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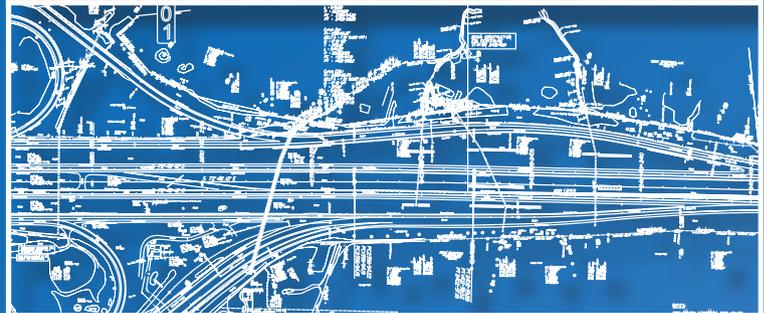


A Design-Build Project

I-64 Widening Exit 200 to 205

Henrico and
New Kent Counties, Virginia

State Project No.: 0064-043-602
Federal Project No.: NHPP-064-3 (499)
Contract ID No.: C00107458DB95



Statement of Qualifications



A JOINT VENTURE



December 15, 2016



3.2 Letter of Submittal



December 15, 2016

Mr. Joseph A. Clarke, PE
Alternate Project Delivery Division
Virginia Department of Transportation
1401 East Broad Street
Richmond, VA 23219

**RE: Letter of Submittal | Design Build | I-64 Widening Exit 200 to 205 | Henrico & New Kent Counties, VA
State Project No.: 0064-043-602 | Federal Project No.: NHPP-064-3 (499)
Contract ID Number C00107458DB95**

Dear Mr. Clarke:

3.2.1 Corman-E.V. Williams, a Joint Venture (Corman-EVW JV), 12001 Guilford Road, Annapolis Junction, MD 20701, a joint venture between Corman Construction, Inc. and E.V. Williams, Inc., is the legal entity who will execute the contract with VDOT and submits the following:

- One original Statement of Qualifications (SOQ) with full supporting documentation
- One CD-ROM containing the entire SOQ in a single cohesive Adobe PDF file
- 10 abbreviated copies of the original SOQ

3.2.2 Point of Contact	Secondary Point of Contact	3.2.3 Principal Officer of Legal Entity
<p>Jo Ellen Sines, DBIA, Vice President, Project Development Corman Construction, Inc. 12001 Guilford Road Annapolis Junction, MD 20701 301-343-5484 -Cell 301-953-0384 Fax jsines@cormanconstruction.com</p>	<p>Lou Robbins, PE, DBIA, Vice President Design-Build Corman Construction, Inc. 12001 Guilford Road Annapolis Junction, MD 20701 703-772-8566 -Cell 301-953-0384 Fax lrobbins@cormanconstruction.com</p>	<p>Arthur C. Cox, III, Vice President Corman Construction, Inc. 12001 Guilford Road Annapolis Junction, MD 20701 410-792-9400 Telephone ccox@cormanconstruction.com</p>

3.2.4 Corporate Structure: Corman-E.V. Williams, a Joint Venture is a construction joint venture of Corman Construction, Inc. and E.V. Williams, Inc. The Corman-EVW JV will share financial responsibility for the project. Corman and E.V. Williams will be jointly and severally liable with no limitations. Corman-EVW JV will provide a single 100% performance bond and single 100% payment bond.

3.2.5 Lead Contractor: Corman-E.V. Williams, a Joint Venture | **Lead Designer:** Whitman, Requardt & Associates, LLP.

3.2.6 Affiliated and/or Subsidiary Companies Table (Attachment 3.2.6) is in the Appendix.

3.2.7 Certification Regarding Debarment Forms (Attachments 3.2.7(a) and 3.2.7(b)) are in the Appendix.

3.2.8 Corman Construction, Inc. (C097-Active) and E.V. Williams, Inc. (W488-Active) VDOT Prequalification certificates are in the Appendix, along with evidence that our Joint Venture (JV070) is prequalified.

3.2.9 Surety Letters are in the Appendix.

3.2.10 SCC and DPOR information are in **Attachment 3.2.10** and supporting documentation are in the Appendix.

3.2.11 Corman-EVW JV is committed to achieving a 10% DBE participation goal for the entire value of the contract.

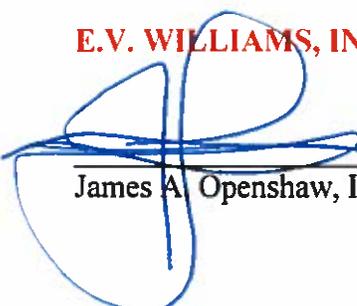
Sincerely,

CORMAN CONSTRUCTION, INC.

E.V. WILLIAMS, INC.



Arthur C. Cox, III, Vice President



James A. Openshaw, III, President

3.3 Team Structure



3.3 TEAM STRUCTURE

With a combined Design-Build portfolio of over \$1.9 billion, Corman Construction, Inc. (Corman) and E.V. Williams, Inc. (EVW) have teamed together to form Corman-E.V. Williams, a Joint Venture (Corman-EVW JV). Together, we come to VDOT with the hands-on experience and accomplished personnel it takes to execute the design, construction, and manage the risks of the I-64 Widening Exit 200 to 205 Design-Build project. Our two firms have an established history of working together. Corman and EVW have joined forces on other roadway projects in Virginia:



Figure 1: Corporate Organizational Chart

1. VDOT’s Design-Build Military Highway Continuous Flow Intersection (CFI) which is Virginia’s first CFI and reconstructs 3.6 miles of roadway in Norfolk at a contract cost of \$60 Million.
2. VDOT’s Route 17 widening project which widens 2.8 miles of Route 17 from four to six lanes in Newport News to relieve today’s 37,000 ADT and prepares for the future forecasted 59,000 ADT, including a new bridge over the Poquoson River costing \$25.2 Million.
3. Reconstructed the Tidewater Drive and Little Creek Intersection for the City of Norfolk, including roadway and bridge construction totaling \$6 Million.
4. Median expansion of I-64 from J. Clyde Morris Boulevard to Hampton Roads Center Parkway in Newport News, including demolition and reconstruction of the Harpersville Road Bridge over I-64 costing \$25 Million.

Through the years, Corman and EVW have built a solid reputation of strategically aligning with the design-build partners that meet project needs and requirements. For this project, the Corman-EVW JV selected Whitman, Reardon & Associates, LLP (WRA) as the Lead Designer who has over a century of experience, including delivering successful projects with both JV partners. They are currently teamed with Corman on VDOT’s Design-Build Fall Hill Avenue project as the Lead Designer and Design-Build Route 29 Solutions as the engineer leading the Berkmar Drive Extension element where they are working with Ryan Gorman, our proposed Design/Construction Integrator. Corman and WRA are partners on three other Design-Build projects in the Hampton Roads and Washington, DC areas with a combined value of \$95 Million. WRA also developed the 30% design bridging documents for VDOT’s I-64/Route 15 Zion Crossroads Diverging Diamond

Interchange (DDI) project where Corman was the Design-Builder and WRA developed preliminary plans and reviewed final plans submitted by the Corman Design-Build Team.

WRA also has fostered a strong working relationship with NXL Construction Services—the team’s Quality Assurance firm having teaming together on VDOT CEI contracts for years. The Corman-EVW | WRA Team delivers projects with seasoned professionals and resources, providing the highest quality to ensure that the project will be complete within budget and schedule.

Together, we are positioned to provide significant safety and operation improvements to the corridor.

3.3.1 Key Personnel: The Corman-EVW | WRA Team has assembled highly-qualified and experienced individuals and structured them for optimal performance. Our key staff and design firms come together with a shared history of successful projects and established working relationships. This established teaming will minimize VDOT’s risks and staffing requirements. Although our task leaders and technical staff are responsible for items, such as design, public involvement, and construction, everyone is responsible for project success. Table 1 below introduces our Key Personnel with resumes in the Appendix (Attachment 3.3.1). ***Please note that our Key Personnel are all full-time employees in their respective firms displayed on our Organizational Chart on Page 8 at the time of submitting this Statement of Qualifications and that there are no embedded employees within VDOT.***

.1 Design-Build Project Manager (DBPM)	Jo Ellen Sines, DBIA
.2 Quality Assurance Manager (QAM)	Michael Saunders, PE, CCM, DBIA
.3 Design Manager (DM)	Michael Russell, PE
.4 Construction Manager (CM)	Kyle Kern

Table 1: Key Personnel

Value-Added Staff: In addition to the above key personnel, the Corman-EVW | WRA Team appoints the following value-added staff to deliver a quality project on time and on budget. **DB** symbolizes having Design-Build experience:

DB Deputy Design Manager | Lead Roadway Engineer: Gail Kuttesch, PE (WRA) with 12 years’ experience in designing interchange and roadway projects. ***Gail filled these same positions for the design of the Design-Build Fall Hill Avenue project for the Corman/WRA Design-Build Team.*** She will report to and assist the Design Manager in coordinating the design discipline’s efforts and ensure work is in accordance with the design QA/QC requirements. As Lead Roadway Engineer, Gail will draw on her Design-Build experience working with Corman to deliver the team another quality design that is strategically coordinated with the construction team members. As Deputy Design Manager, Gail will provide an additional layer of oversight to the design and quality control.

DB Lead Structural Engineer Jeremy Schlusel, PE (WRA) has recent design-build experience with Corman and E.V. Williams’s affiliate Branch Highways as the Lead Bridge Engineer, including VDOT’s Design-Build Fall Hill Avenue Bridge over I-95 with Corman. ***Other design-build bridge design experience with Corman is the Route 29 Solutions Berkmar Drive Extension Bridge over South Fork of the Rivanna River.*** Jeremy has over 20 years of experience in bridge design and rehabilitation having worked on over 110 tasks within the Richmond District since 2003, including major bridge rehabilitation, bridge replacements, bridge widenings, studies, and construction engineering services. ***More than 20 of these tasks were constructed by Corman.*** Jeremy will report to the Design Manager and be in charge of structural engineering, including plans, estimates, and specifications. ***He has extensive experience designing interstate bridge projects for VDOT, including I-64 over Route 33 in the Richmond District, I-81 over New River Bridges in the Salem***

District, I-81 over Maury River and I-81 over Buffalo Creek bridge replacement projects in the Staunton District. He will also review structural shop drawings and assist the DBPM, CM, and DM during construction.

DB Design | Construction Integrator: Ryan Gorman, PE, DBIA (Corman-EVW JV) will coordinate with the contractor and designers and ensure the design meets all VDOT's requirements. He has been involved with local design-build projects since 2007 and has over 20 years of heavy civil construction experience. As a Virginia PE, Ryan performs engineering designs and estimates for construction. His career path as Corman's Superintendent to Sr. Project Manager to Design-Build Project Manager to most recently Vice President, Design-Build has broadened his attention to detail and quality which will enhance the Corman-EVW | WRA Team's position in meeting VDOT's requirements. Ryan will review design submittals for conformance to project requirements, constructability and scheduling needs. ***He is currently the Design/Construction Integrator AND Responsible Charge Engineer (RCE) on the first contract in Virginia to require a dedicated RCE position – the \$116 Million Design-Build Route 29 Solutions project*** where Ryan has been embedded with the WRA Design Team in their Richmond office during bridge and roadway design development for the Berkmar Extension and wet utility design portion of that project. He will report to the DBPM with lines of communication to the DM and CM.

DB Lead Geotechnical Engineer Jeff Basford, PE (WRA) has over 16 years' experience in subsurface explorations, geotechnical analysis, design of pavement sections and shallow and deep foundations, slope stability analysis, design of pavement sections and shallow and deep foundations, slope stability analysis, concrete and geo-synthetic reinforced earth retaining structures, and in-situ testing and verification during construction. ***Jeff recently completed geotechnical engineering for Design-Build Fall Hill Avenue and three design-build projects in Washington, DC and in Hampton Roads, all with Corman. He is currently the Lead Geotechnical Engineer on the Design-Build I-81 Halls Bottom Road Bridge Replacement project and on the I-81 New River Bridge Replacement project in the Salem District and was the Lead Geotechnical Engineer on the I-81 Maury River and Buffalo Creek Bridge Replacement projects in the Staunton District.*** Jeff has a complete understanding of the VDOT Manual of Instruction, Chapter 3, will report to the Design Manager, and collaborate with the Structural Design Engineer and Construction Manager.

DB Public Relations Manager: Mike Carosi (Seventh Point) has over 21 years' experience leading outreach on major transportation projects and ensuring robust public affairs, community outreach, marketing, advertising, and strategic public communications programs. His knowledge and experience include collaboratively planning and delivering community and media relations programs associated with transportation construction and road building. ***Mike is currently serving in a similar role on the Corman | E.V. Williams' Military Highway project*** and will report to the DBPM with an open line of communication back to VDOT.

DB MOT Engineer: Dana Trone, PE, PTOE (WRA) has over 19 years of experience in traffic engineering, including developing Transportation Management Plans (TMP) and MOT design. She has developed TMPs for construction on interstates in Virginia and VDOT Design-Build projects, and prepared the 30% design for the Design-Build I-495 North Extension Shoulder Use Lane project. Dana will report to the DM and collaborate with the ***Construction MOT Manager.***

DB Lead Environmental Compliance and Permitting: Taylor Sprenkle, PWD (WRA) will report to the Design Manager and secure any environmental permit modifications. He has over 12 years of experience with environmental reviews and permitting for transportation projects, including the I-81 Truck Climbing Lanes in Montgomery County and the 17-mile Route 460 project in the City of Suffolk and Isle of Wight County. During construction, Taylor will work with the Construction Environmental Manager to fulfill permit requirements.

DB Weigh Station Specialist: Lou Robbins, PE, DBIA (Corman-EVW JV) has over 45 years of design experience, including performing preliminary and final design for five weigh stations in Maryland and

New Jersey for SHA and NJDOT. During design, he will review the design’s impact on the operation of the weigh station with the design team, and if the weigh station remains open during construction, work with the construction team to provide specialized MOT plans to accommodate the large volume of trucks. Lou will review items, such as the additional acceleration needs of the heavier vehicles and limited stopping distances and maneuverability. He will report to the Design Manager.

DB Architect for Pedestrian Tunnel: Doug Kelso, AIA (WRA) has over 40 years of experience in leadership and coordination of many projects, including for DOT clients, such as administration/operations buildings. He served as the Lead Architect and Project Manager on design-build projects, most recently the LaPlata Readiness Center in LaPlata, MD.

DB MEP for Pedestrian Tunnel: Kevin Fallin, PE LEED AP BD+C PMP, CEM (WRA) oversees a group of architects and engineers to produce building designs for new construction and renovation projects in governmental, municipal, commercial, mission critical, and higher education environments. He has over 23 years’ experience in the design of government, commercial, and higher education facilities. As a Senior Mechanical Engineer, he uses his past experience to enhance energy efficiency, optimize system performance, and reduce operating costs. Kevin is involved in commissioning, sustainable design and documentation, troubleshooting, preparation of due diligence reports, property condition assessments, and energy audits. His Design-Build experience is extensive, including P-621 MCEG Quantico, and LaPlata Readiness Center. Kevin will report to the DM.

3.3.2 Organizational Chart: The Corman-EVW | WRA Team organizational chart on Page 8 illustrates our “chain of command” of all companies, including individuals responsible for pertinent disciplines proposed on our team and notes key personnel. Solid lines identify the reporting relationships of our team members in managing, designing and constructing the project and illustrate clear reporting lines from the DBPM to the design and construction team. Dashed lines represent indirect reporting and obligations. The chart also shows a clear separation and independence between the Quality Control (QC) and Quality Assurance (QA) programs for construction, including separation between QA and QC inspection and field/laboratory testing per Minimum Requirements for Quality Assurance and Quality Control on Design Build and P3 Projects, January 2012.

Functional Relationships – Integrate to Facilitate: Design-Build unites the contractor and designer more than just contractually. It integrates innovative design and construction techniques that benefit schedule and cost which lead to client satisfaction. Design/Construction Integrator Ryan Gorman, PE, DBIA will ensure timely interface between Corman-EVW JV’s field crews and the designers with concerns openly discussed. Having a dedicated Design/Construction Integrator during design and construction eliminates subsequent delays or rework, streamlines reviews, expedites plan revisions, and eliminates potential construction field issues, thereby guaranteeing a superior project on time and on budget. Through our DBPM and CM, we will create a firm relationship that sets the foundation to interact and partner with VDOT and third-party stakeholders. Other integration strategies during design and construction include:

- ✓ Interdisciplinary design reviews prior to milestones to coordinate design disciplines
- ✓ Corman-EVW JV constructability reviews of design, especially for MOT, E&S control, and utility conflict avoidance
- ✓ Weekly schedule meetings to review the previous week and develop three and four-week look aheads
- ✓ Monthly scheduling meetings to review CPM progress
- ✓ Weekly foreman meetings to discuss safety, schedule, and coordination
- ✓ Morning huddles with the crews to set daily safety and production goals
- ✓ Weekly progress meetings with VDOT to review and discuss submittals and progress
- ✓ Bi-weekly contractor coordination meetings with adjacent contracts, EMS, Police, etc.
- ✓ Monthly partnering meetings with stakeholders to identify and resolve issues

Our Key Personnel’s duties and responsibilities include:

DB **Design-Build Project Manager (DBPM) Jo Ellen Sines, DBIA (Corman-EVW JV)** is responsible for project design and construction, quality management, contract administration, and other services, including procuring/furnishing materials, equipment, services, and labor reasonable inferable from the contract documents in a timely manner. She will be available to VDOT, has the expertise/experience to supervise and exercise control of the work, and accepts responsibility for the final work product. Jo Ellen is VDOT’s primary point of contact who will coordinate, integrate, and administrate the Corman-EVW | WRA Team, including design, construction, QA, MOT, safety, public outreach, and utilities. ***She will be responsible for meeting our contract obligations and avoid/resolve disputes per the RFP.*** Jo Ellen will supervise the Design Manager, Design/Construction Integrator, Construction Manager, ROW Manager, and Quality Assurance Manager, ***and manage/coordinate any public outreach and public meetings through the Public Relations Manager.*** She will be involved with preconstruction, design, construction, and punch out. Jo Ellen will assist with constructability reviews and safety audits, and oversee the quality management program, purchasing, and construction operations.

