ORIGINAL

Statement of Qualifications

I-81 BRIDGE REPLACEMENT AT EXIT 114

Montgomery County / Town of Christiansburg, Virginia

September 6, 2017

Contract ID Number: C00093074DB96

State Project Numbers: 0081-154-733, P101, R201, C501, B601, B616

Federal Project Number: IM-081-2(992)

Submitted by:

Allegheny Construction Co.
Incorporated 1963

In Association With:

Louis Berger

SECTION 3.2
Letter of Submittal

Allegheny Construction Co.

2830 Nicholas Avenue NE · Roanoke, Virginia 24012 · 540-345-0817 ph · 540-345-0715 fax

September 6, 2017

Mr. Stephen D. Kindy, PE
Alternative Project Delivery Division
Virginia Department of Transportation
1401 E. Broad Street
Richmond, Virginia 23219

RE: **Request for Qualifications Design-Build Project for I-81 Bridge Replacement at Exit 114**
Contract ID Number: C00093074DB96

Dear Mr. Kindy:

Allegheny Construction Company, Inc. (Allegheny) is enthusiastic about the opportunity to support the Virginia Department of Transportation (VDOT) in making the I-81 Bridge Replacement at Exit 114 a successful reality. Allegheny has decades of construction experience with VDOT and a proven history of completing quality bridge projects on schedule. In 2015, our work for the demolition and replacement of the Mulatto Run bridge (Route 231) in Madison County was completed on time and under budget. The project was also awarded the VDOT Culpeper District Quality Project of the Year. Along with lead designer, Louis Berger U.S., Inc. (Louis Berger) and our entire team of talented professionals, VDOT can be confident in our ability to collaboratively deliver practical solutions that enhance safety, mobility and economic growth while protecting your financial exposure.

3.2.1: Offeror – Allegheny Construction Company, Inc. is the legal entity that will execute the contract.

3.2.2: Point of Contact – John Douthat, Vice President / Design-Build Project Manager
2830 Nicholas Ave NE, Roanoke, VA 24012
P: 540.345.0817, F: 540.345.0715
E: john@alleghenyconstruction.net

3.2.3: Principal Officer of the Offeror – Anderson (Andy) Douthat, IV, President
2830 Nicholas Ave NE, Roanoke, VA 24012
P: 540.345.0817
E: andy@alleghenyconstruction.net

3.2.4: Offeror's Corporate Structure – Allegheny is structured as a corporation. Allegheny will undertake full financial responsibilities for the project and accept the risks and liabilities for the performance of the work. A single 100% performance bond and single 100% payment bond will be provided.

3.2.5: Identity of Lead Contractor and Lead Designer – Allegheny is the Lead Contractor and Louis Berger is the Lead Designer.

3.2.6: Affiliated/Subsidiary Companies – Please refer to Attachment 3.2.6 in the Appendices.

3.2.7: Certification Regarding Debarment – Executed forms provided in Appendices.

3.2.8: Offeror's VDOT Prequalification Status – Allegheny prequalification number A013 is active and in good standing. Certificates documenting both are provided in the Appendices.

3.2.9: Bonding Capacity – Allegheny's surety letter is provided in the Appendices.

3.2.10: SCC and DPOR Requirements – Documentation is provided in the Appendices.

3.2.11: DBE Participation Goal – Allegheny is committed to meeting or exceeding the 8% DBE goal. Team member H&B Surveying and Mapping, LLC, a certified DBE, will contribute to achieving the goal.

We appreciate your consideration of our qualifications and look forward to continuing our successful working relationship with VDOT.

Sincerely,

Anderson Douthat, IV | President

SECTION 3.3
Offeror's Team Structure

3.3 TEAM STRUCTURE

Allegheny recognizes the success of any project is largely dependent upon the staff assigned to it. We have carefully assessed the preliminary project requirements and have assembled a team of proven, veteran design and construction professionals who have performed identical work and who possess the necessary Virginia licenses and certifications.

LEAD CONTRACTOR AND LEAD DESIGNER

Allegheny Construction Company, Inc. was founded in 1963 and has undertaken and completed a wide range of projects from bridge replacements to arched dams. Allegheny's experience also includes interstate and railroad bridges as well as commercial and industrial site developments. Allegheny has decades of experience with VDOT as well as having worked with small towns, counties, cities and the U.S. Army Corps of Engineers (USACE). Allegheny prides itself on undertaking modern and advanced engineering challenges.

Based in Roanoke, Virginia, Allegheny is extremely familiar with the challenges associated with the Exit 114 project. Allegheny brings a wealth of knowledge from the firm's experience on similar projects in the area, including slope repairs and ramp modification along I-81 and the VDOT I-581 Valley View interchange project, which Allegheny was the contractor for the initial bridge and ramps. Allegheny has constructed numerous roadway and bridge projects in the Salem District on Route 460, Route 220 and Route 11, including more than 12 bridges in the Christiansburg area.

Allegheny brings decades of VDOT experience, including the construction of more than a dozen bridges in the Christiansburg area. The team can immediately apply recent insights and lessons learned from their prior experience to gain efficiencies in the construction process.

As the lead contractor, Allegheny will be responsible for project management, supervising construction and overall performance of the team. Allegheny will self-perform the majority of construction including grading, drainage, bridge demolition, pile driving, substructure and superstructure concrete. Allegheny will utilize subcontractors for paving, guardrail, pavement markings and bridge deck reinforcing steel. Several factors, including DBE participation, will be considered when selecting subcontractors to provide VDOT with a well-integrated and trusted team. The Allegheny design-build team includes local firms all experienced with VDOT design and construction.

Louis Berger U.S., Inc. will lead design efforts as the lead designer. Louis Berger is an ENR Top Ten transportation services firm that serves a diverse client base with a comprehensive suite of planning, environmental, economic, engineering, and construction engineering and inspection services. Since its founding in 1953, the firm has provided design services for thousands of bridges of all sizes and types and been active in design-build, design-bid-build and P3 project delivery methods.

Louis Berger has been an active leader in Virginia's bridge engineering community for more than 28 years, designing structures ranging from larger, complex river crossings to culverts for VDOT

Table 3.3-1 – Team members and roles

Allegheny Construction Co.	**Allegheny Construction Company, Inc.** Lead Contractor
Louis Berger	**Louis Berger U.S., Inc.** Lead Designer
rda RINKER DESIGN ASSOCIATES	**Rinker Design Associates, P.C.** Roadway/MOT/QA
ECS	**ECS Mid-Atlantic, LLC** Geotechnical/QA Lab
H&B	**H&B Surveying and Mapping, LLC** Surveying

and local transportation authorities. Louis Berger (and its recently integrated affiliate Ammann & Whitney) was lead designer for the award-winning 3,000-ft. Huguenot Memorial Bridge replacement and the Route 58 Bridges over the Middle Fork of the Holston River, both for VDOT. In association with asset management companies, **the Virginia staff has also successfully completed designs for the rehabilitation or repair of more than 100 of Virginia's interstate bridges.** Additionally, they have provided construction engineering services for challenging structural engineering projects throughout the region, including the superstructure replacement of I-64 over the ACCA rail yard and the pin and hanger replacement on the Frederick Douglass Bridge in Washington, DC. Currently, Louis Berger is the lead designer for Transform I-66 Outside the Beltway design-build project in Fairfax County, Virginia.

SUBCONSULTANTS

Rinker Design Associates, P.C. (RDA), as a subconsultant to Louis Berger, will provide roadway design, maintenance of traffic (MOT), and other support services for the project. RDA is a Virginia-based firm with more than 120 employees in Manassas, Fredericksburg, and Richmond. They are an award-winning Virginia-Certified Small Business and, in the last decade, has served as the lead designer on 13 design-build projects (eight for VDOT) while supporting an additional five.

ECS Mid-Atlantic, LLC (ECS) will provide geotechnical engineering and construction materials testing services. ECS has completed more than 300 transportation projects and/or task orders for support of new or existing VDOT infrastructure in the last 10 years. ECS has also gained similar experience as a geotechnical subconsultant on VDOT's Salem District Bridge Limited Design Services Contract, and on VDOT's Statewide Bridge Limited Design Services Contracts.

H&B Surveying and Mapping, LLC (H&B), a Virginia-Certified, DBE/WBE will provide land surveying services. H&B is experienced in all phases of land surveying and aerial photogrammetry that involves surveying streets and highways throughout Virginia. H&B has surveyed many projects throughout the Commonwealth that involved full location surveys, Class I bridge situation surveys, traffic calming intersection surveys, and large storm and sanitary sewer surveys. H&B's VDOT design-build experience includes Walney Road Bridge and Road Widening and Fall Hill Avenue Bridge Reconstruction and Widening project.

3.3.1 KEY PERSONNEL

Design-Build Project Manager (DBPM), John Douthat (Allegheny) will have overall accountability for all aspects of project performance and delivery including design, construction, safety, quality, schedule, budget, stakeholder and VDOT engagement, as well as procurement and furnishing of all materials, equipment, labor and services required for the project. All staff and functions of our proposed team will report directly to John Douthat. In addition to his full and complete authority for all aspects of the team's project delivery, John will be the main point of contact with VDOT. He will be responsible for contract negotiation and execution and responding to VDOT inquiries throughout the duration of the project. In this role, John will strive to resolve challenges, avoid disputes and will work in good faith with VDOT and in accordance with *Section 10.2.2 of RFP Part 4 – General Conditions of Contract*. John has fulfilled the project management role many times over the years working with VDOT.

> ***John has been instrumental to the success of Allegheny's VDOT contracts. As a project manager, John has a strong track record of meeting project schedules and budgets.***

John brings more than 30 years of construction project management experience, during which he has built a strong reputation for delivering quality projects, on schedule and within budget. Over the years, he has managed numerous VDOT projects, including Route 231 Mulatto Run Bridge

Replacement and the Goshen Bridge Replacement. John's diligence and leadership has lead to multiple acknowledgments, including two nominations for VDOT's Quality Project of the Year and one award, the VDOT's Culpeper District Quality Project of the Year, just to name a few. John's proven record of management for VDOT projects enables him to successfully manage the I-81 Exit 114 project.

Quality Assurance Manager (QAM), Scott Shropshire, PE (RDA) *reports directly to the DBPM on all quality issues.* Although Scott coordinates with construction personnel, they have no authority over QA inspection staff as these operations are completely independent. Scott keeps VDOT informed on the status of the quality of construction and issues/resolutions/solutions through weekly reports and progress meetings. As QAM, Scott holds the authority to shut down the job if quality issues warrant. Scott is a registered Professional Engineer in Virginia. *The AMRL Certified QA laboratory reports to Scott.*

Scott has completed numerous projects for VDOT and has extensive experience on interstate projects. In his tenure at VDOT, Scott was the Area Construction Engineer for more than 120 contracts in the Fredericksburg District.

Design Manager (DM), Craig Ponte, PE (Louis Berger) *reports directly to the DBPM.* Craig has responsibility for managing all aspects of design, including interface and coordination between disciplines and review of design working plans, shop drawings, specifications, and constructability. He will also ensure the work product of all design disciplines is effectively integrated with construction, right-of-way, utility, and safety elements. Craig has ultimate accountability for ensuring that the team's design is in conformance with contract documents, as well as implementing and managing over-arching design QC. It is Craig's duty to utilize team resources appropriately so that those performing QC do not have conflict vis-à-vis design production, as stated in *VDOT Minimum Requirements for Quality Assurance and Quality Control on Design-Build and P3 Projects.*

Craig is a registered, licensed Professional Engineer in Virginia with 14 years of experience. He is an experienced project manager and currently serves as deputy design project manager on the Transform I-66 Outside the Beltway design-build project. He also recently served as project manager on the Route 360 Bridge Replacement project which contained similar bridge structures, MOT challenges, and multi-disciplinary coordination as I-81 Exit 114. His work with VDOT has made him knowledgeable of VDOT's requirements and regulations, ensuring no learning curve for this project.

