STATEMENT OF QUALIFICATIONS

DESIGN-BUILD FALL HILL AVENUE WIDENING AND MARY WASHINGTON BOULEVARD EXTENSION
CITY OF FREDERICKSBURG, VIRGINIA

STATE PROJECT NO.: U000-111-233, P101, R201, C501, B609, UPC 88699
FEDERAL PROJECT NO.: STP-5A01()
CONTRACT ID NUMBER: C00088699DB59

MAY 2, 2013

Submitted to: Virginia Department of Transportation
1401 E. Broad Street
Richmond, Virginia 23219
3.2 LETTER OF SUBMITTAL
May 2, 2013

Bill Arel, P.E.
VDOT Alternate Project Delivery Office
1401 East Broad Street, Annex Building, 8th Floor
Richmond, VA 23219

RE: Statement of Qualifications
Design-Build Fall Hill Ave. Widening and Mary Washington Blvd. Extension
City of Fredericksburg, Virginia
State Project No.: U000-111-233, P101, R201, C501, B609, UPC 88699
Federal Project No.: STP-5A01(); Contract ID No: C00088699DB59

Dear Mr. Arel:

Corman Construction, Inc. (Corman) is pleased to submit 1 original hard copy of our Statement of Qualifications (SOQ), 10 abbreviated hard copies of the original version, and 1 CD containing the entire original in a single PDF to provide design-build (DB) services for the Fall Hill Ave, Widening and Mary Washington Blvd. Extension project. Corman has thoroughly reviewed the RFQ, including Addendum I (4/8/13) and Q&As 1 (4/5/13). This letter is signed in ink by an authorized representative of Corman.

Acknowledgement of Receipt of RFQ, Revisions, and/or Addenda (Form C-78-RFQ) and SOQ Checklist - Completed and included as Attachments 2.10 and 3.1.2 in the appendix.

3.2.2 Official Representative and Point of Contact – Jo Ellen Sines, DBIA - Vice President Project Development - 12001 Guilford Road, Annapolis Junction, MD 20701. She can be reached at: 301-953-0900 (T), 301-953-0384 (F), 301-343-5484 (C), or jsines@cormanconstruction.com.

3.2.3 Principal Officer Information – Arthur C. Cox, III - Vice President of Corman - 12001 Guilford Road, Annapolis Junction, Maryland 20701, is the principal officer of the legal entity (Offeror) with whom a DB contract with VDOT will be written. He can be reached at: 410-792-9400 x235 (T), 240-882-3973 (C).

3.2.4 Corporate Structure – Corman, structured as a corporation, will be the DB contracting entity for this project. Corman will be the sole major participant firm and responsible party to the DB contract with VDOT. Corman will hold all financial responsibility for the contract (a surety letter is attached). In addition, Corman is an active participant in the eVA Internet procurement solution program (Registration Number E27577).

3.2.5 Lead Contractor and Lead Designer – Corman is the Lead Contractor and Whitman, Requardt & Associates, LLP (WR&A) is the Lead Designer for this Project.

3.2.6 Affiliated/Subsidiary Companies – The complete list is shown in Attachment 3.2.6 in the appendix.

3.2.7 Debarment Forms - Certification Regarding Debarment Form(s) - Primary and Lower Covered Transactions Attachments 3.2.7(a) and 3.2.7(b) are included in the appendix.

3.2.8 VDOT Prequalification Evidence - Corman is pre-qualified with VDOT (C097 – active) to provide Grading, Major and Minor Structures, and Underground Utilities. See Attachment 3.2.8 in the appendix.

3.2.9 Surety Letter - A Surety Letter stating Corman is capable of obtaining a performance and payment bond based on the current estimated contract value is shown as Attachment 3.2.9 in the appendix.

3.2.10 DPOR Licenses and SCC Registrations – The necessary license and registration information is shown as Attachment 3.2.10 in the appendix, including supporting documentation.

3.2.11 DBE Requirements – Corman is committed to achieving a fifteen percent (15%) DBE participation goal for the entire value of the contract.

Sincerely,

CORMAN CONSTRUCTION, INC.

Arthur C. Cox, Jr., Vice President
3.3 Team Structure
3.3 TEAM STRUCTURE

With a track record of successfully delivering over $1.4 billion in Design-Build (DB) roadway and bridge projects, Corman comes to VDOT with the hands-on experience and top notch personnel it takes to effectively execute the design, construction and manage all the risks of the Fall Hill Avenue Widening and Mary Washington Boulevard Extension Design-Build Project. During our 13-year design-build history, Corman has exceeded the owner’s expectations in the on-time, on-budget delivery of high-quality projects, without any claims, while meeting some of the most strenuous maintenance of traffic and environmental commitments. Out of these ventures, over $1.2 billion have included contractor-led QC programs.

Through the years, Corman has built a solid reputation of strategically aligning with the Design-Build partners most suited to meet the specific needs and requirements of the project at hand. For the Fall Hill Avenue project, we selected Whitman, Requardt and Associates, LLP (WR&A) as our lead design firm with nearly 100 years of experience, WR&A is one of the leading multi-discipline engineering, planning and construction management firms in the Mid-Atlantic region. WR&A continues to create innovative solutions for their clients by implementing state-of-the-art technologies and the latest advancements in engineering and design. Their key personnel have successfully delivered design services to VDOT on Virginia’s busiest and most heavily traveled roadways for dozens of projects over the past 10 years, including multiple bridge designs for the VDOT Fredericksburg District.

The Corman DB Team (Corman, WR&A and subconsultants) will deliver success with seasoned professionals and resources, providing the highest level of quality to ensure that the project will be completed within our promised budget and schedule.

Corman, WR&A and major subconsultant, Sabra, Wang & Associates, Inc. (SWA) have a history of working together on projects for VDOT, MSHA and various other transportation agencies/authorities. Our mutual involvement on transportation facility projects includes a range of functional relationships from design-build partnerships to owner representatives to design-bid-build roles, including close coordination through construction for design compliance. Some of our past collaborations include:

<table>
<thead>
<tr>
<th>PROJECT</th>
<th></th>
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<tbody>
<tr>
<td>I-64/Route 15 Interchange Zion Crossroads (Louisa County, VA)</td>
<td>DB</td>
</tr>
<tr>
<td>Intercounty Connector Contract A (Montgomery County, MD)</td>
<td>DB</td>
</tr>
<tr>
<td>Intercounty Connector Contract B (Montgomery County, MD)</td>
<td>DB</td>
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<tr>
<td>MD 30 Hampstead Bypass (Hampstead, MD)</td>
<td>DB</td>
</tr>
<tr>
<td>I-70 Phase 2D (Frederick, MD)</td>
<td>DB</td>
</tr>
<tr>
<td>MD Route 216 US 29 to I-95 (Howard County, MD)</td>
<td>DB</td>
</tr>
<tr>
<td>Route 1 over Aquia Creek – Stafford County, VA</td>
<td>DB</td>
</tr>
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3.3.1 KEY PERSONNEL

The Corman DB Team has assembled a Team of highly-qualified and experienced individuals and structured them accordingly for optimal performance. These key staff and design firms come together with a shared past history of successful projects and an established existing working relationship. These past successes will lower
VDOT’s risks and staffing requirements on the Fall Hill Avenue project, while increasing the Department’s confidence that a qualified Team is taking charge. Though our task leaders and technical staff are responsible for items such as design, public involvement, and/or construction, each team member is ultimately responsible for the total success of the project. Below are the key staff and their functional responsibilities. A DB has been placed next to the names of the individuals with Design-Build experience.