DB **Quality Assurance Manager (QAM) Michael Saunders, PE, CCM, DBIA (NXL)** reports to the DBPM and will have direct, independent access to VDOT and our Executive Committee. He will ensure work and materials, testing, and sampling are performed in conformance with contract requirements and “*approved for construction*” plans/specifications. Michael will be responsible for development of and adherence to the QA Plan, QA inspection and testing of all materials used, and work performed. As an independent entity, he will audit and monitor Corman-EVW | WRA Team’s Construction QC Program. ***Michael can stop construction, enforce compliance with specifications, and issue and require resolution of Non-Conformance Reports (NCRs).*** He will manage the QA program, including the QA inspector and independent QA testing firm and testing technicians. ***The QA team will conduct independent and concurrent tests and analysis of the work from the construction QC team.*** Michael will maintain project quality records and approve/submit pay estimates. He will also submit monthly written reports to VDOT’s project manager and the JV’s Executive Committee.

DB **Design Manager (DM) Michael Russell, PE (WRA)** reports to the DBPM and brings over 28 years of experience designing and managing transportation projects and programs for VDOT. ***He is currently the Design Element Lead for the Design-Build Route 29 Solutions – Berkmar Avenue Extension with Corman as the Design-Builder in a joint venture, the Design Manager on the Design-Build I-81 Halls Bottom Road Bridges, Design QA/QC Manager on the Design-Build I-95 Express Lane Extension – Southern Terminus, and the Project Design Manager on the I-81 New River Bridge Replacement project in the Salem District.*** Mike will provide a quality product, meet design milestones, continual Design-Build Team coordination and involve the Design QA/QC Manager throughout design. He will ensure design work is performed in accordance with current VDOT Policies, Procedures and Guidelines, manage design, including roadway; structural; hydraulic; traffic; MOT; environmental; and geotechnical, assign resources as needed; oversee the design sub-consultant for survey; coordinate design and review schedules; develop and implement corrective measures, if necessary; and integrate environmental compliance measures into the design. Mike will coordinate design and construction with Lead Environmental Compliance & Permitting Coordinator Taylor Sprenkle to achieve commitments. He will remain involved once construction starts to oversee any plan modifications and shop drawings, and review construction activities with the CM as work progresses.

DB **Construction Manager Kyle Kern (Corman-EVW JV)** has over 26 years’ hands-on experience in managing construction, including QC activities to ensure materials and work meet contract requirements and “*approved for construction*” plans/specifications. He will manage the onsite construction team, including Project Controls, Construction QC Manager, superintendents, and project field staff, including scheduling, safety, environmental compliance, utilities and MOT. Kyle will be assigned to this project and be onsite full time throughout construction. He will play a key role in conjunction with Design/Construction

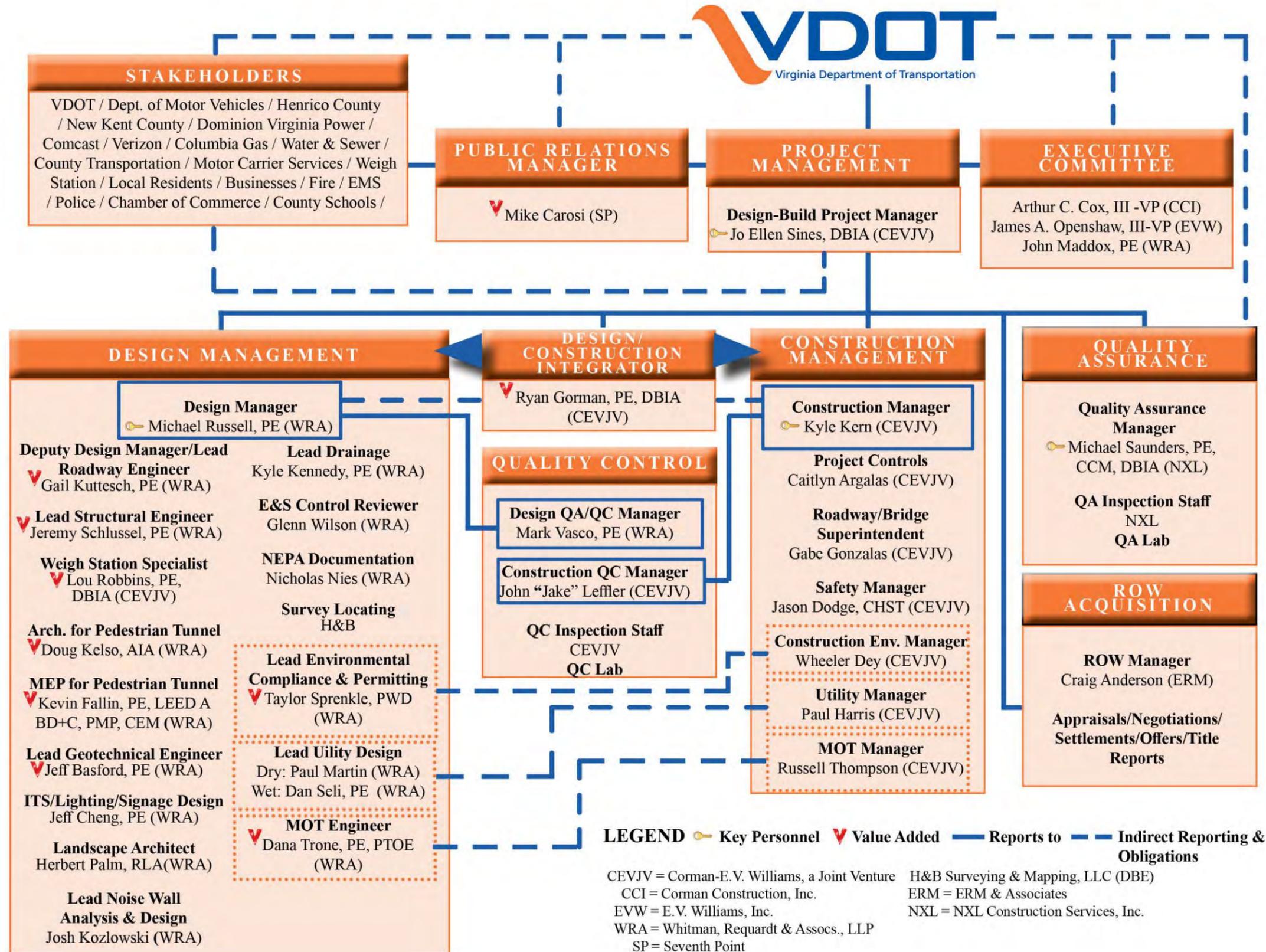
Integrator Ryan Gorman and the Design QA/QC Manager in design constructability reviews, work with Ryan to coordinate between the design and construction forces with regard to environmental commitments, utilities, ROW, and MOT. Kyle and his staff will focus on performing construction safely, and along with our Construction QC Manager, that materials and work are per approved plans/contract documents. He will coordinate with the Design Manager during construction for the accurate and timely issuance and review of any RFIs and shop drawings, as well as field visits, preparation of as-builts and plan revisions.



Keys to Success are communication and coordination between the many parties involved: Corman-EVW | WRA Team, VDOT, review agencies, and stakeholders. This is based upon open and honest communication, frequent meetings, and updates. The Corman-EVW | WRA Team will have internal weekly meetings during design with key construction and design staff present. Tracking sheets monitor progress of utilities, ROW, and design disciplines, as well as environmental and design approvals. Once construction starts, design participants stay involved. Added to the weekly meetings as construction begins are the superintendents, field surveyors, MOT Manager, and Construction QC Manager. Key stakeholder representatives, including utility companies (Dominion Virginia Power, Comcast, Verizon, Columbia Gas, County Water and Sewer), County Schools, Hospital, EMS Responders, State Police (Weigh Station), DMV, Motor Carrier Services, and others will be invited. Monthly meetings will also be held with the Corman-EVW | WRA Team, VDOT, QAM, stakeholders and others to enhance partnering and resolve issues quickly and efficiently.

Quality Assurances will be coordinated with, but independent of, daily QC and construction. The QAM will be given timely notice of construction activities so his QA staff can be onsite to document compliance. He will have access to all meetings and records he needs to independently assure that construction complies with contractual and design requirements. Reporting to the DBPM, the QAM will provide VDOT and the Executive Committee with the reports and assurances required. He will have unrestricted access to the construction and fabricator sites/facilities. A Corman-EVW | WRA Management Team representative will contact the QAM monthly to confirm project compliance.

Our team members were selected for their firsthand knowledge of the site and their ability to handle their responsibilities and minimize VDOT/other agency involvement. ***The team has effectively delivered design-build projects together and will bring proven management procedures and success to this project.***



3.4 Team Experience



3.5 Project Risks

3.4 TEAM EXPERIENCE

Please see Appendix Tab. Work History Forms.

3.5 PROJECT RISKS

The Corman-EVW | WRA Team will employ the Construction Management Association of America (CMAA) endorsed approach to risk management through a “Risk Register,” which includes a list of identified risks, potential impacts and mitigation for each. A robust risk management process considers risks throughout the project’s life and delivery processes. Our Team’s risk management process has sprung into action, will evolve throughout design and construction, and position us to respond to changes as issues unfold. The Corman-EVW | WRA Team employs a Five-Step Risk Management Approach:

1. **IDENTIFY** – Name risks, determine cause and effect, and categorize
2. **ASSESS** – Assign probability of occurrence, severity of impact, and determine response
3. **ANALYZE** – Quantify severity, determine exposure, establish tolerance level, and determine contingency (applicable during preliminary design and pricing)
4. **MANAGE** – Define response plans and actions, establish risk ownership, and manage response (after NTP)
5. **MONITOR / REVIEW** – Monitor/review/update risks, monitor response plans, update exposure, analyze trends, and produce reports (after NTP, during design, during construction)



Figure 2: Risk Management Plan

We have reviewed the available information, visited the project site during various traffic and weather conditions, and jointly discussed the major risks. With the mindset of project *risk* being defined as an issue that has the potential to impact the schedule, budget, or both, we have identified the three most critical risks we will face during the project:

RISK NO. 1: HAVING TO COMPLETELY REPLACE THE BRIDGES

With both bridge structures having been designed and constructed in the 1960s, there is considerable risk in leaving the existing elements in place while trying to widen for the future lanes while meeting the AASHTO 75-year life span criteria. Leaving the existing bridge elements in place, which are over 50 years old, will create a situation that leaves old materials, sub-standard geometrics (shoulders width and parapets), and detailing/design practices (joints, bearings, earthquake detailing) that are not appropriate for today’s traveling public. In addition, the existing bridges may not meet the new Load Rating Criteria being required by VDOT/FHWA for all bridges on/within one mile of the Interstate (*Memo from FHWA for Load Rating for the FAST Act’s Emergency Vehicles dated 11/3/16*).



Figure 3: I-64 Over Chickahominy River

WHY CRITICAL: As stated, the existing bridges were designed and built in the 1960s and do not meet current standards for shoulder width nor are the current detailing practices for long-term low maintenance of bridge structures in place. From a review of the RFQ no design waivers or exceptions are identified for the

bridges for substandard shoulder widths, allowance of joints, or the continued use of the existing parapets. It is also not identified what the intentions are for the RFP to reduce long-term maintenance considerations and/or design features that are not up to current standards (bearings, earthquake design). This is a risk to the project if the selected Design-Build Team cannot rehabilitate and widen the existing substructures and superstructures and has to replace them with new bridge structures. Replacing the bridges will require a more complex maintenance of traffic phasing and the resulting schedule and cost impacts may negatively impact project success.

IMPACTS: *Maintenance of Traffic:* Based on the RFQ drawings, it appears the project scope is to widen I-64 only to the median and not to the outside of the existing lanes. To accommodate widening to the median, traffic needs to be shifted to the outsides to allow room for temporary traffic barriers along the median (this could require a reduction on travel lane widths). Once traffic is shifted, the entire median and bridge widenings can be completed in a single maintenance of traffic phase.

If it is determined that the bridges need to be replaced, it would force the project to be completed in two phases. The portion of the bridge constructed on the median side in Phase 1 will be required to be constructed wide enough to accommodate two lanes of traffic, plus minimum shoulder widths. This would cause the final structures to be considerably wider than what is required for a bridge widening. Phase 2 would demolish and reconstruct the existing bridges and tie the existing roadway shoulders to the bridge. Additionally, the outside shoulders approaching the existing bridges that currently taper to a narrow width would also need to be widened to match the new bridge. This outside shoulder widening is not currently shown on the RFQ Concept Plans and may require additional environmental permitting right-of-way to construct. The widening would also be in areas of soft subgrade.

Completion Schedule: The project's current completion date allows for a total project length of two years. That is an adequate amount of time to design, permit and construct this project if the existing bridges are only widened. However, if they are not, it would be extremely difficult to complete design, obtain environmental clearances and permits, widen the median, and construct the new two-lane portion, switch traffic, and finish the remaining portions of the bridge within that timeframe.

Project Cost: The project estimate listed in the RFQ appears to be adequate for bridge widenings. However, if the Corman-EVW | WRA Team has to replace the existing structures, there will be a significant cost impact, including additional maintenance of traffic due to two phases, demolition of existing structures, and the new structures widths/lengths being larger than if the bridges were widened. There may also be added costs due to any additional environmental mitigation or ROW acquisition. There would also be costs due to acceleration to construct the project within the allotted time. All of these additional costs may force the project to rise above VDOT's identified tight budget.

MITIGATION: *Design Mitigation Strategy:* WRA and Corman are leaders in bridge design and construction, respectively, having worked on many VDOT bridge projects, especially in the Richmond District. We have the experience and knowhow of working on existing bridges to extend their lifespan, to include such design features as carbon fiber reinforcing, joint elimination, and newer material products to reduce the potential for long-term issues. WRA has evaluated existing conditions for over 200 projects, including over 40 bridges on/over the interstates in the Richmond District. We will draw on this knowledge to review what is required for these bridges from a design perspective. For this project, our team has identified such mitigation features as:

- ✓ **Superstructure Design:** Perform a FEM model to model how the creep/shrinkage that has already occurred will impact the proposed widening to reduce the potential for differential cracking at the construction joint with the proposed widening. The model will allow for a properly designed beam/superstructure to accommodate to the creep and shrinkage of the widened portion.

- ✓ **Bearings:** The existing beams are plain elastomeric pads which will require modifications to match the design of the proposed widening due to differences in relative stiffness; our team will evaluate modifications to the seat vs. raising of the vertical grades to determine the least impact to the proposed design.
- ✓ **Material Condition:** Our team will perform a material evaluation of the existing elements to remain to include such tests as chloride testing, half-cell potential, compressive, freeze-thaw, carbonization, etc. Using these test results will determine the extent of mitigation necessary, such as zinc anodes, partial deck removal, and/or chloride extraction to extend the life of the in-situ bridge elements that will remain.
- ✓ **Load Rating:** If the existing beams are unable to have a rating greater than 1.0, our team will evaluate using carbon fiber (or other external reinforcement) to strengthen the beams.

This experience should provide the Department confidence that rehabilitating the existing structures can be accommodated cost-effectively with the assumption *that appropriate design exceptions/waivers are issued with the RFP*. Corman will use our knowledge of construction techniques and conduct constructability reviews for the means and methods to rehabilitate/widen the two bridges over Chickahominy River. Together, our team will review the existing elements to determine how the substructure and superstructure can be economically rehabilitated and strengthened while keeping the project at a single phase.

Construction Mitigation Strategy: Corman has successfully rehabilitated hundreds of comparable bridges while effectively maintaining traffic. All repairs would likely be performed during Phase 1 median widening under live traffic or temporary lane closures. Below is an example of Sequence of Construction to rehabilitate the existing bridges. Utilizing this sequence will mitigate delays and cost overruns:

1. Repair end diaphragm concrete for all bays of all spans of both bridges.
2. Repair substructure surface concrete and cracks where needed.
3. Jack and block the existing superstructures from abutment and pier wash areas to the newly-reconstructed end diaphragms. The blocking support calculations will consider live loads and dead loads.
4. Repair any beam ends to the existing Type 3 AASHTO girders.
5. Repair bearing pad concrete and replace bearings, anchor bolts, and retainer angles.
6. If required for increased load capacity, convert the existing simple spans to continuous spans via deck top mat reinforcing splices.
7. Perform rapid hydro-mill and rapidset latex overlay the existing bridge decks. During this process, also reconstruct the expansion joints and back walls.

ROLE OF VDOT AND/OR OTHER AGENCIES: None other than expected on a typical Design-Build project and approving appropriate Design Exceptions or Design Waivers.

RISK NO. 2: CONSTRUCTION INGRESS/EGRESS TO THE MEDIAN WORK ZONE

Construction ingress/egress to the median work zone is one of the most dangerous risks on this project. Introducing construction traffic to an operating interstate corridor can increase congestion and distractions to motorists as they tend to observe new construction activity, signage, and MOT devices in the vicinity of the work. Rapidly slowing down traffic as large heavily-loaded trucks slow down to access work zones at ingress locations (or slowly accelerate when leaving the work zone egress locations) causes delays and potential rear end or sideswipe collisions. There are limited options for motorists to alter their driving habits or routes. Selecting an alternate route could substantially impact commutes. We anticipate most will not change their routes, thereby creating frustration due to increased travel time resulting from construction. This section of I-64 is a travel route to many vacationers heading to destinations, such as Historic Williamsburg, Busch Gardens, Norfolk, Virginia Beach, and North Carolina’s Outer Banks. Motorists will enter the work zone unaware of the

construction activity and the perils of driving in the left lane. The combination of increased commute time, additional distractions to driving caused by construction, vacation travelers and rapid deceleration of traffic caused by 60,000 to 75,000 lb. Gross Vehicle Weight (GVW) trucks in the left lane decelerating to access the construction area and accelerating when leaving can increase the chance of auto accidents, especially rear-end collisions.