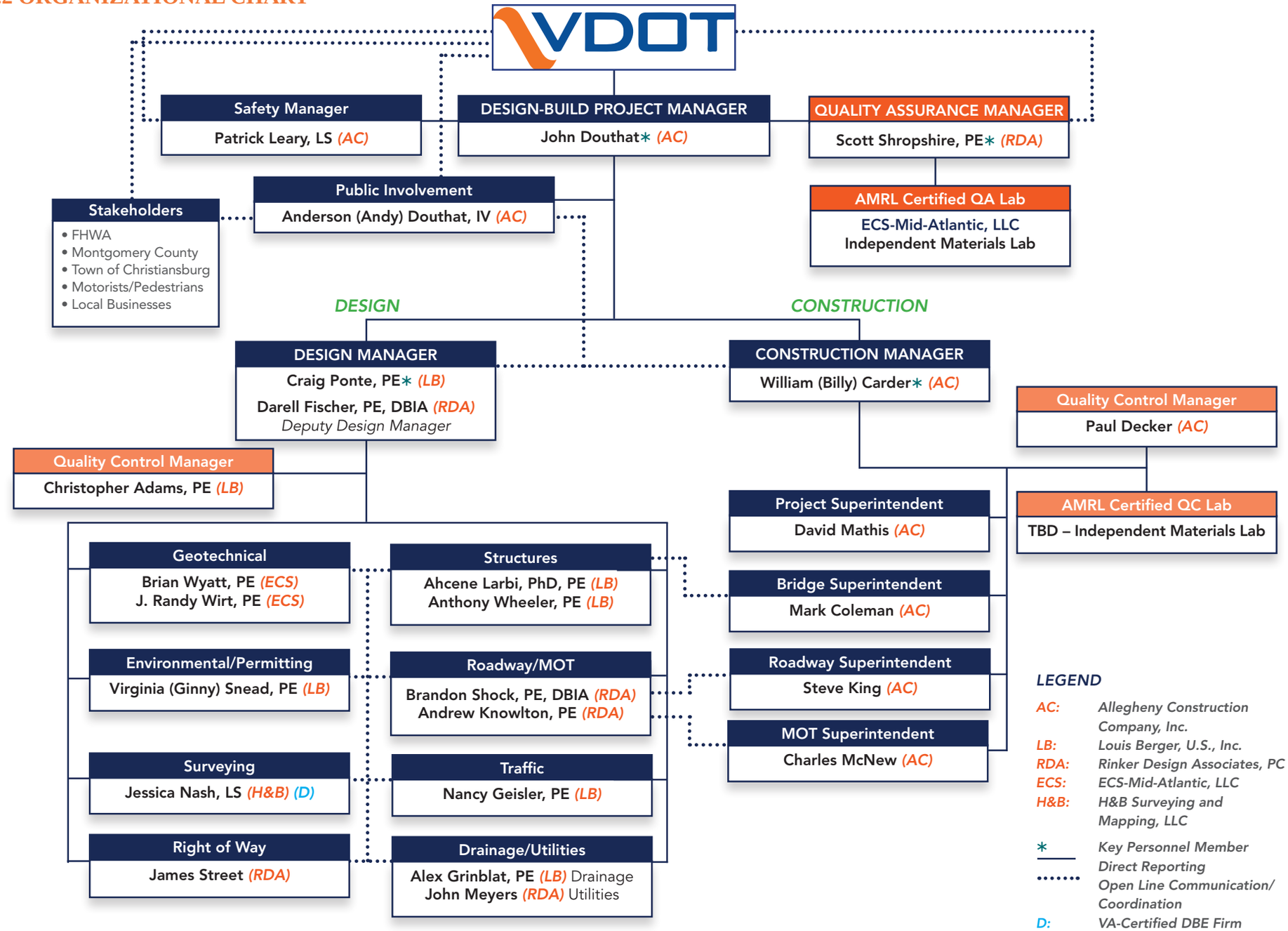
Craig has recent experience on relevant VDOT projects, including Transform I-66 Design-Build project and Route 360 bridge replacement. He has the ability to proactively manage the design process to ensure solutions are found before a problem arises.

Construction Manager (CM), William (Billy) Carder, (Allegheny) *reports directly to the DBPM with open lines of communication to the DM and Public Involvement Coordinator.* Billy will be responsible for managing the construction process as well as QC activities. Throughout all construction activity Billy will be in the field at the project site. Billy will have primary responsibility for maintaining the project schedule.

Billy holds a VDOT Erosion and Sediment Control Contractor Certification (ESCCC) and will hold a Virginia DEQ Responsible Land Disturber (RLD) certification prior to commencement of construction. He has 35 years of experience encompassing numerous bridge and road construction projects, including VDOT's Route 623 (Twin Bridges Road) bridge replacement in Green Bay.

Billy Carder (CM) was the project superintendent on VDOT's Route 623 (Twin Bridges Road) Bridge Replacement.

3.3.2 ORGANIZATIONAL CHART



3.3.2 ORGANIZATIONAL CHART NARRATIVE

The Allegheny design-build team has provided an organizational chart identifying the key personnel, leaders for each discipline, and a chain of command. A more in depth description of the experience and capabilities of the team is provided below.

VALUE-ADDED | **PROJECT LEADERSHIP**

Safety Manager, Patrick Leary, LS (Allegheny) *reports to the DBPM.* He is responsible for all aspects of safety during the life of the project. Patrick will be responsible for developing the project-specific safety plan and ensuring that the program is being followed to ensure the safety of workers and the traveling public. He will enforce compliance with all applicable VDOT and OSHA regulations and guidelines, as well as Allegheny's safety policy.

Public Involvement Coordinator, Anderson (Andy) Douthat (Allegheny) *reports directly to the DBPM and will work with the DBPM, VDOT, DM and CM* to maintain open lines of communication and ongoing updates about or affecting the project. Andy will be available as needed for stakeholder outreach and will coordinate any required public outreach and public meetings.

Andy has years of experience in this aspect of construction as well as having served on various boards and advisory panels from his local church to the Virginia State Bar Association. These efforts encompassed a broad spectrum of constituencies and needs. Andy and his brother John (DBPM) have built a strong working relationship that keeps projects moving, workers motivated, and created an accomplished record of projects, awards and safety achievements that rival much larger companies.

VALUE-ADDED | **DESIGN**

Design Quality Control Manager, Christopher (Chris) Adams, PE (Louis Berger) *reports directly to the DM.* He will support the DM by performing Independent Quality Control activities. Chris will not be involved in design production, which will facilitate "fresh eyes reviews" and diversified thinking during the delivery of this important project.

Deputy Design Manager, Darell Fischer, PE, DBIA (RDA) brings substantial design expertise to the team with 31 years of experience in the management of all technical and disciplinary aspects of roadway design. As deputy design manager, he will *report directly to and assist Craig Ponte (DM)* in ensuring contract compliance and team integration. His ability to successfully resolve complex design challenges with innovative, context-sensitive solutions for projects large and small validates his in-depth knowledge of state and local design criteria and management strategies. Darell's experience includes serving as DM on seven VDOT design-build projects: I-581/Elm Avenue Interchange Improvements, Rolling Road/Franconia-Springfield Interchange Improvements, Route 7 Widening and Bridge Rehabilitation over Dulles Toll Road and Airport Access Highway, I-64 Capacity Improvements – Segment II, Route 36 Roadway Improvements, Middle Ground Boulevard Extension, and I-95 at Temple Avenue Improvements. Darell's expertise also includes the management of projects of various sizes involving interchange designs, bridge rehabilitations and replacements, interstate realignments, intersection improvements, roadway designs on new alignment, parallel widenings, urban widenings, and park and rides.

As deputy design manager, Darell will utilize his experience as DM on seven VDOT design-build projects and involvement in the VTCA Design-Build Committee to assist Craig Ponte (DM) in ensuring contract compliance and team integration.

Structural Engineer, Ahcene Larbi, PhD, PE (Louis Berger) *reports directly to the DM* with open lines of communication to all design disciplines. Ahcene is ultimately responsible for design of all structures and integration, as needed, of other design disciplines. Ahcene has 23 years of diverse, technical experience, including his recent work as senior structural engineer for VDOT's Huguenot Bridge Replacement and the City of Richmond's Mayo Bridge project.

Geotechnical Engineer, Brian Wyatt, PE (ECS) *reports directly to the DM.* Brian has 21 years of experience in geotechnical engineering and construction inspection, including oversight of geotechnical, construction materials testing and inspection, and forensic consultation projects. Brian's recent experience includes US 460 Bypass/ Southgate Drive and Interchange Connector in Montgomery County and Route 220 Replacement Bridge over Back Creek in Roanoke County.

Drainage Engineer, Alex Grinblat, PE (Louis Berger) *reports directly to the DM.* Alex has more than 25 years of experience in drainage and hydraulic systems design. His responsibilities have included construction administration and supervising the design of public roads, grading, erosion control, water distribution systems, sanitary sewers, and best management practices (BMP)/ stormwater management. Alex has been responsible for field work supervision during the construction phase of projects. He is a trusted team leader with the ability to maintain strong relationships with clients and government officials at all levels.

Environmental Permitting, Virginia (Ginny) Snead, PE (Louis Berger) *reports directly to the DM.* Ginny brings more than 25 years of environmental experience and is an expert in stormwater management. She has worked with and for VDOT, managing stormwater management programs across the state, including VDOT's State Maintenance Stormwater Program in Richmond. She also served in a project manager role for 14 years managing a variety of environmental projects including on-call environmental engineering services, water and wastewater engineering, solid waste, policy development, stormwater utility development, brownfields, hazardous waste, and risk assessment.

VALUE-ADDED | CONSTRUCTION

Construction Quality Control Manager, Paul Decker (Allegheny) *reports directly to Billy Carder (CM).* Paul has 38 years of bridge building and replacement construction experience. Together, they have worked on numerous projects for Allegheny. Paul holds VDOT's ESCCC, VDOT ATSSA Virginia Intermediate TCS Work Zone Traffic Control Training, and Trench and Excavation Competent Person Training. Paul was responsible for the forming and pouring all of the bridge decks on 12 bridges for the Route 460 Christiansburg Bypass project. The bridges were all constructed on pile foundations similar to those proposed for Exit 114. His familiarity with the area and its geology will be a valuable asset to the team.

Project Superintendent, David Mathis (Allegheny) *reports directly to the CM and will work with Paul Decker, Construction Quality Control Manager.* David has 33 years of heavy/ civil construction experience. He has worked with Billy and Paul on many projects for Allegheny. David holds VDOT's ESCCC, VDOT ATSSA Virginia Intermediate TCS Work Zone Traffic Control Training, Trench and Excavation Competent Person Training and will have his expired Virgina DEQ RLD certification reinstated prior to the commencement of construction.

Bridge Superintendent, Mark Coleman (Allegheny) *reports directly to the Project Superintendent.* Mark was the superintendent in charge of 12 Route 460 Christiansburg Bypass bridges, so he is familiar with the Christiansburg area and its karst geology. The bridges were all constructed on pile foundations similar to those proposed for Exit 114.

MOT Superintendent, Charles McNew and Roadway Superintendent, Steve King (Allegheny) *report directly to the Project Superintendent.* Charles (MOT) has recent experience sequencing traffic phases on I-81. He is the project superintendent on the Route 220 bridge and culverts replacements which involves a highly traveled roadway connecting I-81 and I-64. To reduce traffic impacts, the project has multiple traffic sequencing phases. Steve (Roadway) oversaw the grading and roadway activities for the Culpeper District Quality Project of the Year, Route 231, Mulatto Run Bridge Replacement in Madison County, VA.

SECTION 3.4
Experience of Offeror’s Team

3.4.1 LEAD CONTRACTOR AND LEAD DESIGNER

The Allegheny design-build team has excellent established relationships that have developed over many years of working together. Louis Berger has served as Allegheny's engineer for construction engineering services for more than 12 years on a variety of projects throughout Virginia. Allegheny has come to rely on Louis Berger for quick and safe solutions at the construction site. Louis Berger has designed erection plans, temporary shoring, cofferdams, and many other structures for Allegheny's projects. Most recently, Louis Berger and Allegheny collaborated on the design of an innovative movable overhang buck removal system at the Route 20 bridge replacement over the Slate River. The excellent communication lines established between our two firms is vital and will greatly contribute to the success of this design-build project.

Lead Contractor – Allegheny

Founded in Virginia nearly 55 years ago, Allegheny has considerable experience with VDOT and local municipalities, including bridge replacements in the Montgomery County and surrounding areas.

Allegheny has constructed numerous temporary bridges for VDOT projects.

Construction in High Volume Traffic

Allegheny has experience with construction in high traffic count roadways. These VDOT projects include Route 634 (Hardy Road) widening, Route 40 widening in Rocky Mount which also included a bridge over NS for an access ramp onto Route 220 as well as the I-81 Valley View interchange Phase I. Having constructed many high volume traffic projects, Allegheny is well versed in the types of challenges presented by the I-81 Exit 114 project.

Route 460 Christiansburg Bypass Bridges, Montgomery County, VA

Allegheny replaced a total of 12 bridges along the Route 40 Christiansburg Bypass in Montgomery County, Virginia. The bridges were constructed on pile foundations in an area known for its karst geology. Allegheny's construction team was responsible for the forming and pouring of all bridge decks on the project.

- VDOT bridge replacements
- On-pile bridge foundations
- Christiansburg location
- Karst geology
- MOT on high volume route

Route 220 Bridge/Culvert Replacements, Botetourt County, VA

Allegheny is the general contractor for the replacement of two narrow bridges and the realignment of approximately one mile of Route 220 in Botetourt County. The project includes the replacement of two bridge structures and importation of approximately 60,000cy of borrow, storm drainage, box culverts, base aggregate, paving and traffic control. The roadway reconstruction widens the shoulders to eight ft. and will install centerline and edge line rumble strips. All of the project borrow material is imported from off site.

The project is adjacent to a significant wetlands area on one side and a high volume roadway consisting of both local traffic and truck traffic connecting from I-64 and I-81. As the roadway development progresses the project requires multiple installations of traffic control devices to include MB-11A barrier and impact attenuators. The work is being accomplished with minimal disruption to traffic on a major highway system.

- VDOT bridge replacements
- Replacement of two bridges
- MOT on high volume route
- Environmental
- Public involvement

Lead Designer – Louis Berger

Louis Berger's global client base has been progressively utilizing alternative project delivery methods, including design-build and P3s, as the preferred procurement and delivery method for their projects and programs. In the U.S., state and local agencies are increasingly taking advantage of these methods, with nearly every state authorizing design-build as a delivery method to date, as compared to little or no authorization for design-build across the country in 1993. In addition, 33 U.S. States, District of Columbia, and Puerto Rico have passed legislation and policies that enable the use of various P3 approaches for the development of transportation infrastructure.

To support this growing need, Louis Berger created a dedicated alternative project delivery team to specifically work with clients in the development and pursuit of these projects. The team has developed company-wide alternative project delivery standard operating procedures and best practices, and provide training to help Louis Berger staff better understand the technical requirements and nuances of these delivery methods. The team also coordinates company-wide resources to ensure that the most qualified staff are assigned to ensure that each project is delivered efficiently, timely, and on budget. Our team will operate as an extension of VDOT staff to provide practical solutions that also consider the overall transportation system.

VDOT, Transform I-66 Outside the Beltway, Fairfax County, VA

Louis Berger was selected to provide both tender design and detailed final design for improvements to this heavily traveled and critical roadway leading to Washington, DC. Crossing rural and urban areas in Northern Virginia, the I-66 corridor has seen significant population and employment growth. Area travel is congested with limited secondary options, extensive congestion, unpredictable travel times and uncoordinated and limited transit service.

