, 2017  
\_\_\_\_\_  
Date

Managing Member  
\_\_\_\_\_  
Title

Traffic Signals Plus, PLLC  
\_\_\_\_\_  
Name of Firm

*Offeror's VDOT Prequalification  
Certification*



COMMONWEALTH OF VIRGINIA



## CERTIFICATE OF QUALIFICATION

**HAYMES BROTHERS, INC.**

**Vendor Number: H018**

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; MINOR STRUCTURES; INCIDENTAL CONCRETE;  
UNDERGROUND UTILITIES; H.C.C. PAVEMENT**

Issue Date: May 31, 2017

This Rating and Classification will Expire: May 31, 2018

Suzanne FR Lucas, State Prequalification Officer

Don E. Silies, Director of Contracts

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

# *Surety Letter*



**THE  
HARTFORD**

Business Insurance  
Employee Benefits  
Auto  
Home

August 15, 2017

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

Re: Haymes Brothers, Inc.  
Virginia Department of Transportation  
Request for Qualifications  
A Design-Build Project  
I-81 Bridge Replacement at Exit 114  
From: 0.381 Mi. South of Christiansburg SCL  
TO: 0.510 Mi North of Christiansburg SCL  
Montgomery County/Town of Christiansburg, Virginia  
State Project No.: 0081-154-733, P101, R201, C501, B601, B616  
Federal Project No.: IM-081-2(992)  
Contract ID Number: C00093074DB96

Dear Mr. Kindy:

The Hartford, through its operating entities, has issued bonds to Haymes Brothers, Inc. since 2011. During this time we have favorably considered projects up to \$50,000,000 with an aggregate program of \$100,000,000. Our experience with Haymes Brothers, Inc. has been excellent, and we highly recommend them to you.

As surety for Haymes Brothers, Inc., The Hartford is capable of obtaining 100% Performance Bond and 100% Labor and Materials Payment Bond in the amount of the anticipated cost of construction, and said bonds will cover the Project and any warranty periods as provided for in the Contract Documents on behalf of the Contractor, in the event that such firm be the successful bidder and enter into a contract for this project, subject to acceptable review of the contract documents and bond forms, financing, availability of reinsurance, and Haymes Brothers, Inc. continuing to satisfy other underwriting considerations at the time the bonds are requested.

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

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

Sincerely,

  
Margaret D. Elliott  
Executive Underwriter

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The Hartford – Richmond Regional Office  
4480 Cox Road | Suite 200  
Glen Allen, VA 23060-6751

W: 804-253-8093  
F: 866-212-4423

### *3.2.10 SCC and DPOR Information Tables*

## ATTACHMENT 3.2.10

### State Project No. 0081-154-733

#### 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>
Haymes Brothers, Inc.	0136848-9	Corporation	Active	440 Hawkins Road Chatham, VA 24531	Class A Contractor	2701010500	03-31-2019
A. Morton Thomas and Associates, Inc.	F049431-2	Corporation	Active	14555 Avion Parkway, Suite 350 Chantilly, VA 20151	ENG, LS	0411000586	02-28-2018
A. Morton Thomas and Associates, Inc.	F049431-2	Corporation	Active	105 Arbor Drive, Suite 200 Christiansburg, VA 24073	ENG	0411001223	02-28-2018
A. Morton Thomas and Associates, Inc.	F049431-2	Corporation	Active	100 Gateway Centre Parkway, Suite 200 Richmond, VA 23235	ENG, LS	0411000587	02-28-2018
CTI Consultants, Inc.	0252760-4	Corporation	Active	1348 South Main Street Blacksburg, VA 24063	ENG	0411000482	02-28-2018
ERM & Associates, LLC	S431583-6	LLC	Active	7047 Wintergreen Court Warrenton, VA 20187	N/A		
Froehling & Robertson, Inc.	0027211-2	Corporation	Active	1734 Seibel Drive NE Roanoke, VA 24012	ENG	0411000053	02-28-2018
Haley & Aldrich, Inc.	F108818-8	Corporation	Active	7926 Jones Branch Drive, McLean, VA 22102	ENG	0407003076	12-31-2017
Pulsar Advertising, Inc.	F160855-5	Corporation	Active	10940 Wilshire Boulevard, Suite 1050 Los Angeles, CA 90024	N/A		
Traffic Signals Plus, PLLC	S299757-7	LLC	Active	621 French's Store Rd Cumberland, VA 23040	ENG	0413000317	12-31-2017

## ATTACHMENT 3.2.10

### State Project No. 0081-154-733

#### SCC and DPOR Information

<b>DPOR INFORMATION FOR INDIVIDUALS (RFQ Sections 3.2.10.3 and 3.2.10.4)</b>						
<b>Business Name</b>	<b>Individual's Name</b>	<b>Office Location Where Professional Services will be Provided (City/State)</b>	<b>Individual's DPOR Address</b>	<b>DPOR Type</b>	<b>DPOR Registration Number</b>	<b>DPOR Expiration Date</b>
A. Morton Thomas and Associates, Inc.	Laura Michelle Mehiel	Chantilly, VA	2 East Read St 4 <sup>th</sup> Floor Baltimore, MD 21202	ENG	0402034707	04-30-2019
A. Morton Thomas and Associates, Inc.	Frederick J Wagner	Baltimore, MD	104 Roselawn Court Bel Air, MD 21014	ENG	0402050917	09-30-2018
A. Morton Thomas and Associates, Inc.	Khossrow Babaei	Chantilly, VA	12144 Westwood Hills Drive Herndon, VA 20171	ENG	0402025896	02-28-2019
A. Morton Thomas and Associates, Inc.	Keith Michael Benedict	Baltimore, MD	1350 Locust Avenue Bel Air, MD 21014	ENG	0402049248	07-31-2019
A. Morton Thomas and Associates, Inc.	Donald J Rissmeyer	Richmond, VA	100 Gateway Centre Parkway, Suite 200 Richmond, VA 23235	ENG	0402026104	06-30-2019
A. Morton Thomas and Associates, Inc.	J K Sinclair, Jr	Chantilly, VA	1009 Tyler Street Herndon, VA 20170	ENG	0402011195	09-30-2018
A. Morton Thomas and Associates, Inc.	Matthew Hendrik Willems	Chantilly, VA	26 Jeffrey Lane Brunswick, MD 21758	ENG	0402036144	05-31-2019
A. Morton Thomas and Associates, Inc.	Charles Kenneth O'Connell	Chantilly, VA	12977 Hampton Forest Court Fairfax, VA 22030	ENG	0402024735	02-28-2018
A. Morton Thomas and Associates, Inc.	John Scott Claytor	Richmond, VA	9409 Derbyshire Road Richmond, VA 23229	LS	0403002288	01-31-2018
A. Morton Thomas and Associates, Inc.	Chadwick Ryan McMurray	Abingdon, VA	3937 Foxfire Lane Kingsport, TN 37664	ENG	0402039985	01-31-2018
CTI Consultants, Inc.	Charles Jacob Newman	Blacksburg, VA	402 Alleghany Street Blacksburg, VA 24060	ENG	0402040732	06-30-2019
Haley & Aldrich, Inc.	David A Schoenwolf	McLean, VA	1 Plantation Court Rockville, MD 20852	ENG	0402022802	08-31-2018
Traffic Signals Plus, PLLC	Earl Gardiner Hughes	Richmond, VA	621 French's Store Road Cumberland, VA 23040	ENG	0402042707	09-30-2018

*3.2.10 SCC and DPOR  
Full Size Copies*

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Commonwealth of Virginia  
State Corporation Commission

Vir

CISM0180

CORPORATE DATA INQUIRY

09/01/17

15:48:01

CORP ID: 0136848 - 9 STATUS: 00 ACTIVE STATUS DATE: 04/21/03  
CORP NAME: HAYMES BROTHERS, INC.

DATE OF CERTIFICATE: 02/29/1972 PERIOD OF DURATION: INDUSTRY CODE: 00  
STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK  
MERGER IND: CONVERSION/DOMESTICATION IND:  
GOOD STANDING IND: Y MONITOR INDICATOR:  
CHARTER FEE: MON NO: MON STATUS: MONITOR DTE:  
R/A NAME: HENRY A HAYMES

STREET: HAYMES BROTHERS INC AR RTN MAIL:  
440 HAWKINS ROAD  
CITY: CHATHAM STATE : VA ZIP: 24531-0000  
R/A STATUS: 2 OFFICER EFF. DATE: 12/24/04 LOC : 171  
ACCEPTED AR#: 217 02 2438 DATE: 01/17/17 PITTSYLVANIA CO  
CURRENT AR#: 217 02 2438 DATE: 01/17/17 STATUS: A ASSESSMENT INDICATOR: 0  
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES  
17 100.00 1,000

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(Screen Id:/Corp\_Data\_Inquiry)

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c



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CISM0180

CORPORATE DATA INQUIRY

09/01/17

13:14:13

CORP ID: F049431 - 2 STATUS: 00 ACTIVE STATUS DATE: 12/15/09  
CORP NAME: A. MORTON THOMAS & ASSOCIATES, INC.

DATE OF CERTIFICATE: 11/26/1997 PERIOD OF DURATION: INDUSTRY CODE: 00  
STATE OF INCORPORATION: MD MARYLAND STOCK INDICATOR: S STOCK  
MERGER IND: CONVERSION/DOMESTICATION IND:  
GOOD STANDING IND: Y MONITOR INDICATOR:  
CHARTER FEE: 2000.00 MON NO: MON STATUS: MONITOR DTE:  
R/A NAME: COGENCY GLOBAL INC.

STREET: 250 BROWNS HILL COURT AR RTN MAIL:

CITY: MIDLOTHIAN STATE : VA ZIP: 23114-0000  
R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 05/02/17 LOC : 120  
ACCEPTED AR#: 216 16 0323 DATE: 10/27/16 CHESTERFIELD CO  
CURRENT AR#: 216 16 0323 DATE: 10/27/16 STATUS: A ASSESSMENT INDICATOR: 0  
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES  
16 400.00 52,000

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(Screen Id:/Corp\_Data\_Inquiry)

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CISM0180

CORPORATE DATA INQUIRY

09/01/17

15:52:00

CORP ID: 0252760 - 4 STATUS: 00 ACTIVE STATUS DATE: 05/05/15  
CORP NAME: C.T.I. Consultants, Inc.