WHY CRITICAL:

- ✓ We estimate 10,000-15,000 construction trucks will be entering and leaving the median to construct this project. They need a substantial distance to decelerate and enter construction zones, as well as to accelerate as they leave. These deceleration/acceleration distances will take place in the left lane of an interstate. Motorists do not typically anticipate left lane interstate traffic to be impeded in this manner. This increases the chance of rear-end and side collisions as traffic switches lanes to avoid slowing or stopped traffic in the left lane.
- ✓ Ingress locations will require attenuators to protect motorists from hitting the blunt end of the temporary median barrier dividing them from the work area. While hitting an attenuator is preferred to hitting the blunt end of a stationary object, crashes often cause extensive property damage, severe injuries, or even death.
- ✓ Traffic slowed down by construction traffic, crashes, or other incidents may impact first responders arriving onto the scene. Merging traffic at the west end of the westbound lane of the project can further complicate access to an accident scene, particularly if emergency responders are arriving from I-295.

IMPACT:

- ✓ Rear end, sideswipe or other types of collisions can bring traffic to a complete stop, which impacts – among other things – the progression of work. There is the chance of negative public perception if these incidents occur regularly.
- ✓ Narrowing existing outside shoulder widths to accommodate the median construction poses a safety hazard to motorists involved in crashes or breakdowns, as well as incident and first responders. Any safety compromise for these people will seriously impact the project.
- ✓ Any delays to first responders can result in negative public relations and fatalities.
- ✓ Slow or stopped traffic inhibits getting workers, equipment and material to the project, which can significantly impact schedule and cost.

MITIGATION: The Corman-EVW | WRA Team has already strategically considered the impacts of this risk on the project. First and foremost, a Transportation Management Plan (TMP) with well-defined traffic control devices and proper oversight will minimize this risk. The Corman-EVW | WRA Team will incorporate our vast experience from similar interstate widening projects, including “lessons learned” and successfully proven traffic systems to facilitate safe, effective transportation management through ALL phases of construction. Proposed mitigation strategies include:

Develop Work Zones with Internal Areas for Trucks to Turn Around: We will divide the project into these work zones:

1. Eastern project limits to Bottoms Creek.
2. Bottoms Creek to Meadow Road Bridge.
3. Meadow Road Bridge to western project limits.

Within each of these areas there will be an internal traffic plan to allow construction trucks to turn around within the work zone. This eliminates trucks from exiting a work zone and attempting to merge across traffic to access the closest exit ramp to “loop around” to reverse direction. Additionally, this will allow utilization of

one longer access/egress area for each work zone on EB and WB I-64 where necessary. Constructing the project this way will demand acceleration of extending drainage features, such as D-601 in the east zone to minimize schedule impacts.

Strategic Work Zones and Access Points: There will still be a need for a small number of access points into the median from the interstate. These will be strategically designed, highly-visible, and located away from vertical or horizontal curved roadway segments. We will grade access and egress locations to create slopes to develop VDOT Work Area Protection Manual compliant clear zones within each access or egress area. If this is not feasible, we will install temporary guardrail within the work area to allow long enough access and egress openings in the temporary barrier for sufficient acceleration length for construction traffic to safely merge with interstate traffic. As a part of our temporary access/egress lane, we will taper the barrier and attenuator away from traffic at beginnings of barrier runs. We may have to reset the attenuator and some temporary barrier at these ingress/egress locations, but we have found this added safety benefit is worth the added cost.

Eastern Project Limits to Bottoms Creek: This zone will be accessed on the WB side by extending a temporary lane for truck deceleration from WB Sta. 2613 to the beginning of the project at Sta. 2610. This deceleration lane lets trucks exit from the left travel lane at freeway speed while allowing deceleration before entering the work zone. Trucks entering this part of the work zone from New Kent Highway need to enter from EB New Kent Highway, allowing 600-ft. to merge into the left lane before using the temporary truck deceleration lane in the WB I-64 median. Eastbound traffic will either exit out the east end of the project or at an access point accommodating the emergency crossover located in the vicinity of Sta. 2592.

- **Bottoms Creek to Meadow Ridge Road:** Our initial review suggests both EB and WB access points in the vicinity of the proposed emergency crossover at Sta. 2545. This allows the added safety of this emergency crossover to be in service earlier and provides zone access in a tangent section. This location would also maximize the distance from the weigh station with decelerating and accelerating trucks in the outside lanes from our access points with decelerating and accelerating trucks in the inside lanes.
- **Meadow Road Bridge to Western Project Limits:** This is potentially the most dangerous zone. Merging traffic, exiting traffic, and limited sight lines all contribute to safety challenges here. Access and egress from the east end of the project similar to the western zone would eliminate mixing with merging EB traffic and exiting WB traffic.

Each of these possible access/egress scenarios is preliminary. Further study of all safety considerations, such as sight lines will be required prior to a final TMP.

Constructability Review (TMP-based): Before finalizing our design and plans, the Corman-EV | WRA Team will conduct a constructability review solely dedicated to traffic safety during construction. Examples of design/plan features that will be scrutinized include locating construction ingress/egress at points where they are most visible to motorists, locations of crossovers, ways to minimize traffic phasing shifts, providing safe separation from work zones, and promoting a design that is sensitive to commuter and vacation traffic.

Optimizing Traffic Phasing: The Corman-EV | WRA Team has proven experience at optimizing traffic phasing. Since changes in traffic patterns promote the potential for auto accidents, we will take a closer look at ways to minimize lane shifts and/or locate crossovers at points where high visibility is most prevalent. ***Work on the outside of the interstate will be completed as early as possible to bring these added safety features on line early on.***

Accelerate the Construction: Minimizing construction duration will significantly reduce hazards to motorists and Corman-EV JV field staff. WRA's design staff has extensive experience on the I-64 corridor in the Richmond District designing bridge projects that focused on accelerating construction similar to the I-64 Shockoe Bottom bridge where hydro-demolition and overlay was completed during a weekend closure.

Safety Training: Our construction forces receive certified in-house training on maintaining a safe work zone, starting with safety hazard awareness caused by mixing highway and construction traffic. Weekly safety meetings will be required for all construction staff.

Public Awareness/Incident Management Plan: Our TMP will consider advance warning signs and our TMP supervisor will regularly patrol the project corridor to confirm traffic devices are highly visible and functioning, especially at any access points. A robust public campaign will raise public awareness prior to and during construction.

ROLE OF VDOT AND/OR OTHER AGENCIES: None from VDOT other than expected on a typical Design-Build project. Other agencies, such as the State Police, Emergency Responders, and the Dept. of Motor Vehicles (weigh station operators) will be coordinated to provide the highest level of safety possible for stakeholders and motorists.

RISK NO. 3: EXISTING SUBSURFACE CONDITION

I-64 Widening from MP 200 to 205 is within the coastal plain deposits in the Chickahominy River Basin. We are extremely familiar with the coastal plain physiographic province soils, east of Richmond, Virginia and have drawn on our recent VDOT project experience in the area on Route 54 and I-95, and Route 33 over I-64 bridge and road expansion projects where coastal plain soils were encountered.

Anticipated Specific Geology Related Subsurface Conditions: At present, no site-specific subsurface information is available for review. Based on our review of other available data, we identified the following anticipated deposits:

- Alluvial sediments, including soft, organic clays, and silts are likely to be encountered with an estimated thickness of 10 to 30-ft.
- Tertiary marine clays, which have been described to “*liquefy without the addition of water when it is shaken or disturbed. These soils usually have a high clay content that has a particular structure which is subject to collapse when disturbed.*” (VDME Report of Investigations 38, 1974) are expected to be encountered below the alluvial deposits. Consolidated outcropping of these fine grained soils of Tertiary period are reported on the historic and existing banks of the Chickahominy River Basin.
- Marlboro Clay which is often associated with foundation problems and slope failures. Marlboro Clay deposits are likely be encountered below the marine clay deposits, ranging 50-ft. to 150-ft. deep below the surface. Marlboro clays may be encountered near the surface in some areas.
- Portions of the project are within the floodways of the Bear Swamp Creek and the Chickahominy River and its tributaries where poor soils are expected to be encountered.

WHY CRITICAL: The unknown subsurface conditions places financial and schedule burdens on the project:

IMPACT: Embankment on Soft Soils: The approach embankments for the proposed bridge abutment and portions of road widening is expected to be constructed on soft fine grain soils to significant depths, and these elements will be designed and constructed as “*Embankment on Soft Soils.*” Soft soil embankment design and construction causes the following issues:

- Foundation Stability
- Stability of the Slope of the Embankments
- Lateral Squeeze (“plastic flow causing mud-wave”)
- Settlement and strength grain management during construction

Bridge Abutments and Negative Skin Friction on Deep Foundations: Stabilizing subgrade soils for bridge embankment fill is expected to be one of potential geotechnical challenges. Due to the new abutment loads, time-dependent consolidated settlements of clayey subgrade (virgin and/or recompression) are expected. Any deep foundation for the bridge abutment support would be constructed after the embankment is sufficiently settled to mitigate negative skin friction issues of the deep foundations. Estimation and monitoring of settlements and duration are key components of effective and economical foundation design. The peril of not properly evaluating the settlement would be:

- Under estimating settlement could result in installing undersized piles which settle under the combination of structure and downdrag loads.
- Under estimating consolidation time could result in schedule delays associated with driving piles, casting coping and installing final pavement.

MITIGATION: We have experience in designing and managing construction of embankment on soft soils, including design and construction management with geotechnical instrumentation of the Woodrow Wilson Bridge Maryland abutment and approaches in soft clays soils, and our current design efforts of the Atkinson Boulevard Bridge in Newport News approaches in soft clay subsoil conditions. These same strategies will be implemented on this project to minimize impacts while constructing embankments.

Methods to mitigate the deep foundation risks in the anticipated subsurface conditions are complex. Potential methods to be reviewed will include:

- Basal reinforcement design for foundation and slope stability issues.
- Construction management with *“phased construction”* for lateral squeeze and overall stability.
- Additional laboratory testing and in-situ strength testing with detailed analysis for strength and settlement estimations during design and construction phases.

Selecting a bridge foundation type will be influenced by the presence of marine clays. Based on WRA experience in these types of soils, careful crafting of soil laboratory testing program to evaluate appropriate soil design will mitigate this risk.

We will perform laboratory consolidation testing prior to construction to augment our design and use instrumentation monitoring during construction prior to and during deep foundation installation. These methods were successfully used on our recently completed Design-Build Route 636 Relocation project for the Staunton District.



Figure 4: Pile installed after settlement ceased

ROLE OF VDOT AND OTHER AGENCIES: None other than expected on a typical Design-Build project.

Appendix

ATTACHMENT 3.1.2

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

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

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

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	16-18
Acknowledgement of RFQ, Revision and/or Addenda	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	19
Letter of Submittal (on Offeror's letterhead)				1
Authorized Representative's signature	NA	Section 3.2.1	yes	1
Offeror's Point of Contact information	NA	Section 3.2.2	yes	1
Principal Officer information	NA	Section 3.2.3	yes	1
Offeror's corporate structure	NA	Section 3.2.4	yes	1
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	1
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	20-21
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	22-29
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	30-37
Evidence of obtaining bonding	NA	Section 3.2.9	no	38-45

ATTACHMENT 3.1.2

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

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15- page limit?	SOQ Page Reference
SCC and DPOR registration documentation (Appendix)	Attachment 3.2.10	Section 3.2.10	no	46-47
Full size copies of SCC Registration	NA	Section 3.2.10.1	no	48-56
Full size copies of DPOR Registration (Offices)	NA	Section 3.2.10.2	no	57-64
Full size copies of DPOR Registration (Key Personnel)	NA	Section 3.2.10.3	no	66-67
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	1
Offeror's Team Structure				
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	67-68
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.2	no	69-70
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.3	no	71-72
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.4	no	73-74
Organizational chart	NA	Section 3.3.2	yes	8
Organizational chart narrative	NA	Section 3.3.2	yes	5-7
Experience of Offeror's Team				
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	75-77

ATTACHMENT 3.1.2

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

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
Lead Designer Work History Form	Attachment 3.4.1(b)	Section 3.4	no	78-80
Project Risk				
Identify and discuss three critical risks for the Project	NA	Section 3.5.1	yes	9-15

ATTACHMENT 2.10

**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION**

RFQ NO. C00107458DB95
PROJECT NO.: 0064-043-602

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 – November 3, 2016
(Date)
- 2. Cover letter of RFQ Addendum No. 1 – November 30, 2016
(Date)
- 3. Cover letter of _____
(Date)


SIGNATURE

12/15/16
DATE

Arthur C. Cox, III
PRINTED NAME

Vice President,
Corman Construction, Inc.
TITLE

ATTACHMENT 3.2.6

State Project No. 0064-043-602, C00107458DB95

Affiliated and Subsidiary Companies of the Offeror

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

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

Relationship with Offeror (Affiliate or Subsidiary)	Full Legal Name	Address
CORMAN CONSTRUCTION, INC.		
Affiliate (Parent)	CG Enterprises, Inc.	12001 Guilford Road, Annapolis Junction, MD 20701
Affiliate (Sister)	Corman Marine Construction, Inc.	711 East Ordnance Road, Suite 715, Baltimore, MD 21226
Affiliate (Joint Venture)	CK Constructors, A Joint Venture	12001 Guilford Road, Annapolis Junction, MD 20701
Affiliate (Joint Venture)	Intercounty Constructors Joint Venture	120 White Plains Road, Suite 310, Tarrytown, NY 10591
Affiliate (Joint Venture)	MD 200 Constructors, A Joint Venture	450 Dividend Drive, Peachtree City, GA 30269
Affiliate (Joint Venture)	Wagman, Corman, McLean Joint Venture	3290 North Susquehanna Trail, York, PA 17406
Affiliate (Joint Venture)	Corman-Wagman, A Joint Venture	12001 Guilford Road, Annapolis Junction, MD 20701
Affiliate (Joint Venture)	KC Constructors, A Joint Venture	1800 South Bell Street, Suite 300, Arlington, VA 22202
Affiliate (Joint Venture)	Corman-E.V. Williams, a Joint Venture	12001 Guilford Road, Annapolis Junction, MD 20701
E.V. WILLIAMS, INC.		
Parent	The Branch Group	P. O. Box 4004, Roanoke, VA 24022
Subsidiary	Branch Highways, Inc.	P. O. Box 4004, Roanoke, VA 24022
Subsidiary	Branch & Associates, Inc.	P. O. Box 40051, Roanoke, VA 24022
Subsidiary	G. J. Hopkins, Inc.	P. O. Box 12467, Roanoke, VA 24025
Affiliate (Joint Venture)	Dominion Boulevard Constructors	925 S. Military Highway, Virginia Beach, VA 23464

ATTACHMENT 3.2.6

State Project No. 0064-043-602, C00107458DB95

Affiliated and Subsidiary Companies of the Offeror

Affiliate (Joint Venture)	Corman-E.V. Williams, a Joint Venture	925 S. Military Highway, Virginia Beach, VA 23464
Affiliate (Joint Venture)	BBI/EVW JV	430 Eastwood Road, Wilmington, NC 28403

ATTACHMENT NO. 3.2.7(a)

**CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS**

Project: I-64 Widening Exit 200 to 205
Project No.: 0064-043-602

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

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

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

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

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

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

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

	12.15.16	Vice President of Corman Construction, Inc.
Signature	Date	Title

Corman-E.V. Williams, a Joint Venture
Name of Firm

ATTACHMENT NO. 3.2.7(a)

**CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS**

Project: I-64 Widening Exit 200 to 205
Project No.: 0064-043-602

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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;

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

	12.15.16	
Signature	Date	Vice President
		Title

Corman Construction, Inc.
Name of Firm

ATTACHMENT NO. 3.2.7(a)

**CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS**

Project: I-64 Widening Exit 200 to 205
Project No.: 0064-043-602

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

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

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

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

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

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

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

	12/15/16	President
Signature	Date	Title
James A. Openshaw, III		
E.V. Williams, Inc.		
Name of Firm		

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project: I-64 Widening Exit 200 to 205
Project No.: 0064-043-602

- 1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

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

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

12/7/16
Signature Date

Senior Vice President
Title

Whitman, Requardt & Associates, LLP
Name of Firm

ATTACHMENT NO. 3.2.7(b)

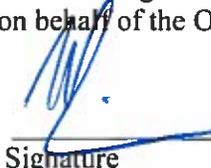
**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project: I-64 Widening Exit 200 to 205
Project No.: 0064-043-602

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

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



NOVEMBER 28, 2016

VICE PRESIDENT OF PUBLIC AFFAIRS

Signature

Date

Title

SEVENTH POINT TRANSPORTATION PR

Name of Firm

ATTACHMENT NO. 3.2.7(b)

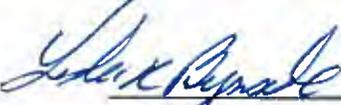
**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project: I-64 Widening Exit 200 to 205
Project No.: 0064-043-602

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

 November 22, 2016 Vice President
Signature Date Title

H&B Surveying and Mapping, LLC
Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project: I-64 Widening Exit 200 to 205
Project No.: 0064-043-602

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

Craig [Signature] 11/30/16 President
Signature Date Title

ERM & ASSOCIATES
Name of Firm

ATTACHMENT NO. 3.2.7(b)

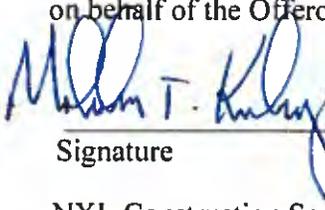
**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project: I-64 Widening Exit 200 to 205
Project No.: 0064-043-602

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

	December 2, 2016	President
Signature	Date	Title
NXL Construction Services, Inc		
Name of Firm		



COMMONWEALTH OF VIRGINIA



CERTIFICATE OF QUALIFICATION

CORMAN CONSTRUCTION, INC.