### Design-Build Project Manager – Jo Ellen Sines, DBIA (Corman – 33 years of experience)

**DB – Jo Ellen Sines (DBPM)** will have full and complete authority of all project design and construction matters for the Corman DB Team. She is responsible for managing the overall project from start to completion and all contract management/administration. She is VDOT’s primary point of contact throughout the project. As DBPM, Jo Ellen has full responsibility and authority for coordination, integration and direction of the entire Design-Build Team, including design, construction, quality assurance, Cultural Resource Avoidance, MOT, safety, right-of-way and utilities. Jo Ellen will supervise the Design Manager, Design/Construction Coordinator, Construction Manager, ROW Manager, Public Relations Manager and Quality Assurance Manager throughout the project. She will be involved with the project starting with the Technical Proposal and preconstruction, through design, construction and punch out. Jo Ellen will assist with constructability reviews and safety audits, and oversee the quality management program, purchasing and all construction operations. She, along with the Public Relations Manager, will be responsible for third-party communication for the Corman DB Team.

### Quality Assurance Manager – Kaushik Vyas, P.E. (Quinn – 27 years of experience)

**DB – Kaushik Vyas (QAM)** will report directly to the DBPM and will have direct, independent access to VDOT. He will ensure work is performed in conformance with contract requirements and “approved for construction” plans and specifications. He will be responsible for development and adherence to the QA Plan, QA inspection and testing of all materials used, and work performed. As an independent entity, Kaushik will audit and monitor Corman’s Construction Quality Control Program. **He will have the ability to stop construction, enforce compliance with all specifications, and issue and require resolution of all Non-Conformance Reports (NCRs).** He will manage all aspects of the QA program including the QA inspector and independent QA testing firm and testing technicians. The QA Team will conduct independent and concurrent tests and analysis of the work with the Construction Quality Control Team. He will maintain project quality records, and approve and submit pay estimates. In addition, Kaushik will submit monthly written reports to both the VDOT Project Manager and Corman’s Executive Committee.

### Design Manager – John Maddox, P.E. (WR&A – 27 years of experience)

**DB – John Maddox (DM)** will also report directly to the DBPM. He will be responsible for providing a quality product and input into the project schedule, meeting all design milestones and interfaces and ensuring the Design QA/QC Manager’s involvement. John is responsible for ensuring all design work is performed in accordance with current policies, procedures and guidelines. He will manage all aspects of design including but not limited to roadway, structural, hydraulic, traffic, MOT, environmental and geotechnical. He will assign resources as needed, oversee design subconsultants, coordinate design and review schedules, develop and implement corrective measures, if necessary, and ensure environmental compliance measures are integrated into the design. He will coordinate the design and construction with the Lead Environmental Manager, Nicholas Nies, to ensure all commitments are achieved by the project. John will maintain involvement in the project once construction begins to oversee any plan modifications and shop drawings, and review construction activities with the CM as work progresses. He will collaborate with the entire design and construction team leadership for maintainability characteristics, constructability, inter-operability of bridge/roadway/utilities/drainage aspects, right-of-way and project cost control.

### Construction Manager – Peter Bernat (Corman – 23 years of experience)

**DB – Peter Bernat (CM)** will also report directly to the DBPM. Peter will manage the efforts of the on-site construction team including the Project Control Team, Construction QC Manager, superintendents, and project
field staff including scheduling, safety, environmental compliance, utilities, and MOT. Peter will be assigned to this project and be on-site full-time for the duration of construction. He will play a key role in conjunction with Lou Robbins, Design/Construction Coordinator and Mark Vasco, the Design QA/QC Manager in constructability reviews for all aspects of the design. He will work with Lou to oversee the coordination between the design and construction forces with regard to environmental commitments, utilities, ROW and MOT. Along with his staff, he will focus on ensuring the construction is performed safely, and along with our Construction QC Manager, Danielle Litardo, make sure all materials and work are in accordance with the approved plans and contract documents. Peter will coordinate with the DM during construction for the proper and timely issuance and review of any RFIs and shop drawings, as well as field visits, preparation of as-builts and plan revisions.

**Lead Environmental Manager (EM) – Nicholas Nies (WR&A – 13 years of experience)**

**DB – Nicholas Nies** will report directly to the DM and will be responsible for having a complete understanding of all environmental documents completed for the project including the National Environmental Policy Act (NEPA) documents, Section 4(f) of the Transportation Act of 1996 and amendments, Section 106 of the National Historic Preservation Act and amendments, the Clean Water Act, all applicable Federal and State environmental regulations regarding the preservation of cultural resources, maintaining water quality, protection of wetlands, protection of air quality and management of solid and hazardous waste. Nicholas Nies has managed and developed NEPA documents for major VDOT projects and developed Section 106 MOA for historic resources and has coordinated those efforts with the Virginia Department of Historic Resources (VDHR). Nick will engage with our Cultural Resources Manager, Dr. Kerri Barile, Ph.D., to implement required data recovery before construction and guidance in achieving all commitments from the MOA. Nick will work directly with the roadway and utility design engineers to remind them of the commitments of the MOA and will ensure the design at each phase of the project maintains all commitments. Nick will also coordinate with the Wetland Delineation and Permitting Coordinator, Bob Siegfried, to ensure the permitting for the project is in accordance with all requirements of the NEPA document and current regulations.

**Lead Right-of-Way Manager (ROWM) – Al Dorin, Jr., MAI, SRA, R/W-NAC (KDR – 37 years of experience)**

**DB – Al Dorin** will play an integral role in pre-construction activities by leading all elements of ROW acquisition for the Team and subsequently the Commonwealth of Virginia. Accelerating pre-construction activities such as clearing parcels in accordance with VDOT policies and procedures is an important step in maintaining the entire project schedule. Proactively working with property owners in partnership with our Design Team promotes fair, equitable and constructiv negotiating. Al will manage all associated ROW activities for our Team including: (1) appraisal, (2) independent appraisal reviews, (3) approved just compensation/offer, (4) negotiations and (5) settlement and title services. He will facilitate timely and yet sensitive ROW acquisition services while maintaining the reputation as a fair and responsive adjoining property owner. Al will report directly to the DBPM. **As the ROW Manager of the contiguous $3.2 million Fall Hill Avenue Bridge Replacement Project, Al led all elements of ROW acquisition, negotiation and consulted with the city official and engineer regarding valuation and acquisition issues.** There were two properties on this project that were encumbered with historic conservation easements. The easements stipulated that the property boundaries could not be re-configured. He was instrumental in remedying the situation so that the road could be constructed by converting proposed acquired right-of-way to a permanent easement to avoid changing the property boundary lines.