With project limits extending over 22.5 miles of roadway the design was divided into three segments. Louis Berger is serving as the largest of the three design firms and currently responsible for providing the detailed final design for Segment 2 of the project corridor, from State Route 28 to Waples Mill Road. **As a subconsultant to Louis Berger, RDA is providing roadway design services.** Louis Berger's responsibilities include reconstruction of complex interchanges at State Route 28 and US 50, as well as the addition of seven miles of new express lanes (Segment 2). The final design includes roadways, 27 bridges, 129 retaining walls, drainage, lighting, 77 sign structures, MOT scheme, incorporation of ITS requirements within the project area and stakeholder and team coordination.

- VDOT design-build
- MOT on high volume route
- Public involvement

Louis Berger is overseeing development of project controls for Segment 2 as well as managing the design budget and QC compliance for the project.

Region 2 Multiple Culvert Rehabilitation Design-Build, Richmond, Fredericksburg and Northern Virginia Districts, VA

Working as the prime consultant for Corman Construction, Louis Berger (formerly Ammann & Whitney) acted as design manager and QAM for the replacement or improvement of nine culvert structures in Central and Northern Virginia. In addition to the primary task of structural design engineering, each of the culverts required hydraulics and hydrology studies, permit drawings, SWPP sheets, erosion and sediment control plans, guardrail design, and traffic control plans. Many of the sites required staged construction and detailed maintenance of traffic plans.

- VDOT structure replacement
- MOT

SECTION 3.5
Project Risks

3.5. PROJECT RISKS

Risk 1 – Existing Structures Remaining in Service During Construction

Why this Risk is Critical – The existing structures, constructed in 1964, are in poor condition and classified as structurally deficient in the most recent safety inspection. The bridges are in such poor condition they are now inspected every six months, as opposed to the regular two year inspection cycle.

Both decks and superstructures have earned ratings of 4 (poor condition) since the 2011 safety inspections. The bridges have been subject to collisions from traffic on Route 8 due to insufficient vertical clearances (14'-11" NB, 15'-02" SB). These collisions, coupled with fatigue prone details in the girder connections, and high ADTT on mainline I-81, 21,700 (24% Truck) SB and 22,300 (27% Truck) NB, have made the structures particularly vulnerable to steel cracking and crack propagation from fracture and fatigue under heavy truck loading cycles. Steel cracking in the beams has been noted throughout both bridges.

The substructures earned ratings of 5 (fair), however, the controlling load rating member for each bridge is the pier cap due to the extensive deterioration on the underside of pier caps. The main reinforcing has extensive section loss and complete loss of stirrups in the critical load carrying location between columns. The load carrying capacity of the piers caps has become severely compromised.

Extensive pier cap deterioration is just one factor making the I-81 Exit 114 a critical replacement.

Impact to the Project – It is imperative that the existing structures be removed from service as quickly as possible. The bridges continue to deteriorate and are vulnerable to continued steel cracking, crack propagation, and loss of load carrying capacity. These conditions will eventually force load carrying restrictions, closure of lanes, or closure of bridges.

Mitigation Strategies – The team will accelerate construction to the greatest extend possible to reach completion and remove the existing structures from service. The conceptual design provided in the RFQ shifted the horizontal alignments of both NB and SB lanes and provided for the construction of each bridge adjacent to traffic in stages. Demolition and construction operations in such close proximity to live traffic will necessarily slow progress as construction is performed in four stages and personnel, material, and equipment must be carefully maneuvered in and around tight work zones.

To speed construction, the team will consider using a temporary bridge in the median to alternately carry both directions of traffic during two distinct phases of construction. Additionally, the horizontal alignment of the roadway will remain unchanged, with adjustments made to the vertical profile as needed for additional vertical clearance. Shifting traffic onto the median, completely away from each bridge, allows for the full closure of each bridge and the elimination of two phases of construction. With more room to work, construction crews can demolish and construct the new bridges more safely, quickly, and efficiently. Using this technique will:

- Save an estimated six months of construction
- Remove the structurally deficient existing bridges from service six months earlier
- Eliminate one inspection cycle
- Improve traveler safety by decreasing the number of vehicles crossing the existing deficient bridges by approximately 8,000,000

Role of VDOT or Other Agencies – By programming for replacement utilizing design-build procurement, VDOT has accelerated the design and construction schedule and advanced replacement. The team will design the temporary bridge and median cross overs in accordance with S&B and MOT standards. The team will rely on VDOT for design concurrence and accelerated reviews and approvals of design submittals.

Risk No. 2 – Maintenance of Traffic (MOT) During Construction

Why this Risk is Critical – MOT is the most visible aspect of construction by which the public judges the success of a project, and ultimately VDOT and its contractor. Impacts to the travelway brought on by construction are a necessity to repair our aging transportation infrastructure; however, with proper planning and concise public outreach a construction project can be viewed as a welcomed sight by the traveling public. The I-81 corridor is the primary trucking route in the western half of the state. This corridor carries more than 20% truck volume, one of the highest truck volumes in the state, proving this section of highway to be vital in the overall transportation of goods and people. Being nestled in rural western Virginia, alternate routes are not as direct and less efficient. While I-81 experiences moderate traffic volumes, when compared to other facilities around the state, coupled with heavy truck traffic construction within this section of highway, it is as complex as any other in the state. A thoughtful and well detailed MOT plan will ensure a successful project and functional corridor for years to come. Aspects of the MOT design that are critical to the project include:

- Demolition and replacement of the existing bridges
- Adjustments to vertical geometry for clearance over Route 8
- Multiple traffic shifts necessary to accommodate construction activities
- Alignment of on- and off- ramps
- Shoulder and lane widths during construction

Impacts to the Project – An effective MOT plan will minimize impacts to congestion, limit driver distractions, and improve the safety of the traveling public as well as our construction work crews. Failure to have and implement an effective MOT will negatively impact public perception, lead to major incidents, and drive up project cost and schedule. The MOT/TMP risk presented with constructing the I-81 project results in the following impacts to the safe and efficient MOT in the corridor.

- Narrowing of travel lanes and making use of the existing shoulders will be necessary to reconstruct the new travel lanes. Adjustment in the horizontal and vertical geometry further exacerbate the issue of providing adequate space to construct the project. This reduces capacity, increases distraction to the traveling public, and increases the possibility for incidents. Reduced lane widths and shoulder widths restrict the available room for recovery and ability to safely exit the travelway on to the shoulder adding to the congestion and delays through the project work zone.
- Access to the work areas in the median will require sufficient acceleration and deceleration lanes extending the projects impact well beyond the physical construction activities and may impact level of service due to available decel and accel lengths which will be limited. Entering and existing construction traffic from the median side will be unfamiliar to motorist.
- Driver safety and the efficient movement of traffic coupled with heavy truck volumes will be impacted by construction. Access to the work zones will coincide with merging traffic from the on- and off- ramps of Route 8, further exacerbating congestion and appropriate room for merging traffic both from the right and left travel lanes.
- Increased congestion and incidents in the work zone can lengthen response time for emergency responders.
- Extensive cost to build increased permanent retaining walls and full-depth roadway sections.

Mitigation Strategies – The team's approach to minimizing MOT risk on the project begins with the development of a robust MOT/TMP plan. The team will focus on identifying the space needed to maintain traffic on the existing roadway while maximizing the available area for construction. Safety of the traveling public and construction workers will be an important emphasis of the MOT/TMP plan. Incident management and situational awareness will be addressed through the design and implementation of our MOT/TMP plan evaluating the performance along the way to identify improvements when necessary.

The team's approach to constructing the project (Figure 3.5.1) includes making use of a temporary bridge structure in the existing median. This temporary structure will be constructed with minimal encroachment in the existing travelway and eliminates major impact to either the NB and SB bridge structures. The temporary structure will generally follow the proposed grade of the proposed SB bridge and minimize the encroachment into the existing travelway, while providing sufficient horizontal clearance for grade adjustments along the existing alignment during the proposed bridge construction. The structure width of the temporary bridge will accommodate, at a minimum, two lanes of travel, a four-ft. shoulder, and a two-ft. shoulder (which generally matches the shoulder widths on the existing structures). The traveling public will experience minimal changes from what they experience today.

Once the temporary bridge is in-place, one direction of traffic will be shifted onto the bridge so that the existing bridge associated with that direction can be demolished and the new bridge be constructed in a single phase of construction without any construction joints.

Upon completion of the first proposed bridge, traffic will be shifted back to the new bridge and the temporary bridge will be utilized for the other direction of traffic to demo and construct the other proposed bridge in the same fashion. The added benefit of this simplified phasing (Figure 3.5.2) is that once the temporary bridge is put into place, all access to work zones will be accomplished from the outside of the roadway typical section and from Route 8 between the ramp terminals which will meet driver expectations and minimize impacts to traffic flow.

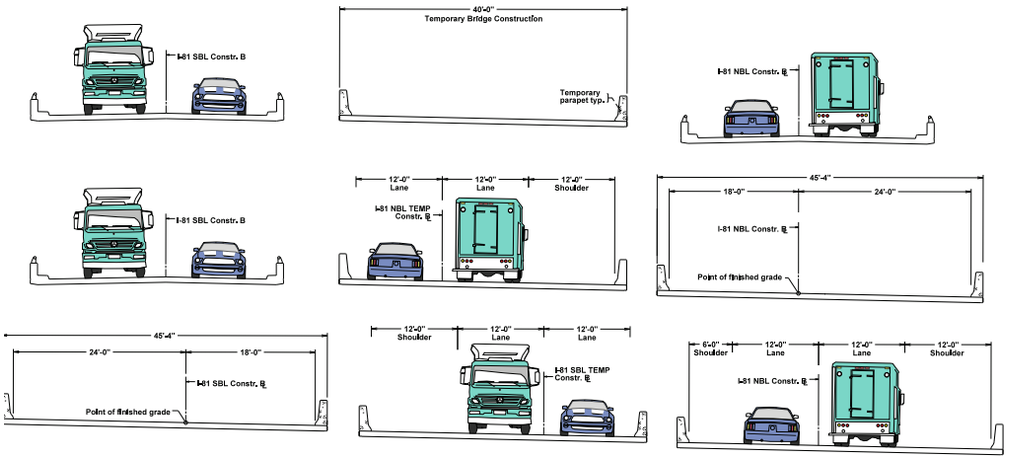


***Figure 3.5.1** – Sequencing traffic movements during construction with the use of a temporary bridge structure in the existing median will significantly eliminate impacts to traffic.*

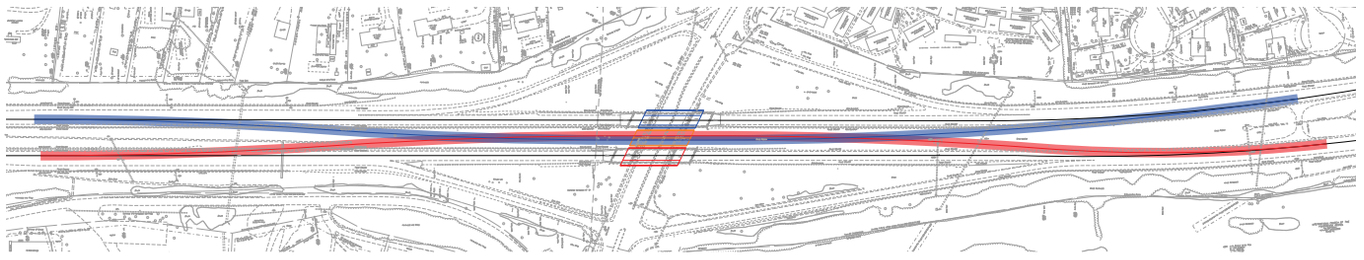


***Figure 3.5.2** – The simplified phasing approach improves safety and reduces impacts to traffic.*

Acceleration and deceleration can be accomplished utilizing the existing auxiliary lanes thereby eliminating median and ramp merging operations. With the existing horizontal alignment being reconstructed in-place and the substantial widening associated with providing a proposed 12-ft. shoulder right of traffic being constructed to the outside for both bridges, future expansion through the corridor will have ample room to construct a travel lane in each direction from within the median, thereby avoiding costly ramp gore reconstruction.

Lastly, no remediation will be necessary to the existing structures during the initial phase of construction to erect the temporary structure. Temporary widening into the median will be accomplished through minor shifts onto the shoulder or nightly lane closures with minimal impact to peak travel demands.

To aid in the risk mitigation, the MOT/TMP plan will incorporate communication strategies developed to bring public awareness of the project's construction activities, schedules, and overall project status. Through public outreach, the team will keep the public well informed of the project and situations that may be encountered when traveling along the corridor or through the area. Key elements to achieving success through public outreach include:

- Formal partnering
- Providing up-to-date information on traffic shifts, major construction activities and real-time communication on incidents, delays and alternate routes
- Predetermined alternate routes for emergency responders will be coordinated closely and incorporated in the incident management plan (IMP)
- Dynamic messaging signs (DMS) will be utilized to provided advanced notice of construction activities, lane shifts, and changed conditions

Role of VDOT and Other Agencies – VDOT, in partnership with the Allegheny design-build team will work together to remove roadblocks and misconceptions regarding temporary bridge structures during the design process. Additionally, VDOT will have a supportive role with the team in communicating the project status to roadway users and stakeholders. The team will support VDOT by providing content for press releases, the project website, and other media for communicating with the public. Regular coordination meetings will be conducted with key stakeholders, including VDOT staff, key personnel from adjacent projects, and the team. With a robust MOT and IMP in place and a proposed public outreach coupled with the VDOT's role in communicating the project status, we are confident that the Allegheny design-build team in partnership with VDOT will have a successful project and VDOT's role and risk on the project will be minimal.