Vendor Number: C097

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; UNDERGROUND UTILITIES

Issue Date: March 31, 2016

This Rating and Classification will Expire: March 31, 2017

Suzanne FR Lucas, State Prequalification Officer

Don E. Sillies, 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.



Department's List of Prequalified Vendors
Includes All Qualified Levels As Of 11/22/2016

- W -

Vendor ID: W488
Vendor Name: E. V. WILLIAMS, INC.
Prequal Exp: 10/31/2017

-- PREQ Address --

P. O. BOX 65128
VIRGINIA BEACH, VA 23467-5128
Phone: 757-420-1140
Fax: (757)420-6518

Work Classes (Listed But Not Limited To)

002 - GRADING
005 - DRAINAGE STRUCTURES
006 - PORTLAND CEMENT CONCRETE PAVING
045 - UNDERGROUND UTILITIES

Bus. Contact: MILLER, DENNIS JAMES
Email: ESTIMATING@EVWILLIAMS.COM

-- DBE Information --

DBE Type: N/A
DBE Contact: N/A

Vendor ID: W029
Vendor Name: S. L. WILLIAMSON COMPANY, INCORPORATED
Prequal Exp: 10/31/2017

-- PREQ Address --

1230 RIVER ROAD
CHARLOTTESVILLE, VA 22901-0000
Phone: 434-295-6137
Fax: 434-977-7852

Work Classes (Listed But Not Limited To)

002 - GRADING
004 - ASPHALT CONCRETE PAVING
005 - DRAINAGE STRUCTURES

Bus. Contact: WILLIAMSON, BLAIR KILLEY
Email: BLAIR@SLWILLIAMSON.COM

-- DBE Information --

DBE Type: N/A
DBE Contact: N/A

Karen Countiss

From: Prequalification (VDOT) <Prequalification@VDOT.Virginia.gov>
Sent: Wednesday, September 02, 2015 3:58 PM
To: Patricia Langley; Prequalification (VDOT)
Cc: Ken Pena; Bonnie James; Jo Ellen Sines; Stevenson, Bryan (VDOT)
Subject: RE: VDOT MilitaryHwy cover2.pdf - Adobe Acrobat Standard

Patty,
The new Joint Venture # is JV070

THIS IS REGARDING
CORMAN-E.V. WILLIAMS, A JOINT VENTURE

Thank-you

Suzanne Lucas, CAPM

State Prequalification Supervisor
Construction Division
Virginia Department of Transportation
1401 East Broad Street
Richmond, Virginia 23219
(804) - 786-2941

Email: Prequalification@VDOT.Virginia.gov

From: Patricia Langley [<mailto:PLangley@CormanConstruction.com>]
Sent: Wednesday, September 02, 2015 1:11 PM
To: Prequalification (VDOT)
Cc: Ken Pena; Bonnie Hulme; Jo Ellen Sines
Subject: RE: VDOT MilitaryHwy cover2.pdf - Adobe Acrobat Standard

Ok. Thank you very much.

From: Prequalification (VDOT) [<mailto:Prequalification@VDOT.Virginia.gov>]
Sent: Wednesday, September 02, 2015 1:02 PM
To: Patricia Langley; Prequalification (VDOT)
Cc: Ken Pena; Bonnie Hulme; Jo Ellen Sines
Subject: RE: VDOT MilitaryHwy cover2.pdf - Adobe Acrobat Standard

Patty,
Thank-you. My office is in the middle of moving. At this point I do not have access to a phone but obviously our computers are set-up.
Please mail the originals in the mail so we will have the original signatures documented.
I will email you the JV # once this is processed.

Thank-you for your firm's inquiry.

Suzanne Lucas, CAPM

State Prequalification Supervisor
Construction Division
Virginia Department of Transportation
1401 East Broad Street
Richmond, Virginia 23219
(804)-786-2941

Email: Prequalification@VDOT.Virginia.gov

From: Patricia Langley [<mailto:PLangley@CormanConstruction.com>]
Sent: Wednesday, September 02, 2015 11:44 AM
To: Prequalification (VDOT)
Cc: Ken Pena; Bonnie Hulme; Jo Ellen Sines
Subject: RE: VDOT MilitaryHwy cover2.pdf - Adobe Acrobat Standard
Importance: High

Hi Suzanne,

Attached is the signed JV Bidding Agreement. Please let me know if you will require any additional information in order to issue the prequalification number. I can send the originals to you in the mail if necessary (please advise).

Thank you for your assistance.

Patty Langley
Assistant Controller
Corman Construction, Inc.
12001 Guilford Road
Annapolis Junction, MD 20701
Office: (410) 792-9400 Ext. 237
Cell: 443-790-9000
email: plangley@cormanconstruction.com



From: Prequalification (VDOT) [<mailto:Prequalification@VDOT.Virginia.gov>]
Sent: Friday, August 28, 2015 4:28 PM
To: Patricia Langley
Subject: RE: VDOT MilitaryHwy cover2.pdf - Adobe Acrobat Standard

Fyi-Getting the JV Vendor # will not be a problem; however since our move it may not happen until end of next week.
I am off on Monday

Thank-you for your firm's inquiry

Suzanne

Prequalification

Construction Division
Virginia Department of Transportation
1401 East Broad Street
Richmond, Virginia 23219
Prequalification Officer: (804)-786-2941
Prequalification Assistant: (804)-786-2938

Email: Prequalification@VDOT.Virginia.gov

From: Patricia Langley [<mailto:PLangley@CormanConstruction.com>]
Sent: Friday, August 28, 2015 4:23 PM
To: Prequalification (VDOT)
Subject: RE: VDOT MilitaryHwy cover2.pdf - Adobe Acrobat Standard

Not a problem. I found it in the meantime.

Thank you.

From: Prequalification (VDOT) [<mailto:Prequalification@VDOT.Virginia.gov>]
Sent: Friday, August 28, 2015 3:16 PM
To: Patricia Langley
Subject: RE: VDOT MilitaryHwy cover2.pdf - Adobe Acrobat Standard

Corman Construction or Marine?
C097 is Corman Construction

I apologize I can not answer the phone-I am online with the help desk on an issue

From: Patricia Langley [<mailto:PLangley@CormanConstruction.com>]
Sent: Friday, August 28, 2015 3:07 PM
To: Prequalification (VDOT)
Subject: RE: VDOT MilitaryHwy cover2.pdf - Adobe Acrobat Standard

Can you tell me what Corman's VDOT vendor number is?

From: Prequalification (VDOT) [<mailto:Prequalification@VDOT.Virginia.gov>]
Sent: Friday, August 28, 2015 12:09 PM
To: Patricia Langley
Subject: RE: VDOT MilitaryHwy cover2.pdf - Adobe Acrobat Standard

Please let me know if you can modify the PDF form so to remove the informational text and the hi-lite.

Once completed I can assign a JV #.

Thank-you for your firm's inquiry.

Suzanne Lucas,CAPM

State Prequalification Supervisor
Construction Division
Virginia Department of Transportation
1401 East Broad Street
Richmond, Virginia 23219
(804)-786-2941

Email: Prequalification@VDOT.Virginia.gov

From: Patricia Langley [<mailto:PLangley@CormanConstruction.com>]
Sent: Friday, August 28, 2015 11:37 AM
To: Prequalification (VDOT)
Cc: Ken Pena
Subject: RE: VDOT MilitaryHwy cover2.pdf - Adobe Acrobat Standard

Thank you.

From: Prequalification (VDOT) [<mailto:Prequalification@VDOT.Virginia.gov>]
Sent: Friday, August 28, 2015 11:24 AM
To: Patricia Langley
Subject: RE: VDOT MilitaryHwy cover2.pdf - Adobe Acrobat Standard

Patty,
Thank-you for your firm's inquiry –I will get back to you in the later afternoon

Suzanne Lucas,CAPM

State Prequalification Supervisor
Construction Division
Virginia Department of Transportation
1401 East Broad Street
Richmond, Virginia 23219
(804)-786-2941

Email: Prequalification@VDOT.Virginia.gov

From: Patricia Langley [<mailto:PLangley@CormanConstruction.com>]
Sent: Friday, August 28, 2015 10:38 AM

To: Prequalification (VDOT)
Subject: FW: VDOT MilitaryHwy cover2.pdf - Adobe Acrobat Standard

Please see the attached, as we are requesting a prequalification number for Corman-E V Williams A Joint Venture.

Thank you for your assistance.

Patty Langley
Assistant Controller
Corman Construction, Inc.
12001 Guilford Road
Annapolis Junction, MD 20701
Office: (410) 792-9400 Ext. 237
Cell: 443-790-9000
email: plangley@cormanconstruction.com



From: Ken Pena
Sent: Friday, August 28, 2015 10:31 AM
To: Patricia Langley
Subject: VDOT MilitaryHwy cover2.pdf - Adobe Acrobat Standard

CONFIDENTIALITY NOTICE: This communication may contain privileged or other confidential information. If you are not the intended recipient, or believe you have received this communication in error, please do not print, copy, retransmit, disseminate or otherwise use the information. Also, please indicate to the sender that you have received this message in error and delete the copy you received. Thank you.

CONFIDENTIALITY NOTICE: This communication may contain privileged or other confidential information. If you are not the intended recipient, or believe you have received this communication in error, please do not print, copy, retransmit, disseminate or otherwise use the information. Also, please indicate to the sender that you have received this message in error and delete the copy you received. Thank you.

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CONFIDENTIALITY NOTICE: This communication may contain privileged or other confidential information. If you are not the intended recipient, or believe you have received this communication in error, please do not

print, copy, retransmit, disseminate or otherwise use the information. Also, please indicate to the sender that you have received this message in error and delete the copy you received. Thank you.



Construction Risk Solutions, LLC
11311 McCormick Road, Suite 450
Hunt Valley, MD 21030
Main: 443-798-7499
Fax: 443-798-7290

December 15, 2016

Virginia Department of Transportation
Alternate Project Delivery Office
1401 East Broad Street
Richmond, VA 23219
Attn: Mr. Joseph A. Clarke, P.E.

Re: Corman Construction, Inc. – Surety Qualification
In Association with a JV Proposal by Corman-E.V. Williams, a Joint Venture
Request for Qualifications – A Design-Build Project
I-64 Widening Exit 200 to 205 from Interstate 295 to Exit 205 (Bottom Ridge)
Henrico & New Kent Counties, VA
Contract ID No.: C00107458DB95
State Project No.: 0064-043-602; Federal Project No: NHPP-064-3 (499)

Dear Mr. Clark:

As Surety for Corman Construction, Inc., Fidelity and Deposit Company of Maryland and Zurich American Insurance Company with A.M. Best Financial Strength Ratings “A+” and Financial Size Category “XV” are capable of providing 100% Performance Bond & 100% Labor and Materials Payment Bond in the anticipated amount of \$55,000,000.00 and said bonds will cover the Project and any warranty periods as provided for in the Contract Documents on behalf of the Contractor, in the event that such firm be the successful bidder and enter into a contract for this project.

If Corman Construction, Inc., as a member of the Joint Venture, is short-listed and/or awarded a contract for the referenced project and requests that we provide the necessary Bid and Performance and Payment Bonds, we will be prepared to execute the bonds subject to our acceptable review of the contract terms and conditions, bond forms and any other underwriting considerations at the time of the request.

Fidelity and Deposit Company of Maryland and Zurich American Insurance Company are proud to have represented Corman Construction, Inc.’s as its surety for over twenty (20) years. Based on Corman Construction, Inc.’s financial strength and track record, we are prepared to consider jobs of \$150,000,000 single/\$400,000,000 aggregate total program.

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

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

Sincerely,



Robert A. Chlada, Attorney-in-Fact

Commonwealth of Virginia

STATE CORPORATION COMMISSION

July 1, 2016

FIDELITY AND DEPOSIT COMPANY OF MARYLAND
600 RED BROOK BLVD
OWINGS MILLS MD 21117-5153

is hereby licensed to transact the business of

Aircraft Liability	Glass
Auto Liability	Homeowners Multi-Peril
Auto Physical Damage	Inland Marine
Boiler & Machinery	Liability Other than Auto
Burglary & Theft	Misc Property & Casualty
Commercial Multi-Peril	Ocean Marine
Credit	Surety
Credit Property Insurance	Water Damage
Fidelity	Workers Compensation & Employers'
Fire	Liability

in the Commonwealth of Virginia through the thirtieth day of June next succeeding the date hereof unless this license shall be sooner revoked or otherwise cancelled.

ID: 39306



State Corporation Commission
Bureau of Insurance

By: *Jaqueline K. Conner*
Commissioner

FIDELITY AND DEPOSIT COMPANY

OF MARYLAND

600 Red Brook Blvd., Suite 600, Owings Mills, MD 21117

Statement of Financial Condition As Of December 31, 2015

ASSETS

Bonds	\$ 142,878,497
Stocks	22,315,096
Cash and Short Term Investments.....	337,835
Reinsurance Recoverable	24,731,651
Other Accounts Receivable.....	19,935,844
TOTAL ADMITTED ASSETS	\$ <u>210,198,923</u>

LIABILITIES, SURPLUS AND OTHER FUNDS

Reserve for Taxes and Expenses.....	\$ 46,436
Ceded Reinsurance Premiums Payable	40,456,309
Securities Lending Collateral Liability	0
TOTAL LIABILITIES	\$ <u>40,502,745</u>
Capital Stock, Paid Up	\$ 5,000,000
Surplus	164,696,178
Surplus as regards Policyholders.....	169,696,178
TOTAL	\$ <u>210,198,923</u>

Securities carried at \$57,996,983 in the above statement are deposited with various states as required by law.

Securities carried on the basis prescribed by the National Association of Insurance Commissioners. On the basis of market quotations for all bonds and stocks owned, the Company's total admitted assets at December 31, 2015 would be \$212,137,795 and surplus as regards policyholders \$171,635,049.

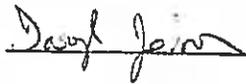
I, DENNIS F. KERRIGAN, Corporate Secretary of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing statement is a correct exhibit of the assets and liabilities of the said Company on the 31st day of December, 2015.



 Corporate Secretary

State of Illinois }
 City of Schaumburg } SS:

Subscribed and sworn to, before me, a Notary Public of the State of Illinois, in the City of Schaumburg, this 15th day of March, 2016.



 Notary Public



**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 **Joseph A. PIERSON, Robert A. CHLADA, Cynthia M. CHARVAT, Dennis C. OURAND, Steven A. DZURIK, JR., John J. MARKOTIC and Diane S. LOUGHRY**, all of Hunt Valley, Maryland, 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 22nd day of September, A.D. 2016.

ATTEST:

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



By: *Eric D. Barnes*

Gerald F. Haley

*Secretary
Eric D. Barnes*

*Vice President
Gerald F. Haley*

State of Maryland
County of Baltimore

On this 22nd day of September, A.D. 2016, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **GERALD F. HALEY, Vice President, and ERIC D. BARNES, 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, deposed 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



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

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 or 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 15th day of December, 2016.



Michael Bond
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

10 Franklin Road, SE
Suite 550
Roanoke, VA 24011
Tel (540) 343-8071
Fax (540) 345-2958



Charlotte
Greensboro
Knoxville
Lynchburg
Nashville
Raleigh
Richmond

December 5, 2016

Mr. Joseph A. Clarke, PE
Alternative Project Delivery Division
Virginia Department of Transportation
1401 East Broad Street
Richmond, VA 23219

Re: E. V. Williams, Inc. (Corman-E. V. Williams, a Joint Venture)
Project: I-64 Widening Exit 200 to 205
From: Interstate 295
To: Exit 205 (Bottom Bridge)
Henrico and New Kent Counties, Virginia
State Project No.: 0064-043-602
Federal Project No.: NHPP-064-3 (499)
Contract ID Number: C00107458DB95
Estimated Contract Value - \$55,000,000

Dear Mr. Clarke:

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

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

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

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

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

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

Sincerely,



Theresa S. Stump, Attorney-In-Fact

cc: E. V. Williams, Inc.
Hartford Fire Insurance Company

POWER OF ATTORNEY

Direct Inquiries/Claims to:

THE HARTFORD
BOND, T-12
One Hartford Plaza
Hartford, Connecticut 06155
Bond.Claims@thehartford.com

call: 888-266-3488 or fax: 860-757-5835

KNOW ALL PERSONS BY THESE PRESENTS THAT:

Agency Code: 14-730214 (MC), 14-730836, 14-731912
Agency Name: JAMES A SCOTT & SON INC

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

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

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

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

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



John Gray

John Gray, Assistant Secretary

M. Ross Fisher

M. Ross Fisher, Senior Vice President

STATE OF CONNECTICUT }
COUNTY OF HARTFORD } ss. Hartford

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



CERTIFICATE

Kathleen T. Maynard

Kathleen T. Maynard
Notary Public
My Commission Expires July 31, 2021

I, the undersigned, Assistant Vice President of the Companies, DO HEREBY CERTIFY that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is still in full force effective as of December 5, 2016 Signed and sealed at the City of Hartford.