DATE OF CERTIFICATE: 02/27/1984 PERIOD OF DURATION: INDUSTRY CODE: 00  
STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK  
MERGER IND: S SURVIVOR CONVERSION/DOMESTICATION IND:  
GOOD STANDING IND: Y MONITOR INDICATOR:  
CHARTER FEE: 200.00 MON NO: MON STATUS: MONITOR DTE:  
R/A NAME: ANDREW W WHITE

STREET: LECLAIRRYAN, A PROFESSIONAL CORPORATION AR RTN MAIL:  
919 EAST MAIN STREET, 24TH FLOOR  
CITY: RICHMOND STATE : VA ZIP: 23219-0000  
R/A STATUS: 4 ATTORNEY EFF. DATE: 08/31/15 LOC : 216  
ACCEPTED AR#: 217 02 3671 DATE: 01/19/17 RICHMOND CITY  
CURRENT AR#: 217 02 3671 DATE: 01/19/17 STATUS: A ASSESSMENT INDICATOR: 0  
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES  
17 670.00 100,000

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(Screen Id:/Corp\_Data\_Inquiry)

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c



09/01/17

LLCM3220

LLC DATA INQUIRY

15:50:41

LLC ID: S431583 - 6 STATUS: 00 ACTIVE STATUS DATE: 12/03/12  
 LLC NAME: ERM & ASSOCIATES, LLC

DATE OF FILING: 12/03/2012 PERIOD OF DURATION: INDUSTRY CODE: 00

STATE OF FILING: VA VIRGINIA MERGER INDICATOR:

CONVERSION/DOMESTICATION INDICATOR:

P R I N C I P A L O F F I C E A D D R E S S

STREET: 7047 WINTERGREEN CT

CITY: WARRENTON STATE: VA ZIP: 20187-0000

R E G I S T E R E D A G E N T I N F O R M A T I O N

R/A NAME: CRAIG J. ANDERSON

STREET: 15 MAIN STREET

RTN MAIL:

CITY: WARRENTON STATE: VA ZIP: 20186-0000

R/A STATUS: 1 MEMBER/MANAGER EFF DATE: 11/30/16 LOC: 130 FAUQUIER COUNTY

YEAR	FEE	PENALTY	INTEREST	BALANCE
16	50.00			

(Screen Id:/LLC\_Data\_Inquiry)

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CISM0180

CORPORATE DATA INQUIRY

09/01/17

15:52:41

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

DATE OF CERTIFICATE: 10/11/1924 PERIOD OF DURATION: INDUSTRY CODE: 00  
STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK  
MERGER IND: CONVERSION/DOMESTICATION IND:  
GOOD STANDING IND: Y MONITOR INDICATOR:  
CHARTER FEE: 2480.00 MON NO: MON STATUS: MONITOR DTE:  
R/A NAME: WILLIAM H HOOFNAGLE III

STREET: 1900 ONE JAMES CENTER AR RTN MAIL:  
901 E CARY ST  
CITY: RICHMOND STATE : VA ZIP: 23219-0000  
R/A STATUS: 4 ATTORNEY EFF. DATE: 09/21/11 LOC : 216  
ACCEPTED AR#: 216 14 0753 DATE: 09/15/16 RICHMOND CITY  
CURRENT AR#: 216 14 0753 DATE: 09/15/16 STATUS: A ASSESSMENT INDICATOR: 0  
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES  
17 1,700.00 1,700.00 1,100,000

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(Screen Id:/Corp\_Data\_Inquiry)

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CISM0180

CORPORATE DATA INQUIRY

09/01/17

15:48:53

CORP ID: F108818 - 8 STATUS: 00 ACTIVE STATUS DATE: 09/03/02  
 CORP NAME: HALEY & ALDRICH, INC.

DATE OF CERTIFICATE: 05/13/1999 PERIOD OF DURATION: INDUSTRY CODE: 00  
 STATE OF INCORPORATION: MA MASSACHUSETTS STOCK INDICATOR: S STOCK  
 MERGER IND: CONVERSION/DOMESTICATION IND:  
 GOOD STANDING IND: Y MONITOR INDICATOR:  
 CHARTER FEE: 400.00 MON NO: MON STATUS: MONITOR DTE:  
 R/A NAME: CORPORATION SERVICE COMPANY

STREET: BANK OF AMERICA CENTER, 16TH FLOOR AR RTN MAIL:  
 1111 EAST MAIN STREET  
 CITY: RICHMOND STATE : VA ZIP: 23219-0000  
 R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 02/28/17 LOC : 216  
 ACCEPTED AR#: 217 08 3822 DATE: 05/15/17 RICHMOND CITY  
 CURRENT AR#: 217 08 3822 DATE: 05/15/17 STATUS: A ASSESSMENT INDICATOR: 0  
 YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES  
 17 1,270.00 200,000

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(Screen Id:/Corp\_Data\_Inquiry)

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CISM0180

CORPORATE DATA INQUIRY

09/01/17

15:53:05

CORP ID: F160855 - 5 STATUS: 00 ACTIVE STATUS DATE: 05/11/15  
CORP NAME: Pulsar Advertising, Inc.

DATE OF CERTIFICATE: 11/22/2004 PERIOD OF DURATION: INDUSTRY CODE: 00  
STATE OF INCORPORATION: NY NEW YORK STOCK INDICATOR: S STOCK  
MERGER IND: CONVERSION/DOMESTICATION IND:  
GOOD STANDING IND: Y MONITOR INDICATOR:  
CHARTER FEE: 50.00 MON NO: MON STATUS: MONITOR DTE:  
R/A NAME: CT CORPORATION SYSTEM

STREET: 4701 COX ROAD, SUITE 285 AR RTN MAIL:

CITY: GLEN ALLEN STATE : VA ZIP: 23060-0000  
R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 10/04/13 LOC : 143  
ACCEPTED AR#: 216 16 2349 DATE: 10/31/16 HENRICO COUNTY  
CURRENT AR#: 216 16 2349 DATE: 10/31/16 STATUS: A ASSESSMENT INDICATOR: 0  
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES  
16 100.00 200

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(Screen Id:/Corp\_Data\_Inquiry)

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

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09/01/17

LLCM3220

LLC DATA INQUIRY

15:51:18

LLC ID: S299757 - 7 STATUS: 00 ACTIVE STATUS DATE: 09/12/13  
 LLC NAME: Traffic Signals Plus, PLLC

DATE OF FILING: 08/03/2009 PERIOD OF DURATION: INDUSTRY CODE: 70

STATE OF FILING: VA VIRGINIA MERGER INDICATOR:

CONVERSION/DOMESTICATION INDICATOR:

P R I N C I P A L O F F I C E A D D R E S S

STREET: 621 FRENCHS STORE RD

CITY: CUMBERLAND STATE: VA ZIP: 23040-0000

R E G I S T E R E D A G E N T I N F O R M A T I O N

R/A NAME: VIRGINIA PROFESSIONAL SERVICES LLC

STREET: 3850 Gaskins Rd., Suite 120

RTN MAIL:

CITY: Richmond STATE: VA ZIP: 23233-0000

R/A STATUS: 5 ENTITY AUTHORIZ EFF DATE: 05/04/11 LOC: 143 HENRICO COUNTY

YEAR	FEE	PENALTY	INTEREST	BALANCE
17	50.00			

(Screen Id:/LLC\_Data\_Inquiry)

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400 Richmond, VA 23233

Telephone: (804) 367-6500

EXPIRES ON

03-31-2019

NUMBER

2701010500

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



HAYMES BROTHERS INC  
440 HAWKINS ROAD  
CHATHAM, VA 24531



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

*James W. DeBoer*  
James W. DeBoer, Director

# COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

02-28-2018

NUMBER

0411000586

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

BUSINESS ENTITY BRANCH OFFICE REGISTRATION

PROFESSIONS: LS, ENG



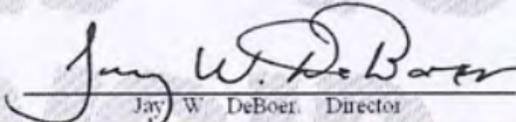
A MORTON THOMAS AND ASSOCIATES INC

1455 AVION PKWY STE 150

CHANTILLY, VA 20151



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

  
Jay W. DeBoer, Director

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9900 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

02-28-2018

NUMBER

0411001223

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

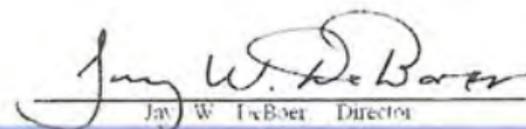
PROFESSIONS: ENG



A MORTON THOMAS AND ASSOCIATES INC  
105 ARBOR DR STE 200  
CHRISTIANSBURG, VA 24073



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

  
Jay W. DeBoer Director

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

02-28-2018

NUMBER

0411000587

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

PROFESSIONS: ENG, LS



A MORTON THOMAS AND ASSOCIATES INC  
100 GATEWAY CENTRE PKWY  
SUITE 200  
RICHMOND, VA 23235



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

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

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

02-28-2018

NUMBER

0411000482

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

PROFESSIONS: ENG



CTI CONSULTANTS INC  
1348 S MAIN STREET  
BLACKSBURG, VA 24060



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

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

# COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

02-28-2018

NUMBER

0411000053

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

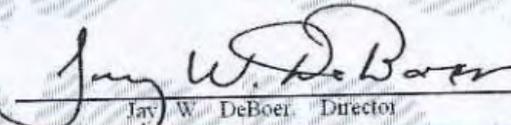
PROFESSIONS: ENG



FROEHLING ROBERTSON INC  
1734 SEIBEL DR N E  
ROANOKE, VA 24012



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

  
Jay W. DeBoer, Director

# COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

12-31-2017

NUMBER

0407003076

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

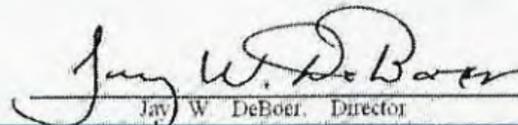
PROFESSIONS: ENG



HALEY & ALDRICH, INC  
7926 JONES BRANCH DRIVE  
SUITE 870  
MC LEAN, VA 22102



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Jay W. DeBoer, Director

# COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

12-31-2017

NUMBER

0413000317

BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS  
AND LANDSCAPE ARCHITECTS  
PROFESSIONAL LIMITED LIABILITY COMPANY

PROFESSIONS: ENG



TRAFFIC SIGNALS PLUS PLLC  
621 FRENCH'S STORE RD  
CUMBERLAND, VA 23040



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

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# COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

04-30-2019

NUMBER

0402034707

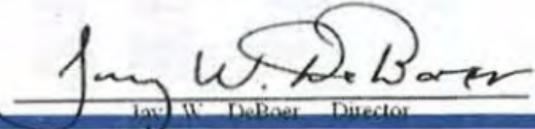
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS  
AND LANDSCAPE ARCHITECTS  
PROFESSIONAL ENGINEER LICENSE



LAURA MICHELLE MEHIEL  
901 DULANEY VALLEY ROAD  
SUITE 710  
TOWSON, MD 21204



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Jay W. DeBoer Director

# COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

09-30-2018

NUMBER

0402050917

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



FREDERICK J WAGNER  
104 ROSELAWN CT  
BEL AIR, MD 21014



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

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

# COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

02-28-2019

NUMBER

0402025896

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



KHOSSROW BABAEI  
12144 WESTWOOD HILLS DR  
HERNDON, VA 20171



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

# COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

07-31-2019

NUMBER

0402049248

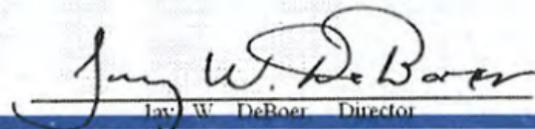
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS  
AND LANDSCAPE ARCHITECTS  
PROFESSIONAL ENGINEER LICENSE



KEITH MICHAEL BENEDICT  
1350 LOCUST AVE  
BEL AIR, MD 21014



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Jay W. DeBoer, Director

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DPOR-LIC (02/2017)