In addition to the personnel listed above, the Corman DB Team has named additional value-added staff (identified on the following page) to complete our entire Team and ensure a successful project.
Design-Build for Fall Hill Ave. Widening and Mary Washington Blvd. Ext. – City of Fredericksburg, VA
Contract ID #: C00088699DB59
Quality Team

**DB – Construction QC Manager (CQC), Danielle Litardo** will report to the CM. Danielle will manage and coordinate all QC activities independent from and coordinated with the QA Team. The CQC Manager will coordinate the third-party QC testing lab and testing technicians. Danielle has extensive experience with QC programs on DB projects such as the Intercounty Connector Contract A, I-70 Phase 2D and Frederick Douglass Bridge. She also was involved in the QC of the reconstruction of the Historic Lincoln Memorial Reflecting Pool in Washington, D.C. She will coordinate with the QAM during development of the QC program. Danielle will attend weekly two-week look-ahead meetings and keep abreast of the overall project schedule for accurate scheduling of inspection staff. **Danielle has the authority to stop specific work activities that do not meet QC requirements.**

**DB – Design QA/QC Manager, Mark Vasco, P.E.** will report to the DM. Mark will arrange for all design quality control procedures in accordance with the quality control plan. He will verify that checks and reviews are made prior to submissions, including review comment checking, contract conformance reviews, interdisciplinary reviews and constructability reviews by Corman staff. Mark has more than 29 years of experience in the design of transportation projects, with extensive experience in both highway and maintenance of traffic designs, and is familiar with the VDOT design manuals, IIMs, design standards and criteria. Mark performed as the Design QA/QC Manager on the George Mason University Campus Drive Design-Build project for the Route 123 improvements.

Utility Team

**DB – Utility Design Engineer: Dan Seli, P.E.** has 25 years of experience in utility designs/relocations and has worked on the VDOT NOVA District On-Call Utility Design contract since 1996 and has completed over 120 utility design projects for VDOT and the City of Fredericksburg. Dan is also currently managing the VDOT Statewide Utility Coordination contract, has relationships with numerous utility owner personnel and is conversant in VDOT’s 2011 Utility Manual and UT-9 determination process. Projects include coordination with Verizon, Virginia Dominion Power, gas and several fiber optic cable providers. Dan will report to John Maddox, P.E. the DM and will interact closely with the Construction Utility Manager.

**DB – Construction Utility Manager: Tim Bulford** will report to the CM. With 12 years of experience in the construction industry, he will oversee the implementation of the comprehensive utility plan prepared by the design team to identify all known existing utilities within the project area. Tim will lead the effort to identify and resolve any conflicts with unknown utilities discovered and manage and coordinate all of the utility field work to maintain the project schedule. He will work closely with the Utility Design Engineer.

ROW Team

Our ROW Team will be led by Al Dorin of KDR Real Estate Services, Inc. who will report to the DBPM. The Team will include only appraisers and review appraisers approved by VDOT. The ROW Team will include:

- **Appraiser** – Karen D. Pape, MAI
- **Review Appraiser** – R. Scott Barber
- **Negotiator** – KDR Real Estate Services, Inc.

Some of these individuals are the same that assisted the City of Fredericksburg with the ROW required for the adjacent Fall Hill Ave. Bridge over the Rappahannock Canal.

MOT Team

**DB – MOT/Traffic Engineer: Dana Trone, P.E., PTOE** has over 17 years of experience in traffic engineering for interstate/urban roadway projects. Her experience includes development of transportation management plan (TMP), design of MOT, lighting, signing, ITS and pavement marking plans. Dana has developed several TMPs for bridges with construction on and over interstates including I-95. Her experience includes several urban projects and the signing and pavement marking for roundabouts. She is extensively familiar with the Traffic

**DB – Construction MOT Manager: Jake Leffler, EIT, LEED** will report to the CM and has over 8 years experience in the construction industry including MOT on both large Interstate and local transportation projects. Jake will work full-time on the project and be on-site during all major traffic shifts. He will ensure MOT is in accordance with the approved plans and functioning effectively for the motorist as well as the local pedestrian and bicyclist. He will work closely with MOT/Traffic Engineer, Dana Trone, P.E., PTOE.

**Environmental Team**

**DB – Cultural Resources Manager: Dr. Kerri Barile, Ph.D.** will work with the Project Team to ensure that all cultural resource criteria outlined within the project scope are satisfied and coordinated with all involved agencies and consulting parties. Dr. Barile has over 20 years of professional experience in the field of archaeology, architectural history, historic research and cultural resource management. She has worked on dozens of Fredericksburg area historic sites, buildings and battlefields, including archaeological data recoveries on the nearby Smith Run Civil War encampment. Dr. Barile served as the Preservation Program Coordinator for the Virginia Department of Transportation (VDOT) and as an archaeologist and architectural historian for the Center for Historic Preservation at the University of Mary Washington (UMW). She will report directly to the EM and the DM, during design. During construction she will be available to consult on the reconstruction of the Fall Hill Stone Gate plus protection of any sites that may be exposed or impacted by the project.

**DB – Wetland Delineation and Permitting Coordinator: Bob Siegfried** has 30 years of experience in environmental planning, assessments and design. His expertise includes wetlands, streams, floodplains and related environmental services. He also provides coordination and permitting leadership through various state, federal, and local agencies and has established relationships with these agencies to help steer projects through the design approvals and permitting process. Bob will report to the DM and collaborate with Anmarie Collins, the Construction Environmental Manager.

**DB – Drainage/Hydraulics Engineer: David Gertz, P.E.** will report to the DM and lead the design efforts for drainage and SWM. David has over 31 years of experience in roadway drainage design and stormwater management utilizing the new Virginia stormwater regulations. David has worked on VDOT projects as the Lead Drainage/Hydraulics Engineer continuously for the last 23 years. David has designed major stormwater management projects for the City of Fredericksburg, such as Gayle’s Pond Diversion near the historic Rappahannock canal, just south of Route 1.

**DB – Erosion and Sediment Control Reviewer: Glenn Wilson** has 15 years of experience in E&S control design and other water resources engineering services for transportation projects. He is thoroughly familiar with the water quality requirements of USACE, DCR, VDOT’s Drainage Manual, Virginia’s SWM Handbook, Virginia E&S Control Handbook and related IIM’s. He is a certified DCR Combined Administrator (Certificate #684). Glenn will report to the DM and collaborate with the Construction Environmental Manager.

**DB – Construction Environmental Manager: Anmarie Collins** has 10 years of experience and will report to the CM. Her primary functions are to provide environmental oversight during construction and ensure all environmental commitments are met on the project. Anmarie will ensure all controls are in place both daily and prior to or after any rain event. She will work closely and consult with Bob Siegfried, the Wetland Delineation and Permitting Coordinator.

**Additional Construction and Design Support**

**DB – Design/Construction Coordinator (DCC) and Public Relations Manager: Louis Robbins, P.E., DBIA** has been involved with Design-Build projects locally in the area since 1986. He has led DB Teams as the General Contractor, Designer and Quality Control Manager. His unique experiences as both the lead designer and GC on Design-Build projects will greatly assist in coordinating the efforts of the contractor and designers to ensure the project’s success in meeting VDOTs strict requirements. He will review all design submittals for
compliance with project requirements, constructability and conformance to the specific project scheduling needs. Lou has also successfully developed the strategy and led the implementation of numerous Community Involvement Programs for both large and small infrastructure and highway projects throughout the Mid-Atlantic region ranging from less than $1 million to $900 million. Lou will report to the DBPM.