Risk No. 3 – Karst Geologic and Geotechnical Conditions

Why this Risk is Critical – The alignment of the bridge replacement project passes the Lower Ordovician and Upper Cambrian Formations of the Valley and Ridge Physiographic Province that include carbonate limestone and dolostone which are prone to karst activity. The project site is located near faults to the south separating these Formations from the Elbrook and Rome Formations, which may indicate folded and faulted, erratic rock conditions. Multiple sinkholes are mapped within two miles surrounding the project site, including a cavern opening.

Based on the Engineering Geology sheets from the 1963 bridge plans (Figure 3.5.3), dolostone bedrock was encountered in the original bridge borings at depths varying erratically by as much as 40 ft. beneath individual substructures, and

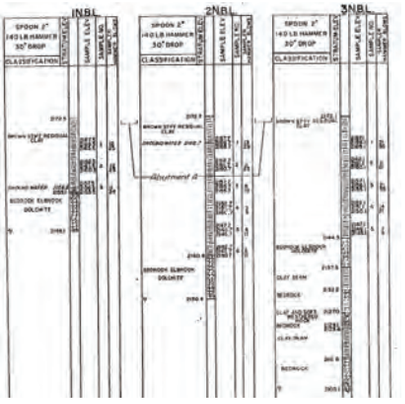


Figure 3.5.3 *The original bridge borings shown in the 1963 Engineering Geology plans reveal characteristic karst conditions.*

typically by as much as 20 ft. Rock conditions included weathered zones and clay seams. The residual soils are anticipated to consist of fine grained residual soils (CH/MH/CL/ML) over rock, with existing fill embankment of similar soil types beneath the existing I-81 approaches. Based on the original borings and our experience in this geology, consistency of the overlying residual soils are anticipated to be soft to stiff, with decreasing strength near the rock surface in some instances.

For this project, the team sees these existing soil and rock subsurface conditions as comprising risk for the bridge and roadway foundations due to characteristic karst conditions, and if not addressed appropriately during design and construction could lead to stability and foundation design and construction issues.

Impact to the Project – With the potential for an erratic rock surface, poor rock layers, clay seams, and void spaces characteristic of karst geology, it is anticipated that support for bridge foundations will require deep foundations extending to competent rock in order to reach suitable bearing conditions. Moreover, competent rock may be overlain by intermixed rock and clay seams, requiring penetration to a suitable underlying layer. It is our experience that suitable rock elevation within each foundation footprint will likely be variable, even within a single foundation element.

With the potential need for modifications to the existing approach embankments, approach work for I-81, as well as Route 8, will likely encounter subgrade soils consisting of residuum and fill soils which classify as high-plastic clays and silts (CH/MH), typical of karst geology. A significant portion of these soils may be moist to wet with moisture contents greater than or equal to 20% of the respective soils' optimum moisture content. These soils pose a risk to the project due to the additional time required to delineate the extent of these soils during construction and the time and cost required to modify or remove and replace these soils with suitable fill.

Mitigation Strategies – To mitigate the potential impact of karst conditions to negatively affect the project, the team will review existing geotechnical data and focus early phase geotechnical explorations within the footprint of the new bridge foundations, potentially including geophysical surveying with electrical resistivity where applicable, to characterize the bedrock conditions. Construction methods selected for bridge foundations will consider the potential impact of karst variable rock surface and quality.

This proactive planning will also focus on laboratory tests of the samples to include natural moisture contents, Atterberg limits, and Standard Proctor tests. The results of these tests will help delineate the lateral extent and depth of unsuitable soils to allow for proactive measures to be taken in early earthwork construction phases. After the delineation of potentially unsuitable soils, the team will identify alternative treatment methods using a feasibility matrix. The matrix outlines the applicable station ranges, depth of treatment, and proposed treatment method. Typical treatment methods in this geologic setting and what the team will evaluate on this project include undercut and replacement, geosynthetic separation and stabilization fabrics, and in-situ soil modification. The in-situ soil treatments will generally include lime or cement admixtures to create a stabilized subgrade. Where appropriate, the team will conduct specific laboratory testing programs to optimize the lime or cement admixture percentages based on subgrade soil classifications and strength of the soil/admixture treated soil. Overall, this mitigation strategy is conducted during the design phase so as not to impact the project schedule during actual earthwork activities.

Role of VDOT and Other Agencies – The team fully expects to handle and manage the risks associated with the existing subsurface conditions. We expect to take on these risks when we propose on a design-build project and this project is no exception. Outside of the standard process for requesting and provision of available existing geologic data and VDOT review of plans and other contract documents, no significant additional effort is anticipated from VDOT or any other agency.

APPENDIX

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.

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
Statement of Qualifications Checklist and Contents	Attachment 3.1.2	Section 3.1.2	no	Appendix A-1*
Acknowledgement of RFQ, Revision and/or Addenda	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	Appendix A-4
Letter of Submittal (on Offeror's letterhead)				Section 3.2 Page 1
Authorized Representative's signature	NA	Section 3.2.1	yes	"
Offeror's point of contact information	NA	Section 3.2.2	yes	"
Principal officer information	NA	Section 3.2.3	yes	"
Offeror's Corporate Structure	NA	Section 3.2.4	yes	"
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	"
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	Appendix A-5
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	Appendix A-6*
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	Appendix A-11*
Evidence of obtaining bonding	NA	Section 3.2.9	no	Appendix A-12*

**additional pages follow*

ATTACHMENT 3.1.2

Project: 0081-154-733

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
SCC and DPOR registration documentation (Appendix)	Attachment 3.2.10	Section 3.2.10	no	Appendix A-15*
Full size copies of SCC Registration	NA	Section 3.2.10.1	no	Appendix A-17*, A-20*, A-24*, A-27*, A-30*
Full size copies of DPOR Registration (Offices)	NA	Section 3.2.10.2	no	Appendix A-19, A-22*, A-26, A-29, A-32
Full size copies of DPOR Registration (Key Personnel)	NA	Section 3.2.10.3	no	Appendix A-33
Full size copies of DPOR Registration (Non-APELSCIDLA)	NA	Section 3.2.10.4	no	N/A
DBE statement within Letter of Submittal confirming Offeror is committed to achieving the required DBE goal	NA	Section 3.2.11	yes	Section 3.2 Page 1
Offeror's Team Structure				
Identity of and qualifications of Key Personnel	NA	Section 3.3.1	yes	Section 3.3 Page 3
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	Appendix A-34*
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.2	no	Appendix A-36*
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.3	no	Appendix A-38*

**additional pages follow*

ATTACHMENT 3.1.2

Project: 0081-154-733

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.4	no	Appendix A-408
Organizational chart	NA	Section 3.3.2	yes	Section 3.3 Page 5
Organizational chart narrative	NA	Section 3.3.2	yes	Section 3.3 Page 6*
Experience of Offeror's Team				
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	Appendix A-42*
Lead Designer Work History Form	Attachment 3.4.1(b)	Section 3.4	no	Appendix A-45*
Project Risk				
Identify and discuss three critical risks for the Project	NA	Section 3.5.1	yes	Section 3.5 Page 10*

**additional pages follow*

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	DATE
	8/24/17

PRINTED NAME	TITLE
Anderson W. Douthat, IV	President

ATTACHMENT 3.2.6

State Project No. 0081-154-733

Affiliated and Subsidiary Companies of the Offeror

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

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

Relationship with Offeror (Affiliate or Subsidiary)	Full Legal Name	Address
Affiliate	**Fincastle Equipment Company LC**	**2830 Nicholas Ave NE, Roanoke, VA 24012**

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	8/24/17	**President**
	Date	Title

Allegheny Construction Company, 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 21, 2017 Date	President, U.S. Transportation Market Title

Louis Berger, U.S., 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	8/2/2017 Date	Vice President/Branch Manager Title

ECS Mid-Atlantic, 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 2, 2017 Date	Vice President Title

H&B Surveying and Mapping, 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	7/31/2017 Date	Director of Transportation/Principal Title

Rinker Design Associates, P.C.
Name of Firm

COMMONWEALTH OF VIRGINIA

VDOT
Virginia Department of Transportation

CERTIFICATE OF QUALIFICATION

ALLEGHENY CONSTRUCTION COMPANY, INC.

Vendor Number: **A013**

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

Issue Date: January 31, 2017

This Rating and Classification will Expire: January 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.

August 1, 2017

HAWK ADVISERS

Virginia Department of Transportation
1401 East Broad Street
Richmond, VA 23218

RE: Allegheny Construction Company, Inc.
Prequalification-Project I-81 Bridge Replacement at Exit 114
Montgomery County, Christiansburg, VA
A Design-Build Project – Estimated Value: $21,000,000.
State Project No.: 0081-154-733,P101, R201, C501, B601, B616
Federal Project No.: IM-081-2(992) Contract ID No: C00093074DB96

To Whom It May Concern:

Zurich American Insurance Company and/or its subsidiary, Fidelity and Deposit Company of Maryland, have provided surety credit to Allegheny Construction Company, Inc. for single projects of $30,000,000. Zurich/F&D is rated A+/negative with a financial size category of XV ($2 billion+) by AM Best and has a US Treasury Limit exceeding $300 million.

As surety for Allegheny Construction Company, Inc., Zurich American Insurance Company and/or its subsidiary, Fidelity and Deposit Company of Maryland, is capable of obtaining a 100% Performance Bond and 100% Labor and Materials Payment Bond in the amount of the anticipated cost of construction for the referenced project. If Allegheny Construction Company, Inc. is the successful bidder and awarded a contract for the referenced project and requests that we provide the necessary Performance and Labor and Materials Payment Bonds in the amount of the anticipated costs of construction to cover the Project and any warranty periods provided for in the Contract Documents on behalf of the Contractor, we will be prepared to execute the bonds subject to our acceptable review of the contract terms and conditions, bond forms, appropriate contract funding and other underwriting considerations at the time of the request.

Our consideration and issuance of bonds is a matter solely between Allegheny Construction Company, Inc. and ourselves, and we assume no liability to third parties or to you by issuance of this letter.

We trust this information meets with your satisfaction. If there are further questions, please feel free to contact me.

Sincerely,

Elizabeth S. Mabrey

Zurich American Insurance Company
Fidelity and Deposit Company of Maryland
Attorney-in-Fact

info@hawkadvisers.com
www.hawkadvisers.com
206 Williamson Rd. Suite 100
Roanoke, VA 24013
540.343.4309
800.277.4309

ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND
POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Maryland, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Maryland (herein collectively called the "Companies"), by **GERALD F. HALEY, Vice President,** in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint **Sandra P. HAMILTON, Stephen T. HAMILTON, Robert D. LOWERY, Elizabeth S. MABREY and Randal W. WRIGHT, all of Roanoke, Virginia, EACH** its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: **any and all bonds and undertakings,** and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said **ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND**, this 7th day of February, A.D. 2017.

ATTEST:

ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND

By: _____
Secretary
Michael McKibben

_____
Vice President
Gerald F. Haley

State of Maryland**FOR YOUR PROTECTION,**
County of Baltimore **LOOK FOR THE ZURICH WATERMARK**

On this 7th day of February, A.D. 2017, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **GERALD F. HALEY, Vice President, and MICHAEL MCKIBBEN, Secretary,** of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, deposeth and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.

_____
Constance A. Dunn, Notary Public
My Commission Expires: July 9, 2019

POA-F 176-0349B

EXTRACT FROM BY-LAWS OF THE COMPANIES

"Article V, Section 8, Attorneys-in-Fact. The Chief Executive Officer, the President, or any Executive Vice President or Vice President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Company, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify of revoke any such appointment or authority at any time."

CERTIFICATE

I, the undersigned, Vice President of the ZURICH AMERICAN INSURANCE COMPANY, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that Article V, Section 8, of the By-Laws of the Companies is still in force.

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the ZURICH AMERICAN INSURANCE COMPANY at a meeting duly called and held on the 15th day of December 1998.

RESOLVED: "That the signature of the President or a Vice President and the attesting signature of a Secretary or an Assistant Secretary and the Seal of the Company may be affixed by facsimile on any Power of Attorney...Any such Power or any certificate thereof bearing such facsimile signature and seal shall be valid and binding on the Company."

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at a meeting duly called and held on the 5th day of May, 1994, and the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990.

RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this 1st day of August, 2017.

Michael Bond, Vice President

TO REPORT A CLAIM WITH REGARD TO A SURETY BOND, PLEASE SUBMIT ALL REQUIRED INFORMATION TO:

Zurich American Insurance Co.
Attn: Surety Claims
1299 Zurich Way
Schaumburg, IL 60196-1056

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.