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

06-30-2019

NUMBER

0402026104

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



DONALD J RISSMEYER  
A. MORTON THOMAS & ASSOCIATES INC.  
100 GATEWAY CENTRE PARKWAY  
SUITE 200  
RICHMOND, VA 23235



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

*Jerry W. DeBorja*  
Director

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

09-30-2018

NUMBER

0402011195

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



J K SINCLAIR JR  
1009 TYLER STREET  
HERNDON, VA 20170-3250



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

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

# COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

05-31-2019

NUMBER

0402036144

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



MATTHEW HENDRIK WILLEMS  
26 JEFFREY LANE  
BRUNSWICK, MD 21758



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

*Jan W. DeBoer*  
Jan W. DeBoer, Director

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (02/2017)

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

02-28-2018

NUMBER

0402024735

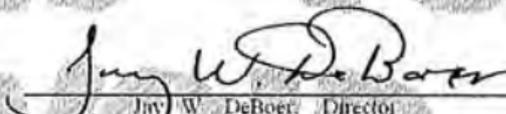
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS  
AND LANDSCAPE ARCHITECTS  
PROFESSIONAL ENGINEER LICENSE



CHARLES KENNETH O'CONNELL  
12977 HAMPTON FOREST CT  
FAIRFAX, VA 22030



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Jay W. DeBoer, Director

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

01-31-2018

NUMBER

0403002288

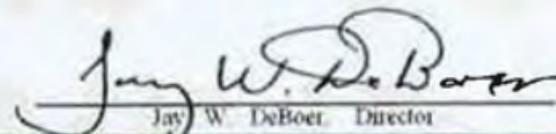
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS  
AND LANDSCAPE ARCHITECTS  
LAND SURVEYOR LICENSE



JOHN SCOTT CLAYTOR  
9409 DERBYSHIRE ROAD  
RICHMOND, VA 23229



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Jay W. DeBoer, Director

# COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

01-31-2018

NUMBER

0402039985

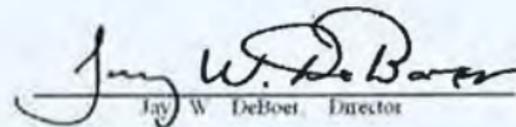
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS  
AND LANDSCAPE ARCHITECTS  
PROFESSIONAL ENGINEER LICENSE



CHADWICK RYAN MCMURRAY  
3937 FOXFIRE LN  
KINGSPORT, TN 37664



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

  
Jay W. DeBoer, Director

# COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

**EXPIRES ON**  
**06-30-2019**

**NUMBER**  
**0402040732**

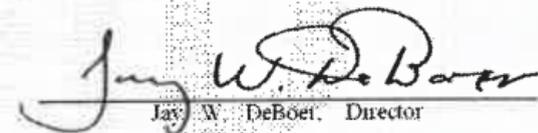
**BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS  
AND LANDSCAPE ARCHITECTS  
PROFESSIONAL ENGINEER LICENSE**



**CHARLES JACOB NEWMAN**  
**402 ALLEGHANY ST**  
**BLACKSBURG, VA 24060**



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Jay W. DeBoer, Director

# COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

08-31-2018

NUMBER

0402022802

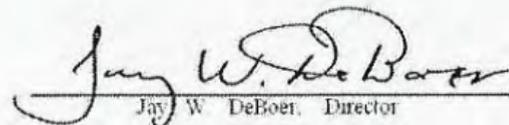
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS  
AND LANDSCAPE ARCHITECTS  
PROFESSIONAL ENGINEER LICENSE



DAVID A SCHOENWOLF  
1 PLANTATION CT  
ROCKVILLE, MD 20852



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Jay W. DeBoer, Director

# COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

09-30-2018

NUMBER

0402042707

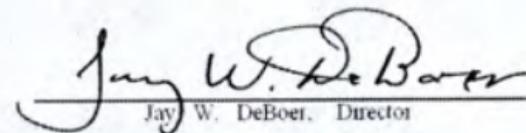
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AND LANDSCAPE ARCHITECTS  
PROFESSIONAL ENGINEER LICENSE



EARL GARDINER HUGHES  
621 FRENCH'S STORE ROAD  
CUMBERLAND, VA 23040



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Jay W. DeBoer, Director

### *3.3.1 Key Personnel Resumes*

**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

Brief Resume of Key Personnel anticipated for the Project.	
a.	Name & Title: <b>Henry Haymes</b> <b>Vice President</b>
b.	Project Assignment: <b>Design-Build Project Manager</b>
c.	Name of all Firms with which you are employed at the time of submitting SOQ. In addition, please denote the type of employment (Full time/Part Time): <b>Haymes Brothers, Inc. (Full Time)</b>
d.	Years experience: With this Firm <u>32</u> Year With Other Firms <u>0</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>Vice President</b> <i>Haymes Brothers, Inc. .... 1985 - Present</i> Responsible for bidding and project management for box culvert, roadway, and bridge projects including scheduling, contract administration, coordination with stakeholders, safety, resource allocations and project quality. Serves as primary Project Manager for all of Haymes Brothers's VDOT and NCDOT contracts.  Henry began his career with Haymes Brothers working in the field as a laborer, foreman, and eventually superintendent. After 15 years of field leadership experience, Henry assumed his current role as Vice President of HBI in 2001. Henry is able to integrate the foundation of knowledge he gained in the field into his current project management and corporate leadership roles. Together with his partner, he successfully manages a roster of approximately 200 employees, a multimillion dollar fleet of equipment, and a portfolio of dozens of projects at any given time. He is responsible for project management of box culvert, roadway, and bridge projects; his duties include scheduling, contract administration, coordination with stakeholders, safety, resource allocations, and project quality. Henry serves as the primary Project Manager for all of Haymes Brothers's VDOT and NCDOT contracts. He also is instrumental in the development and implementation of company HR policies and serves as the company's EEO officer.
e.	Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: <b>Virginia Tech, Blacksburg, Virginia / BS / 1985 / Civil Engineering</b>
f.	Active Registration: Year First Registered/ Discipline/VA Registration #: N/A
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 assignment; projects older than fifteen (15) years will not be considered for evaluation.</i></li></ol> <b>(List <u>ONLY</u> three (3) relevant projects* for which you have performed similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)</b>

Project Name:	<b>Route 58 Danville Expressway (future Interstate 785) and Interchange with U.S. Route 29, Pittsylvania County, VA</b>	Start Date: End Date:	<b>2000 2004</b>
Project Role:	<b>Project Manager</b>		
Client/Owner	<b>Virginia Department of Transportation</b>	With Current Firm?	<b>Yes</b>

**Project Manager.** This \$24 million project included the construction of 4.4 lane miles of limited access freeway built to interstate standards in Danville, VA. The project included 2 million cubic yards of unclassified excavation, construction of 7 new bridges, 10,100 linear feet of storm drain, fine grading and subgrade preparation with aggregate base material. All of these items were self-performed. The project also included asphalt paving, guardrail, signage, pavement marking, seeding, domestic waterline and landscaping which were all performed by sub-contractors that Henry managed for Haymes Brothers. This project included construction of an interchange with highway 29 and tying in of the bypass with Route 58 business. These items required a great deal of planning and coordination to account for traffic control and safety. Henry was responsible for the overall management of all facets of the project, including daily operations and scheduling; resource and manpower allocation; contract administration; timely payment of vendors/subcontractors; on site safety; project quality and quality management; traffic control and railroad communications; communications with the owner and subcontractors.

Project Name:	<b>Route 130 Bridge over the Maury River, Glasgow, VA</b>	Start Date: End Date:	<b>2008 2010</b>
Project Role:	<b>Project Manager</b>		
Client/Owner:	<b>Virginia Department of Transportation</b>	With Current Firm?	<b>Yes</b>

**Project Manager.** This \$11M project replaced an aging existing bridge that carried VA Route 130 over the Maury River in Glasgow, VA with a new structure comprised of 1000' long steel girders and concrete deck. Due to the presence of karst geology, the foundation structure for the bridge required 72" diameter drilled shafts that extended up to 100' deep. Haymes Brothers was able to secure the contract thanks to Mr. Haymes's carefully prepared estimation. As construction began, Henry served as project manager for the project. He was responsible for overall management of all facets of the project, including daily operations and scheduling; resource and manpower allocation; contract administration; timely payment of vendors/subcontractors; on site safety; project quality and quality management; traffic control; communications with the owner and subcontractors. Henry also developed the girder erection plan and guided the on-site superintendent in the implementation of the plan.

Project Name:	<b>NCDOT C203274 (Bridge Replacements) Alamance and Orange Counties, NC</b>	Start Date: End Date:	<b>2013 2016</b>
Project Role:	<b>Design-Build Project Manager</b>		
Client/Owner:	<b>North Carolina Department of Transportation</b>	With Current Firm?	<b>Yes</b>

**Design-Build Project Manager.** This nearly \$7 million design-build project was to replace aged and unsafe bridges with precast segmental box culverts at 14 different locations across Alamance and Orange Counties in NCDOT Division 7. The work included road closures and traffic diversion, adhering to strict erosion and sediment control standards, water diversion, bridge demolition, construction of structural foundation, culvert placement, backfilling/compaction, seeding, and asphalt paving and striping. Each of the 14 sites presented unique challenges with regards to hydraulic, environmental, and constructability constraints. For each site, Henry served as the point of communication between the field personnel, the design team, and the owner: he collaborated with all three parties in order to determine the construction means and methods that would produce the most efficient design. Henry was also responsible for overall management of all facets of the project, including daily operations and scheduling; resource and manpower allocation; contract administration; safety; project quality and quality management; traffic control; communications with the public/public outreach; and work with chief engineer for design of 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.