Kevin Heckman

Kevin Heckman, Assistant Vice President

ATTACHMENT 3.2.10

State Project No. 0064-043-602, C00107458DB95

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
Corman Construction, Inc.	F046798-7	Foreign	Active/ Good Standing	12001 Guilford Road Annapolis Junction, MD 20701-0160	Class A Contractors Classifications H/H	2701014794	10/31/17
E.V. Williams, Inc.	0478466-6	Incorporated	Active/ Good Standing	925 South Military Highway Virginia Beach, VA 23467-5128	Class A Contractors Classifications H/H	2705037384	2/28/17
Whitman, Requardt & Associates, LLP	K000382-4	Limited Liability Partnership	Active/ Good Standing	801 South Caroline St. Baltimore, MD 21231	ENG, LS, LA, ARC	0407001676	12/31/17
				9030 Stony Point Parkway, Suite 220 Richmond, VA 23235	ENG	0411000133	2/28/18
				3701 Pender Drive, Suite 450 Fairfax, VA 22030-6045	ENG	0411000134	2/28/18
				100 5 th Street, Suite L2000 Bristol, TN 37620	ENG	0411001228	2/28/18
Seventh Point	0267541-1	Corporation	Active/ Good Standing	N/A	N/A	N/A	N/A
H&B Survey & Mapping, LLC	S290560-4	Limited Liability Company	Active/ Good Standing	612 Hull Street Suite 101B Richmond, VA 23224	LS	0407005432	12/31/17
ERM Associates, LLC	S431583-6	Limited Liability Company	Active/ Good Standing	N/A	N/A	N/A	N/A

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

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Virginia.gov

CISM0180

CORPORATE DATA INQUIRY

12/02/16

11:10:00

CORP ID: F046798 - 7 STATUS: 00 ACTIVE STATUS DATE: 01/06/06
CORP NAME: CORMAN CONSTRUCTION, INC.

DATE OF CERTIFICATE: 11/02/1984 PERIOD OF DURATION: INDUSTRY CODE: 00
STATE OF INCORPORATION: DE DELAWARE STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: MON NO: MON STATUS: MONITOR DTE:
R/A NAME: CT CORPORATION SYSTEM

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

CITY: GLEN ALLEN STATE : VA ZIP: 23060-0000
R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 10/04/13 LOC : 143
ACCEPTED AR#: 216 16 8343 DATE: 11/14/16 HENRICO COUNTY
CURRENT AR#: 216 16 8343 DATE: 11/14/16 STATUS: A ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
16 100.00 1,000

(Screen Id:/Corp_Data_Inquiry)

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C



CISM0180

CORPORATE DATA INQUIRY

11/23/16

12:02:06

CORP ID: 0478466 - 6 STATUS: 00 ACTIVE STATUS DATE: 03/07/13
 CORP NAME: E. V. WILLIAMS, INC.

DATE OF CERTIFICATE: 01/27/1997 PERIOD OF DURATION: INDUSTRY CODE: 00
 STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
 MERGER IND: CONVERSION/DOMESTICATION IND:
 GOOD STANDING IND: Y MONITOR INDICATOR:
 CHARTER FEE: 50.00 MON NO: MON STATUS: MONITOR DTE:
 R/A NAME: MELANIE F WHEELER

STREET: 442 RUTHERFORD AVE NE AR RTN MAIL:

CITY: ROANOKE STATE : VA ZIP: 24016-0000
 R/A STATUS: 2 OFFICER EFF. DATE: 01/11/08 LOC : 217
 ACCEPTED AR#: 216 02 3399 DATE: 01/20/16 ROANOKE CITY
 CURRENT AR#: 216 02 3399 DATE: 01/20/16 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
17	100.00				100.00	5,000

(Screen Id:/Corp_Data_Inquiry)

Commonwealth of Virginia



State Corporation Commission

CERTIFICATE OF FACT

I Certify the Following from the Records of the Commission:

On August 10, 2000, a statement of registration as a foreign registered limited liability partnership was filed in the Clerk's Office of the Commission by Whitman, Requardt & Associates, LLP, a Maryland partnership.

As of the date below, this statement of registration is in effect.

Nothing more is hereby certified.

*Signed and Sealed at Richmond on this Date:
July 7, 2016*



Joel H. Peck

 Joel H. Peck, Clerk of the Commission

Commonwealth of Virginia



STATE CORPORATION COMMISSION

Richmond, August 10, 2000

This is to Certify that the statement of registration of

Whitman, Requardt & Associates, LLP

a limited liability partnership registered under the laws of MARYLAND; was this day admitted to record in this office and that the partnership is registered to transact business in Virginia as a foreign Registered Limited Liability Partnership, subject to all laws applicable to the partnership and its business.



State Corporation Commission

Attest:

Joel H. Beck

Clerk of the Commission



COMMONWEALTH OF VIRGINIA
STATE CORPORATION COMMISSION

Office of the Clerk

June 14, 2016

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

RECEIPT

RE: WHITMAN, REQUARDT & ASSOCIATES, LLP

ID: K000382 - 4

DCN: 16-06-14-0536

Dear Customer:

This is your receipt for \$50.00 to cover the fee for filing the annual continuation report for the above-referenced registered limited liability partnership.

The annual continuation report was filed on June 14, 2016.

If you have any questions, please call (804) 371-9733 or toll-free in Virginia, 1-866-722-2551

Sincerely,

Joel H. Peck
Clerk of the Commission

GPACCEPT
CISCCJ

P.O. Box 1197, Richmond, VA 23218-1197
Tyler Building, First Floor, 1300 East Main Street, Richmond, VA 23219-3630
Clerk's Office (804) 371-9733 or (866) 722-2551 (toll-free in Virginia) www.scc.virginia.gov/clk

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State Corporation Commission



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CISM0180

CORPORATE DATA INQUIRY

11/29/16

12:19:03

CORP ID: 0267541 - 1 STATUS: 00 ACTIVE STATUS DATE: 04/17/06
CORP NAME: Seventh Point, Inc.

DATE OF CERTIFICATE: 03/04/1985 PERIOD OF DURATION: INDUSTRY CODE: 00
STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: MON NO: MON STATUS: MONITOR DTE:
R/A NAME: ALBERT H POOLE

STREET: 4705 COLUMBUS ST

AR RTN MAIL:

CITY: VIRGINIA BEACH STATE : VA ZIP: 23462-6749
R/A STATUS: 4 ATTORNEY EFF. DATE: 03/24/98 LOC : 228
ACCEPTED AR#: 216 04 2729 DATE: 02/26/16 VIRGINIA BEACH
CURRENT AR#: 216 04 2729 DATE: 02/26/16 STATUS: A ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
16 100.00 3,000

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12/02/16

10:06:49

LLCM3220

LLC DATA INQUIRY

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

DATE OF FILING: 12/03/2012 PERIOD OF DURATION: INDUSTRY CODE: 00
STATE OF FILING: VA VIRGINIA MERGER INDICATOR:

CONVERSION/DOMESTICATION INDICATOR:

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

STREET: 7047 WINTERGREEN CT

CITY: WARRENTON STATE: VA ZIP: 20187-0000

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

R/A NAME: CRAIG J. ANDERSON

STREET: 15 MAIN STREET

RTN MAIL:

CITY: WARRENTON STATE: VA ZIP: 20186-0000

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

YEAR	FEES	PENALTY	INTEREST	BALANCE
16	50.00			50.00

(Screen Id:LLC_Data_Inquiry)

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CORPORATE DATA INQUIRY

12/05/16

09:02:11

CORP ID: 0349742 - 7 STATUS: 00 ACTIVE STATUS DATE: 11/17/89
CORP NAME: NXL Construction Co., Inc.

DATE OF CERTIFICATE: 11/17/1989 PERIOD OF DURATION: INDUSTRY CODE: 00
STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: 50.00 MON NO: MON STATUS: MONITOR DTE:
R/A NAME: NICOMEDES L DE LEON

STREET: 9606 GEORGE'S BLUFF RD AR RTN MAIL:

CITY: RICHMOND STATE : VA ZIP: 23229-0000
R/A STATUS: 2 OFFICER EFF. DATE: 10/08/98 LOC : 143
ACCEPTED AR#: 216 14 8475 DATE: 10/03/16 HENRICO COUNTY
CURRENT AR#: 216 14 8475 DATE: 10/03/16 STATUS: A ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
16 100.00 5,000

(Screen Id:/Corp_Data_Inquiry)

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation
9960 Myland Drive, Suite-400, Richmond, VA 23233

Telephone: (804) 367-8500

NUMBER
2701014794

**BOARD FOR CONTRACTORS
CLASS A CONTRACTOR
CLASSIFICATIONS HH**



**CORMAN CONSTRUCTION INC
12001 GUILFORD RD
ANNAPOLIS JUNCTION, MD 20701-0160**

James W. B...
Secretary, Licensee

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

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NUMBER: 2701014794 EXPIRES: 10-31-2017

**CORMAN CONSTRUCTION INC
12001 GUILFORD RD
ANNAPOLIS JUNCTION, MD 20701-0160**



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Telephone: (804) 367-8500

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2705037384

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EV WILLIAMS, INC
925 SOUTH MILITARY HWY
VIRGINIA BEACH, VA 23467-5128



James W. DeBoer
James W. DeBoer Director

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AND LANDSCAPE ARCHITECTS
AND BUSINESS ENTITY REGISTRATION



PROFESSIONS: ENG, LS, LA, ARC



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

J. W. Johnson
J. W. Johnson, Esq.

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BUSINESS ENTITY REGISTRATION

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



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Department of Professional and Occupational Regulation
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Telephone: (804) 367-8500

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02-28-2018

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0411000133

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BUSINESS ENTITY BRANCH OFFICE REGISTRATION**

PROFESSIONS: ENG



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



James W. B. [Signature]
Professional Engineer
License Number: 0411000133

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

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COMMONWEALTH of VIRGINIA
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BUSINESS ENTITY BRANCH OFFICE REGISTRATION
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**PROFESSIONS: ENG
WHITMAN REQUARDT AND ASSOCIATES
9030 STONY POINT PKWY STE 220
RICHMOND, VA 23235**



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BUSINESS ENTITY BRANCH OFFICE REGISTRATION



PROFESSIONS: ENG



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

James W. DeBorja
James W. DeBorja
Inspector

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



(FOLD)

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BUSINESS ENTITY BRANCH OFFICE REGISTRATION

PROFESSIONS: ENG



WHITMAN, REQUARDT AND ASSOCIATES LLP
100 5TH ST STE L2000
BRISTOL, TN 37620



James W. Trebock
James W. Trebock, Director

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BUSINESS ENTITY BRANCH OFFICE REGISTRATION
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PROFESSIONS: ENG
WHITMAN, REQUARDT AND ASSOCIATES LLP
100 5TH ST STE L2000
BRISTOL, TN 37620



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DPOR-PC (05/2015)

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AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY REGISTRATION



PROFESSIONS: ES

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



James W. DeBorja
DPOR Director

63

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Department of Professional and Occupational Regulation
9966 Mayland Drive, Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

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

PROFESSIONS: ENG, LS



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

James W. R. B...
JAMES W. R. B...

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BOARD FOR APELSCIDLA
BUSINESS ENTITY REGISTRATION
NUMBER: 0407003031 EXPIRES: 12-31-2017
PROFESSIONS: ENG, LS
NXL CONSTRUCTION CO INC
NXL CONSTRUCTION SERVICES INC
114 E CARY ST STE 200
RICHMOND, VA 23219



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Telephone: (804) 367-8500

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PROFESSIONAL ENGINEER LICENSE



MICHAEL A RUSSELL
17282 CLEVELAND RD
ABINGDON, VA 24211



Jay W. DeBoer
Jay W. DeBoer, Director

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DPOR-LIC (05/2015)

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COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

BOARD FOR APPLSCIDLA
PROFESSIONAL ENGINEER LICENSE
NUMBER: 0402024814 EXPIRES: 02-28-2018

MICHAEL A RUSSELL
17282 CLEVELAND RD
ABINGDON, VA 24211



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DPOR-PC (05/2015)

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Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

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0402041295

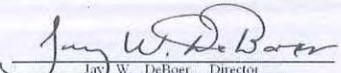
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AND LANDSCAPE ARCHITECTS
PROFESSIONAL ENGINEER LICENSE



MICHAEL WILLIAM SAUNDERS
4500 LITCHFIELD DRIVE
CHESTERFIELD, VA 23832



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Jay W. DeBoer, Director

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DPOR-LIC (05/2015)

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title:	Jo Ellen Sines, DBIA – Vice President Project Development
b. Project Assignment:	Design-Build Project Manager
c. Name of all Firms with which you are employed at the time of submitting SOQs. In addition, please denote the type of employment (Full time/Part time):	Corman Construction, Inc.-Full Time
d. Employment History: With this Firm <u>36</u> Years With Other Firms <u>1</u> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):	<p>Corman Construction, Inc. Vice-President Project Development 2006 – Present Jo Ellen manages highway, bridge and utility construction, cost control, schedule compliance, procurement and corporate resources. For almost 10 years (2004-2013), she oversaw Corman’s corporate safety program. Jo Ellen is a senior management member concentrating in innovating contracting with 24 Design-Build projects totaling over \$1.5 billion in the company’s portfolio and has been a Design-Build Project Manager on 10 design-build projects. Award: 2016 Maryland Quality Initiative (MdQI) Flanigan Award for her exceptional work in the transportation industry.</p> <p>Organizations:</p> <ul style="list-style-type: none"> ▪ Design-Build Institute of America (DBIA) Mid-Atlantic Region: On the Board of Directors from 2011-2012. ▪ Virginia Transportation Construction Alliance (VTCA): Design-Build Committee Member 2011-2014 ▪ American Road & Transportation Builders Association (ARTBA): Women Leaders Council 2011-Present and on the Board of Directors 2009-2010. ▪ Maryland Transportation Builders & Materials Association (MTBMA): Chairman from 2008-2010 and has been active on the Board of Directors for 11 years. <p>Corman Construction, Inc. Sr. Project Manager/Operations Manager 2003 – 2006 As Operations Manager, Jo Ellen managed roadway/bridge project management staff, oversaw projects from start to finish, schedules, cost control, staffing, quality control, environmental compliance, partnering, client relations, and constructability planning and troubleshooting. As Sr. Project Manager, she managed roadway/bridge projects, including onsite engineering staff, developed/reviewed schedules, cost control, means and methods, subcontractors, and field staffing.</p> <p>Corman Construction, Inc. Project Manager/Project Engineer 1994-2003 As Project Manager/Project Engineer, Jo Ellen oversaw construction from start up to close out on heavy highway, bridge, and utility projects, managed the project team, equipment and material procurement, objectives and goals, work plans, budgets and resources, coordinated subcontractors, monitored schedules, conducted progress meetings, minimized exposures/risks, mitigated issues, reviewed/approved deliverables, RFIs, change orders, administered contracts, oversaw budget, safety, and quality compliance, and successfully completed projects.</p>
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:	University of Pittsburgh Pittsburgh, PA B.S. 1980 Civil Engineering / Structures
f. Active Registration: Year First Registered/ Discipline/VA Registration #:	2009 Design-Build Institute of America (DBIA) #D651 2009 Virginia Erosion & Sediment Control DCR Responsible Land Disturber 31792
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> (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.)	<p>DESIGN-BUILD I-64 & ROUTE 623 WIDENING & IMPROVEMENTS SHORT PUMP, VA Project Role: Design Build Project Manager Dates: Oct. 2013-Dec. 2015 With Current Firm?: Yes</p>

Responsibility/Specific Job Duties: As **Design-Build Project Manager**, Jo Ellen was responsible for the design and construction from procurement to completion, including contract administration, furnishing materials, equipment, services, and labor for this project that widened 4.5 miles of I-64 from a four-lane to a six-lane divided highway and added a 12-ft. through lane and 12-ft. shoulder constructed to the inside of I-64 east and westbound. Twin replacement bridges were designed for I-64 over Little Tuckahoe Creek where VDOT was provided with new, low maintenance structures accompanied by a 75-year design life at a lower cost than having the existing structures rehabilitated. Jo Ellen assisted in determining extent of exploration, such as geotechnical, utility and HAZMAT, integrated job team and participated in plan development, in-house, client and agency reviews, assisted in preparing the schedule (integrates design and construction), oversaw construction, ROW acquisition, third-party coordination, and QA/QC, provided construction management expertise and project management, including public relations, led teams in environmental stewardship programs and partnering, and coordinated public outreach with VDOT. The project was completed on schedule, on budget with no claims or litigation. **Client: VDOT | Cost: \$33.2 million**

Relevancy: *VDOT Design-Build; interstate roadway widening; survey; bridge; environmental; geotechnical; hydraulics; traffic control devices; TMP; ROW; public involvement/relations; QA/QC; ITS; construction engineering and inspection; project management*

DESIGN-BUILD FALL HILL AVENUE & MARY WASHINGTON BLVD. EXTENSION | FREDRICKSBURG, VA

Project Role: **Design-Build Project Manager** **Dates:** **April 2014-Jan. 2017** **With Current Firm?:** **Yes**

Responsibility/Specific Job Duties: As **Design-Build Project Manager**, Jo Ellen is responsible for the design and construction from procurement to completion, including contract administration, furnishing materials, equipment, services, and labor for this project that widens Fall Hill Ave. from two to four lanes with a raised median, extends Mary Washington Blvd. to provide a new connection between Jefferson Davis Highway and Fall Hill Ave, medians to divide opposing traffic, and replaces the bridge over I-95. A portion of Mary Washington Blvd. is widened to a four-lane divided urban section with sidewalks and the Route 1 intersection provides additional turn lanes. There is one stormwater management pond, MOT, and new retaining walls to minimize the ROW and environmental impacts. Jo Ellen, assists in determining extent of exploration, such as geotechnical, utility and HAZMAT, integrates job team and participates in plan development, in-house, client and agency reviews, assists in preparing the schedule (integrates design and construction), oversees construction, ROW acquisition, third-party coordination, and QA/QC, provides construction management expertise and project management, including coordinating public outreach and public meetings, leads teams in environmental stewardship programs and partnering, meets contract requirements, and avoids/resolves disputes. **Jo Ellen works with Kyle Kern who was the Site Superintendent/Deputy Construction Manager on this project.** **Client: VDOT | Cost: \$30.7 million**