SCC & DPOR INFORMATION FOR BUSINESSES (RFQ Sections 3.2.10.1 and 3.2.10.2)							
Business Name	SCC Information (3.2.10.1)			DPOR Information (3.2.10.2)			
	SCC Number	SCC Type of Corporation	SCC Status	DPOR Registered Address	DPOR Registration Type	DPOR Registration Number	DPOR Expiration Date
Allegheny Construction Company, Inc.	00955732	Sub S	Active	2830 Nicholas Ave NE, Roanoke, VA 24012	Class A Contractor	2701006768	01-31-2019
Louis Berger U.S., Inc.	F1131780	Foreign Corporation	Active	412 Mount Kemble Ave, Morristown, NJ 07960	ENG	0407006979	12-31-2017
Louis Berger U.S., Inc.	"	"	"	Boulders III 1100 Boulders Pkwy, Suite 720 Richmond, VA 23225	ENG (Branch)	0411001319	02-28-2018
Louis Berger U.S., Inc.	"	"	"	96 Morton Street New York, NY 10014	ENG (Branch)	0411001320	02-28-2018
Louis Berger U.S., Inc.	"	"	"	2401 Walnut Street Suite 501, Philadelphia, PA 19103	ENG (Branch)	0411001334	02-28-2018
ECS Mid-Atlantic, LLC	S1208216	Limited Liability Company	Active	7670 Enon Drive, Suite 101 Roanoke, VA 24019	ENG	0411000381	02-28-2018
ECS Mid-Atlantic, LLC	S1208216	Limited Liability Company	Active	2119-D North Hamilton Street Richmond, VA 23230	ENG	0411000384	02-28-2018
H&B Surveying and Mapping, LLC	S2905604	Limited Liability Company	Active	612 Hull Street, Suite 101B Richmond, VA 23224	LS	0407005432	12-31-17
H&B Surveying and Mapping, LLC	"	"	"	2105 Electric Road SW, Suite 103 Roanoke, VA 24018	LS (Branch)	0411001268	02-28-2018

ATTACHMENT 3.2.10

State Project No. 0081-154-733

SCC and DPOR Information

Rinker Design Associates, P.C.	02270627	Professional Corporation	Active	4301 Dominion Blvd Suite 100 Glen Allen, VA 23060	ENG (Branch)	0410000220	02-28-2018
Rinker Design Associates, P.C.	"	"	"	927 Maple Grove Drive, Suite 105 Fredericksburg, VA 22407	ENG, LS (Branch)	0410000156	02-28-2018

DPOR INFORMATION FOR INDIVIDUALS (RFQ Sections 3.2.10.3 and 3.2.10.4)						
Business Name	Individual's Name	Office Location Where Professional Services will be Provided (City/State)	Individual's DPOR Address	DPOR Type	DPOR Registration Number	DPOR Expiration Date
Louis Berger U.S., Inc.	Craig Anthony Ponte, PE	Richmond, VA	513 Ridge Top Rd Richmond, VA 23229	Professional Engineer	0402043185	01-31-2019
Rinker Design Associates, P.C.	Steven Scott Shropshire, PE	Fredericksburg, VA	5203 Yellow Birch Dr Fredericksburg, VA 22407	Professional Engineer	0402035812	06-30-2019

Commonwealth of Virginia

State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That ALLEGHENY CONSTRUCTION COMPANY, INC. is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is January 16, 1963;

That the period of its duration is perpetual; and

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

Nothing more is hereby certified.

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

Joel H. Peck

Joel H. Peck, Clerk of the Commission

CISECOM
Document Control Number: 1707145633

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

SCC eFile FAST. SIMPLE. SECURE.

SCC eFile

Business Entity Details

Help

ALLEGHENY CONSTRUCTION COMPANY, INC.

General

SCC ID: 00955732
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 1/16/1963
Status: Active
Shares Authorized: 1000

Principal Office

2830 NICHOLAS AVENUE NE
ROANOKE VA24012

Registered Agent/Registered Office

J. RUDY AUSTIN
GENTRY LOCKE ET AL /10 FRANKLIN RD SE STE 800
P. O. BOX 40013
ROANOKE VA 24022
ROANOKE CITY 217
Status: Active
Effective Date: 6/17/2013

Select an action

- File a registered agent change
- File a registered office address change
- Resign as registered agent
- File an annual report
- Pay annual registration fee
- Order a certificate of good standing
- Submit a PDF for processing (What can I submit?)
- View eFile transaction history
- Manage email notifications

New Search | Home

Screen ID: e1000

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation
9960 Mayland Drive, Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

EXPIRES ON
01-31-2019

NUMBER
2701006768

BOARD FOR CONTRACTORS
CLASS A CONTRACTOR
CLASSIFICATIONS BEC CBC H/H RBC

ALLEGHENY CONSTRUCTION CO INC
2830 NICHOLAS AVE
ROANOKE, VA 24012

DPOR

Jay W. DeBoer Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)
(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

CLASS A BOARD FOR CONTRACTORS
CONTRACTOR

CLASSIFICATIONS BEC CBC H/H RBC
NUMBER: 2701006768 EXPIRES: 01-31-2019

ALLEGHENY CONSTRUCTION CO INC
2830 NICHOLAS AVE
ROANOKE, VA 24012

(FOLD)

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

DPOR-PC (05/2015)

Commonwealth of Virginia

State Corporation Commission

I Certify the Following from the Records of the Commission:

The foregoing is a true copy of the application for an amended certificate of authority to transact business in Virginia filed in the Clerk's Office of the Commission by Louis Berger U.S., Inc., a New York corporation.

Nothing more is hereby certified.

Signed and Sealed at Richmond on this Date:
May 13, 2016

Joel H. Peck

Joel H. Peck, Clerk of the Commission

CIS0357

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

SCC eFile
FAST. SIMPLE. SECURE.

SCC eFile
Business Entity Details

Help

Louis Berger U.S., Inc.

General

SCC ID: F1131780
Entity Type: Foreign Corporation
Jurisdiction of Formation: NY
Date of Formation/Registration: 2/10/1993
Status: Active
Shares Authorized: 200

Principal Office

412 MOUNT KEMBLE AVENUE
MORRISTOWN NJ07960

Registered Agent/Registered Office

CORPORATION SERVICE COMPANY
Bank of America Center, 16th Floor
1111 East Main Street
RICHMOND VA 23219
RICHMOND CITY 216
Status: Active
Effective Date: 4/29/2011

Select an action

- File a registered agent change
- File a registered office address change
- Resign as registered agent
- File an annual report
- Pay annual registration fee
- Order a certificate of good standing
- View eFile transaction history
- Manage email notifications

New Search | Home

Screen ID: e1000

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
0407006979

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

PROFESSIONS: ENG

LOUIS BERGER US INC
412 MOUNT KEMBLE AVENUE
MORRISTOWN, NJ 07962

DPOR

Jay W. DeBoer, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)

(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
BUSINESS ENTITY REGISTRATION
NUMBER: 0407006979 EXPIRES: 12-31-2017
PROFESSIONS: ENG
LOUIS BERGER US INC
412 MOUNT KEMBLE AVENUE
MORRISTOWN, NJ 07962

(FOLD)

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

DPOR-PC (05/2015)

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
0411001319

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

PROFESSIONS: ENG

LOUIS BERGER US INC
BOULDERS III
1100 BOULDERS PKWY STE 720
RICHMOND, VA 23225

DPOR

Jay W. DeBoer, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)

(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411001319 EXPIRES: 02-28-2018
PROFESSIONS: ENG
LOUIS BERGER US INC
BOULDERS III
1100 BOULDERS PKWY STE 720
RICHMOND, VA 23225

(FOLD)

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

DPOR-PC (05/2015)

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
0411001320

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

PROFESSIONS: ENG

LOUIS BERGER US INC
96 MORTON ST
NEW YORK, NY 10014

DPOR

Jay W. DeBoer, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)

(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411001320 EXPIRES: 02-28-2018
PROFESSIONS: ENG
LOUIS BERGER US INC
96 MORTON ST
NEW YORK, NY 10014

(FOLD)

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
0411001334

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

PROFESSIONS: ENG

LOUIS BERGER US INC
2401 WALNUT ST STE 501
PHILADELPHIA, PA 19103

DPOR

Jay W. DeBoer, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)

(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411001334 EXPIRES: 02-28-2018
PROFESSIONS: ENG
LOUIS BERGER US INC
2401 WALNUT ST STE 501
PHILADELPHIA, PA 19103

(FOLD)

Commonwealth of Virginia

State Corporation Commission

CERTIFICATE OF FACT

I Certify the Following from the Records of the Commission:

That ECS - Mid-Atlantic, LLC is duly organized as a limited liability company under the law of the Commonwealth of Virginia;

That the date of its organization is April 16, 2004; and

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

Nothing more is hereby certified.

Signed and Sealed at Richmond on this Date:
June 7, 2017

Joel H. Peck, Clerk of the Commission

CISECOM
Document Control Number: 1706075387

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

SCC eFile
FAST. SIMPLE. SECURE.

SCC eFile
Business Entity Details

Help

ECS - Mid-Atlantic, LLC

General

SCC ID: S1208216
Entity Type: Limited Liability Company
Jurisdiction of Formation: VA
Date of Formation/Registration: 4/16/2004
Status: Active

Principal Office

14026 THUNDERBOLT PL STE 100
CHANTILLY VA20151

Registered Agent/Registered Office

JAMES A ECKERT
14026 THUNDERBOLT PL STE 100
CHANTILLY VA 20151
FAIRFAX COUNTY 129
Status: Active
Effective Date: 4/16/2004

Select an action

- File a registered agent change
- File a registered office address change
- Resign as registered agent
- File a principal office address change
- Pay annual registration fee
- Order a certificate of fact of existence
- Submit a PDF for processing (What can I submit?)
- View eFile transaction history
- Manage email notifications

New Search | Home

Screen ID: e1000

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
0411000381

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

PROFESSIONS: ENG

ECS-MID-ATLANTIC LLC
7670 ENON DR STE 101
ROANOKE, VA 24019

DPOR

Jay W. DeBoer, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)

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
0411000384

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

PROFESSIONS: ENG

ECS MID-ATLANTIC LLC
2119-D NORTH HAMILTON ST
RICHMOND, VA 23230

DPOR

Jay W. DeBoer, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)

Commonwealth of Virginia

STATE CORPORATION COMMISSION

Richmond, April 27, 2009

This is to certify that the certificate of organization of

H & B Surveying and Mapping, LLC

was this day issued and admitted to record in this office and that the said limited liability company is authorized to transact its business subject to all Virginia laws applicable to the company and its business. Effective date: April 27, 2009

State Corporation Commission
Attest:

Joel H. Peck
Clerk of the Commission

SCC ID: S2905604

CIS0322

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

SCC eFile

Business Entity Details

Help

H & B Surveying and Mapping, LLC

General

SCC ID: S2905604
Entity Type: Limited Liability Company
Jurisdiction of Formation: VA
Date of Formation/Registration: 4/27/2009
Status: Active

Principal Office

612 HULL STREET STE 101B
RICHMOND VA23224

Registered Agent/Registered Office

TIMOTHY H GUARE
TIMOTHY H GUARE PLC
6802 PARAGON PL STE 100
HENRICO VA 23230
HENRICO COUNTY 143
Status: Active
Effective Date: 7/2/2009

Select an action

- File a registered agent change
- File a registered office address change
- Resign as registered agent
- File a principal office address change
- Pay annual registration fee
- Order a certificate of fact of existence
- Submit a PDF for processing (What can I submit?)
- View eFile transaction history
- Manage email notifications

New Search | Home

Screen ID: e1000

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
0407005432

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

PROFESSIONS: LS

H & B SURVEYING & MAPPING LLC
612 HULL ST
SUITE 101B
RICHMOND, VA 23224

DPOR

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

Jay W. DeBoer Director

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)

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
0411001268

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

PROFESSIONS: LS

H & B SURVEYING & MAPPING LLC
2105 ELECTRIC RD SW STE 103
ROANOKE, VA 24018

DPOR

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

Jay W. DeBoer Director

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)

(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411001268 EXPIRES: 02-28-2018
PROFESSIONS: LS
H & B SURVEYING & MAPPING LLC
2105 ELECTRIC RD SW STE 103
ROANOKE, VA 24018

(FOLD)

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

DPOR-PC (05/2015)

Commonwealth of Virginia

State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

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

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

That the period of its duration is perpetual; and

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

Nothing more is hereby certified.

Signed and Sealed at Richmond on this Date:
July 25, 2017

Joel H. Peck

Joel H. Peck, Clerk of the Commission

CISECOM
Document Control Number: 1707256648

SCC eFile
FAST. SIMPLE. SECURE.

SCC eFile

- SCC eFile Home Page
- Check Name Distinguishability
- Business Entity Search
- Certificate Verification
- FAQs
- Contact Us
- Give Us Feedback
- My Favorites

Business Entities

UCC or Tax Liens

Court Services

Additional Services

SCC eFile
Business Entity Details

Rinker Design Associates, P.C.

General

SCC ID: 02270627
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 2/24/1982
Status: Active
Shares Authorized: 20000

Principal Office

9385 DISCOVERY BOULEVARD
SUITE 200
MANASSAS VA20109

Registered Agent/Registered Office

JOHN S WISIACKAS
ODIN FELDMAN & PITTLEMAN PC
1775 WIEHLE AVENUE STE 400
RESTON VA 20190
FAIRFAX COUNTY 129
Status: Active
Effective Date: 8/27/2012

Select an action

- File a registered agent change
- File a registered office address change
- Resign as registered agent
- File an annual report
- Pay annual registration fee
- Order a certificate of good standing
- Submit a PDF for processing (What can I submit?)
- View eFile transaction history
- Manage email notifications

Add to My Favorites | New Search | Home

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
0410000220

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

PROFESSIONS: ENG

RINKER DESIGN ASSOCIATES PC
4301 DOMINION BOULEVARD, SUITE 100
GLEN ALLEN, VA 23060

DPOR

Jay W. DeBoer, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)

(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
PROFESSIONAL CORPORATION BRANCH OFFICE REGISTRATION
NUMBER: 0410000220 EXPIRES: 02-28-2018
PROFESSIONS: ENG
RINKER DESIGN ASSOCIATES PC
4301 DOMINION BOULEVARD, SUITE 100
GLEN ALLEN, VA 23060

(FOLD)

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

DPOR-PC (05/2015)

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
0410000156

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

PROFESSIONS: ENG, LS

RINKER DESIGN ASSOCIATES PC
927 MAPLE GROVE DR STE 105
FREDERICKSBURG, VA 22407

DPOR

Jay W. DeBoer, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)

(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
PROFESSIONAL CORPORATION BRANCH OFFICE REGISTRATION
NUMBER: 0410000156 EXPIRES: 02-28-2018
PROFESSIONS: ENG, LS
RINKER DESIGN ASSOCIATES PC
927 MAPLE GROVE DR STE 105
FREDERICKSBURG, VA 22407

(FOLD)