**DB – Grading/Roadway Superintendent: Stan Sutphin** will report to the CM. Stan has over 40 years of experience in the construction industry, specifically 13 years of supervisory experience on design-build and grading/roadway projects. His MD 924 DB project was constructed to maintain and enhance the Town of Bel Air’s historical features, which included the essence of historic Main Street, while minimizing construction impacts to the community (project limits encompassed the historically-significant Armory and Harford County Courthouse). On the Fall Hill Avenue project, Stan will direct onsite crew and equipment set up, create daily reports, implement the safety plan, supervise safety inspections, provide design development and changes during construction as needed and coordinate project scheduling with the Project Management Team.

**DB – Bridge/Structure Superintendent: Gabe Gonzalez** will also report to the CM. Gabe has over 10 years onsite construction experience, specifically supervisory experience on interstate structural/bridge projects and has overseen field operations for VDOT. **Over the past 10 years, he has worked closely with Jeremy Schlussel, our Structural/Bridge Engineer, on past local Corman/WR&A joint projects.**

**DB – Structural/Bridge Engineer: Jeremy Schlussel, P.E.** reports to the DM and will be in charge of structural engineering for the project including the I-95 Bridge, retaining and noise walls. Jeremy has extensive experience designing bridge projects over I-95. Jeremy has managed the design of over 50 bridge improvement projects within the Fredericksburg District since 2003. He will lead production efforts for all structural engineering designs including plans, estimates and specifications for the project. Jeremy will also review structural shop drawings and assist the DBPM, CM and DM during construction, as needed.

**DB – Safety Manager: John Lanigan, CHST, OHST** reports to the CM and will provide regular oversight of plans and field activities to provide a safe environment for VDOT, construction workers and the traveling public. John will provide all needed safety training for the project and aid in developing a job-specific safety plan to address unique project hazards that will enhance our standard Corman policies, including subcontractor protocols. **John has the authority to stop work, which does not meet Corman’s strict safety requirements.**

**DB – Roadway Engineer: Gail Kuttesch, P.E.** has 10 years of experience, serving key roles on numerous similar VDOT projects including the Southeast Connector in Rockingham County, a four-lane divided highway with a raised median and the design efforts on several roundabout projects including Route 226 at Route 600 in Dinwiddie County as the Roadway Engineer. Gail has worked on numerous highway and urban roadway widening projects and understands VDOT policies and procedures, including the process for identifying design exceptions and waivers. Gail will report to the DM and serve as the backup point of contact for design.

**DB – Geotechnical Engineer: Jeff Basford, P.E.** has over 13 years of experience in subsurface explorations, geotechnical analysis, design of pavement sections and shallow and deep foundations, slope stability analysis, concrete and geosynthetic reinforced earth retaining structures, ground-improvement, groundwater control and in-situ testing and verification during construction. Jeff is currently the Lead Geotechnical Engineer on two Design-Build projects in Virginia, both very similar to the Fall Hill Avenue project. Jeff has a complete understanding of the VDOT Manual of Instruction, Chapter 3. Jeff will report to the DM and collaborate with the Structural Design Engineer and CM.

**DB – Landscape Architect: Herbert Palm, RLA** has over 31 years of experience in providing Landscape Architectural services and has developed landscape plans for transportation projects. His experience includes developing and coordinating a landscape design to screen projects from historic properties on the National Registry of Historic Properties, such as a reforestation project that was located in the boundary of the Monocacy National Battlefield in Frederick County, Maryland. Herbert will report directly to the DM, John Maddox, P.E.
3.4 Team Experience
3.3.2 ORGANIZATIONAL CHART

The Corman DB Team organizational chart on Page 5 illustrates our “chain of command” and notes key personnel team members. 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 relationships and obligations to the owner and/or corporate management. The chart also shows that a clear separation exists between Quality Assurance and Construction Quality Control inspection and field/laboratory testing.

Keys to Success

The key to the success of the project will be proper communication and coordination between the many parties involved: Corman DB Team, VDOT, review agencies and all stakeholders. This cooperation will be based upon open and honest communication plus frequent meetings and updates. The Corman DB Team will have internal weekly meetings during the design phases with key construction and design staff present. Tracking sheets will be developed to track progress of utilities, ROW and various design disciplines efforts, as well as environmental and design approvals. Once construction starts, the design participants will continue to be actively involved. As the construction activities begin, members such as the superintendents, field surveyors, MOT Manager and CQC Manager will begin to participate as well. Key stakeholder representatives including utility companies, EMS responders, etc. will also be invited to these weekly meetings as planned activities demand. Monthly meetings will also be held with VDOT, QAM, stakeholders and others required to enhance the partnering effort and resolve any pertinent issues – quickly and efficiently.

**Quality Assurance efforts will be coordinated with, but independent of the day-to-day Quality Control and construction efforts.** The QAM and VDOT independent Verification Team will be given timely notice of all construction activities so the QA staff can be on site at the appropriate and required times to document compliance. The QAM and VDOT oversight will have access to all meetings and records to provide independent assurance that the construction complies with all contractual and design requirements. The QAM will report directly to the DBPM and provide VDOT and the project’s Executive Committee with the reports and assurances required. He will have unrestricted access to the construction and fabricator sites/facilities. A representative of Corman’s Management Team will contact the QAM monthly to confirm the project is in compliance. The QAM also has the authority to stop work, which does not meet plan or procedural requirements.

The above Team members were chosen because of their firsthand knowledge of the site, as well as their ability to handle these specific risks and minimize VDOT involvement. Corman and WR&A’s prior joint experience gained from working within the project vicinity and KDR’s past work on Fall Hill Avenue, including the historic significant properties, enhances the skill level of our Team. Together, Corman and WR&A have effectively delivered past projects using the Design-Build method and will bring those proven management procedures to this project.

3.4 TEAM EXPERIENCE

As mentioned earlier, Corman, WR&A, and SWA have successfully teamed on numerous projects. This existing work history will enhance the Corman DB Team’s ability to identify, openly discuss and solve issues as they arise on the project. The Corman DB Team members already know each other and time will not be required to build trust and effective working relationships. The key team members include:

**CORMAN CONSTRUCTION (CORMAN)** – A privately-held family business since 1920, Corman is a licensed heavy civil contractor specializing in highway, bridge, restoration and heavy utility construction. Corman prides itself as a “Best in Class” contractor, where our “A” ratings confirm the quality in our projects. Known for unparalleled partnering, Corman delivers projects on time and on budget without lingering disputes. We hold employee and public safety to a high standard and our 0.72 EMR validates this commitment. Throughout the last few years, Corman received 20 local and national...
awards for our design-build projects. Corman has constructed projects in Virginia for over 30 years. We consistently earn outstanding performance ratings and currently hold a CQIP of 94.2, CPE of 94.3 and C-36’s in the high 90s. Corman has successfully delivered over $1.4 billion of Design-Build (DB) roadway and bridge projects in the region, many of similar scope and complexity to this project. Included in the Appendices Section are Work History forms for the $43 million DB MD 30 Hampstead Bypass, $236 million I-95 Telegraph Road Interchange Improvements, and $21 million DB MD Route 216 US 29 to I-95. Jo Ellen, our DBPM, and/or Peter, our CM, were each actively involved in two of the three projects highlighted.