N/A

**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

<b>Brief Resume of Key Personnel anticipated for the Project.</b>	
a. Name & Title:	<b>Chad McMurray, PE, PMP, CCM, DBIA</b> <b>Associate</b>
b. Project Assignment:	<b>Quality Assurance Manager</b>
c. Name of all Firms with which you are employed at the time of submitting SOQ. In addition, please denote the type of employment (Full time/Part Time):	<b>A. Morton Thomas and Associates, Inc. (Full Time)</b>
d. Years experience: With this Firm <u>6</u> Years With Other Firms <u>19</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>Associate</b> <i>A. Morton Thomas and Associates, Inc. .... 2011 - Present</i> Responsible Charge Engineer for Abingdon Office with direct control and supervision of all engineering services provided out of this office of 40 employees. General duties include management of contracts, supervision of project staff, performance of contract duties including acting as the owner's representative on projects, providing QA/QC services on Design Build and Design Bid Build projects, development of project reports, and meeting client and company performance requirements.</p> <p><b>Senior Principal Engineer</b> <i>AMEC E&amp;I, Inc. (formerly MACTEC). .... 2008 - 2011</i> QA/QC duties included documentation including RFI's, NCR's, DWR's, schedule review and monitoring, providing/overseeing QA/QC testing and inspecting, oversight of QA/QC inspection/testing staff. Duties included management of contracts, supervision of project staff, performance of contract duties including acting as the owner's representative on projects, providing QA/QC services on Design Build and Design Bid Build projects development of project reports, and meeting client and company performance requirements.</p> <p><b>Area Construction Engineer</b> <i>Virginia Department of Transportation ..... 2004 - 2008</i> Coordinate and supervise field inspection staff responsible for construction oversight and QA/QC on VDOT projects in the Bristol District. Responsible for ensuring the Department met on-time, on-budget, quality, and environmental compliance goals for assigned geographic area. Assign QA Inspection staff and oversee inspection and testing program in area.</p> <p><b>Project Manager</b> <i>Avisco, Inc. .... 2000 - 2004</i> Responsible for supervision and coordination of all field activities from start to completion of complex civil construction projects and assistance with managing overall Oak Ridge Operations. Responsible for project Quality Control testing and inspection.</p>
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:	<b>University of Tennessee, Knoxville / BS / 1993 / Civil Engineering</b>
f. Active Registration: Year First Registered/ Discipline/VA Registration #:	2004 / Professional Engineer / #39985 Certified Construction Manager (CCM) # A2397 Project Management Professional (PMP) # 1405995 Design-Build Professional (DBIA), SMW and ESC Certification, Guardrail Installation Training (GRIT) Intermediate Work Zone Traffic Control Certification Workzone Training for Law Enforcement Officers (LEO)

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

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

Project Name:	<b>I-81 over Halls Bottom Design Build, Washington County, VA</b>	Start Date: <b>2016</b> End Date: <b>2018</b>
Project Role:	<b>Quality Assurance Manager</b>	
Client/Owner:	<b>Virginia Department of Transportation</b>	With Current Firm? <b>Yes</b>

**Quality Assurance Manager and QA Geotechnical Engineer** for this \$13M Design-Build highway/bridge project in Washington County. His responsibilities included the development, updating, and implementing of a Quality Assurance plan. The design-build project includes replacement of two bridges on Interstate 81. Mr. McMurray's responsibilities also included coordination of QA/QC testing of embankment, drainage structures, subgrade, asphalt and incidental items. As the QAM, he is responsible for the acceptance testing and documentation of all materials used on the Contract as well as the generation of the VDOT Materials Book and constructability reviews. He verifies that the QC staff is following the QC Inspection Plan/Materials Testing Requirements in the approved QA/QC Manual for this Contract. He is also responsible for ensuring environmental compliance is met and performing environmental reviews on the project. Duties include oversight of all construction activities and analysis and interpretation of project plans and specifications to insure constructability as well as providing oversight and management of inspection and testing staff. Sharepoint software was used to keep project documentation and materials information.

Project Name:	<b>Military Highway Design Build, Norfolk, VA</b>	Start Date: <b>2015</b> End Date: <b>2018</b>
Project Role:	<b>Responsible Charge Engineer</b>	
Client/Owner:	<b>Virginia Department of Transportation</b>	With Current Firm? <b>Yes</b>

**Responsible Charge** duties and document management services for this \$60M intersection and capacity improvement project on US 13 in Norfolk Virginia. Mr. McMurray reviews changes and Notices of Intent, coordinates with FHWA for concurrence and participation in changes, also reviews project correspondence, design submittals, RFI's, Schedule submittals, and VDOT reviews and comments, includes reviewing and coordinating reviews and comments of submittals, and communication with Design-Build and is responsible for leading and guiding the Construction Manager, Inspection, and Engineering Support staff to effectively administer goals for safety, quality, schedule, and budget while overseeing construction activities. Due to contractual requirements for response times, he works to ensure that responses and comments are provided. He attends regular project meetings and holds weekly teleconferences to review the status of outstanding submittals, RFI's, and deadlines for comments/responses.

Project Name:	<b>U.S. Route 460 Connector Phase I Design Build, Breaks, VA</b>	Start Date: <b>2011</b> End Date: <b>2015</b>
Project Role:	<b>Quality Assurance Manager</b>	
Client/Owner:	<b>Virginia Department of Transportation</b>	With Current Firm? <b>Yes</b>

**Quality Assurance Manager and QA Geotechnical Engineer** for this \$113M Design-Build highway/bridge project in Buchanan County. His responsibilities included the development, updating, and implementing of a Quality Assurance plan, review of geotechnical design and issues, and coordination design revisions. Responsible for coordination of QA/QC testing of embankment, drainage structures, subgrade, asphalt and incidental items. As the QAM, he is responsible for the acceptance testing and documentation of all materials used on the Contract as well as the generation of the VDOT Materials Book and constructability reviews. He verifies that the QC staff is following the QC Inspection Plan/Materials Testing Requirements in the approved QA/QC Manual for this Contract. He is also responsible for ensuring environmental compliance is met and performing environmental reviews on the project. Duties include oversight of all construction activities and analysis and interpretation of project plans and specifications to insure constructability as well as providing oversight and management of inspection and testing staff. Sharepoint software was used to keep project documentation and materials information.

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

**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

Brief Resume of Key Personnel anticipated for the Project.			
a.	Name & Title:	<b>Laura Mehiel, PE</b> <b>Associate</b>	
b.	Project Assignment:	<b>Design Manager</b>	
c.	Name of all Firms with which you are employed at the time of submitting SOQ. In addition, please denote the type of employment (Full time/Part Time):	<b>A. Morton Thomas and Associates, Inc. (Full Time)</b>	
d.	Years experience: With this Firm <u>6</u> Year 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>Associate</b></p> <p><i>A. Morton Thomas and Associates, Inc..... 2011 - Present</i> Senior Project Manager and Associate in Charge of mega projects and innovative delivery projects. Oversees highway development/design teams for transportation projects throughout the Commonwealth of Virginia, including design QC responsibilities. DPM for design-build and other innovative contracting techniques.</p> <p><b>Senior Project Manager / Operations Manager</b></p> <p><i>HNTB Corporation..... 1998 – 2011</i> Senior Project Manager who oversaw highway development/design teams for transportation projects including design/build throughout VA, MD, and DC, including QC role. Engineer in Charge of the Columbia, MD office, supervising a staff of highway, hydraulics, traffic, and construction professionals. Held operational, business development, and technical oversight roles.</p>	
e.	Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:	<b>University of Delaware, Newark Delaware / BCE / 1986 / Civil Engineering</b>	
f.	Active Registration: Year First Registered/ Discipline/VA Registration #:	1992..... Virginia..... Professional Engineer #34707 Also registered in DC, DE, MD, NC, PA, TN	
g.	Document the extent and depth of your experience and qualifications relevant to the Project.	<ol style="list-style-type: none"> <li>1. Note your role, responsibility and specific job duties for each project, not those of the firm.</li> <li>2. Note whether experience is with current firm or with other firm.</li> <li>3. Provide beginning and end dates for each assignment; projects older than fifteen (15) years will not be considered for evaluation.</li> </ol> <p><b>(List ONLY three (3) relevant projects* for which you have performed similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)</b></p>	
	Project Name:	<b>Design-Build Route 1 at Fort Belvoir Fairfax County, VA</b>	Start Date: <b>2013</b> End Date: <b>2017</b>
	Project Role:	<b>Design Manager</b>	
	Client/Owner:	<b>FHWA – Eastern Federal Lands/VDOT</b>	With Current Firm? <b>Yes</b>
<p><b>Design Manager</b> responsible for managing a multi-disciplinary team for widening/new alignment of 3.6 miles of US Route 1 from 4 lanes undivided to a 6 lane divided facility. The \$82M project includes roadway widening/new alignment, safety and capacity improvements, bridges and culverts, new trail and sidewalk, retaining walls, and pile-stabilized slopes. Two intersections of the project carry on average more than 62,000 vehicles per day during construction, requiring well planned maintenance of traffic design to keep traffic safely moving through the work zone.</p>			

Ms. Mehiel and her team designed the project in 3 stages with 7 sub-phases, generally by widening to the west, shifting traffic to the new pavement, then completing the reconstruction of the existing lanes to serve as northbound. Extensive temporary drainage measures were required to carry storm flows across the existing roadway while carrying traffic. Ms. Mehiel managed all design including geometric alignments, intersection improvements, traffic analysis, bridge and wall design, MOT plans/TMP, drainage and SWM design, wetland/stream permits, topographic and utility surveys, geotechnical explorations, and Erosion and Sediment Control. She organized and ran two design public hearings and conducted stakeholder design workshops, and four Pardon Our Dust meetings. A total of 24 separate “release for construction packages” were prepared, including two advance grading packages to initiate grading early and to facilitate utility relocations. She managed environmental permits including wetland/ stream impacts, floodplain model of the new bridge crossing, and on-site reforestation for tree impacts. Her efforts helped facilitate schedule, by obtaining wetland permits within 7-months, and by negotiating to remove time-of-year restrictions for 5 Waters of the U.S. and to allow sand bag diversions in 4 others. She also managed the right of way acquisition process, with her direct team preparing all Right of Way Plans, and her subconsultant providing appraisals, negotiations, COT’s and relocations. Ms. Mehiel was responsible for Design Quality Control compliance. She has been involved in the construction phase, providing design support such as refined MOT sequencing, shop drawing reviews, RFI’s, and partnering.

Project Name:	<b>Southgate Drive / US 460 Bypass Interchange Blacksburg, VA</b>	Start Date:	<b>2012</b>
Project Role:	<b>Design Project Manager</b>	End Date:	<b>2014</b>
Client/Owner:	<b>Virginia Department of Transportation</b>	With Current Firm?	<b>Yes</b>

**Design Manager** on this \$47M “turn-key” project which was the #1 priority of the Salem District, a multi-million dollar interchange, roadway improvement and bridge project adjacent to Virginia Tech. Ms. Mehiel oversaw a cutting-edge design that incorporated multiple innovative intersections including two roundabouts and a DDI interchange. She managed a multi-discipline team of 22 in-house staff and five subconsultants to prepare alternatives analyses, public hearing/design approval, and 100% PS&E, all in a period of 20 months. She provided technical leadership and ensured QC compliance for the design of highway, interchange, and shared-use path, roundabout design, TMP/MOT, SWM, and drainage facilities, and managed the staff who performed traffic modeling, bridge and retaining wall design, geotechnical investigations, right of way plans, design waivers, and environmental permits. Laura organized and facilitated a stakeholder outreach plan which included alternative workshops, design charettes, graphics, simulations and renderings for the Design Public Hearing. The shared use trail is grade separated in three locations, and the project includes gateway aesthetic treatments on walls and abutments.

Project Name:	<b>Design-Build I-495 HOT (Express) Lanes Fairfax County, VA</b>	Start Date:	<b>2007</b>
Project Role:	<b>Area 1 Design Manager</b>	End Date:	<b>2010</b>
Client/Owner:	<b>Fluor-Lane / VDOT</b>	With Current Firm?	<b>No</b>

This billion dollar “mega project” on the Virginia portion of I-495 in Northern Virginia was divided into four (4) separate Design-Build segments, with separate Design Managers and teams handling each. Area 1 was from south of Braddock Road to north of US 50, containing four (4) interchange over nearly five miles of interstate roadway.