Relevancy: *VDOT Design-Build; roadway widening; survey; interstate bridge; environmental; geotechnical; hydraulics; traffic control devices; TMP; ROW; utilities; public involvement/relations; QA/QC; construction engineering and inspection; project management*

DESIGN-BUILD I-70, PHASE 2D | FREDERICK, MD

Project Role: **Design-Build Project Manager** **Dates:** **Sept. 2010-Aug. 2014** **With Current Firm?:** **Yes**

Responsibility, and specific job duties: As **Design-Build Project Manager**, Jo Ellen was responsible for the design and construction from procurement to completion, including contract administration, furnishing materials, equipment, services, and labor for this project that designed/reconstructed/widened a two-mile section of dual-divided I-70 and replaced two narrow bridges on I-70. The roadway was widened one lane in each direction to eliminate traffic backups from merging lanes. On- and off-ramps were reconfigured as dedicated lanes to maintain flow from exiting and merging traffic. Work involved complex horizontal and vertical geometry and phased construction of the roadway, ramps, and bridge, including phased construction of cross culverts spanning I-70. There were MSE and decorative retaining walls, utility relocations (sanitary, CCTV, and gas), and new traffic signals. Jo Ellen managed the design team during preparation for bid, assisted in determining extent of exploration, such as geotechnical, utility and HAZMAT, integrated job team and participated in plan development, in-house, client and agency reviews, assisted in preparing the schedule (integrates design and construction), oversaw construction, provided construction management expertise and project management, including coordinating public outreach with Owner (newsletters, toll-free telephone number, etc.), and led teams in environmental stewardship programs and partnering. **She also worked with proposed Construction Manager Kyle Kern who was the Construction Manager** and the design and permitting team developing/coordinating/reviewing designs and developed procurement approaches (including erosion & sediment control), met contract requirements, and avoided/resolved disputes. The project was completed on time and on budget. **Client: VDOT | Cost: \$37.5 million**

Relevancy: *Design-Build; roadway widening; survey; structures and bridges; environmental; geotechnical; hydraulics; traffic control devices; TMP; ROW; utilities; public involvement/relations; QA/QC; ITS; project management*

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

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

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title:	Michael Saunders, PE, CCM, DBIA Vice President/Director of Construction Services
b. Project Assignment:	Quality Assurance Manager
c. Name of all Firms with which you are employed at the time of submitting SOQs. In addition, please denote the type of employment (Full time/Part time):	NXL Construction Services, Inc.-Full Time
d. Employment History: With this Firm <u>5</u> Years With Other Firms <u>10</u> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):	<p>NXL Construction Services, Inc., Vice President/Director of Construction Management 2014-Present Michael manages/coordinates the workload of in-house staff and sub-consultants, including overseeing four Prime VDOT District-Wide Contracts. He provides consistency and coordination across assigned tasks, coordinates progress meetings and establishes regular communications with clients, and provides project review and Quality Control/ Quality Assurance Management on Design-Build Projects to ensure required QC testing and independent QA is carried out per applicable requirements to meet construction quality standards.</p> <p>NXL Construction Services, Inc., Project Manager/Quality Assurance Manager 2011-2014 Michael managed projects of varying complexity to include utility relocations and constructability reviews on VDOT and municipal construction projects. He was the Quality Assurance Manager for several design –build projects ensuring contract requirements and specifications are appropriately administered/applied, required QC testing and independent QA is carried out per requirements ensuring construction quality standards are met and payments processed.</p> <p>Virginia Dept. of Transportation, Project Controls Engineer/Area Construction Engineer for Design Build and Local Administered Projects 2007-2011 Michael worked to deliver construction projects in the Six Year Improvement Plan, including managing construction/maintenance contracts safely, with quality, on time, and within budget; to include providing responsible charge supervision and technical guidance to Construction Managers and Inspectors. He supervised all phases of multi-operational roadway and structural construction projects to ensure work was performed per project plans, specifications, and special provisions. Michael coordinated constructability reviews to include developing pre-advertisement schedules and sequence of construction, as well as for coordination of post-award schedule reviews and district-wide schedule impact analysis. He was the Responsible Charge Project Manager for Design-Build Projects throughout the Richmond District where he attended weekly progress meetings and design meetings, and ultimately served as the Responsible Charge Engineer acting on behalf of the owner.</p> <p>Virginia Dept. of Transportation, Construction Project Manager 2005-2007 Michael supervised all phases of multi-operational roadway and structural construction projects to ensure work was performed per project plans, specifications, and special provisions. He supervised construction inspectors’ work and career development and resolved contractual disputes with contractors. Michael prepared/presented the project showings and preconstruction conferences, prepared/submitted work orders, and tracked project cost to assure projects remained within budget. He conducted on-site field visits to ensure design and construction are within scope of contract and established standards/specifications, provided feedback, and performed follow-up reviews with project staff and management to support implementation of recommendations.</p> <p>Virginia Dept. of Transportation, Architect/Engineer I 2004-2005 Michael assisted in the Land Development and Maintenance Program Operations for the Salem Residency and performed Assistant Resident Engineering and Construction Project Management for the Bedford Residencies. He performed site plan reviews and provided comments to designers and was involved in the inspection and acceptance of additions to the secondary street system. Michael prepared/presented showings and preconstruction conferences for the projects; supervising Construction Inspectors assigned to the different projects. He monitored construction projects to include communicating verbally and in writing with inspector, contractor, and District personnel; handling potential work orders and claims issues and aiding in decisions made at the Residency level; tracking project cost and productivity to determine if projects would be completed on time and on budget; and performing final review and acceptance of projects from the contractor on behalf of the Department.</p> <p>Virginia Dept. of Transportation, Engineer Associate 2001-2004 Michael completed the Transportation Engineer Associate Program at VDOT where he rotated through the different divisions within the Department gaining the training to develop the technical and leadership competencies that sustain</p>

VDOT. He served in various roles, such as Contract Administrator, Construction Project Engineer, and routine Maintenance Program Operations.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
Virginia Polytechnic Institute and State University, Blacksburg, VA | BS | 2001 | Civil Engineering

f. Active Registration: Year First Registered/ Discipline/VA Registration #:
2005 | PE | VA Registration #041295

- 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.)

DESIGN-BUILD I-64/I-264 PAVEMENT REHABILITATION | NORFOLK, VA

Project Role: Quality Assurance Manager Dates: April 2014-Nov. 2015 With Current Firm?: Yes

Responsibility/Specific Job Duties: As Quality Assurance Manager, Michael prepared the Quality Assurance/Quality Control Plan and oversaw QA procedures and plan for this project that included major restoration and pavement rehabilitation of roadway on I-64 and I-264 totaling 10 miles or 67 lane-miles. He was responsible for the performance and coordination of QA testing and inspection per VDOT's Design-Build guidelines, monitored the contractor's QC program and was the liaison with the Department regarding compliance to ensure IA/IV testing was being performed. Approved QC inspection, staffing assignments, and the QC frequency testing plan before submitting to VDOT. Michael managed the QA staff, including sufficient staffing, for contract, plan, and specification compliance. He handled the preparation, maintenance, and submission of documentation, including diaries, EEO, materials/notebook/documentation, as-built sketches, the approval of monthly pay packages, and preparation/submission of final records. **Client: VDOT | Cost: \$36.5 million**

Relevancy: VDOT Design-Build; interstate roadway; survey; environmental; geotechnical; traffic control devices; TMP; public involvement/relations; QA/QC; construction engineering and inspection; project management

DESIGN-BUILD ROUTE 3 WIDENING | CULPEPER, VA

Project Role: Quality Assurance Manager Dates: May 2014-May 2017 (Est.) With Current Firm?: Yes

Responsibility/Specific Job Duties: As Quality Assurance Manager, Michael prepares the Quality Assurance/Quality Control plan and oversees QA procedures and plan for this project that improves a 5.1 mile section of Route 3 from two lanes to a four-lane divided highway. He is responsible for the performance and coordination of QA testing and inspection per VDOT's Design-Build guidelines, monitors the contractor's QC program, and is the liaison with the Department regarding compliance to ensure that IA/IV testing is being performed. Approved QC inspection, staffing assignments, and the QC frequency testing plan before submitting to VDOT. Michael manages the QA staff, including sufficient staffing, to ensure contract, plan, and specification compliance. He handles the preparation, maintenance, and submission of project documentation, including diaries, EEO, materials/notebook/documentation, as-built sketches, approval of monthly pay packages, and the preparation/submission of final records. **Client: VDOT | Cost: \$24 million**

Relevancy: VDOT Design-Build; roadway; survey; structures and bridges; environmental; geotechnical; hydraulics; traffic control devices; TMP; ROW; utilities; public involvement/relations; QA/QC; ITS; construction engineering and inspection; project management

DESIGN-BUILD ROUTE 36 BRAC IMPROVEMENTS | RICHMOND, VA

Project Role: Quality Assurance Manager Dates: Nov. 2011-Dec. 2012 With Current Firm?: Yes

Responsibility/Specific Job Duties: As Quality Assurance Manager, Michael was responsible for the oversight of the QA procedures and plan for this project that improved Route 36 and Route 144 near Fort Lee totaling approximately 1.5 miles. He was responsible for the performance and coordination of QA testing and inspection per VDOT's Design-Build guidelines, monitored the contractor's QC program and was the liaison with the Department regarding compliance to ensure IA/IV testing was being performed. Approved QC inspection, staffing assignments, and the QC frequency testing plan before submitting to VDOT. Michael managed the QA staff, including sufficient staffing, to ensure contract, plan, and specification compliance. He handled the preparation, maintenance, and submission of documentation, including diaries, EEO, materials/notebook/documentation, as-built sketches, the approval of monthly pay packages, and the preparation/ submission of final records. **Client: VDOT | Cost: \$9 million**

Relevancy: VDOT Design-Build; roadway; survey; structures; environmental; geotechnical; hydraulics; traffic control devices; TMP; ROW; utilities; public involvement/relations; QA/QC; ITS; construction engineering and inspection; project management

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

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

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.		
a.	Name & Title: Michael Russell, P.E. – Vice President	
b.	Project Assignment: Design Manager	
c.	Name of all Firms with which you are employed at the time of submitting SOQs. In addition, please denote the type of employment (Full time/Part time) Whitman, Requardt & Associates, LLP-Full Time	
d.	<p>Employment History: With this Firm <u>2</u> Years With Other Firms <u>26</u> Years</p> <p>Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):</p> <p>Whitman, Requardt & Associates, LLP Vice-President 2014 – Present Michael is currently a Vice-President where he manages transportation projects in Central and Southwestern Virginia. He serves as WRA’s Design Manager on major regional Design-Build projects and Project Manager on major interstate and other transportation projects.</p> <p>Virginia Dept. of Transportation District Administrator 2011-2014 Michael became the Bristol District Administrator in 2011 who provided executive leadership and direction to the Department’s 623 employees in the 12-County District. He was an extension of the Commissioner’s Office who oversaw a \$500M Six-Year construction program and an annual maintenance/operation budget averaging \$170M per year. Michael oversaw and designed key projects in the District providing design guidance and construction claim resolution. He worked with staff to resolve design and construction issues which advanced the District’s program. Major construction programs include the \$2.8B Coalfields Expressway and Corridor Q.</p> <p>Virginia Dept. of Transportation PE Manager/Planning & Investment Management 2008-2011 Michael became the Salem District Assistant District Administrator for Preliminary Engineering, Planning, and Investment Management in 2008 and led the District's Preliminary Engineering staff, including Location & Design, Environmental, and ROW sections. He was responsible for engineering functions for compliance with state and federal transportation and environmental standards and policies. Michael led the District's Planning & Investment Management staff, including Land Use, Land Development, Planning, and Programming.</p> <p>Virginia Dept. of Transportation Location & Design Engineer 2005-2008 Michael became the Salem District Location & Design Engineer in 2005 and subsequently led and managed design staff who prepared highway, ROW, and construction plans, including survey, roadway and hydraulic design. He coordinated with ROW, environmental, bridge, traffic, and materials sections for a cohesive and collaborative design for all projects. Michael oversaw engineering to ensure projects were developed per state and federal standards. As District L&D Engineer, he was responsible for the design of projects ranging less than \$1 million to complex projects costing \$100 million. His collaborative and hands on approach to project management and design guided design teams to significantly improve on-time and on-budget performance of the District’s projects and Dashboard performance measures while maintaining a problem-solving team mindset.</p> <p>Virginia Dept. of Transportation Resident Engineer 2004-2005 Michael became the Wytheville Resident Engineer in 2004 responsible for construction and maintenance activities in Wythe and Grayson Counties. In addition to having geographic responsibility for VDOT activities in those counties, he was as the Department’s Responsible Charge Engineer for construction activities and ensured compliance with plans, specifications, environmental requirements and contract documents. Michael reviewed and accepted independent work order estimates and analysis while focusing on successful field resolution of disputes by providing technical analyses of issues, and negotiating/implementing partnering with contractors to settle conflicts. He was responsible for on-time/on-budget completion and increased controls to track and monitor progress on projects, including earned value & cost analysis. Michael also supervised Construction Managers and oversaw VDOT inspectors.</p> <p>Virginia Dept. of Transportation Transportation Engineer Sr. 2000-2004 Michael was project manager for multiple transportation improvement projects in the Salem District.</p>	
e.	Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Virginia Polytechnic Institute and State University Blacksburg, VA B.S. 1989 Civil Engineering	
f.	Active Registration: Year First Registered/ Discipline/VA Registration #: 1994 Virginia Professional Engineer #0402024814	
g.	Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i>	

3. 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.)

DESIGN-BUILD I-81 HALLS BOTTOM ROAD BRIDGE REPLACEMENT | WASHINGTON COUNTY, VA

Project Role: Project Design Manager **Dates:** May 2016 – Sept. 2019 **With Current Firm?:** Yes

Responsibility/Specific Job Duties: As Project Design Manager, Michael is responsible for design elements of the replacement of two bridges on I-81 over Halls Bottom Road, roadway design, coordinating individual design elements, and ensuring design conforms with contract requirements. He established and oversees the design QA/QC program for all pertinent design disciplines, including review of the design, working plans, shop drawing review, specifications, and constructability. This project is being constructed within existing ROW requiring a complex MOT Plan utilizing the existing median to temporarily carry north and southbound traffic while the bridges are replaced. The efficient design replaces the twin 3-span 220-ft. long bridges with 140 single span structures utilizing a “true MSE” abutment design. Michael managed an aggressive design schedule allowed construction to begin only 3.5 months after NTP. With construction plans being reviewed now and construction already underway, Michael is readily available to serve as Design Manager on the I-64 Widening project. **Client:** VDOT | **Cost:** \$11.2 million

Relevancy: VDOT Design-Build; interstate roadway; survey; structures and bridges; environmental; geotechnical; hydraulics; traffic control devices; TMP; public involvement/relations; QA/QC; construction engineering and inspection; project management

DESIGN-BUILD ROUTE 29 SOLUTIONS–BERKMAR AVE. EXTENSION | ALBEMARLE COUNTY, VA

Project Role: Design Element Lead **Dates:** Dec. 2014 – Oct. 2017 **With Current Firm?:** Yes

Responsibility/Specific Job Duties: As Design Element Lead, Michael is responsible for all roadway and structural design and coordinating design elements of the Berkmar Avenue Extension portion of this unique Route 29 Solutions Design-Build Project being delivered to VDOT by Lane/Corman JV design-build team. He is responsible for design of the 2.5-mile Urban Connector roadway, including a 716-ft. long bridge over the South Fork of the Rivanna River. This project is being delivered on an accelerated schedule with ROW plans completed in just six months and construction plans approved in nine months. Michael accelerated design efforts needed to advanced ROW approvals and VSMP permits to allow clearing activities to occur before the time-of-year restrictions of the Northern Long-Eared Bat, which was listed as endangered after contract award. He ensured that design activities and plan reviews were delivered per the Berkmar Extension’s QA/QC Plan and Construction Engineering support included review of all shop drawings prepared by the contractor and suppliers. With construction plans approved over a year ago and construction well underway, Michael is readily available to serve as Design Manager on the I-64 Widening Project. **Client:** VDOT | **Cost:** \$32 million

Relevancy: VDOT Design-Build; roadway; survey; structures and bridges; environmental; geotechnical; hydraulics; traffic control devices; TMP; ROW; utilities; public involvement/relations; QA/QC; ITS; construction engineering and inspection; project management

I-81 BRIDGE REPLACEMENT OVER THE NEW RIVER & ROUTE 232 OVER I-81 | MONTGOMERY AND PULASKI COUNTIES, VA

Project Role: Project Design Manager **Dates:** Dec. 2014 – June 2016 (Advertisement) **With Current Firm?:** Yes

Responsibility, and specific job duties: As Project Design Manager, Michael was responsible for the roadway design and coordination of all design disciplines and ensuring design conforms with the contract, including 1.72 miles of improvements to the existing four-lane divided interstate, replaced two-lane bridges over the New River with three-lane bridges in each direction and replaced the Route 232 overpass bridge at Exit 105. The I-81 bridges are approximately 1,600-ft. long and are 80-ft. above the river. I-81 widened to provide deceleration and acceleration lanes along I-81. Widening the mainline bridges and associated MOT require replacing the Route 232 Bridge over I-81. The project is being developed under a “Turnkey Delivery” and Michael is overseeing and coordinating design elements, including surveys, roadway, hydraulics, SWM, structural, geotechnical, and traffic engineering, ITS, TMP, environmental permits, utility design, and QA/QC of plans, constructability reviews, and special provisions. Due to funding constraints, the design was modified to phase construction to accelerate Northbound Bridge and the Route 232 Bridge at Exit 105 construction. Construction engineering support includes review of shop drawings prepared by the contractor and suppliers. **Client:** VDOT | **Cost:** \$98 million