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
0402035812

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

STEVEN SCOTT SHROPSHIRE
5203 YELLOW BIRCH DRIVE
FREDERICKSBURG, VA 22407

DPOR

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

(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
01-31-2019

NUMBER
0402043185

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

CRAIG ANTHONY PONTE
513 RIDGE TOP ROAD
RICHMOND, VA 23229

DPOR

Jay W. DeBoer Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title:
John Douthat – Vice President, Project Management

b. Project Assignment:
Design-Build Project Manager (DBPM)

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) :
Allegheny Construction Company, Inc., Full Time Employee/Owner

d. Employment History: With this Firm **33** Years With Other Firms **0** 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):

2002 – Present: Allegheny Construction Company, Inc.
As vice president and secretary, John is an owner of the company with the key responsibilities of project management, project estimating, and field engineering. Since joining the firm in 1984, John has held many roles. Today, John regularly manages VDOT projects where he has overall accountability for all aspects of project performance and delivery, including design, construction, safety, quality, schedule, budget, stakeholder and VDOT engagement, as well as procurement and furnishing of all materials, equipment, labor and services. John has been instrumental to the successful VDOT and municipality contracts that Allegheny has completed in the last 30 years.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
University of Virginia, Charlottesville, VA / BS, Civil Engineering / 1984

f. Active Registration: Year First Registered/ Discipline/VA Registration #:
Not Applicable

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 project; projects older than fifteen (15) years will not be considered for evaluation.*

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

VDOT, Route 231 (N. Blue Ridge Turnpike), Mulatto Run Bridge Replacement, Madison County, VA. Project manager for the replacement of existing bridge over Mulatto Run with a concrete structure and new approaches on both ends. Project management included preparing bid, letting subcontracts, purchase orders, preparing schedules, and submittals while supporting the Superintendent on-site. Total construction cost: $3,591,062 *(Allegheny Construction Company, November 2014 – March 2016)*

VDOT, Route 6 (West River Road), Replacement of Hardware River Bridge and Approaches, Fluvanna County, VA. Project manager for the replacement and widening of the bridge and approaches over the Hardware River. The bridge was widened significantly to 44 ft. allowing for wider shoulders and raised 20 ft. for the new roadway alignment. Project management included preparing bid, letting subcontracts, purchase orders, preparing schedules, and submittals. While supporting Billy Carder (CM) the Project Superintendent, Paul Decker (proposed Construction QC Manager) who oversaw forming and pouring the decks, and Dave Mathis (proposed Project Superintendent) who oversaw grading activities. Total construction cost: $4,388,409 *(Allegheny Construction Company, March 2014 – August 2015)*

VDOT/City of Martinsville, Liberty Street Widening, Martinsville, VA. Project manager for the construction to widen 0.475 miles of an urban minor arterial undivided roadway, including demolition, grading, excavation, storm drainage, water line modifications, and traffic maintenance and new signals. Project management included letting subcontracts, purchase orders, preparing schedules, tracking quantities for the pay requests and supporting Patrick Leary (proposed Safety Manager) who served as the on-site project manager and safety officer as well as Dave Mathis (proposed Project Superintendent) who served as the grading superintendent. Total construction cost: $3,068,619 *(Allegheny Construction Company, November 2012 – December 2013)*

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

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

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title:
S. Scott Shropshire, PE – Director of Construction Services, Southern Region

b. Project Assignment:
Quality Assurance Manager (QAM)

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):
Rinker Design Associates, P.C., Full Time Employee

d. Employment History: With this Firm **2** Years With Other Firms **17** 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):

2015 – Present: Rinker Design Associates, P.C.
Scott is responsible for overseeing and managing all elements of construction engineering and providing overall direction of RDA's Construction Services Division in the Fredericksburg and Richmond offices. His duties include active contract management, monitoring field inspections/ testing, strong emphasis on and enforcing QA/QC specifications, providing accurate project documentation/records, and determining construction solutions to design and unforeseen field conditions. He also serves as responsible charge engineer (RCE) and QA/QC manager in the field for traditional design-bid-build (DBB) and design-build (DB) contract work.

2014 – 2015: A. Morton Thomas & Associates, Inc.
As quality control manager (QCM), Scott worked exclusively on design-build projects as lead QC. Responsible for the QC documentation related to inspection, reporting and testing of all materials used and work performed, in addition to establishing and maintaining the Materials Register on the projects.

2004 – 2014: Virginia Department of Transportation
As Fredericksburg District area construction engineer, Scott was responsible for providing leadership and technical guidance for inspectors, construction managers, contract administration, and consultant staff in the delivery of the Six Year Improvement Program's highway construction segment via traditional DBB and DB procurements.

2002 – 2004: Johnson, Mirmiran & Thompson, Inc.
As traffic engineer, Scott provided roadway and traffic engineering services as well as management on various transportation projects to multiple clients.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
Virginia Military Institute, Lexington, Virginia / BS, Civil Engineering / 1996

f. Active Registration: Year First Registered/ Discipline/VA Registration #:
2005 / Professional Engineer / Virginia #0402035812

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 project; projects older than fifteen (15) years will not be considered for evaluation.*

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

FHWA-EFLHD, US Route 1/Jefferson-Davis Highway Improvements at Fort Belvoir, Fairfax County, VA. As quality control manager, Scott was responsible for project quality control inspection and testing, establishing and maintaining the Materials Register in accordance with the project QA/QC Manual, as well as, coordinating and addressing RFIs and shop drawing reviews for the widening of US Route 1 to six lanes divided. His role also included establishing and maintaining the SWPPP, coordination of all applicable permits to include the VPDES permit, reviewing and maintaining project diaries and daily work reports, generating and compiling

weekly work reports for the QAM. His responsibilities included construction oversight of TMP, utility coordination, bridge demolition/replacement, pile driving, and drilled in caissons. Scott was also responsible for coordinating with the contractor (during design and during construction), FHWA-EFLHD, VDOT, Fort Belvoir, Fairfax County, and utility companies to ensure that the design/construction requirements of the contract were met and to expedite the concurrence for associated services. During construction, he provided field engineering decisions via coordination with QAM, FHWA-EFLHD, and VDOT to assist the contractor in addressing differing conditions and provided corrective measures to rectify non-conforming construction elements. This input and integration into construction included MOT elements, drainage features, bridge decks, and fill slopes in confined spaces. In several cases, the field coordination resulted in plan revisions to better align with the field conditions and best means and methods of construction. This project involved contract work under the purview of the FHWA-EFLHD consisting of 3.66 miles of roadway widening from four to six lanes along US Route 1/ Jefferson-Davis Highway under urban conditions. The scope of work included roadway excavation, embankment, subgrade and drainage improvements, twin bridges over Accotink Creek, paving, and sound walls. *(A. Morton Thomas & Associates, Inc., March 2014 – April 2015)*

VDOT, I-95/VA Route 207 Interchange Improvements, Caroline County, VA. As the responsible charge engineer for this federal oversight project, Scott was responsible for the contract administration, construction, and quality assurance inspections and testing as well as coordinating and addressing RFIs and shop drawing reviews for improvements to the I-95 interchange at VA Route 207. His role also included coordination of roadway design technical and construction issues, survey, ROW acquisition, and utility coordination. Scott's project responsibilities extended to construction oversight of TMP, utility coordination, earthwork, subgrade and drainage improvements, paving, sign structures, and traffic engineering elements. During construction, he was responsible for coordinating with the contractor, FHWA, VDOT, Caroline County, utility companies, and adjacent business owners to ensure that the construction requirements of the contract were met and to provide updates to the FHWA area engineer on project concerns, issues, and progress. Additionally, Scott monitored the contractor's and subcontractor's QC program by reviewing inspection and test reports from his quality assurance inspection staff. In addition to actively monitoring the inspection staff, he performed periodic evaluations of the project records at regular intervals including (but not limited to): the Materials Notebook, Project Daily Work Reports, Force Accounts/Work Orders, and density reports. At the time of the invoice, missing documentation for identified pay items would be withheld until the documentation was received. Scott provided field engineering decisions to assist the contractor in addressing differing conditions and provided corrective measures to rectify non-conforming construction elements. In several cases, field coordination resulted in the best means and methods of construction. *(VDOT, June 2009 – June 2011)*

VDOT, VA Route 3/Piankatank River Bridge, Matthews/Middlesex Counties, VA. As the area construction engineer, Scott monitored, supervised, and provided technical expertise for the replacement of the existing superstructure, coupled with major rehabilitation of the substructure for the two-lane, 30-span, 2,100-linear-ft. river crossing. In this role, he was fully integrated with the project team, providing supervisory direction and control authority for making and approving engineering decisions during construction. His responsibilities also included coordination of bridge design revisions, construction implementation, survey, right of way evaluation, and utility coordination. Additional project obligations included construction oversight of TMP, utility relocations, formwork, reinforced steel, hydraulic cement operations, sign structures, and traffic engineering elements. During construction, Scott was responsible for coordinating with the contractor, VDOT, local government, utility companies, and adjacent property owners to ensure that requirements of the contract were met. He also monitored the construction QC program by reviewing inspection and test reports from his QA inspection staff. In addition to actively monitoring the inspection staff, he performed periodic evaluations of project records at regular intervals including (but not limited to): the Materials Notebook, Project Daily Work Reports, Force Accounts/Work Orders, and testing reports. He also processed pay requests and provided field engineering decisions address differing conditions as well as how to correct non-conforming construction elements. Through his efforts, three pending Notices of Intent to File Claim were resolved. *(VDOT, October 2012 – April 2014)*

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

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

Not Applicable

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title:
Craig Ponte, PE – Manager

b. Project Assignment:
Design Manager (DM)

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) :
Louis Berger U.S., Inc., Full Time Employee

d. Employment History: With this Firm **12** Years With Other Firms **2** Years
Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):

2017 – Present: Louis Berger, Manager
Craig is currently a manager with Louis Berger in the Richmond office where he is responsible for the management and quality control of transportation projects throughout Virginia and the District of Columbia. He is currently serving as a deputy project manager and lead structural designer on a major P3 design-build project in Virginia valued at more than $2.3 billion. Craig is also responsible for managing and delivering structural engineering services to the District of Columbia under Louis Berger's on-call engineering contract including the load rating and repair of complex, historic, and aging structures throughout the District. Additionally, Craig is responsible for the development, growth, and quality of the firm's structural engineering staff based in Virginia.

2015 – 2017: RK&K, Project Manager
Craig served as a project manager with RK&K in the Richmond office and was responsible for project management and quality control on a wide variety of transportation projects throughout the Commonwealth. Craig managed and delivered diverse transportation projects involving the design of new bridges and associated structures. Part of these responsibilities included design and quality control on a $100+ million design-build project for VDOT. Craig also provided project management for a pre-scoping, feasibility study, and stage I design (TS&L) for the replacement of two structurally deficient brides for VDOT. As project manager, Craig was responsible for the firm's communications with VDOT including Central Office and District staff. He was also responsible for coordination of sub-consultants across associated disciplines including materials testing, surveying, geotechnical, roadway, and railroad coordination. Craig was also responsible for the development and control of scope, budget, and schedule as well as project quality control. While at RK&K, Craig also was responsible for the structural components of a major EIS document for the development of regional interstate highways and harbor crossings in the Hampton Roads region, culminating in a $3.3 billion preferred alternative, requiring planning level design and close coordination with VDOT Central office staff.

2004 – 2015: Ammann & Whitney (now Louis Berger), Associate
Craig served as associate with Ammann & Whitney in the Richmond office. Ammann & Whitney has since merged and has become fully incorporated with Louis Berger. With Ammann & Whitney, Craig served as structural engineer, construction manager, and project manager on a wide variety of transportation projects throughout Virginia, the District of Columbia and across the United States. Craig was responsible for structural engineering for the design, rehabilitation, and maintenance, and reconstruction of bridges. Notably, Craig served as a structural engineer for design on the Huguenot Bridge replacement project in Richmond, Virginia, valued at more than $36 million. Craig was also served as design manager and engineer of record for a VDOT design-build project valued at more than $3 million.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
Syracuse University, Syracuse, New York / BS, Civil Engineering / 2003 / Structural Engineering

f. Active Registration: Year First Registered/ Discipline/VA Registration #:
2009 / Professional Engineer / Virginia #043185

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 project; projects older than fifteen (15) years will not be considered for evaluation.*

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

VDOT/Ferrovial Agroman, Transform I-66 Outside the Beltway, Fairfax County, VA. Craig is the current deputy project manager and lead structural engineer for improvements to this heavily traveled and critical roadway leading to Washington, DC, including the design of four express lanes within the median for this 22.5-mile, multi-modal corridor to reduce traffic congestion. Craig is responsible for structural design for the reconstruction of complex interchanges at State Route 28 and US 50, as well as the addition of seven miles of new express lanes (Segment 2). The final design includes: roadways, 27 bridges, 129 retaining walls, six miles of sound walls, drainage, lighting, 77 sign structures, MOT scheme and incorporation of ITS requirements within the project limits. Craig is responsible for the structural engineering and plan preparation for the 18 bridges in Segment 2 along with walls and associated structures. This P3 design-build project is valued in excess of $2.3 billion. (Louis Berger, 2017-Present)

VDOT, Route 360 Bridges over Route 360 Business & NSRR, Amelia County, VA. Project manager for pre-scoping alternatives analysis and Phase 1 (TS&L) design services for the replacement of two structurally deficient steel girder bridges. Craig was responsible for the firm's communication with VDOT, including Richmond District staff and project manager, as well as communications with sub-consultants and the other disciplines across this multi-discipline project. In-depth inspection and detailed bridge condition assessment were performed to identify the most cost effective method to correct the deficiencies through rehabilitation or replacement. Following the condition assessment, seven feasible alternatives were identified for life-cycle cost analysis. VDOT's Common Sense Engineering (CSE) principles were implemented allowing for a replacement in-kind options. Craig coordinated the CSE process, authored, and obtained the necessary design waivers from Central Office. Our study concluded that $2 million was saved by utilizing CSE principles. Ultimately, a two span steel structure was selected as the preferred alternative and designed to 30% design and construction plan preparation. This project is valued in excess of $9 million and is funded with State of Good Repair funds. (RK&K, 2015-2017)