As **Area 1 Design Manager**, Laura managed the design for the Area 1 project limits, entailing \$270M construction value, and supervised the D/B team’s design of I-495 mainline widening and four interchanges. She oversaw design production of over fifty staff and subconsultants in producing 55 design packages for grading/drainage, erosion control, final grading/roadway, noise and retaining walls, 13 bridges, utility relocations, and ROW plans, 80% of which was completed in a 10 month period. Ms. Mehiel ensured QC procedures were followed. She worked closely with the Contractor and GEC reviewers daily by use of over-the-shoulder reviews, comment resolution meetings, and discipline-specific design sessions to maintain production schedule. Ms. Mehiel and her team prepared a complex MOT staging plan for interchange ramp reconstruction, which required traffic modeling for each phase. Her design provided retaining walls to mitigate impacts to Accotink Creek, and outfall improvements at degraded outfalls throughout Wakefield Park meeting channel protection requirements (following MS-19 requirements). Wetland and stream permits were obtained for unavoidable environmental impacts. Ms. Mehiel assisted with extensive utility coordination and right of way plans.

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

**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

Brief Resume of Key Personnel anticipated for the Project.	
a.	Name & Title: <b>Robert Kent Bishop</b> <b>Project Manager</b>
b.	Project Assignment: <b>Construction Manager</b>
c.	Name of all Firms with which you are employed at the time of submitting SOQ. In addition, please denote the type of employment (Full time/Part Time): <b>Haymes Brothers, Inc. (Full Time)</b>
d.	Years experience: With this Firm <u>1.5</u> Years With Other Firms <u>9</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>Project Manager</b> <i>Haymes Brothers, Inc. .... 2016 - Present</i> Responsibilities involve in construction/project management on multiple projects to include: completion of contract documents and administration, project scheduling, planning of construction activities, construction means and methods; subcontractor coordination, crew and equipment coordination, project safety, project cost and billing, and coordination with project owners. Also involved with project estimating and bidding.  <b>Superintendent</b> <i>Skanska USA Civil Southeast, Inc. .... 2010 - 2016</i> Responsibilities included managing crews during all phases of construction on large bridge, building and railway projects. Items of work under Kent's direct supervision included substructure construction of cast in place abutments, footers and piers; installation of structural steel girders and bulb tee girders; retaining wall and MSE wall construction; bridge deck construction; post-tensioning installation; precast concrete installation; cast in place segmental bridge construction; MOT; utilities installation. Activities included planning, submittals, RFIs, work plans, material procurement, scheduling, and construction of items on portions of the project while maintaining safety, quality and budget during construction. Coordinated daily activities among different crews and subcontractors.  <b>Field/Project Engineer</b> <i>Skanska USA Civil Southeast, Inc. .... 2007 - 2010</i> Responsibilities included project cost and schedule tracking, coordinating subcontractors, procurement of materials, constructing work plans for contract items, field testing and all layout and field surveying for the project.
e.	Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: <b>Virginia Tech, Blacksburg, Virginia / BS / 2007 / Civil Engineering</b>
f.	Active Registration: Year First Registered/ Discipline/VA Registration #: Virginia DEQ RLD Certification (#RLD04076) VTCA/VDOT E & S Control Contractor (#1-07172) ACI Concrete Certification (#01113425) OSHA 30hr (15-600550065) OSHA Rigger Cert. Level II
g.	Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none"><li>1. Note your role, responsibility and specific job duties for each project, not those of the firm.</li><li>2. Note whether experience is with current firm or with other firm.</li><li>3. Provide beginning and end dates for each assignment; projects older than fifteen (15) years will not be considered for evaluation.</li></ol> <b>(List <u>ONLY</u> three (3) relevant projects* for which you have performed similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)</b>

Project Name:	<b>Rt. 29 SB Bridge Replacement over NSRR, VDOT I-60 Project, Pittsylvania County, VA</b>	Start Date:	<b>2016</b>
Project Role:	<b>Construction Project Manager</b>	End Date:	<b>2017</b>
Client/Owner:	<b>Virginia Department of Transportation</b>	With Current Firm?	<b>Yes</b>

The VDOT I-60 project was a \$4.6 million project in which Haymes Brothers replaced the southbound lane bridge on Rt. 29, north of Chatham, Virginia. The existing Rt. 29 had two northbound lanes of traffic and two southbound lanes, and had a traffic volume of roughly 12,000 vehicles per day. During construction, the two northbound lanes were reduced to one lane over the existing northbound bridge, and the two southbound lanes were reduced to a single lane and switched to the existing northbound bridge, so that the existing northbound bridge carried one lane of northbound traffic and one lane of southbound traffic. The old southbound bridge over the NSRR was demolished and the new bridge was constructed along the existing alignment. A new turning lane was constructed and approaches were rebuilt and repaved. The new bridge is a single span approximately 180' long with 15'+ tall abutment walls and concrete slope protection. Mr. Bishop was responsible for the overall management of the project, from the initial detour of traffic through to opening the new bridge and switching traffic. Mr. Bishop's activities on the project included scheduling, material procurement, means and methods, work plans for critical activities, submittals, RFIs, crew and equipment coordination, subcontractor coordination, project safety and quality, coordination with Norfolk Southern Railroad and VDOT, and traffic control/public safety.

Project Name:	<b>US 331 Design/Build - Choctawhatchee Bay Bridge, Walton County, FL</b>	Start Date:	<b>2013</b>
Project Role:	<b>Superintendent</b>	End Date:	<b>2016</b>
Client/Owner:	<b>Florida Department of Transportation</b>	With Current Firm?	<b>No</b>

The US 331 Choctawhatchee Bay Bridge was a \$118M design build project in Walton County, Florida that involved building an additional bridge adjacent to the existing US 331 bridge in the Choctawhatchee Bay. The project consisted of over 500 - 30" concrete piles and 86 piers supporting 85 spans of concrete bulb tee girders. The total project length was over 3.3 miles long, with over 2.2 miles of bridge. Mr. Bishop was responsible for managing crews for the installation of roughly 8,000 LF of water and sewer pipe, extending the existing causeway, temporary work trestle installation, substructure (footer, column and cap) installation, setting bulb tee girders, concrete deck placement, maintenance of traffic, and coordinating subcontractors. Mr. Bishop's activities on the project included construction means and methods, work plans, RFIs, material procurement, planning and coordinating daily crew activities, planning and coordinating subcontractors, planning and coordinating equipment needs for multiple crews, project safety, cost and quality, overall management of multiple construction activities.

Project Name:	<b>Rt. 147 Huguenot Bridge Replacement, Richmond, VA</b>	Start Date:	<b>2011</b>
Project Role:	<b>Superintendent</b>	End Date:	<b>2012</b>
Client/Owner:	<b>Virginia Department of Transportation</b>	With Current Firm?	<b>No</b>

The Rt. 147 Huguenot Bridge Replacement was a \$35M project to replace the existing bridge over the James River, which connected the City of Richmond to Henrico County, Virginia. The project was a major artery to downtown Richmond, and the bridge carried over 25,000 vehicles per day. The project involved replacing the existing bridge in stages, by completing half of the new bridge first and switching traffic to the new half of the bridge, then demolishing the old bridge and finally completing the second half of the new bridge. The staged construction involved maintaining traffic on a daily basis and night-work activities. Mr. Bishop's responsibilities on the project involved managing crews for bridge deck and joint construction, causeway installation, wall and rail construction, setting structural steel and MOT. Mr. Bishop's activities involved construction means and methods, material procurement, planning and coordinating daily crew activities, subcontractor coordination, project safety, quality and cost, maintaining traffic and the management of multiple construction activities.

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.

Construction Manager for cofferdam construction; Cobb's Creek Dam and Reservoir in Cumberland County, VA; estimated completion Jan 2018. Project Manager for VDOT M-01, Project No. 0633-058-972, Mecklenburg and Lunenburg Counties; estimated completion March 2018, to allow his full time assignment to this project.

*3.4.1a Lead Contractor  
Work History Forms*

**ATTACHMENT 3.4.1(b)**

**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 and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: <b>Danville Expressway/ Route 58 (future I-785) and US Route 29 Interchange</b> (VDOT Order I-09)  Location: <b>Danville, VA</b>	Name: <b>Louis Berger Group</b>	Name of Client: <b>Virginia Department of Transportation</b> Phone: 434-433-3144 Project Manager: <b>Vic Reece</b> Phone: 434-250-7718 Email: <b>john.reece@virginiadot.org</b>	05/2004	05/2004	\$22,450	\$23,095 (Owner Directed Changes)	\$23,095

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

**SIMILARITIES TO I-81 Exit 114 Project**

- Complexity**
- ✓ High Traffic (> 20,000 ADT)
  - ✓ Phased Bridge Constr. Under Traffic
  - ✓ Complex MOT with Temp. Detours
  - ✓ Maintain Mainline Traffic Capacity
  - ✓ Unexpected Geotechnical Conditions
  - ✓ Multiple Existing Utilities
  - ✓ Asbestos Containing Materials
  - ✓ Minimize Property Impacts

- Context**
- ✓ National Highway System
  - ✓ Future Interstate
  - ✓ 70 MPH Design Speed
  - ✓ Interchange
  - ✓ VDOT Roadway/Standards/Specs
  - ✓ Congestion Relief & Safety Improvements
  - ✓ Open Shoulders w/Guard Rail
  - ✓ Relocated Ramps
  - ✓ Comply w/Interchange Justification Report
  - ✓ Adjacent Wetland & WOUS/Permit

- Locale**
- ✓ Virginia
  - ✓ Rural/Urban Mix
  - ✓ Adjacent Residential Development

- Scope**
- ✓ Roadway/Asphalt Pavement
  - ✓ Structures (Bridges/Walls)
  - ✓ Interchange Ramps
  - ✓ Major Grading/Earthwork
  - ✓ Drainage/SWM
  - ✓ TMP/MOT
  - ✓ Overhead Signage
  - ✓ Environmental Controls

- Delivery**
- ✓ Contractor Initiated Design
  - ✓ On Time Delivery
  - ✓ On Budget

**SUMMARY OF IMPROVEMENTS**

- Constructed portion of future interstate I-785: Principal Arterial/Limited Access Highway with Open Section, built to full interstate standards
- Constructed 7 bridges, including 4 roadway spans, 2 bridges over the Dan River, and 1 bridge over the railroad
- Constructed new interchange with directional and cloverleaf ramps

**PROJECT NARRATIVE:**

Haymes Brothers, Inc. served as general contractor on this project to construct a portion of the bypass for Route 58 around the city of Danville, VA. The Route 58/US 29 bypass/future Interstate 785, also known as the Danville Expressway, is a 15 mile-long highway built to Interstate standards in Danville and Pittsylvania County, Virginia.



Bypassing Danville to the east, it replaced Highway 29, which passed through the city's downtown. The Danville expressway is part of a larger effort to create a 47-mile interstate highway connecting Interstates 40 and 85 in Greensboro, North Carolina with Danville, Virginia. The bypass is a limited access highway, allowing speeds in excess of 60 miles per hour, greatly decreasing travel times for north-south traffic passing through the Danville area, and increasing safety within the downtown.