WHITMAN, REQUARDT AND ASSOCIATES, LLP (WR&A) has provided transportation design services to VDOT for over 60 years and engineering, planning and construction management services in the Mid-Atlantic region for almost 100 years. WR&A is currently ranked #127 by Engineering News Record and has one of the largest design groups in Virginia and the region. WR&A is a multi-disciplined engineering firm that has experienced staff for roadway, bridge, retaining wall, drainage, river mechanics analysis, traffic engineering, ITS, utility and geotechnical engineering that is currently providing design services to VDOT on numerous projects. Additionally, our environmental staff currently holds the NEPA environmental documents contract with VDOT developing Environmental Assessments and coordination of historical resources for transportation projects across Virginia. Included in the Appendices section of this submittal (Attachment 3.4.1(b)) are the WR&A Work History forms for the Route 123 Interchange at Route 1 project, Fairfax County Parkway Interchange at Fair Lakes Parkway project and the MD 237 (Pegg Road) Design-Build project. The WR&A Design Team will include Sabra, Wang & Associates, Inc. (SWA) and H&B Surveying and Mapping, LLC (H&B). Both firms have worked extensively with WR&A on similar projects.

KDR REAL ESTATE SERVICES, INC. (KDR) is a full service right-of-way and easement acquisition company. Available services that can be provided internally or by qualified subconsultants include ownership verification title search, appraisal of property rights to be acquired, appraisal reviews, conveyance document preparation and compilation of related paperwork for the presentation of an offer to the affected landowners, negotiations with the landowners, clearance of title, closing and settlement procedures and overall project administration to complete the transfer of title from the property owner to VDOT. KDR will ensure that proper acquisition procedures are followed in accordance with the requirements of the Virginia Code and the VDOT Right-of-Way and Utilities Manual, as applicable, relating to rights acquired through the eminent domain process. In addition, KDR was involved in the $3.2M Fall Hill Avenue Bridge Replacement project in Fredericksburg, which consisted of two properties that were encumbered with historic conservation easements.

DOVETAIL CULTURAL RESOURCE GROUP, INC. (DOVETAIL) is a certified Small Minority and Woman Owned (SWaM) and Disadvantaged Business Enterprise (DBE) firm located in the City of Fredericksburg. Dovetail’s founders, Dr. Kerri Barile, Ph.D. and Michael Carmody, both served as preservation program coordinators in the VDOT Fredericksburg District office prior to starting Dovetail. Being a Fredericksburg firm, Dovetail has extensive project experience in and around the Fall Hill Avenue project area. This includes conducting the data recover excavations at site 44SP0519, a confederate camp site located approximately 0.25 miles south of the Fall Hill Avenue project. As part of the mitigation package for this project, Dovetail mapped the Civil War earthworks associated with the northern defenses for the City of Fredericksburg, many of which are directly adjacent to the Fall Hill Avenue project. In addition, Dovetail has conducted numerous other excavation and research project in and around the City of Fredericksburg and has provided similar services directly to VDOT on transportation projects in the region.

The members of the Corman DB Team are strong believers in the Design-Build model. During the proposal and design phase, we will specifically lay out goals to determine where innovative techniques could lead to
3.5 Project Risks
Design-Build for Fall Hill Ave. Widening and Mary Washington Blvd. Ext. – City of Fredericksburg, VA
Contract ID #: C00088699DB59

Inter-Team Relationships
Established, strong working relationships among key firms on a Team are vital to the success of a Design-Build project. Since the individuals on our Team have already developed a rapport and knowledge of each other’s abilities, skills and working style, the framework for the project implementation is strengthened. The Fall Hill Avenue Widening and Mary Washington Boulevard Extension project’s design and construction phases will not be a “training ground” for the Corman DB Team and instead one additional example of our Team’s success.

3.5 PROJECT RISKS
The Corman DB Team will employ the CMAA endorsed approach to risk management through the use of a “Risk Register”, which includes a formal list of identified risks, potential impacts to the project and mitigation strategies for each issue. A successful risk management process is robust because it must consider project risks throughout all facets of the project’s life and delivery processes. Our Team’s risk management process has already commenced, will continue throughout design and construction and enable us to respond to changes in an organized and proactive way as specific project issues unfold.

The Corman DB Team will employ a five step risk management approach to the project including the following stages:
1. **Identify** – Name risks facing the project, determine cause and effect and categorize risks.
2. **Assess** – Assign probability of occurrence, severity of impact and determine response.
3. **Analyze** – Quantify risk severity, determine risk exposure, establish risk tolerance level and determine risk contingency (applicable during preliminary design and pricing).
4. **Manage** – Define response plans and actions, establish ownership of risk, and manage response (after NTP).
5. **Monitor/Review** – Monitor/review/update risks, monitor response plans, update risk exposure, analyze trends, and produce reports (after NTP, during design, during construction).

The Corman DB Team has carefully reviewed the various documents included in the RFQ Informational Package and completed a detailed field investigation to identify the risks on the project. We identified several critical risks during our assessment that could impact the success of the project, such as Maintenance of Traffic, delays in the Right-of-Way Acquisition and Utilities. These critical risks are further described below.

**Risk No. 1 – Maintenance of Traffic**
**Risk Identification and Why It Is Critical:** The current design of the project includes major changes in the Fall Hill Avenue horizontal and vertical alignment, roadway widening, access changes to commercial and residential properties and other related traffic improvements. These planned improvements will require restricting movements to the public during construction and creating entirely new traffic patterns in the long-term. These changes will require advance notice to the local residents, businesses, law enforcement/emergency services, major stakeholders and driving public to avoid unnecessary conflict and abrupt changes to users.

These changes in access can be confusing to motorists, which increases the potential for wrong way movements onto Fall Hill Avenue during and after construction. The traffic shifts to accommodate construction on Fall Hill Avenue could present significant challenges and confusion to travelers, particularly pedestrians and bicyclist. These changes in traffic patterns are a significant safety concern for the project. To clearly define the risk we have identified three areas of concern with the current project design:
Residents living on the east side of Interstate 95 are known to frequently travel by foot or bicycle to access businesses within Central Park on the west side of Interstate 95. This poses a significant challenge to the Team to provide safe passage to pedestrians and bicyclists during construction along Fall Hill Avenue and the bridge crossing I-95.

Maintaining access to residential communities, businesses and local streets along the project corridor will require careful planning and coordination during the life of the project. Driveway access during construction may change for individual properties along the corridor, which will affect those living, working or visiting these parcels.

Thru-travel for drivers using the roadway between Route 1 and Central Park will require clear communications to protect them from construction activities, particularly on the east end of the I-95 bridge and the alignment between Rappahannock Canal and Weston Lane/Crestview Way.

**Risk Impact to the Project:**

- **Safety** – The major impact of safety on the traveling public will be to pedestrians, bicycle and vehicular travelers. Pedestrians, bicyclists or vehicles being led into or through an active work zone must be protected from one another and also from active construction threats. Appropriate traffic controls and protection measures must be in place to avoid impacts for the duration of construction. Similarly, the residents living along the corridor will have a high degree of concern of safety during construction near their residences.

- **Public Relations** – The residents and business along the corridor will be a focus of attention when developing a Transportation Management Plan (TMP) and associated communication plan for the project. This will ensure the construction activities meet the needs of the Fall Hill community, major stakeholders on the project, especially pedestrians, bicyclists and the travelers on the route during construction.