Relevancy: VDOT project, interstate roadway; survey; structures and bridges; environmental; geotechnical; hydraulics; traffic control devices; TMP; ROW; utilities; public involvement/relations; QA/QC; project management

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

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

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title: Kyle Kern – Senior Superintendent / Construction Manager
b. Project Assignment: Construction Manager
c. Name of all Firms with which you are employed at the time of submitting SOQs. In addition, please denote the type of employment (Full time/Part time): Corman Construction, Inc. –Full Time
d. Employment History: With this Firm 27 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): Corman Construction, Inc. Senior Superintendent// Construction Manager 2000 – Present Assigned to roadway and bridge projects, including three design-builds, Kyle develops work plans that comply with contract specifications, oversees material procurement and supplier coordination, reviews the schedule with management teams, advises / directs field crews, and schedules / manages subcontractors, construction, equipment, safety, and quality control. He coordinates field activities with the Quality Control team and inspects construction for compliance and schedule adherence.
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2014 VDOT Erosion & Sediment Control Contract Certification #1-06762 2014 Virginia Erosion & Sediment Control Responsible Land Disturber (RLD) #42214
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> (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.) DESIGN-BUILD INTERCOUNTY CONNECTOR CONTRACT A MONTGOMERY COUNTY, MD Project Role: Construction Manager – Structures Dates: Sept. 2007-Dec. 2010 With Current Firm?: Yes Responsibility/Specific Job Duties: As Construction Manager-Structures for this project consisting of 7.2 miles controlled-access tri-lane divided highway with 18 steel girder or precast concrete girder bridges and four bridge widenings on I-370 highlighted by a 625-ft. deck-over structure, a "Signature" Arch Bridge spanning Rock Creek and a "Gateway" Bridge at the MD 97 Interchange. There was 2.5 million CY earthwork, 400,000 SF sound walls, box culverts, stormwater management/drainage systems, concrete flatwork, landscaping/roadside development, 30,000 SF retaining and MSE walls, 630,000 SY HMA pavement which encompassed new access ramps to two major interchanges lighting/signalization, Electronic Toll Collection (ETC) facilities, Intelligent Transportation Systems (ITS), environmental stewardship, utility relocations, maintenance of traffic, erosion and sediment controls, quality control and community outreach to approximately 10,000 residents surrounding the corridor. Kyle oversaw up to 14 bridge crews and reviewed the quality control check point procedures with the QA / QC team for specification and contract compliance. He was responsible for two bridges: the 600-ft. deck over structure with retaining walls and the signature arch structure spanning Rock Creek. He developed work plans that comply with contract specifications, oversaw material procurement and supplier coordination, reviewed the schedule with management teams, advised / directed field crews, and schedules / managed subcontractors, construction, equipment, safety, and quality control. He worked with proposed DBPM Jo Ellen Sines who was the Vice President of Project Management on this project. Client: Maryland State Highway Administration Cost: \$483.4 million <i>Relevancy: Design-Build; roadway; survey; structures and bridges; environmental; geotechnical; hydraulics; traffic control devices; TMP; ROW; utilities; public involvement/relations; QA/QC; ITS; construction engineering and inspection; project management</i>

DESIGN-BUILD FALL HILL AVENUE & MARY WASHINGTON BLVD. EXTENSION | FREDRICKSBURG, VA

Project Role: Sr. Superintendent | Deputy Construction Manager Dates: May 2015-Present

With Current Firm?: Yes

Responsibility/Specific Job Duties: As Site Superintendent | Deputy Construction Manager, Kyle oversees ALL field work, including roadway widening, bridge construction, shared-use path, stormwater management pond, MOT, retaining walls, and utility relocations for this project that widens Fall Hill Ave. from two to four lanes with a raised median, extends Mary Washington Blvd. to provide a new connection between Jefferson Davis Highway and Fall Hill Ave, medians to divide opposing traffic, and replaces the bridge over I-95. A portion of Mary Washington Blvd. is widened to a four-lane divided urban section with sidewalks and the Route 1 intersection provides additional turn lanes. Kyle develops work plans that comply with contract specifications, oversees material procurement and supplier coordination, reviews the schedule with management teams, advises / directs field crews, and schedules / manages subcontractors, construction, equipment, safety, and quality control. He coordinates field activities with the Quality Control team and inspects construction for compliance and schedule adherence. **Kyle works with proposed DBPM Jo Ellen Sines who is the DBPM on this project. Client: VDOT | Cost: \$30.7 million**

Relevancy: VDOT Design-Build; roadway widening; survey; bridge; environmental; geotechnical; hydraulics; traffic control devices; TMP; ROW; utilities; public involvement/relations; QA/QC; construction engineering and inspection; project management

DESIGN-BUILD I-70, PHASE 2D | FREDERICK, MD

Project Role: Construction Manager Dates: June 2012-Nov. 2013 With Current Firm?: Yes

Responsibility, and specific job duties: As Construction Manager for this project that designed/reconstructed/widened a two-mile section of dual-divided I-70 and replaced two narrow bridges on I-70, Kyle oversaw field work, including roadway widening on South Street, cross slope correction, MSE and retaining walls, utility relocations, traffic signals, stormwater management, bridge construction, lane closures, and traffic switches. The roadway was widened one lane in each direction to eliminate traffic backups from merging lanes. On- and off-ramps were reconfigured as dedicated lanes to maintain flow from exiting and merging traffic. Work involved complex horizontal and vertical geometry and phased construction of the roadway, ramps, and bridge, including phased construction of cross culverts spanning I-70. There were MSE and decorative retaining walls, utility relocations (sanitary, CCTV, and gas), and new traffic signals. Kyle developed work plans that comply with contract specifications, oversaw material procurement and supplier coordination, reviewed the schedule with management teams, advised / directed field crews, and scheduled / managed subcontractors, construction, equipment, safety, and quality control. He coordinated field activities with the Quality Control team and inspects construction for compliance and schedule adherence. Project was completed on time and on budget. **Kyle worked with proposed DBPM Jo Ellen Sines who was the DBPM on this project. Client: VDOT | Cost: \$37.5 million**

Relevancy: Design-Build; interstate roadway widening; survey; structures and bridges; environmental; geotechnical; hydraulics; traffic control devices; TMP; ROW; utilities; public involvement/relations; ITS; project management

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

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

Project	Role	Anticipated Duration
Design-Build Fall Hill Ave. & Mary Washington Blvd. Extension	Site Superintendent Deputy Construction Manager	April 2014-Jan. 2017

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: Design-Build I-64 to Route 623 Widening & Improvements Location: Henrico & Goochland Counties, VA	Name: RK&K	Name of Client/ Owner: Virginia Dept. of Transportation Phone: 804-720-4229 Project Manager: Shane Mann Phone: 804-720-4229 Email: shane.mann@vdot.virginia.gov	11/2015	12/2015 (due to approved slope correction change order which brought a section of I-64 into compliance)	\$33,238	\$34,782 (due to approved slope correction change order which brought a section of I-64 into compliance)	\$34,782

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

PROJECT FEATURES AND ROLE/NARRATIVE



Corman was the Lead Design-Build Contractor that managed the design, construction, quality, safety, DBE, environmental compliance, owner coordination/communication, budget, and the schedule. Corman self-performed the excavation, grading, sub-base installation, and site drainage and water quality swales, constructed the five MSE walls and performed the structural work on the two new bridges. With a 48,313 ADT, which is anticipated to grow to 73,900 by 2036, the goal was to relieve congestion along this I-64 corridor where traffic volume is increasing, improve safety, and improve operational efficiency of the Route 623 Interchange.

4.5 miles of I-64 was widened in the median from a 4- to a 6-lane divided highway, which is similar length to the I-64 Widening Exit 200 to 205 project, and I-64/Route 623 interchange improvements were made, including widening the ramp for an additional turn lane and the I-64 eastbound off-ramp to Route 623 for an additional turn lane. An additional through-lane in each direction reduces congestion and travel time. A widening safety measure included adding a 12-ft. paved inside-shoulder instead of relying on the existing 5-ft. inside-shoulder. The signalized intersection on Route 623 was rebuilt and four new CCTV cameras were installed along the project corridor.

There were culverts below I-64 at five locations that were not continuous through the median area. With the widening occurring to the inside, the additional width of these new travel lanes and fill needed resulted in having to extend the culverts further into the median area. MSE walls were proposed to

support the widened roadway. This change resulted in the elimination of stream diversion or work in the wet, and stream/wetland impacts were avoided, trees were saved in the median, and loading on the existing culverts was reduced. MSE walls also lowered cost and took less time to construct than culvert extensions.

Substandard outside shoulders were rebuilt in place through the Full Depth Reclamation (FDR) process, where feasible. By re-using existing roadway materials, we reduced waste and were able to compress the schedule. RFP plans called for the rehabilitation of two bridges over Little Tuckahoe Creek. The Corman DB Team proposed and built new bridges in lieu of rehabilitating the existing ones. This had a lower initial cost and lessened the maintenance requirements significantly which will save VDOT money in the future. Other project elements include installing stormwater management facilities within the footprint of project sign structures and foundations, storm drainage, pavement reconstruction, overlay, and new signs.

Mass cut/fill operations were demanding. Corman collaborated with the designer's roadway staff to reuse the material on site and worked on mass excavation flow charts to confirm the final product was successful and efficient. This resulted in completing the additional interior lanes and a structurally-sound embankment.

During the Scope Validation period, the Corman DB Team worked with VDOT to resolve a slope correction issue on the existing I-64 lanes. Early in design, it was discovered that some segments did not have the minimum 2% cross-slope required to meet state and federal guidelines. For the 2% cross-slope, variable-depth milling and overlay were required at these areas, which means it would impact the schedule and budget. The mill and overlay work was done under night lane closures, and with the intricacies involved with variable-depth milling, only a fraction of the area could be covered in a single night as compared to straight 2-inch mill. This project was completed on schedule and within budget of the approved change order to resolve the slope correction issue.

SCOPE AND COMPLEXITY SIMILARITIES

VDOT Design-Build	Hydraulics
Interstate Median Widening	Traffic Control Devices
Roadway	TMP
Survey	Public Involvement/Relations
Bridge Replacement/Rehab	QA/QC
Environmental	ITS
Geotechnical	Project Management

RELEVANT AND VERIFIABLE EVIDENCE OF GOOD PERFORMANCE

"This message is just a pat on the back to the crews and construction companies that are currently working on the widening project (64 & 288). I travel this road several times a day and am very pleased with the traffic safety and direction signage. The travel through this area is very smooth and hope that the work is completed soon. Thank you very much for a job well done. Keep up the good work." — Goochland County, VA, resident

TEAMING EXPERIENCE

- Proposed DBPM Jo Ellen, DBIA was the DBPM on this project.
- Proposed Design/Construction Integrator Ryan Gorman performed bridge replacement constructability reviews for this project.
- H&B Surveying & Mapping, LLC performed the surveying on this project.

ATTACHMENT 3.4.1(a)

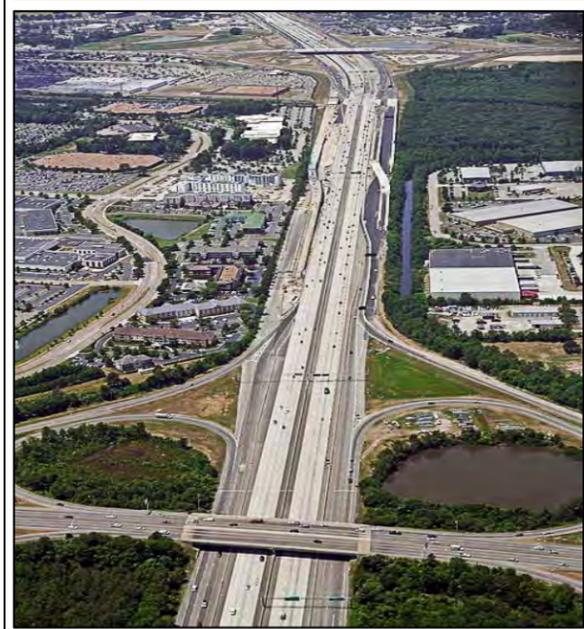
LEAD CONTRACTOR - WORK HISTORY FORM

(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: I-64/Battlefield Boulevard Location: Chesapeake, VA	Name: Kimley Horn & Associates, Inc.	Name of Client/ Owner: VDOT Phone: 757-494-5470 Project Manager: Michael Johnson Phone: 757-494-5470 Email: Michael.Johnson@vdot.Virginia.gov	07/2009	07/2009	\$98,000	\$102,000 (increased due to owner-directed scope changes)	\$102,000

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

PROJECT FEATURES AND ROLE/NARRATIVE



E.V. Williams Inc. was the prime contractor on this large scale urban highway project which included substantial value engineering and additions to scope to improve functionality. The project widened and reconstructed four miles of I-64, reconfigured a standard cloverleaf intersection to include adding Collector Distributor roadways for the entire length of the project, installed several mechanically-stabilized earth retaining walls, designed/constructed sound barrier walls, installed traffic management systems and incorporated large stormwater management facilities within the footprint of the I-64 corridor.

Bridges: Similar to the I-64 widening project from exit 200 to 205, this project included widening two interstate bridges, as well as construction of five new bridges consisting of two structural steel box girder braided ramp structures, two pre-stressed concrete bridges over CSX Railroad, and a phased replacement of the Battlefield Blvd. Overpass Bridge. Major elements of work along with the bridges included 30,000 storm drain pipe, 697 CY Class A-4 concrete for Box Culverts and Box Culvert Extensions, 400,000 CY borrow and 350,000 CY regular excavation

Roadway Widening: Four miles of I-64 was widened from four into eight mainline lanes at the braided bridges and cloverleaf interchange. Mainline pavement sections included 13” of continuous reinforced concrete over cement treated aggregate. Feeder lanes consisted of full depth asphalt paving over cement treated aggregate. As with the I-64 Widening Project from Exit 200 to 205, this project required the existing number of lanes be maintained except for night operations, as well as existing capacity at bridges being maintained while adding to existing or phased replacement of existing. Other work similar to the I-64 Widening Project from Exit 200 to 205 included 120,000 tons of base material and 194,000 tons of asphalt.

Design-Build Element: This project was unique in that it is much more similar to a design-build project as the owner retained the designer to attend progress meetings throughout construction. This allowed a free flow of suggested project improvements, including deleting one phase of construction, adding an additional lane on I-64 at the westbound I-64/Rt. 168 merge, and recycling the concrete pavement as cement treated aggregate (CTA) within the median to improve motorist safety.

Public Relations: VDOT Public Relations, E.V. Williams, and VDOT Project Management worked with third-party stakeholders to keep the public informed of project progress, changes, and successes that would impact the surrounding area.

MOT/TMP: High traffic volumes which increase during peak vacation and holiday travel times placed a high value on safe and well-marked access and egress points. The safety and flow of the motoring public were critical criteria as the TMP was revised. The same considerations were paramount as traffic control was installed, maintained as well as removed. Our trained traffic control crews worked seamlessly with the State and local Police, emergency responders, as well as the local Traffic Operations Center to minimize impacts to

the motoring public. E.V. Williams worked with VDOT to revise the TMP/Phasing plans to develop a revised TMP approach that eliminated the original proposed temporary loops and ramps, is safer for motorists, and produced a project savings. This change also resulted in a 3 month acceleration of the project. Once it was clear the project was ahead of schedule and under budget VDOT, the designer and E.V. Williams collaborated to improve a portion of the roadway design resulting in reconfiguring a major tie-in and adding an enhancement of and additional CD lane at the Rt. 168 interchange. This improved final traffic flow and provides a safer merge from Rt. 168 onto westbound I-64 resulting in exceeding the original contract value, but kept the project within the contingency. This change was on a critical path of the schedule and resulted in the contract completion date being extended back out to the original completion date while still allowing E.V. Williams to earn an early completion bonus.

Innovative Construction Techniques: E.V. Williams worked with VDOT to become the first large project in Virginia to demolish the existing concrete pavement, crush it and use the crushed material as aggregate for CTA. A well was drilled in the median and a concrete batch plant was set up to produce the CTA base material for the new concrete pavement for the project and then later was used to generate the concrete pavement. This eliminated the need to remove 6,700 truckloads of broken concrete pavement from the median, as well as deliver 6,700 loads of CTA into the median.

SCOPE AND COMPLEXITY SIMILARITIES

Roadway	Traffic Control Devices
Survey	TMP
Structures & Bridges	Utilities
Environmental	Public Involvement/Relations
Geotechnical	ITS
Hydraulics	Project Management

RELEVANT AND VERIFIABLE EVIDENCE OF GOOD PERFORMANCE

- 2010 ACEC Engineering Excellence Honor Award

“It was truly an integrated project team that worked hard and followed through with delivering this project to the citizens as promised. We want to reiterate the value that E. V. Williams, Inc. brought to this project and thank you for your outstanding performance.”