Haymes Brothers constructed a portion of the Danville Expressway (VDOT Order I-09), a limited access divided highway with approximately 2 million cubic yards of excavation and twin bridges across the Dan River, each 1800' long. Additionally, Haymes Brothers constructed the interchange of Route 58 business with US Route 29 which consisted of an additional 5 bridges for a total of 7 bridges on the project. One of the most difficult challenges encountered on this project was working in/around the volume of traffic on these major highways. Numerous traffic switches were required to allow the flow of traffic to continue throughout construction at the tie-ins to existing roadways, and where the new bridges spanned US Route 29.

**LESSONS LEARNED** include the unique goals and priorities toward which VDOT strives on major highway construction projects such as this, and how to meet and exceed VDOT's standards. Haymes Brothers gained valuable experience working in and adjacent to high traffic volume highways thereby developing a TMP for the safety of their workers and the traveling public. This experience with traffic control and MOT will carry over to the I-81 Bridge

Replacement at Exit 114 project.

Additionally, one of the seven bridges on this project carried the Norfolk Southern Railroad over Route 58. This particular structure required multiple drilled shafts for foundation support, one of which encountered running water at the termination depth. Through this experience, Haymes Brothers learned much about mitigating unpredictable and varying geologic conditions and the construction issues that may arise.



**CONTRACTOR-INITIATED DESIGN**

This project did not have MOT plans provided as part of the contract documents. Haymes was responsible for the design, scheduling, implementation, and monitoring of all MOT set-ups and devices, including the traffic switches.

**PERSONNEL INVOLVED:**

Henry Haymes served as Project Manager from Haymes Brothers on this project and he will apply experience and lessons learned to the I-81 Bridge Replacement at Exit 114 Project.

**EVIDENCE OF GOOD PERFORMANCE**

The project was completed on time and under budget even while managing over 50 of our own employees, over twenty different subcontractors and in excess of ten different traffic pattern changes.



**ATTACHMENT 3.4.1(b)**

**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 and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: <b>US 29 Bridge Replacement over Norfolk Southern Railroad</b>  Location: <b>Pittsylvania County, VA</b>	Name: <b>VDOT Central Office</b>	Name of Client: <b>Virginia Department of Transportation</b> Phone: <b>434-947-6559</b> Project Manager: <b>Todd Bolling, P.E.</b> Phone: <b>434-433-3134</b> Email: <b>Todd.Bolling@VDOT.Virginia.gov</b>	<b>06/2017</b>	<b>06/2017</b>	<b>\$4,605</b>	<b>\$4,859 (Owner Directed Changes)</b>	<b>\$4,859</b>

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

**SIMILARITIES TO I-81 Exit 114 Project**

- Complexity**
- ✓ Phased Bridge Constr. Under Traffic
  - ✓ Existing Bridge in Poor Condition
  - ✓ Traffic Shifts/Detours
  - ✓ Unpredictable Geologic Conditions
  - ✓ Multiple Existing Utilities
  - ✓ Minimize Property Impacts

- Context**
- ✓ National Highway System
  - ✓ Principal Arterial
  - ✓ 60 to 70 MPH Design Speed
  - ✓ VDOT Roadway/Standards/Specs
  - ✓ Open Shoulders w/Guard Rail
  - ✓ Adjacent Wetland & WOUS/Permit
  - ✓ T&E Species (Bats)

- Locale**
- ✓ Virginia
  - ✓ Rural Area
  - ✓ Adjacent Residential Development

- Scope**
- ✓ Roadway/Asphalt Pavement
  - ✓ New Structures (Bridges/Walls)
  - ✓ Bridge Demolition
  - ✓ Major Grading/Earthwork
  - ✓ Drainage/SWM
  - ✓ TMP/MOT
  - ✓ Environmental Controls

- Delivery**
- ✓ Contractor Initiated Design
  - ✓ Early Completion
  - ✓ On Budget

**SUMMARY OF IMPROVEMENTS**

- Replace existing structurally deficient bridge of US 29 SB
- Construction of temporary detour/traffic switch

**PROJECT NARRATIVE:**

The project is located about 5 miles north of Chatham, Virginia and saw traffic volumes at an estimated 12,000 vehicles per day. The project involved traffic shifts, paving and grading and existing bridge demolition and constructing a new southbound lane bridge. Initially, Haymes Brothers had to build temporary detour lanes to switch traffic off of the existing southbound bridge. Once these lanes were completed, paved and striped, the traffic was shifted so that there was one northbound and one southbound lane on the northbound bridge. After switching the traffic, the existing southbound bridge was demolished.

The existing bridge was built in 1936 and was over the Norfolk Southern Railroad, so the demolition process required extensive coordination and planning. The existing concrete beams weighed in excess of 70,000 lbs and temporary road closures were utilized to remove the beams. The new bridge foundations had over 90 H-piles and 200+ cubic yards of concrete. The abutment walls varied from 12' -22' tall and contained over 350 cubic yards of concrete. There was over 10,000 cubic yards of excavation required for the project, which required extensive temporary shoring on all four corners of the bridge. The five new bridge girders were roughly 180' long and weighed about 75,000 lbs each. These girders were also set using a temporary lane closure on Rt. 29. After structural steel installation was completed, the deck and parapet were placed, all while coordinating with NSRR to work around train traffic. Upon completion of the new bridge, the remaining grading and paving was completed. The traffic was switched to the new structure and the project was completed before the contract completion date.

The Rt. 29 Project posed many challenges throughout the duration of the project, such as dealing with and coordinating with the NSRR, working around live traffic on US 29, performing traffic shifts and lane closures, making critical lifts over the railroad, bridge demolition over the railroad, and temporary shoring installation.

**PERSONNEL INVOLVED:**

Henry Adams was the Project Manager, Kent Bishop was the Construction Manager and James Shelhorse was the Safety Manager. They will bring experiences and lessons learned to the I-81 project.



**CONTRACTOR-INITIATED DESIGN**

Haymes Brothers modified the original traffic plan to eliminate a temporary detour road and use an existing route, which saved money for both VDOT and Haymes Brothers. Although the project was bid-build, Haymes Brothers hired an engineer for design of temporary works over the railroad and demo and lift plans over the railroad. The engineer and Haymes Brothers had to tackle the many constructability issues involved in the project, and by using the 'team' approach to these issues, they were able to successfully complete the project..

**EVIDENCE OF GOOD PERFORMANCE**

During the project, there were no traffic accidents in the project area, despite the changing traffic patterns and conditions. The crews worked the duration of the project with no lost time or recordable injuries. The Rt. 29 Project had multiple plan errors and quantity overruns, as well as design changes such as the addition of temporary shoring. These overruns, errors and design changes delayed the project by almost two months. Despite these issues, Haymes Brothers was able to accelerate the schedule and finish the job early, earning Haymes Brothers an incentive bonus while still producing a quality product.

**LESSONS LEARNED:**

Haymes Brothers feels that by using a similar approach in regards to planning, quality, safety, schedule, budget and by using a design/build 'team' approach, we will be able to produce a successful end product on the I-81 Exit 114 Project.



**ATTACHMENT 3.4.1(b)**

**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 and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: <b>I-77 Bridge Replacements</b>  Location: <b>Bland County, VA</b>	Name: <b>VDOT Central Office</b>	Name of Client: <b>Virginia Department of Transportation</b> Phone <b>276-669-6151</b> Project Contact: <b>Gary Lester</b> Phone: <b>276-669-6151</b> Email: <b>gary.lester@virginiadot.org</b>	<b>11/1996</b>	<b>11/1996</b>	<b>\$5,326</b>	<b>\$5,400</b>	<b>\$5,400</b>

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

**SIMILARITIES TO I-81 Exit 114 Project**

- Complexity**
- ✓ Phased Bridge Constr. Under Traffic
  - ✓ Existing Bridge in Poor Condition
  - ✓ Traffic Shifts/Detours
  - ✓ Unpredictable Geologic Conditions
  - ✓ Minimize Environmental Impacts

- Context**
- ✓ Interstate
  - ✓ National Highway System
  - ✓ Principal Arterial
  - ✓ 60 to 70 MPH Design Speed
  - ✓ Karst Area
  - ✓ VDOT Roadway/Standards/Specs
  - ✓ Open Shoulders w/Guard Rail
  - ✓ Adjacent Wetland & WOUS/Permit

- Locale**
- ✓ Virginia
  - ✓ Rural Area
  - ✓ Mountainous/Rolling Terrain
  - ✓ Adjacent Residential Development

- Scope**
- ✓ Roadway/Asphalt Pavement
  - ✓ New Structures (Bridges)
  - ✓ Bridge Demolition
  - ✓ Drainage/SWM
  - ✓ TMP/MOT
  - ✓ Environmental Controls

- Delivery**
- ✓ Contractor Initiated Design
  - ✓ Aggressive Schedule/Milestones
  - ✓ Early Completion
  - ✓ On Budget

**SUMMARY OF IMPROVEMENTS**

- Interstate bridge superstructure replacement for dual bridges carrying I-77 over Route 216 and Laurel Creek
- Construction of temporary detour/traffic switch

**PROJECT NARRATIVE:**

This interstate bridge replacement project consisted of complete superstructure replacement as well as substructure repairs to parallel twin bridges carrying I-77 over Rt. 613 and Laurel Creek in Bland County, Virginia. Each bridge was 564 feet long with the longest span being 231 feet. The vertical clearance of the bridges over the ground below was in excess of 100 feet.

The height of the structure and the length of the spans resulted in significant challenges in construction means and methods due to the extreme weight of the girders and the difficulty of access. Haymes Brothers designed a girder erection plan to set pre-assembled pairs of girders to insure lateral stability. The assembled pairs for the longest spans weighed in excess of 200 tons; of which, one end had to be hoisted with a crane positioned 100 feet below. A 700 ton capacity mobile crane was utilized on the southbound lane and a 500 ton crawler with an additional counterweight "ringer" system was utilized on the northbound lane.

Due to the potential weather hazards in that area during the winter months, the contract required that two lanes of traffic in each direction be open to travel for the months of December through March. Therefore we had eight months to switch the traffic to one structure, demolish the existing superstructure, rehab two pier caps, demolish and rebuild two abutments, set the extremely heavy girders, pour the decks and parapet and return the traffic to the original pattern.



**LESSONS LEARNED**

With sufficient planning and successful implementation of that plan, a seemingly impossible project schedule can be achieved if the stakeholders work together to see it through.

**CONTRACTOR-INITIATED DESIGN**

This project did not have MOT plans provided as part of the contract documents. Haymes was responsible for the design, scheduling, implementation, and monitoring of all MOT set-ups and devices, including the traffic switches. Haymes Brothers also designed a girder erection plan to set pre-assembled pairs of girders to insure lateral stability.

**PERSONNEL INVOLVED**

Henry Haymes served as a construction manager from Haymes Brothers on this project and he will apply experience and lessons learned to the I-81 Bridge Replacement at Exit 114 Project.

**EVIDENCE OF GOOD PERFORMANCE**

Construction of each lane was completed within the contract seasonal time restrictions resulting in an early completion incentive bonus, and the overall project completed on time and under budget with no lost time incidents and few traffic accidents.