VDOT, Multiple Culvert Rehabilitation Project, Region 2, Richmond, Fredericksburg, and NOVA Districts, VA. Craig was the design manager and engineer of record for this design-build project to rehabilitation or replace structures throughout VDOT Region 2. Craig coordinated, supervised, and checked the hydrologic and hydraulic (H&H) studies, structural design, structural detailing, outlet protection (rip rap) calculations, construction plans, roadside development plans, E&S plans, SWPPP plans, TMP plans, shop drawing review, and quality control. (Ammann & Whitney [now Louis Berger], 2009-2011)

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

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

Not Applicable

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title:
William (Billy) Carder – Bridge Superintendent

b. Project Assignment:
Construction Manager (CM)

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) :
Allegheny Construction Company, Inc., Full Time Employee

d. Employment History: With this Firm **25** Years With Other Firms **10** 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):

2002 – Present: Allegheny Construction Company
Billy has held many roles since joining Allegheny in 1992. Over the last 15 years, his main roles have been as a construction manager, project supervisor and bridge superintendent. Billy has managed the day-to-day construction activities for multiple bridge replacement projects across Virginia and North Carolina. From total bridge replacements to historic rehabilitations, his work has encompassed quality control, materials coordination, job site safety, owner relations, and ensuring compliance with all environmental regulations and permit requirements. Billy provides coordination with subcontractors, employee and equipment activities, as well as field construction expertise to teams to facilitate the incorporation of specific construction techniques and minimize risk.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
University of Alabama, Tuscaloosa, AL / Undergraduate Studies / 1975
Virginia Western Community College, Roanoke, VA / Undergraduate Studies / 1976

f. Active Registration: Year First Registered/ Discipline/VA Registration #:
Expiration 2021 / VDOT/VTCA Erosion & Sediment Control Certification / #1-05891
2016-2020 / Intermediate Work Zone Traffic Control Contractor Certification / #050316751
2015-2020 / NCCCO Certified Crane Operator / #050922051R
2017-2019 / Current First-Aid and CPR Training / # 1094284
2013 / Confined Space Training – Excavation Safety for Competent Person Training / N/A
Billy will hold a Virginia DEQ Responsible Land Disturber (RLD) prior to the commencement of construction.

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 project; projects older than fifteen (15) years will not be considered for evaluation.*

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

VDOT, Route 20 over Slate River, Buckingham County, VA. Bridge superintendent for construction of a 360-ft. bridge spanning the Slate River and the demolition of the existing bridge. Billy was responsible for all day-to-day operations to include shoring, pile driving, steel erection and deck placement. Billy coordinated all sub-contractors to include an MSE wall and a DBE reinforcing steel installer. Project was delivered with no time lost injuries and ahead of scheduled earning 100% of the allowable bonus. Total construction cost: $6,575,841
(Allegheny Construction Company, January 2015 – July 2017)

VDOT, Route 622 over Cascade Creek, Pittsylvania County, VA. Project and bridge superintendent for a fast-track project to replace a structurally deficient bridge. Billy managed all on-site employees and equipment, coordinated delivery of materials and on-site scheduling of subcontractors. Major responsibilities included supervising demolition of existing bridge, installation of piling and substructure concrete, assisting Allegheny office in preparation of the truss assembly and erection plan assembly and erection of VDOT provided prefabricated galvanized truss bridge, forming and pouring of decks and on-site coordination and direction of Allegheny grading support team and subcontractors. Project was delivered ahead of the six-month schedule with no lost time injuries and received 100% of allowable job bonus. Total construction cost: $1,517,071 *(Allegheny Construction Company, July 2015 – December 2015)*

VDOT, Route 623 (Twin Bridges Road) Bridge Replacement, Green Bay, VA. Project superintendent for replacement of a structurally deficient bridges over the Norfolk Southern Railway (NS) and Buckingham Branch Railroad (BB) with three (3) galvanized steel truss bridge, approximately 400 ft. of approach roadway and turn lanes on Route 360. Billy managed all on site employees and equipment, coordinated delivery of materials and on-site scheduling of subcontractors. Major responsibilities included supervising the installation of piling and substructure concrete, assisting Allegheny office in preparation of the truss assembly and erection plan, assembly of truss bridges, coordinating work with NS and BB flagmen, erection of truss bridges, demolition of existing bridges and on-site coordination and direction of Allegheny grading support team and subcontractors. The project was completed on time and on budget. Total construction cost: $2,926,075 *(Allegheny Construction Company, March 2014 – June 2015)*

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

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

Current assignment: Franklin Road Bridge over NS, City of Roanoke, VA
Role: Bridge Superintendent
Anticipated Duration: Ongoing project. If selected for the I-81 Bridge Replacement project, Billy will be replaced with two other bridge superintendents.

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: Route 20 Bridge Replacement over Slate River Location: Buckingham County, VA	Name: VDOT Staff Engineers	Name of Client/ Owner: VDOT Phone: 434.392.4700 Project Manager: Walter Blackwell Phone: 434.395.8095 Email: walter.blackwell@vdot.virginia.gov	10/2017	07/2017	$6,575	$6,605 Final pending	$5,454

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.

The existing Route 20 bridge remained in service during construction to maintain traffic and reduce impacts to motorists.

Firms Role: Allegheny served as the general contractor for roadway realignment and replacement of the Route 20 (South Constitution Road) bridge over the Slate River in Buckingham County, Virginia. Allegheny self-performed the erosion and sediment control, shoring, pile driving, substructure concrete, beam erection, superstructure concrete and all roadway excavation, aggregate placement and traffic control. Allegheny also performed the demolition of the existing bridge.

Louis Berger collaborated on the design of an innovative moveable overhang buck removal system. Allegheny working, with Louis Berger's Richmond office, modified a boom truck to function as a moveable working platform for the removal of the bridge overhang forming system. This modification greatly increased Allegheny's ability to rapidly remove deck forming while providing maximum safety to employees working in elevated conditions.

Project Narrative: The existing bridge on Route 20 over the Slate River was structurally deficient, and at 25.26 ft. wide, the structure was considered a narrow bridge to current design standards. To improve overall safety of the bridge, VDOT designed a new bridge, slightly longer and significantly wider at 47 ft. The new roadway was realigned to improve the bridge approaches, including a horizontal curve south of the river.

The new bridge was constructed parallel to the existing structure to maintain traffic during construction and reduce impacts to motorists.

The project was completed three months ahead of schedule.

Evidence of Good Performance: Allegheny was able to execute an aggressive schedule and deliver a quality, timely project by maintaining strong lines of communication with employees, subcontractors, VDOT and all other parties involved. Safety and environmental aspects were given priority so issues that distracted from workmanship did not arise.

During the project, Allegheny received a CQUIP score of 97.4%. Allegheny finished this two year project three months ahead of schedule, delivered a quality project with no environmental or safety mishaps and earned a $125,000 bonus.

Similar Scope Elements:

- ✓ Multi-span, 360-ft. bridge
- ✓ Demolition of existing bridge
- ✓ Existing bridge in service during construction
- ✓ MOT
- ✓ Environmental
- ✓ Safety
- ✓ Roadway
- ✓ Project management
- ✓ Completed ahead of schedule and on budget

Similar Staff:

- ✓ William (Billy) Carder, *Bridge Superintendent*
- ✓ Construction Bridge Crew
- ✓ Craig Ponte, PE, *Design Manager*

DBE Performance:
Allegheny exceeded the DBE goal.

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: Route 6 (West River Road), Replacement of Hardware River Bridge and Approaches Location: Fluvanna County, VA	Name: VDOT Staff Engineers	Name of Client/ Owner: VDOT Phone: 540.738.6261 Project Manager: Mauris Mackenzie Phone: 434.422.9793 Email: mauris.mackenzie@vdot.virginia.gov	08/2015	08/2015	$4,388	$4,430	$3,533

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.

Firms Role: Allegheny served as the general contractor on this project for the replacement and widening of the bridge and approaches over the Hardware River on Route 6 (West River Road) in Fluvanna County, Virginia. Allegheny self-performed the erosion and sediment control, shoring, pile driving, substructure concrete, steel erection which included 160-ft.-long steel beams, superstructure concrete and all roadway excavation and traffic control. Allegheny also performed the demolition of the existing bridge.

Project Narrative: Built in 1935, the existing truss bridge on Route 6 (West River Road) over the Hardware River was structurally deficient and in need of replacement. VDOT designed a new 160-ft. single span concrete structure to be erected south of the existing bridge. The new design raised the bridge 30 ft. higher, where the terrain allowed for a smoother transition for the new approaches as well as the new bridge. In addition to the added height, the bridge was widened significantly to 44 ft. allowing for wider shoulders. The project included significant excavation and placement of fills on both sides of the river. Allegheny completed work on time and on budget in August 2015.

Evidence of Good Performance: Throughout the course of the project Allegheny received perfect CPE (contractor performance) scores. The project was completed on time and budget with no safety or environmental issues.

Steel erection during the construction of the Route 6 bridge replacement

Similar Scope Elements:
- ✓ Bridge replacement of similar size
- ✓ Completed on schedule and on budget
- ✓ Construction/MOT control
- ✓ Bridge demolition

Similar Staff and Project Role:
- ✓ Paul Decker, *Superintendent and Safety Manager*
- ✓ Dave Mathis, *Grading Superintendent*

DBE Performance:
Allegheny exceeded the DBE goal.

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: Bridge and Approaches over Naked Creek, Route 603 Location: Page County, VA	Name: VDOT Staff Engineers	Name of Client/ Owner: VDOT Phone: 540.778.2569 Project Manager: Robert S. Good Phone: 540.778.2068 Email: Robert.good@vdot.virginia.gov	4/2013	4/2013	$1,496	$1,500	$1,400

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.

Firms Role: Allegheny served as the general contractor on this project for the replacement of the existing bridge on Route 603 over Naked Creek in Page County, Virginia. Allegheny self-performed the erosion and sediment control, shoring, pile driving, substructure concrete, erection, superstructure concrete, roadway excavation and traffic control for this 201-ft.-long, three span bridge. Allegheny also performed the demolition of the existing bridge. Notably, Allegheny self-performed the installation of the required temporary bridge.

Project Narrative: The Naked Creek project required that Allegheny to provide and install a temporary bridge suitable to VDOT and capable of maintaining two-way traffic with H-20 loading for the life of the project. Allegheny provided the necessary investigation to design and construct the abutments and approaches, erect the bridge, and maintain it for the duration of the project. Once the temporary bridge was installed, the project required the demolition of the existing bridge and construction of the new structure. Once the project was complete, Allegheny was responsible for removing the temporary bridge and restoring the area to its natural condition. Allegheny completed work on time and on budget in August 2013.

Evidence of Good Performance: Throughout the course of the project Allegheny received perfect CPE (contractor performance) scores. The project was completed on time and budget with no safety or environmental issues.

Relevant Project Scope: In order to mitigate I-81 Exit 114 project risk, Allegheny intends to deploy a temporary bridge similar to the one supplied by Acrow Bridge for the Naked Creek project. Allegheny will deploy the bridge between the existing Exit 114 bridges. north and southbound interstate traffic will be alternately located onto the bridge as the existing bridges are taken out of service and replace. Utilizing this approach Allegheny can provide minimal disruption to the existing Interstate traffic, provide a safer work environment for the project team as they are removed from active traffic and the bridge and its decks can be built in one unit as opposed to half at a time.

Similar Scope Elements:

- ✓ Bridge replacement of similar size
- ✓ Completed on schedule and on budget
- ✓ Construction/MOT Control
- ✓ Bridge demolition
- ✓ Temporary bridge installation

Similar Staff and Project Role:

- ✓ Paul Decker, *Project and Bridge Superintendent*

DBE Performance:
Allegheny exceeded the DBE goal.

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: Huguenot Memorial Bridge Replacement Location: Henrico County, VA	Name: Skanska USA Civil Southeast, Inc.	Name of Client.: VDOT Phone: 804.786.2561 Project Manager: Russell Martin Phone: 804.786.4460 Email: Russell.martin@vdot.virginia.gov	08/2010	10/2013	$35,000	$40,000	$4,500 (all subconsultants included) $2,400 (Louis Berger only)

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.

Firms Role: Louis Berger (formerly operating as Ammann & Whitney) served as the design consultant project manager, coordinating and overseeing the work performed by other disciplines, including aerial and ground surveys, traffic data acquisition and analyses, roadway and stormwater management design services, redesign of an interchange along the south bank and initial cultural resource assessment of the site (part of the preliminary study).

Louis Berger staff also provided and managed construction support services for the duration of the project. Notable accomplishments during the construction phase included working with the contractor on alternate deck pouring sequences. Working closely with the contractor, we were able to eliminate construction delays due to utility relocation challenges at the start of the project. The project was completed on budget and three months early.

Project Narrative: This bridge is a vital transportation link in metropolitan Richmond, so traffic lanes had to remain open during construction. During preliminary design, the team developed preliminary layouts for six alternatives. A staged construction methodology was selected that minimized right-of-way impacts and kept traffic moving on the bridge. By placing Stage I of the new structure close to the existing structure, we were able to keep at least one sidewalk open during construction at all times.

The existing bridge had 41 piers, with six in the river and two in the canal. The new bridge has 17 piers, with five in the river and none in the canal. Pier placement was key to minimizing impacts on stream flow. The new structure incorporates aesthetic elements, including a railing that allows pedestrians and motorists to view the river, along with specially shaped piers and surface staining of many visible concrete elements, reminiscent of the old bridge. A portion of the existing open railing, which was cherished by the community but did not meet crash requirements, was preserved and put on a display in a nearby park.