**Risk Mitigation Strategies:** The risk identified above can be effectively managed by first developing a detailed TMP for the project. The Corman DB Team will develop an MOT plan that has a major focus on creating safe passage for pedestrians and bicyclists, and maintaining access for residents and businesses during each phase of construction. The same attention will be paid to the final design of traffic patterns on the project. The Corman DB Team will emphasize public involvement within the process when developing the TMP and develop a defined schedule for public outreach. Additionally, we will systematically implement the MOT plans clearly defining traffic movements through the bridge construction areas, at the major intersections and at the terminus of the project. Below we have highlighted several examples of implementing an effective TMP for the project:

- Access to the residential and business properties along the Fall Hill Avenue corridor will be affected during construction of the bridge, the roundabout and all other improvements on the project. The public will be made aware of these stage changes early in the project and when the stages change over the life of the project. The Corman mitigation strategy includes development of the TMP early in the design phase to include a strong public relations campaign to lay the ground work of communicating the forthcoming changes. With the bridge being built in multiple phases, the TMP must outline the detailed steps for providing access for pedestrians and bicyclists to and across the bridge during the construction and demolition activities. Jake Leffler, MOT Manager and Lou Robbins, Public Relations Manager will lead the effort to ensure that the numerous affected homeowners and businesses are aware of impending changes and duration of impacts likely to be faced. We envision partnering with the City of Fredericksburg, the Fredericksburg Regional Chamber of Commerce, Mary Washington Hospital and homeowner associations to obtain input on staging plans and suggestion of the most effective means to get the word out to the public on planned improvements, especially related to the high risk conditions affecting pedestrians.

- In addition to the Public Relations effort, the Corman DB Team will ensure the proper controls are in place to guide motorists through the construction area and each stage is evaluated against the MOT plan traffic conditions to determine if any adjustments are needed. Temporary guide signs, well-marked crossing locations and permanent signage will be provided along the new routes and checked frequently to ensure effectiveness and proper placement/maintenance.
Role of VDOT and other Agencies: The VDOT role in helping to mitigate the risk would be to attend the public information meetings, reinforce the need to stage the project in a deliberate sequence and review the Corman DB Team’s TMP during design.

Risk No. 2 – Delays from Right-of-Way (ROW) Acquisition

Risk Identification: The project will require ROW (in fee and permanent easement) acquisition from approximately 46 parcels. The parcels along Fall Hill Avenue will also include extensive permanent utilities easements along both sides of the proposed ROW. Additionally, the Fall Hill property will require purchase of a permanent easement in accordance with the Section 106 MOA for the historic property. Delay in procuring the necessary ROW in a timeframe consistent with the critical path required for construction is a risk to successful project completion.

Why this Risk is Critical: This risk has been identified as critical because of the historic nature of some of the properties and the ROW outcomes are partially beyond the direct control of the Corman DB Team. Although VDOT has the power of eminent domain to condemn private property for the public good, individual land owners can object to the taking of their land and extend the process and impact schedule or cost. Their rights are protected by the Virginia and U.S. Constitutions, which could delay a project by several months or even years. The historic Fall Hill and other properties will require additional outside Agency review and possible mitigation.

Risk Impact to the Project: Delays associated with acquiring historic properties or property owner’s resistance to ROW acquisition could negatively affect the design and overall project schedule. Significant ROW and easement needs have been identified by the Corman DB Team for drainage outfalls, utility relocation, driveway connections, stormwater management facilities and roadside grading. Since stormwater management is a regulated element for environmental permitting, it is essential to have the needed land for the proposed facilities. Objections from property owners or not starting the process early enough can adversely impact the sequence, where ROW is needed for critical path items, extending the process, and potentially creating more work for VDOT (i.e. quick-takes).

Risk Mitigation Strategies: Our Team has assessed the potential impact of ROW Risk and determined actions to mitigate the risk. Our Team has assembled the appropriate experienced and seasoned individuals, thoroughly familiar with VDOT’s ROW Manual, to successfully navigate through the processes and work proactively to finalize acquisition in a timely manner. To mitigate this risk, our Team will do the following:

- Promptly assess the feasibility of design refinements and/or design waivers that meet AASHTO criteria to design geometry and grading, which minimizes the need for easements/ROW as the preferred course of action. The evaluation also includes utility impact reviews that may minimize the need for utility relocations or easements.
- Expedite the identification of ROW needs by performing hydrologic and hydraulic analysis within the first two months after notice to proceed, including analysis of outfalls to ensure meeting MS-19 requirements. Utility Field Inspections with all utility owners along the project will be held in the first couple of months to determine the location of permanent utility easements along the corridor. We will identify where easements or ROW are required for construction activities, permanent features and proceed with obtaining VDOT approval of design and ROW/easement limits.
- Perform public outreach to the community to emphasize the project benefits and obtain buy-in from the property owners for the overall project. Where possible, use a model of inclusiveness to incorporate elements and suggestions from property owners into the project, particularly for elements, which directly impact the property in question.
- Utilize the expertise of KDR Real Estate Services, Inc. to work through the acquisition process. Their experienced staff possess the technical skills as well as the more challenging "people skills" that can make all the difference in the successful completion of a ROW project. They have extensive design-build experience in Virginia and have qualified appraisers, ROW agents and negotiators, who have worked directly under contract with VDOT for many years. KDR, under the current City of Fredericksburg Fall
Hill Avenue Bridge Replacement project, is purchasing permanent easements on two properties encumbered with historic conservation easements – they know the area, the property owners to be impacted and are already familiar with the intricacies of ROW takings from Historic Properties with Historic Easements.

- Conduct all steps of the process in a professional and knowledgeable manner, emphasizing the benefits of the project to the property owner. The steps include appraisal; determination of damages, benefits, and just compensation; written offer; negotiation; appeal; offer modification; payment; settlement; and potentially, quick-take/condemnation.
- In coordination with utility owners, emphasize the critical importance in collectively avoiding or minimizing additional impacts to the historic Fall Hill property and Civil War trench resources. If additional easements are required, identify the location early in the process to allow for coordination as required under the Section 106 MOA.

**Role of VDOT:** Timely review and approval of ROW plans and appraisal/just compensation, as well as timely preparation of written offers, and possible “quick take” procedures and assistance in coordination of the Section 106 MOA on the Fall Hill historic properties.

**Risk No. 3 – Utilities**

**Risk Identification and Why It Is Critical:** The existence of extensive utilities along the project corridor is substantial risk to both the schedule as well as the financial success of the project. For example the RFP plan impacts one three-pole transmission structure, one steel transmission structure, one steel static pole, and one wooden static pole within the existing DVP easements, affecting two different DVP transmission lines. Moving these high tension lines, purchasing new easements is challenging in itself, but the risks are increased significantly by the required coordination of the additional easements with the Virginia Department of Historic Resources (VDHR) and the federal and state requirements to minimize impacts to the historic resources within the project limits at Civil War Earthwork 4/ZigZag 1 trenches and the Fall Hill Property. To complicate coordination with Verizon there are two separate wire centers handling their existing plant – Verizon South in Chancellorsville handles the Verizon facilities on the west side of I-95, while the facilities east of I-95 are handled out of Fredericksburg. Comcast, Cox and the Mary Washington Hospital also have facilities that utilize Dominion or Verizon poles or are in separate UG duct banks. Columbia Gas facilities include High Pressure Transmission as well as local 2” and 4” plastic distribution mains. Unless the coordination is handled properly between the utility companies, contractor, VDOT, the City of Fredericksburg, VDHR and the Design Builder ROW, Utility, Drainage, Structural and Roadway Teams the project will face potential delays in property purchases and utility relocations, proper coordination of MOT, potential rework or shutdowns to accommodate scheduling differences, incompatible designs between the DB Team and Utility companies as well as financial risk to the DB Team in determining prior rights.