Mike Prezioso, PE, CCM, Senior Vice President
McDonough, Bolyard Peck
VDOT’s Consultant Construction Manager

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: Design-Build Intercounty Connector Contract A (ICC-A) Location: Montgomery County, MD	Name: Parsons Transportation Group/Jacobs, a Joint Venture	Name of Client/ Owner: Maryland State Highway Administration Phone: 443-572-5222 Project Manager: Mark Coblentz Phone: 443-572-5222 Email: mcoblentz@sha.state.md.us	08/2010	02/2011 (due to owner-directed changes)	\$463,885	\$483,489 (Due to incentive payment and owner-directed changes)	\$483,489

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

PROJECT FEATURES AND ROLE/NARRATIVE



Corman was a Joint Venture Lead Design-Build Contractor Partner who provided full-time engineers, managers, foremen, superintendents and crews. Corman performed bridge construction, including foundations, substructures and superstructures, ranging from steel or concrete girders, concrete arch bridge and deckover structure, erosion and sediment controls, utility construction, roadwork, and MOT. Corman personnel also secured all permits. The project designed and constructed 7.2 miles of controlled-access, six-lane divided highway, **including inside median widening roadway and bridge widening of I-370**; 18 steel-girder or precast-concrete girder bridges; 630,000 SY of HMA pavement that encompassed new access ramps to two major interchanges; 400,000 SF of sound walls; 130,000 SF retaining and MSE walls; stormwater management/drainage systems; maintenance of traffic; Intelligent Transportation Systems (ITSs); quality control; and outreach to 10,000 residents surrounding the corridor. The multi-phased construction of a new interchange at I-370, as well as a new interchange at ICC-A and MD 97, required maintaining traffic on major thoroughfares and working over heavily-traveled roadways and in extremely sensitive neighborhoods. Temporary roads/walkways were constructed to provide access for pedestrian and vehicular traffic through the construction area.

Bridge Widening: Widened six bridges on I-370 , milled the surface, and placed latex modified concrete on the deck portion that originally existed prior to the widening. As part of the I-370 widening, the team widened a steel-girder bridge over a CSX and commuter rail line, requiring bridge and foundation construction within the railroad's right-of-way. Traffic was shifted for

the bridge to remain open during construction and an access road was constructed along the railroad to access the bridge construction.

Utility Relocations: Major utility relocations were completed at 106 locations, including water, sewer, power/electrical, cable lines, and fiber optic (underground and overhead), and critical transmission lines for Columbia and Williams Gas, which required working outside normal timeframes, particularly for the tie-ins. The team completed sewer work at two major stream crossings with impending stream closure deadlines that necessitated working 24/7 with adverse ground conditions (water running in). Many relocations involved elaborate, complex, and extensive piping design, coordination, and construction.

Stakeholders: Stakeholders were brought together early, including permitting agencies, ICC, and the owner. The design-build team coordinated with permit agencies over significant environmental commitments and conditions including MDE permits for sediment control, stormwater management, and work in wetlands and waterways.

ATCs: The team developed Alternative Technical Concepts (ATCs) to redesign a major interchange from three to two levels, resulting in millions of dollars in savings to the project. The team revised noise wall foundations from drilled shafts to spread footings, minimizing and reducing potentially

SCOPE AND COMPLEXITY SIMILARITIES

Design-Build	Traffic Control Devices
ATCs	TMP
Roadway	ROW
Survey	Utilities
Structures & Bridges	Public Involvement/Relations
Environmental	QA/QC
Geotechnical	ITS
Hydraulics	Project Management

RELEVANT AND VERIFIABLE EVIDENCE OF GOOD PERFORMANCE

- Project completed with a 92% "A" rating for Environmental Compliance
- 2012 AGC of America Alliant Build America Award for Design-Build Highway & Transportation
- 2011 Engineering News Record (ENR) Best Project – Transportation

TEAMING EXPERIENCE

- Proposed DBPM Jo Ellen, DBIA was the Vice President of Project Development on this project.
- Proposed CM Kyle Kern was the Construction Manager-Structures on this project.

ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract 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: Design-Build I-95 Express Lane Extension – Southern Terminus Design-Build Location: Stafford County, VA	Name: Branch Highways, Inc.	Name of Client: VDOT Phone: 703-259-2362 Project Manager: Paul Nishimoto Phone: 703-259-2362 Email: paul.nishimoto@vdot.virginia.gov	06/2016	08/2018	\$31,085	\$31,085	\$1,800

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.

PROJECT FEATURES AND ROLE/NARRATIVE



WRA's Richmond Office was the Design-Build Lead Designer for the Extension of the Southern Terminus of the I-95 Express Lanes through the Garrisonville Road (Route 610) Exit on I-95 in Stafford County, Virginia.

Extending the Express Lanes eliminates a heavy weave movement from eastbound Route 610 to the northbound Express Lanes thereby having a significant impact on the congestion experienced by users of the Express Lanes and General Purpose Lanes of I-95, as well as Garrisonville Road itself. Project features include:

Express Lane Design and Interstate Widening: 2.2 miles of a new reversible Express Lane, including the median widening of I-95 to provide a new northbound entry slip ramp and a southbound exit slip ramp/auxiliary lane, was the primary feature of the project to provide safety and operational improvements in the corridor. This extension begins at approximate mile marker 142.5 (north of Garrisonville Road) to the existing Express Lanes terminus at approximate mile marker 145.00 (north of Garrisonville Road). Another 0.7 miles of the existing Express lanes will be resurfaced as part of the project.

ITS/Lighting/Signage Integration: This portion of the project scope consisted design and integration of ITS devices to provide reversible lane operation for the I-95 Express Lanes Southern Terminus Extension, as well as providing other traffic control, monitoring, and informational systems. ITS devices specific to the I-95 Express Lanes Southern Terminus Extension project include DMS signs, CCTV cameras, automated incident detection cameras, traffic detectors, vehicular gates and the control cabinets, power generators, communications, and electrical power to support these systems. This effort required close coordination with VDOT and the I-95 Express Lanes Concessionaire (Transurban) to integrate all new ITS devices and expand the operation of the existing system.

Hydraulic Analysis and Stormwater Management: WRA prepared an advance work package that provided plans and computations to all MOT and clearing work to begin immediately following NTP. During final design of the project, all Stormwater Management BMPs were able to be eliminated through the use of credits.

Geotechnical Analysis and Design: Geotechnical services included pavement and foundation design services, slope recommendations, and the design of a mechanically stabilized slope or "green wall" to eliminate stream impacts near the beginning of the project.

Maintenance of Traffic: With I-95 being one of the most heavily-traveled corridors on the east coast, MOT requirements for the work zone were restrictive with significant penalties for impacts to I-95 or the existing Express Lanes facilities operated by Transurban.

Noise Walls: WRA performed noise data collection and analyses to confirm the preliminary noise wall limits in the conceptual plans were appropriate and required. As a result, the proposed noise walls were decreased by over 30,000 SF.



SCOPE AND COMPLEXITY SIMILARITIES

VDOT Design-Build	Traffic control devices
Interstate Roadway	TMP
Survey	Public Involvement/Relations
Structure	QA/QC
Environmental	ITS
Geotechnical	Utilities
Hydraulics	Project Management

RELEVANT AND VERIFIABLE EVIDENCE OF GOOD PERFORMANCE

- *The project began construction immediately after the NTP with an Advanced Work Package to allow clearing to begin along with grading of upland areas "at risk". This allowed the project to move forward while VDOT obtained the water quality permit for the project.*
- *Excellent coordination with VDOT and Transurban has expedited submittal reviews and response times.*

TEAMING EXPERIENCE

The following proposed individuals have comparable roles on this project as the new I-64 Widening Exit 200 to 205 project:

- Executive Committee Member John Maddox, PE
- Design Manager Michael Russell, PE
- Lead Environmental Compliance & Permitting Taylor Sprenkle, PWD
- ITS/Lighting//Signage Jeff Cheng
- E&S Control Reviewer Glenn Wilson
- NEPA Documentation Nichols Nies.
- Lead Dry Utility Design Paul Martin
- Lead Wet Utility Design Dan Seli, PE
- MOT Manager Dana Trone, PE, PTOE

- H&B Surveying & Mapping, LLC surveying.

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: Design-Build I-95/I-495 at Arena Drive from MD 202 to MD 214 Location: Prince George's County, MD	Name: Lane Construction Corporation	Name of Client: Maryland State Highway Administration (MSHA) Phone: 410-545-8770 Project Manager: Eric Marabello Phone: 410-545-8770 Email: emarabello@sha.state.md.us	06/2007	12/2009	\$26,600	\$29,500	\$1,700

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.

PROJECT FEATURES AND ROLE NARRATIVE



WRA's Baltimore Office led design for this Design-Build project responsible for preparing final engineering design documents and approvals for **widening of I-95/I-495 and improvements to Arena Drive interchange**. The project enabled the Arena Drive interchange with I-95/I-495 (Capital Beltway) to operate as a full-time interchange instead of only during special events. **I-95/I-495 was widened for an additional lane** and incorporated two collector-distributor lanes. Project features include:

Roadway Rehabilitation and Widening: 1.9 miles of median widening to the on the I-95/I-495 for additional lanes in each direction providing significant operational and safety improvements. The I-95/I-495 typical section was reconfigured from four through-lanes only to three through-lanes with two collector-distributor lanes. The collector-distributor lanes provide access to/from three interchanges: MD 214, Arena Drive, and MD 202.

Interchange Reconstruction: Ramps at two interchanges were reconfigured to eliminate inadequate weaving lengths on I-95/I-495. The northeast and northwest loop ramp at MD 214 and northwest ramp at MD 202 were eliminated. Existing quadrant ramps were widened to accommodate additional traffic with new connections to MD 214 and MD 202. As a result of traffic analyses performed during final design, a ramp from MD 202 to I-95/I-495 was identified as needing to be widened to address congestion along MD 202. As a contract modification, an Interstate Modification Report (IMR) was completed and ramp widening was designed and constructed, including additional NEPA approval and environmental permitting.

Hydraulic Analysis and Stormwater Management (SWM): WRA re-evaluated the conceptual SWM plan provided by MSHA and determined that only one of two proposed SWM facilities was required to meet the project's SWM needs. By eliminating the second facility, to be constructed in a loop ramp, over five (5) acres of forest was saved. For the remaining proposed SWM facility, a 48" RCP was jacked and bored under SB I-95/I-495 while traffic was maintained.

Geotechnical and Pavement Analysis/Design: Geotechnical services included jacking and boring a 48" RCP under I-95/I-495, a reinforced slope, and subgrade and pavement design for full-depth pavement and the rehabilitation of existing concrete pavement. Existing shoulders along I-95/I-495 were analyzed for traffic bearing capacity during construction and it was determined that the shoulders were adequate for temporary use and did not required full-depth replacement.

Maintenance of Traffic: Extensive multi-phase maintenance of traffic plans were required on I-95/I-495, MD 214 and MD 202 to maintain traffic throughout the interchanges since over 190,000 vehicles per day traveled on I-95/I-495 at that time. To maintain adequate levels of service for traffic during construction, all lanes remained open during peak hours of 6 to 9 AM and 3 to 7 PM. Limited lane closures were permitted from 9 AM to 3 PM, while multiple lane closures were permitted from 10 PM to 5 AM. As a result, a majority of the pavement resurfacing project was performed at night..

Traffic Control Devices: This project re-used six (6) existing sign structures, including two cantilever, two overhead, and two overhead dynamic message systems. The sign structures were relatively new and were relocated onto new foundations and fitted with new or modified sign panels. Four new cantilever structures were installed and all ground-mounted signing throughout the three interchanges was upgraded. Partial interchange roadway lighting was completed consisting of 80 new light fixtures and four new traffic signals were installed with modifications to another existing traffic signal.

Public Involvement: Public information materials and advanced notification of traffic impacts were provided to MSHA to keep the public informed.

Partnering During Design and Construction: WRA participated in partnering agreement, which set goals and objectives during the early stages of work. Subsequent monthly meetings were held to ensure goals and objectives were being met by discussing the project progress, quality, resolve issues, and current/future schedule.

SCOPE AND COMPLEXITY SIMILARITIES

Design-Build	Traffic Control Devices
Interstate Roadway widening	TMP
Survey	Public Involvement/Relations
Structure	ITS
Environmental	Utilities
Geotechnical	Project Management
Hydraulics	

RELEVANT AND VERIFIABLE EVIDENCE OF GOOD PERFORMANCE

- *The project was delivered on an accelerated schedule and coordinated with an adjacent project on Arena Drive.*
- *WRA innovative design and construction reduced the number of major traffic shifts during construction, which minimized impacts to motorists on I-95/I-495.*

TEAMING EXPERIENCE

- Proposed Lead Geotechnical Engineer Jeff Basford, PE had an identical role on this project.
- Proposed ITS/Lighting/Signage Jeff Cheng, PE had a comparable role on this project.

ATTACHMENT 3.4.1(b)

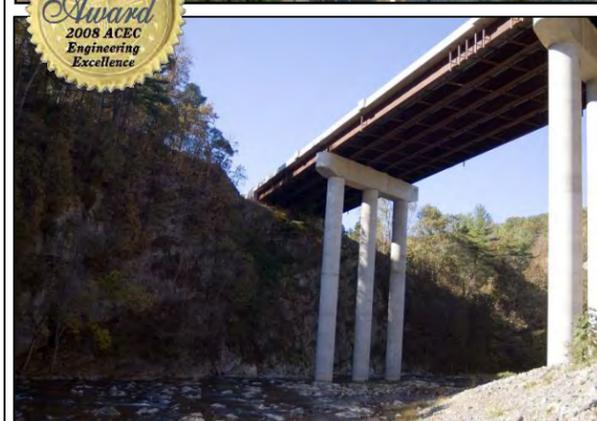
LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract 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-81 Bridges over Buffalo Creek Location: Rockbridge County, VA	Name: Fairfields Echols, Inc. (Fairfield Skanska, Inc.)	Name of Client: VDOT Phone: 540-332-7724 Project Manager: Wayne Nolde Phone: 540-332-7724 Email: Wayne.Nolde@VDOT.Virginia.gov	07/2004	12/2007	\$27,151	\$27,151	\$2,221

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.

PROJECT FEATURES AND ROLE/NARRATIVE



WRA was the prime designer for the I-81 bridge replacement project at Buffalo Creek. WRA completed approximately 90% of the design from our Richmond, Virginia office. The bridges had reduced shoulder width and were classified as functional obsolete. The project was to be the first part of the I-81 reconstruction efforts and were designed to widen I-81 from 4 to 6 lanes.

Roadway Design: Reconstruction / widening one mile of the interstate facility. The design required total replacement of the existing pavement section, which required the roadway typical section to be shifted to the east to ensure two travel lanes were maintained during construction at all times.

Hydraulic Analysis: The project required a detailed hydraulic analysis of Buffalo Creek to ensure the project had no impact to the 100-year flood elevation. Additionally, the analysis included the evaluation of temporary causeways into the stream during construction. Three stormwater management facilities were designed for the projects and all existing corrugated metal drainage pipes were replaced requiring the boring and jacking of several pipes. The projects also included the design of the extension of 2 box culverts.

Geotechnical Engineering: WRA provided all geotechnical engineering services for the project, which included an extensive testing and boring program to locate potential karst features. Our geologists performed extensive site visits and used dye testing to identify underground stream features that may have impacted the project design. At the Buffalo Creek northbound bridge it was determined the existing median contained a major underground stream network. The bridge and roadway improvements were shifted to the outside of the existing northbound I-81 lanes to avoid the karst features. WRA provided a detailed geotechnical report including the design of a major embankments, rock cut slopes and bridge foundations.

Structural Design: The structural design of the two I-81 bridges over the Buffalo Creek gorge with a depth well over 100 feet on I-81 was a main focus of the design. The bridges were on independent alignments and grade with approximately 1,000' distance between the roadways. The NBL bridge was the more challenging design due to the requirement that it be constructed in two stages just downstream from the existing bridge, and due to the site topography. Alignment studies also revealed the need to raise the profiles of the bridges approximately 8 feet to meet current FHWA Interstate Design Standards. The design consists of continuous hybrid steel plate girder bridges with the following span configurations: NBL Bridge: 137'-166'-166'-137' = 606' and the SBL Bridge: 138'-154'-154'-138' = 584'. The NBL Bridge is on a curved alignment while the SBL Bridge is on a tangent alignment. Both bridges required tall piers of up to 110 feet in height due to the depth of the gorge. The Buffalo Creek bridges featured an innovative design element for the treatment of the deck joints at the abutments. The ends of the steel girders are encased in a concrete diaphragm that is integral with the deck and located just beyond the bearings. The deck joints are tooth expansion joints that are located on the abutment side of the concrete diaphragm. VDOT has since included the detail in the Design Guidelines as a special alternative joint detail known as the Virginia Abutment. The design of the bridge was carefully coordinated with VDOT to ensure that it would accommodate future widening of I-81 to four lanes in each direction.

TMP: The sequence of construction and maintenance of traffic required all existing travel lanes to remain open during construction. This required a phased construction of the bridges. The Buffalo Creek northbound bridge was constructed in two phases, while the southbound bridge was shifted into the median and constructed in a single phase.

Public Involvement: WRA provided all presentation materials and participated in the Design Public Hearing for the project.

SCOPE AND COMPLEXITY SIMILARITIES

Interstate Roadway	TMP
Survey	Public Involvement/Relations
Structure	QA/QC
Environmental	ITS
Geotechnical	Utilities
Hydraulics	Project Management
Traffic control devices	

RELEVANT AND VERIFIABLE EVIDENCE OF GOOD PERFORMANCE

- Buffalo Creek was awarded the VDOT Virginia Statewide Construction Quality Award, NPHQ Award "Breaking the Mold" and the ACEC Grand Award for Design Excellence.
- Innovative bridge and abutment design to reduce future maintenance cost.

TEAMING EXPERIENCE

- Proposed Lead Structural Engineer Jeremy Schlusel, PE had a comparable role on this project.
- Proposed Lead Geotechnical Engineer Jeff Basford, PE had a comparable role on this project.
- Proposed Executive Committee Member John Maddox, PE was the Project Manager on this project.