Preliminary and final design and construction support services were provided for the replacement of the Huguenot Memorial Bridge. Built in 1949, the curved steel structure spans the James River, CSX Tracks, James River Parks and the historic Kanawha barge canal.

Maintenance of Traffic: In order to minimize disruption to traffic, the new bridge was built in stages along an alignment that was parallel to the existing structure. In developing the span arrangement, the team sought to minimize the number of piers, which in turn minimized the footprint and environmental effects from the new bridge. Due to local ground accelerations, the new bridge was designed to sustain seismic loads. Design for stream forces, wind loads and special military loading were other special structural considerations included in the project. Other work performed included hydraulic, hydrologic and scour analyses; cost estimates; existing bridge evaluation; replacement structures and span optimization design; repair and replacement alternatives evaluations; and public participation.

Right-of-Way: Right-of-way acquisition was required for this bridge replacement project. As prime for the project our staff oversaw the design of commercial and residential right-of-way acquisitions. Project plans for all relocations and partial property takes were prepared as part of this design-bid-build effort. Our team was responsible for identifying impacts to properties, conducting surveys, and preparing right-of-way maps.

Work was performed in the Richmond and Philadelphia offices.

Similar Scope Elements

- ✓ New Bridge Over Interchange
- ✓ Innovative Structural Design Minimized Traffic and Enviro Impacts
- ✓ Designed for Variety Dynamic Loads
- ✓ Collaborated with contractor to develop Innovative deck Pour Sequence to Avoid Delays
- ✓ Completed Three Months Ahead of Schedule
- ✓ Community/Stakeholder Outreach
- ✓ Utility Coordination/ Relocation
- ✓ ROW Acquisition
- ✓ Environmental Study/Permitting
- ✓ Staged Construction/MOT Control
- ✓ Lighting, Guiderails
- ✓ Storm Drainage/SWM
- ✓ Geotechnical
- ✓ Surveying

Awards

Virginia Transportation Construction Alliance (VTCA), Transportation Engineering Awards 2014
Honorable Mention—Engineering

DBE Performance:

For the Huguenot Bridge replacement project our team utilized DBE firms for geotechnical and survey services. The firms were VDOT-certified DBEs and our team complied with all agency and project DBE requirements.

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: River Crossing Complex Project—SR 0422, Section 4TR Interchange, Location: Montgomery County, PA	Name: J.D. Eckman, Inc.	Name of Client.: PennDOT Phone: N/A Project Manager: Michael Holva, PE Phone: 610.205.6831 Email: mholva@pa.gov	10/2013	12/2015	$16,800	$16,800	$1,500

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.

Firms Role: Louis Berger, formerly operating as Ammann & Whitney and as a subconsultant, was lead designer providing preliminary engineering, final design and construction support services for SR 0422 Section 4TR Trooper Road interchange as part of the River Crossing Complex project.

Project Narrative: Originally built in the 1960s the roadway was not capable of handling today's volume. To meet the objectives of the Section 4TR project—provide local and regional relief to SR 0422 commuter traffic, enhance safety and operational efficiency to/from SR 0422 for the community while minimizing local traffic impacts, and utilize the constrained site to construct the improved interchange within the right-of-way and without disturbing the environmentally sensitive surrounding areas—it was designed and constructed as a full movement interchange.

Traffic Control and Safety: During design an extensive traffic control plan was developed. Throughout the construction the team was able to maintain all lanes of travel along Trooper Road. Lane movements were clearly marked and signs were installed to direct traffic. A pedestrian detour was required. The team provided regular updates to PennDOT who posted construction updates and notifications on their website. The public could check in real time for updates. In order to rebuild and widen Audubon Road the roadway was closed to local traffic for one weekend. Significant coordination with the project stakeholders was required—residences, businesses, the church/school and a bus company. The construction was completed without any incident and to the satisfaction of the community. The project was completed in 897 calendar days without any incidents or accidents, a testament to the team's commitment to safety.

Right-of-Way and Environmentally Sensitive Resources: The single greatest challenge of the project was the physical footprint of the site in which the team had to work. The site, located in the heart of a bustling community, already affected by heavy traffic volume had limited room for expansion. Constrained by the right-of-way and environmentally sensitive resources, the team actively engaged the community and met with all the neighboring property owners to understand their concerns and provide solutions to mitigate them. The interchanges were carefully built into the landscape. Extensive excavation was required to clear and grade the site from the sound walls down to the roadway to accommodate the ramps and geometry of the loops. From the roadway additional earth was undercut to create new storm water BMPs. The contractor provided an alternate option during construction, T-walls (a panelized wall system). Additional land required excavation to bury the concrete straps that support the wall panels, then backfilled. The team worked with the contractor to develop a design for the T-walls that would satisfy the project requirements, while working through the construction sequence and staging to keep the project within the right-of-way.

Storm Water BMPs—Bioretention Basins: There was no room for storm water BMPs outside of the roadway and rock was discovered at or near the surface of the proposed BMP locations with no possibility for infiltration. The team utilized two bioretention/rain garden basins. Amended soils were added where needed. The amended soils allows for sediment dropout and filtering through vegetation while also allowing for minor amounts of infiltration. The area has been landscaped with native grasses, trees and shrubs. The site reduces runoff velocities, enhances infiltration and filters runoff. In addition, amended soils (41,000sy accounting for almost 1/8 of the contact totaling $2M) were used throughout the site to mitigate the volume of water runoff—41,000sy. To maximize the minimal area the team had to treat storm water runoff, amended soils were added to all disturbed areas and some previously untreated areas. The BMPs will maintain and protect existing water quality. Overall, all pollutants except for NO^3 were reduce to below their existing levels.

Quality Assurance/Control: A rigid set of check and balances were implemented during the design and construction process. The team established a project specific quality control program for the work. Throughout the design the team completed quality verification forms, which were required for each major submission. In preparation for each of the major deliverable submissions an independent audit was completed by a professional engineer. The team performed constructability reviews to ensure the project could be built as it was designed. They took into account the construction sequencing, staging, material delivery and laydown, site access, etc. With such a constrained site every inch was critical. Design decisions were made not only based on durability, maintenance requirements and cost, but also for ability to be implemented within the site. Quality and constructability reviews were completed before each major submission to PennDOT, who also conducted their own independent review of the documentation. Drawings were 100% complete before they were released for bid.

Work was performed in the Philadelphia office.

Similar Scope Elements:

- ✓ Designed Full Movement Interchange
- ✓ Constrained Project Site and Right-of-Way
- ✓ Environmental including permitting
- ✓ Extensive MOT Plan
- ✓ MSE and Retaining Walls
- ✓ Lighting and Guiderails
- ✓ Signs and Signage
- ✓ Minimal Disruption to Natural Resources
- ✓ Landscaped with Native Grasses, Trees and Shrubs
- ✓ Stakeholder Coordination
- ✓ Demolition of Structures
- ✓ Drainage and SWM—Designed Two Bioretention/Rain Garden Basins
- ✓ Geotechnical
- ✓ Amended Soils—41,000cy
- ✓ Removed 163,000cy of Earth to Bring Roadway Back 20ft
- ✓ Detailed Quality Management Plan
- ✓ Project Safety—Completed in 897 Calendar Days Without Any Incidents or Accidents

DBE Performance:
For the SR 0422 4TR project our team utilized DBE firms for geotechnical and survey services. Our 10% DBE goal for the design was successfully met. The firms were PennDOT-certified DBEs and our team complied with all agency and project DBE requirements.

ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

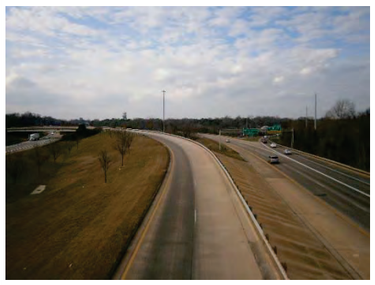
(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: I-77 HOT Lanes P3 Location: Mecklenburg and Iredell Counties, NC	Name: Ferrovial Agroman/W.C. English (joint venture)	Name of Client: North Carolina Department of Transportation (owner)/ Sugar Creek Construction LLC (client) Phone: 877-368-4968 (NCDOT) Project Manager: Virginia Mabry Phone: 919.707.2904 Email: vmabry@ncdot.gov	05/2016	12/2018	$655,000	$735,000	$12,500

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.

Firms Role: Louis Berger served as lead designer during the tender design phase and was engineer of record through the final design of the I-77 HOT Lanes P3 project. This is the first Public Private Partnership (P3) project to be executed by North Carolina Department of Transportation (NCDOT) and provides the addition of managed lanes along a 26-mile corridor of I-77. The addition of the HOT lanes was accomplished within the existing median with minimal need for additional right-of-way. HOT lanes are provided in both directions for the project limits. Two HOT lanes in each direction extend from I-277 to Catawba Avenue and then one HOT lane per direction to NC 150. The project stretches through dense populated suburban conditions from I-277 in uptown Charlotte and progresses to the north including major system to system interchanges with I-85 and I-485.

Project Narrative: Louis Berger is the lead designer providing design services and overall design management providing a design compliant with NCDOT needs and consistent with the concession agreement and technical requirements of the concessionaire. The design includes coordination with both Intelligent Transportation Systems (ITS) and electronic collection elements. Design responsibilities included: roadway, hydraulics, structures, traffic control, signing, lighting, signals, markings, ITS civil works, power drops, and permitting. Staff coordinated with other disciplines including location surveys, geotechnical, environmental documentation, right-of-way acquisition, utility coordination, identified bonus allocation projects, and power services for all contract electronic devices and evaluation of proposed ITS communications infrastructure.



Proactive Approach and Coordination: Our team provided a proactive management approach during tender design and carried that forward through the final design effort. During the tender, the project was developed in close coordination with our contract partner to ensure that the bid was compliant with the technical requirements of the concession agreement. During final design a careful approach to design management is being employed to provide a design that meets the requirements of the concessionaire while coordinating with NCDOT as ultimate owner of the roadway. Our team reached out to local communities and City of Charlotte through the project's public involvement program.

Environmental Protection and Permitting: Crossing environmentally sensitive Lake Norman and protecting the project-adjacent residential areas required extensive coordination with the Federal Environmental Regulatory Commission and the USACE Division of Water Quality. Project concerns addressed the Lake's dam and crucial power supply role in the area and the control of potentially contaminated spill from the project site. Our staff prepared the environmental management plan for the project including a storm water pollution prevention plan (SWPPP) and erosion and sediment control and compliance with the requirements of the categorical exclusion.

Maintenance of Traffic: Another key to the success of the project was development of an extensive TMP. The TMP maintained all existing lanes of traffic during peak hours throughout construction. The TMP incorporated only nighttime and other low volume periods for temporary lane closures through the use of signing barriers, and stripping. Detailed construction staging plans allowed for project flexibility and acceleration while minimizing utility conflicts and relocations. The multi-phase/modal TMP accommodated pedestrians, enhanced motorists' awareness, and protected workers since much of the project work was in urban setting that included multiple utility providers.

Project Controls/Reporting: The team oversaw the establishment of project controls for the contract and managed the overall project design budget, and design and quality compliance requirements including the development of corridor-wide construction standards, specifications, special provisions, directive drawings, design criteria, special specifications and general notes and design review standards. In addition a project-specific detailed design quality management plan (DQMP) was developed for the project. Lead by a dedicated quality manager the DQMP was be updated with every new task order, work order, and scope modification, identifying responsibilities, applicable operating procedures (OPs), and unique requirements.

Fast-track Schedule: Total integration of the project controls process, along with strict adherence to the DQMP, and constant coordination with the construction team, the design team was a major contributor in order to deliver the project in 42 months from financial close.

Design Improvements: Our team worked with the owner, concessionaire, contractor, and the City to revise the southern terminus of the project which allows traffic to better utilize the existing exits on the north side of uptown Charlotte. Originally designed with one flyover, the design team developed a concept to use three flyovers that maintains full access from the HOT lanes to the uptown area. While these flyovers incorporate the existing interchanges on I-277, traffic operation are significantly enhanced. In the design development stage to add additional lanes to the roadway, our team analyzed and refined NCDOT's policy on hydroplaning. Accounting for the speed at which hydroplaning occurs on roadways, our team researched the effects and prepared new standards that are now part of NCDOT's design approach and policy.

The major effort for the design was lead and performed in the Raleigh Office with critical staffing support provided from the offices in Richmond, Columbia, Miami, Dallas, Las Vegas, Needham, Portland, and Morristown.

Similar Scope Elements:

- ✓ First Design Build P3 Project in North Carolina
- ✓ Traffic Control Devices
- ✓ Detailed Quality Management Plan
- ✓ Environmental Protection and Permitting
- ✓ Environmental work with FREC and the USACE Division of Water Quality
- ✓ Geotechnical
- ✓ Key Developer Staff, Local Municipalities and Stakeholder Coordination
- ✓ Drainage and Stormwater Management
- ✓ Extensive MOT Plan for 26 Miles
- ✓ Utility Coordination
- ✓ Fast-track Schedule
- ✓ Interstate Widening
- ✓ Work Performed in Urban/Commercial area
- ✓ 20 Bridge Rehabilitation Replacement or Widening
- ✓ Public Involvement Participation
- ✓ ITS, Lighting and Signalization
- ✓ Coordination with 4 Railroad Companies
- ✓ Developed Detailed Project Control Procedures
- ✓ Refined NCDOT's Policy on Hydroplaning

DBE Performance:
Not applicable

Statement of Qualifications

I-81 BRIDGE REPLACEMENT AT EXIT 114

September 6, 2017

Contract ID Number: C00093074DB96

State Project Numbers: 0081-154-733, P101, R201, C501, B601, B616

Federal Project Number: IM-081-2(992)

Submitted by:

Allegheny Construction Co.
Incorporated 1963

In Association With:

Louis Berger