*3.4.1b Lead Designer  
Work History Forms*



**ATTACHMENT 3.4.1(b)**

**LEAD DESIGNER - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
<b>Name:</b> <b>New Interchange and Roadway Improvements at Southgate Drive and US 460 Bypass</b>  <b>Location:</b> Blacksburg, VA	<b>Name:</b> Branch Civil, Inc.	<b>Name of Client:</b> VDOT Salem District <b>Phone:</b> 540-387-5320 <b>Project Manager:</b> Phillip Hammack, PE <b>Phone:</b> 540-378-5041 <b>Email:</b> Phillip.Hammack@VDOT.Virginia.gov	04//2015	12/2018 (Estimated)	\$46,700	\$46,700 (Estimated)	\$4,916
<b>h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.</b>							
<b><u>SIMILARITIES TO I-81 Exit 114 Project</u></b> <b>Complexity</b> <ul style="list-style-type: none"> <li>✓ High Traffic (&gt; 40,000 ADT)</li> <li>✓ Unpredictable Geology</li> <li>✓ Multiple Existing Utilities</li> <li>✓ Phased Construction "under traffic"</li> </ul>		<b><u>PROJECT NARRATIVE:</u></b> AMT provided full design services on this critical roadway improvement and interchange design project in the Salem District, adjacent to Virginia Tech in Blacksburg. The purpose was to eliminate the existing signalized at-grade T-intersection at the heaviest used, primary entrance to Virginia Tech campus. The project provides a grade separated interchange in a new location southeast of the existing intersection to accommodate current and planned traffic movements and realignment of Route 314 from US 460 to the Virginia Tech campus. The pre-construction intersection experienced significant backups during the morning and evening peak hours as well as during major/special events, which hampered through movements along the US 460, also creating a safety concern due to rear-end collisions. The project is a heavily traveled NHS highway with more than 40,000 vehicles per day passing through the project.		<ul style="list-style-type: none"> <li>• Geotechnical Engineering to support bridge foundation design, wall design, and pavement design. Prepared alternative foundation designs as "bid options" due to presence of shallow rock found at some boring locations. Options included drilled shafts, and driven piles in combination with socketed piles.</li> <li>• Bridge and Structures Design for dual bridges over US 460, 1,100 feet of retaining walls, and box culverts (to serve as trail underpasses)</li> <li>• Traffic Engineering, including signing plans with eight (8) Overhead Sign Structures, signal design, lighting, CCTV Traffic Camera, maintenance of traffic plans, Transportation Management Plan, and pavement markings.</li> <li>• Hydraulic Design including drainage, erosion and sediment control, and stormwater management following VDOT and DEQ requirements (VSMP and SWPPP).</li> <li>• Public and Stakeholder Outreach including development of a tailored coordination/communication plan for each stakeholder. Included turn-key Public Hearing support for brochure, displays, simulations, and renderings</li> <li>• Landscape Architecture/Aesthetic Design to provide a gateway design for the entrance to the University</li> <li>• Right of Way plans per VDOT requirements.</li> <li>• Utility relocation design per Municipality/Owner Requirements</li> </ul>			
<b><u>Context</u></b> <ul style="list-style-type: none"> <li>✓ Freeway, National Highway System</li> <li>✓ 70 MPH Design Speed (US 460)</li> <li>✓ VDOT GS-5 (US 460)</li> <li>✓ Karst Area</li> <li>✓ Interchange</li> <li>✓ Congestion Relief &amp; Safety Improvements</li> <li>✓ Open Shoulders with Guard Rail</li> <li>✓ Relocated Side Street for Access Control and/or Queue Distance</li> <li>✓ NOT TO PRECLUDE future widening</li> <li>✓ NOT TO PRECLUDE interchange reconfiguration</li> <li>✓ Interchange Modification Report</li> <li>✓ Adjacent Wetlands/WOUS</li> <li>✓ T&amp;E Species (Bats)</li> </ul>		As the <b>Engineer of Record</b> , AMT provided services as an extension of VDOT staff, performing many reporting and management functions that VDOT would typically self-perform. Key challenges of the project included an aggressive schedule of 19 months from the start of the alternatives phase to completion of 100% design, managing consensus from the many diverse stakeholders (particularly Virginia Tech), preparing alternative foundation design concepts to respond to site specific geologic conditions which included spread footings at Abutment A, prebored H-piles at the pier, and both drilled shafts and micropiles at Abutment B; and minimizing impacts to: wetlands; old-growth tree stands; rare, threatened, and endangered species; and other environmentally sensitive areas.		<ul style="list-style-type: none"> <li>• Traffic Analysis, including traffic/crash data collection and analysis, traffic operation analysis, no-build and build forecasts, origin/destination study, safety analysis, and travel time study.</li> <li>• Interchange Alternatives and Final Interchange Design, which included an IJR for alternative interchange configurations to assess: meeting purpose and need, geometrics, traffic operations (LOS) and sensitivity analysis, safety, right of way impacts, environmental impacts, construction cost, hydraulics, bridge and structure options, utilities, and constructability.</li> <li>• Roadway Design and Trail Relocation Design, for a total of 3.6 miles of roadway alignment and two reconfigured at-grade intersections (new roundabouts), and one mile of "off-line" trail including two grade separated trail crossings</li> </ul>			
<b><u>Locate</u></b> <ul style="list-style-type: none"> <li>✓ Rural/Urban Mix</li> <li>✓ Salem District / Christiansburg Area</li> <li>✓ Nearby School</li> <li>✓ Nearby Cemetery</li> <li>✓ Nearby "Commuter" Parking</li> </ul>		<b><u>PROJECT SCOPE</u></b>					
<b><u>Scope</u></b> <ul style="list-style-type: none"> <li>✓ Bridge</li> <li>✓ Roadway Realignment</li> <li>✓ Geotechnical</li> <li>✓ Drainage/SWM</li> <li>✓ TMP/MOT</li> <li>✓ Overhead Signage</li> <li>✓ ITS (Traffic Camera,)</li> <li>✓ Environmental Permitting</li> <li>✓ Right of Way Acquisition</li> <li>✓ Survey/SUE</li> <li>✓ Utility Design</li> <li>✓ Public Involvement</li> </ul>		<ul style="list-style-type: none"> <li>• Completed PAC milestone within 19 months of NTP</li> <li>• Conducted successful public involvement with positive feedback from Virginia Tech, Blacksburg and Salem District Administrator</li> <li>• Award-winning (2016 Merit Award from ASLA, VA Chapter)</li> </ul>		<b><u>AMT'S ROLE:</u></b> As the Engineer of Record, AMT was responsible for management and oversight of all aspects of engineering design including roadway, bridges, traffic engineering and maintenance of traffic, hydraulics, utility coordination, and public relations.			
<b><u>Delivery</u></b> <ul style="list-style-type: none"> <li>✓ Concurrent, Interdisciplinary Design</li> <li>✓ Accelerated Schedule</li> <li>✓ Contractor-initiated Design</li> </ul>		<b><u>OFFICE LOCATION:</u></b> Design services were provided from AMT's Chantilly, Richmond and Suffolk offices.		<b><u>VERIFIABLE EVIDENCE OF GOOD PERFORMANCE:</u></b>			
				<b><u>PROPOSED PERSONNEL INVOLVED</u></b>			
				<ul style="list-style-type: none"> <li style="width: 50%;">• Laura Mehiel, PE</li> <li style="width: 50%;">• Khoss Babaei, PE</li> <li style="width: 50%;">• Fred Wagner, PE</li> <li style="width: 50%;">• Don Rissmeyer, PE, CFM</li> <li style="width: 50%;">• Keith Benedict, PE</li> <li style="width: 50%;">• Keith Sinclair, PE</li> <li style="width: 50%;">• Chad McMurray, PE</li> <li style="width: 50%;">• John Farrell, AICP, CEP</li> </ul>			

**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: <b>Design-Build US Route 1 Improvements at Fort Belvoir</b>  Location: Fairfax County, VA	Name: Corman Construction, Inc. / Wagman, Inc. Joint Venture	Name of Client: <b>FHWA-Eastern Federal Lands Highway Div./VDOT NOVA (secondary)</b> Phone: 800-367-7623 Project Manager: <b>Timothy Hartzell</b> Phone: 703-259-2749 Email: <b>Timothy.Hartzell@VDOT.Virginia.gov</b>	06/2013 (Design Build NTP)	06/2017 (Substantial Completion)	\$69,300	\$82,000 (due to Owner directed changes)	\$5,981 (Excludes Real Estate & Construction QC Fees)

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

**SIMILARITIES TO I-81 Exit 114 Project**

- Complexity**
- ✓ High Traffic (> 40,000 ADT)
  - ✓ Substandard Vertical Clearance
  - ✓ Raise Profile "Under Traffic"
  - ✓ Unpredictable Geology
  - ✓ Multiple Existing Utilities
  - ✓ Asbestos Containing Materials
  - ✓ Right of Way During Construction

- Context**
- ✓ National Highway System
  - ✓ VDOT GS-5 Roadway (Rte 286)
  - ✓ Congestion Relief & Safety Improvements
  - ✓ Open Shoulder w/Guard Rail (Rte 286)
  - ✓ Relocated Side Street for Access Control and/or Queue Distance
  - ✓ NOT TO PRECLUDE future widening
  - ✓ Adjacent Wetlands & WOUS - Permit
  - ✓ T&E Species (Bats)

- Locale**
- ✓ Rural/Urban Mix
  - ✓ Virginia
  - ✓ Nearby Cemetery
  - ✓ Nearby Church
  - ✓ Adjacent Residential Development

- Scope**
- ✓ Bridges and Walls
  - ✓ Roadway Realignment
  - ✓ Geotechnical & Pavement Engineering
  - ✓ Drainage/SWM
  - ✓ TMP/MOT
  - ✓ ITS (EVP, Cameras, Traffic Count Loop)
  - ✓ Environmental Permitting
  - ✓ Right of Way Acquisition
  - ✓ Survey/SUE
  - ✓ Utility Design
  - ✓ Public Involvement
  - ✓ CEI

- Delivery**
- ✓ Design-Build
  - ✓ Concurrent, Interdisciplinary Design
  - ✓ Accelerated Design Schedule
  - ✓ Contractor-initiated Design
  - ✓ Contractor-provided QAM
  - ✓ Contractor-provided Constr. QC

**SUMMARY OF IMPROVEMENTS**

- An improved 3.68-mile six-lane divided NHS highway, adding a 32' median to accommodate future transit.
- Twin, 2-span bridges (260 feet long), raised from the existing Rte 1 profile to clear Accotink Creek Floodplain
- Designed roadway and bridges NOT TO PRECLUDE future widening for BRT Bus Lanes
- New Retaining Walls (MSE, VDOT RW-1) and New Noise Walls adjacent to Inlet Cove community.
- A precast slab bridge supported on helical piles for a new shared use path
- Extensive TMP with 3 major phases and 5 sub-phases to provide safe and efficient traffic during construction
- Utility relocation/coordination, including relocating utility poles along entire alignment
- Five SWM ponds, 200+ drainage structures, five miles of storm drain pipe, and E/S control phased with MOT
- Permits for multiple impacts to stream channels (3,500 LF) and wetlands (approximately 2.3 acre), with jurisdiction by VMRC, Army COE Norfolk, and DEQ. In-stream time of year restrictions applied to 2 streams.
- Extensive right-of-way acquisitions, including more than 100 tenant relocations

**PROJECT NARRATIVE:** AMT is the Engineer of Record and Construction Quality Control Manager for this large design-build project in northeastern Virginia, which provides traffic relief and safety for the ongoing BRAC consolidation occurring in the vicinity of Fort Belvoir. The Route 1 Improvements project implements a series of enhancements along Route 1 from the Telegraph Road intersection north to Mt. Vernon Memorial Highway for a distance of 3.68 miles. These improvements generally widen Route 1 from four to six lanes, provide a one-mile new alignment to avoid major property impacts, improve intersection safety, operations and capacity with new traffic signals and acceleration/deceleration lanes, and provide parallel pedestrian and bicycle facilities for the entire length. In addition, this project has new replacement bridges over Accotink Creek, major culverts and equipment/wildlife crossing structures under Route 1, and removal of an existing military railroad crossing. Improvements along Route 286 and Route 610 included shifts in the horizontal alignment, addition of auxiliary lanes, storm drainage, signals, and extension of a trail along NB 286 which required two retaining walls and a slab bridge supported on helical piles to avoid impacts to environmental resources (wetlands, streams, trees).