**Risk Impact to the Project:** The relocation of the impacted DVP facilities, Verizon, Comcast, Cox Communications, the Mary Washington Hospital, gas, water and sanitary sewer has significant risks to the project in the key areas listed below:

- **Utility Project Cost:** The project cost will need to absorb the purchase of new easements, relocation, special designs to mitigate conflicts, scheduling conflicts, etc. These costs are usually hard to quantify during the proposal and bidding stages with most details of the exact conflicts to be encountered, needs and desires of the utility companies, conflicting goals of the numerous stakeholders. The DB Team that under estimates these costs will face substantial financial risk, while conversely VDOT may award the project to a firm with overly conservative estimates and winds up paying more than required. For example the ability of the impacted utilities to shut down their facilities to allow adjacent construction, may not be understood clearly, which could then affect progress and add significant costs to the project.
- **Project Schedule** – There are several critical steps in the utility relocation process that could significantly impact the project schedule. One of which is proper determination of all utility easements required for the project in a timely manner. Along Fall Hill Avenue several utility owners will be required to utilize a joint
easement, which will require extensive coordination between parties with different goals and objectives. The coordination of the relocation of transmission towers normally requires extensive time and coordination and can impact other nearby towers and facilities adjacent to the project. All of this work is a critical path in the utility relocation schedule.

- **Right-of-Way Acquisition** – The right-of-way process will not be able to start until the 30% plans are approved, all utility impacts have been identified and possible mitigation strategies evaluated and then all easements have been identified. This would include obtaining the necessary easements from the historic properties, which has significant coordination requirements for the use of the property. Obviously any delay in the ROW process could have serious adverse impacts to cost and schedule.

- **MOT/Construction Staging** – During the Technical Proposal and pricing stages the DB Team will be making critical assumptions on the sequence of construction and its impact upon providing adequate MOT to the vehicles and Pedestrians. For example along Fall Hill Avenue on the south side between Stations 136 and 140 the DB Team will be required to place a new retaining wall on top of existing Verizon and others communications UG Fiber. Verizon may have different priorities than VDOT, or the DB Team and schedule their relocations in a way that conflicts with the orderly progression of the project. Or possibly the allocation of space within the proposed joint easement is not acceptable to all parties, which would obviously impact cost and schedule.

- **Environmental Coordination** – The potential for additional utility easements and construction on the historic Fall Hill Property may require further coordination with VDHR and a revision to the Section 106 Memorandum of Agreement (MOA) for the resource.

**Risk Mitigation Strategies:** To maintain the proposed project schedule and minimize financial or environmental risk the DB Team, Utilities, VDOT and other stakeholders must work collaboratively with a sense of urgency to avoid the risks mentioned above. Immediately upon award a **Utility Task Force** will be established, with a strong leader assigned to push progress. This approach has proven successful on our past large complicated projects with the same utilities found on this project. The task force will meet regularly (Weekly or Bi-Weekly) as required to insure proper coordination that all issues are identified and resolved or escalated in a timely manner. During the bidding process we will contact all utility owners and start the project utility field inspection process. Once awarded the project, the DB Team will again contact each utility company to confirm any utility claims of prior rights and collect any new as-built information and specific procedures and concerns, search through utility company records to identify if any additional utility facilities are on site in addition to those shown in the RFP, mark out, survey and confirm field marking with the utility companies. We will excavate test pits at potential areas of conflict to accurately determine exact vertical and horizontal locations (SUE Level A) and discuss potential relocation schemes within the task force to minimize ROW needs and expedite construction and minimize cost. Existing VDOT policies and procedures will be followed including the proper completion of VDOT UT-9 forms and the full RUMPS system. In addition utilities will also be invited to the formal partnering meeting as well as the monthly progress/partnering meetings.

**Role of VDOT:** Following the proactive strategies listed above will minimize risk to both VDOT and the project by addressing any design, environmental and construction requirements that could affect the roadway design and construction. VDOT’s role will be to completely review submittals in a timely manner. VDOT will also play a key role in providing guidance on potential environmental concerns with additional easements on historic resources.

**Risk Summary**
The Corman DB Team understands that risks are inherent in Design-Build projects and proposes on this project with eyes wide open. *We fully take on the risks of this project as described above and will deliver the project with no surprises to VDOT or to the many key stakeholders!*
APPENDICES
Attachment 3.1.2

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.

<table>
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<th>Statement of Qualifications Component</th>
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## ATTACHMENT 3.1.2

### Project: U000-111-233, P101, R201, C501, B609

### STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

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Acknowledgement of RFQ, Revisions and/or Addenda
ATTACHMENT 2.10

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

RFQ NO.  C00075877DB47
PROJECT NO.:  0064-007-111, P101, R-201, C-501, B-627

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 11/03/2011
   (Date)

2. Cover letter of Addendum #1 4/8/13
   (Date)

3. Cover letter of
   (Date)

[Signature]

SIGNATURE

DATE  4/12/13
Attachment 3.2.7(a)

Certification Regarding Debarment Primary Covered Transactions
ATTACHMENT NO. 3.2.7(a)

CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS

Project No.: U000-111-233, P101, R201, C501, B609

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

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

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

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

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

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

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

[Signature]
4/12/13

Vice President

Date

Title

Corman Construction, Inc.

Name of Firm
Attachment 3.2.7(b)

Certification Regarding Debarment
Lower Tier Covered Transactions
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: U000-111-233, P101, R201, C501, B609

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

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

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

Signature 3/21/13 Date Senior Vice President Title

Whitman, Requardt and Asssociates, LLP
Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: U000-111-233, P101, R201, C501, B609

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

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

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

Signature _____________________________ Date 03/25/2013

Principal _____________________________ Title

ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: U000-111-233, P101, R201, C501, B609

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

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

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

Signature: [Signature] Date: 3/21/2018 Title: Vice President

Name of Firm: H & B Surveying and Mapping, LLC
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: U000-111-233, P101, R201, C501, B609

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

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

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

[Signature]  March 15, 2013  [President]  [Title]

KDR Real Estate Services

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: U000-111-233, P101, R201, C501, B609

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

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

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

[Signature] 3/21/2013   Vice President

[Date]   [Title]

DME Engineering Consultants

Name of Firm
ATTACHMENT NO. 3.2.7(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: U000-111-233, P101, R201, C501, B609

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

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

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

Signature March 25, 2013 Principal Engineer
Date Title

Engineering & Materials Technologies, Inc. (E.M. Tech)
Name of Firm
ATTACHMENT NO. 3.2.7(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: U000-111-233, P101, R201, C501, B609

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

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

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

Signature: Quinn Date: April 12, 2013

President

Title

Quinn Consulting Services, Inc.