Common Sense Engineering was applied during design. Through the use of milling, overlay, and build-up in area where allowable, proposed maintenance of traffic was simplified requiring smaller shifts in traffic to address grade changes at the curb line, providing pavement widening as needed. In areas of complete reconstruction, AMT established a bifurcated roadway profile to help minimize earthwork and limit impacts on the adjacent Fort Belvoir and other historic properties.

Two of the major complexities on this project were dealing with variable geotechnical conditions, and maintaining traffic on heavily traveled principal arterials during major reconstruction. We developed slope stability design solutions including pile supported slopes and seep relief designs, which in turn allowed the slopes to be contained within ROW and minimize overall footprint. The Maintenance of Traffic Plan included 3 major phases with 5 sub-phases to maintain 50,000 vehicles per day through major intersections and on the through corridor, primarily achieved by building the new southbound lanes first with temporary widening into the median, shifting all traffic to NB, then re-building southbound.

AMT also provided phased drainage/culvert construction plans, creative stormwater management approach to minimize the number of facilities (using the "1 percent rule" and nutrient banking), and advance grading packages to facilitate early utility pole relocations. The project is coordinated with several concurrent and/or adjacent projects administered by others - North Post Access Control Point (Fort Belvoir), Lyndam Hills Phase 2 Development, and Jeff Todd Way. Twenty-five parcels required either partial or total acquisition, and more than 100 tenants were provided relocation as part of the design-build contract, under the management of AMT. Demolition of existing buildings prior too roadway construction required abatement activities due to the presence of asbestos containing materials.

**AMT'S ROLE:** AMT is the Engineer of Record, responsible for management and oversight of all aspects of engineering design (roadway, structures, geotechnical, drainage, phasing/traffic control, signing, signals, ITS, lighting, stormwater management, erosion and sediment control, ROW and utilities). AMT obtained all permits, and provided the Construction Quality Control Manager for the project. This includes managing/providing quality control inspection and testing services.

**OFFICE LOCATION:** Design services were provided from AMT's Richmond and Chantilly offices, in addition to the project on-site field office. Construction services were provided from the field office.

**VERIFIABLE EVIDENCE OF GOOD PERFORMANCE:**

- AMT structured its delivery of the project to allow for adequate time for outreach and community input. First construction package was approved within 1 month of VDOT Design Approval.
- Acquired Individual Wetland Permit from ACOE/DEQ within 7 months of application (2 months ahead of schedule)
- Excellent community feedback on social media, for example: "Thank you so very much for the work efforts made in the design and construction of U.S. Route 1. Project Team members have shared information and answered questions at scheduled meetings and programs in communities like mine. There have been creative and safe detours and temporary closures with signs providing news regarding current and future changes."

**PROPOSED PERSONNEL INVOLVED**

- Laura Mehiel, P.E.
- Don Rissmeyer, P.E.
- Fred Wagner, P.E.
- Matt Willems, P.E.
- Khoss Babaei, P.E.
- Charlie O'Connell, P.E.
- Keith Benedict, P.E.
- Keith Sinclair, P.E.



**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: <b>I-695 at US 1 Interchange Modifications and Bridge Replacements (BA366-51)</b> Location: Baltimore, Maryland	Name: Concrete General, Inc.	Name of Client: <b>Maryland DOT State Highway Administration</b> Phone: 410-545-8315 Project Manager: <b>Joseph Navarra</b> Phone: 410-545-8315 Email: <a href="mailto:jnavarra@sha.state.md.us">jnavarra@sha.state.md.us</a>	12/2014	11/2017 (Estimated)	\$37,137	\$37,137 (Estimated)	\$645

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

**SIMILARITIES TO I-81 Exit 114 Project**

- ✓ High Traffic (> 40,000 ADT)
- ✓ High Trucks (> 10,000 VPD)
- ✓ Poor bridge condition
- ✓ Phased Bridge Constr. Under Traffic
- ✓ Complex MOT with Ramp Detour
- ✓ Maintain Mainline Traffic Capacity
- ✓ Multiple Existing Utilities
- ✓ Minimize Property Impacts

- ✓ Interstate/National Highway System
- ✓ 60 to 70 MPH Design Speed
- ✓ Existing Interchange
- ✓ Congestion Relief & Safety Improvements
- ✓ Open Shoulders w/Guard Rail
- ✓ Relocated Ramp
- ✓ Comply w/Interchange Mod. Report
- ✓ Categorical Exclusion
- ✓ Adjacent Wetland & WOUS/Permit

- ✓ Nearby School
- ✓ Nearby Commuter Parking Lot
- ✓ Nearby Church
- ✓ Animal Clinic Abuts New Ramp (retaining wall to minimize impact)
- ✓ Adjacent Residential Development

- ✓ Roadway Alignment Design
- ✓ Structures (Bridges/Walls)
- ✓ Geotechnical Engineering
- ✓ Drainage/SWM
- ✓ TMP/MOT
- ✓ Overhead Signage
- ✓ Environmental Permitting
- ✓ Utility Design
- ✓ Public Involvement

- ✓ Concurrent, Interdisciplinary Design
- ✓ Accelerated Schedule

**SUMMARY OF IMPROVEMENTS**

- Total replacement of the two bridges carrying northbound I-695 (inner loop) over Benson Avenue, AMTRAK, US 1 (Southwestern Boulevard) and Leeds Avenue;
- Relocation of the interchange ramp from Leeds Avenue to northbound I-695.
- New interchange ramp that provides a direct connection from US 1 to northbound I-695.
- Reconstructing and reconfiguring US 1 between Linden Avenue and Knecht Avenue, changing US 1 from a 4-lane facility to a 2-lane road with one through lane in each direction, turning lanes, bicycle lanes and sidewalks

**PROJECT NARRATIVE:** The project is located in Arbutus, an urbanized area southwest of Baltimore. Originally constructed in 1957 and widened in 1970, the I-695 inner loop bridges were nearing the end of their useful service life, were structurally deficient and required total replacement. I-695 inner loop is an four-lane road with full access control, classified as an urban interstate on the National Highway System, with a posted speed of 55 mph. I-695 inner loop has an Average Annual Daily Traffic (AADT) volume of approximately 90,000 vehicles through the study area, with nearly 12,000 trucks per day (NB I-695 only). US 1 is an urban principal arterial with an AADT of approximately 9,000 vehicles. Commuter traffic is largely generated by the 770-space Halethorpe MARC Station/Commuter Parking Lot, located along US 1 just south of the interchange. US 1 carries between two and five lanes in the north-south direction through the study area with a speed limit varying between 45 and 50 mph. South of the nearby I-95 overpass, US 1 carries one lane in each direction with a raised median and wide shoulders that are used for overflow commuter parking. US 1 has a high accident rate due to the numerous side street access points, lack of turn lanes, and tendency of motorists to exceed the posted 45mph speed limit. Adjacent properties within the project limits include the Maiden Choice School, Arbutus Animal Hospital, Church of the Holy Apostles, and numerous residential communities.

The existing interchange did not provide a direct connection between US 1 and the inner loop of I-695, requiring traffic on US 1 to take an indirect route via Leeds Avenue and travel through a residential neighborhood and business district before accessing I-695. No turn lanes existed for access to Ramp 8, thus creating blockages on northbound Leeds Avenue during peak travel periods. AMT's design will provide more direct local and commuter access to the I-695 Inner Loop from US 1 and reduce traffic on local streets by relocating the terminus of existing on-ramp to I-695 from Leeds Ave to US 1. The design also includes pedestrian and bicycle upgrades which will improve non-vehicular access and safety along US 1. AMT performed Synchro, HCS, and Corsim analysis and prepared an IAPA/IMR report for ramp modification. Evaluated multiple MOEs including Level of Service, queues, and delay. AMT also prepared, for the entire project, the SWM Report/Permit, Wetlands Permit,



and the project-wide TMP. The TMP required consideration of impacts to bus routes, fire/rescue, truck traffic, and access to adjacent businesses. AMT's construction drawings depicted pavement construction, proposed realigned ramp, retaining wall and sound wall, improvements to sidewalks, and phased MOT plans. Storm water design included bioretention, extended detention, temporary erosion and sediment control plans, and storm drain plans/profiles.

AMT's involvement on this project contributed to a cohesive, well-coordinated structural design project using "common sense engineering". Constructability, phasing, and maintaining interstate traffic throughout bridge replacement construction were key requirements in AMT's comprehensive TMP. The AMT retaining walls were MSE walls with straps that attach to the adjacent MSE wing wall on the opposite side of the ramp. To avoid large moment slabs for the concrete barrier, wall design was in accordance with the NCHRP Report 663. Diamond back parapet and coping as well as vertical striations on the retaining walls match the adjacent wing walls on the bridge over Leeds Ave.

**AMT'S ROLE:** AMT was responsible for complete design for all US 1 and interchange ramp modifications, which included retaining wall design and preparation of the Interchange Modification Report (requiring FHWA approval). AMT performed an extensive maintenance of traffic alternative analysis (MOTAA) and prepared a Transportation Management Plan (TMP) for the entire project, including I-695 bridge replacements. AMT developed multi-stage MOT and detour plans based upon the analysis and input from MDOT-SHA and the community. AMT oversaw design for 2 retaining walls and a sound wall. AMT prepared environmental permits for the entire project. AMT determined impacts to Waters of the US and 100-year floodplain; prepared impact plates, matrix, and application forms; and prepared a report of existing conditions specifying Waters of the US type, soil maps, NWI map, and FEMA map.

**OFFICE LOCATION:** Design services were provided from AMT's Rockville and Baltimore offices.

**VERIFIABLE EVIDENCE OF GOOD PERFORMANCE:**

- 100% PS&E Design, including FHWA-Approved IMR, less than 11 months from NTP
- Zero contractor claims or change orders relative to AMT's design

**PROPOSED PERSONNEL INVOLVED**

- Michael Wiercinski, P.E., PS
- Keith Benedict, P.E.
- Fred Wagner, P.E.
- Matt Willems, P.E.

Figure F-1. Final Detour Routes for Leeds Avenue Ramp Closure