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: U000-111-233, P101, R201, C501, B609

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

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

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

[Signature] 10 April 13 [Title]

Dovetail Cultural Resource Group

Name of Firm
Certificate of Prequalification
C097
CORMAN CONSTRUCTION, INC.
PREQ. EXP : 03/31/2014

--PREQ ADDRESS -------------- WORK CLASSES (LISTED BUT NOT LIMITED TO)
12001 GUILFORD ROAD          002 - GRADING
ANNAPOLIS, MD 20701-1201      003 - MAJOR STRUCTURES
PHONE : 410-792-9400          007 - MINOR STRUCTURES
FAX   : 301-953-0384           045 - UNDERGROUND UTILITIES

BUSINESS CONTACT: PENA, KENNETH JOHN
EMAIL: KPENA@CORMANCONSTRUCTION.COM
--------DBE INFORMATION--------

DBE TYPE : N/A
DBE CONTACT: N/A

C1140
CORMAN MARINE CONSTRUCTION, INC.
PREQ. EXP : 03/31/2014

--PREQ ADDRESS -------------- WORK CLASSES (LISTED BUT NOT LIMITED TO)
12001 GUILFORD RD            030 - PILE DRIVING AND CAISSONS
ANNAPOLIS JUNCTION, MD 20701-1201 054 - MARINE CONSTRUCTION
PHONE : 301-953-0900          082 - SHORING AND SHEETING
FAX   : 301-953-0384

BUSINESS CONTACT: PENA, KENNETH JOHN
EMAIL: BHULME@CORMANCONSTRUCTION.COM
--------DBE INFORMATION--------

DBE TYPE : N/A
DBE CONTACT: N/A

---------------------------------
Surety Letter
May 1, 2013

Bill Arel, P.E.
Alternative Project Delivery Office
Virginia Department of Transportation
1401 East Broad Street
Annex Building, 8th Floor
Richmond, VA 23219

RE: Corman Construction, Inc.

Project: RFQ - Design/Build Project-Fall Hill Avenue Widening and Mary Washington Boulevard Extension, City of Fredericksburg, VA
State Project No. U000-111-233,P101,R201,C501,B609 UPC 88699
Federal Project No. STP-5A010
Contract ID Number: C00088699DB59

It is our understanding that Corman Construction, Inc. is submitting a proposal on the referenced project. As surety for the above named Contractor, Fidelity and Deposit Company of Maryland with an A.M. Best Rating of A+ and Financial Size Category of XV is capable of obtaining a 100% Performance Bond and 100% Labor and Materials Payment Bond in the amount of the anticipated cost of construction with a current estimate of $35,000,000. and said bonds will cover the Project and any warranty periods on behalf of the Contractor, in the event that such firm be the successful bidder and enter into a contract for this project.

Our firm in conjunction with Fidelity and Deposit Company of Maryland have handled all of Corman Construction, Inc.’s bonding needs for over twenty years. Based on their excellent financial strength and track record of profitability, Fidelity and Deposit Company of Maryland has extended a bond program of $150,000,000 single/$400,000,000 total program. These are not the maximum limits they would consider but rather are general parameters to handle the company’s day to day bonding needs.

In closing, we highly recommend this contractor and should you desire more specific information feel free to give me a call.

Sincerely,

[Signature]
Patricia L. Lewis
Attorney-In-Fact
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 (hereinafter collectively called the "Companies"), by Geoffrey Delisio, 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 Patricia L. Lewis 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 _17th_ day of _May_, A.D. 2012.

ATTEST:

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

By: ____________________________

     Assistant Secretary
     Gerald F. Haley

By: ____________________________

     Vice President
     Geoffrey Delisio

State of Maryland
County of Baltimore

On this _17th_ day of _May_, A.D. 2012., before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, Geoffrey Delisio, Vice President and Gerald F. Haley, Assistant 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, deposes 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.

By: ____________________________

     Constance A. Dunn, Notary Public
     My Commission Expires: July 14, 2015
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 ___1st___ day of ______May______, 2013____.

[Seals]

[Signature]

Thomas O. McClellan, Vice President
Attachment 3.2.10

SCC and DPOR Information
**ATTACHMENT 3.2.10**

**State Project No. U000-111-233, P101, C501, R201, B609**

**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.

<table>
<thead>
<tr>
<th>Business Name</th>
<th>SCC Number</th>
<th>SCC Type of Corporation</th>
<th>SCC Status</th>
<th>DPOR Registered Address</th>
<th>DPOR Registration Number</th>
<th>DPOR Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corman Construction, Inc.</td>
<td>F046798-7</td>
<td>Incorporated</td>
<td>Active</td>
<td>12001 Guilford Rd</td>
<td>Class A Contractors License</td>
<td>2701 014794A</td>
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<td>Annapolis Junction, MD 20701</td>
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<tr>
<td>Whitman, Requardt &amp; Associates, LLP</td>
<td>K000382-4</td>
<td>Limited Liability Partnership</td>
<td>Active</td>
<td>1320 Central Park Blvd., Suite 224 Fredericksburg, VA 22401</td>
<td>Eng</td>
<td>0411000861</td>
</tr>
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<td>Whitman, Requardt &amp; Associates, LLP</td>
<td>K000382-4</td>
<td>Limited Liability Partnership</td>
<td>Active</td>
<td>9030 Stony Point Parkway, Suite 220 Richmond, VA 23235</td>
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<td>Whitman, Requardt &amp; Associates, LLP</td>
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<td>Eng</td>
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<td>Sabra, Wang &amp; Associates, Inc.</td>
<td>F134320-3</td>
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<td>101 West Broad St, Suite 301 Falls Church, VA 22046</td>
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<td>H&amp;B Surveying and Mapping, LLC</td>
<td>S290560-4</td>
<td>Limited Liability Corporation</td>
<td>Active</td>
<td>612 Hull St., Suite 101B Richmond, VA 23224</td>
<td>LS</td>
<td>0407005432</td>
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<tr>
<td>Quinn Consulting Services, Inc.</td>
<td>0492551-7</td>
<td>Incorporated</td>
<td>Active</td>
<td>14160 Newbrook Dr, Suite 220 Chantilly, VA 20151</td>
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<tr>
<td>KDR Real Estate Services, Inc.</td>
<td>0571210-4</td>
<td>Incorporated</td>
<td>Active</td>
<td>2500 Grenoble Road Richmond, VA 23294</td>
<td>Real Estate</td>
<td>0226007129</td>
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<tr>
<td>DMY Engineering Consultants, LLC</td>
<td>S313497-2</td>
<td>Limited Liability Corporation</td>
<td>Active</td>
<td>45662 Terminal Dr., Suite 110 Dulles, VA 20166</td>
<td>Eng</td>
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<tr>
<td>Engineering &amp; Materials Technologies, Inc.</td>
<td>0478633-1</td>
<td>Incorporated</td>
<td>Active</td>
<td>7857 Coppermine Drive Manassas, VA 20109</td>
<td>Eng</td>
<td>0407005994</td>
</tr>
</tbody>
</table>
## ATTACHMENT 3.2.10

State Project No. U000-111-233, P101, C501, R201, B609

### SCC and DPOR Information

<table>
<thead>
<tr>
<th>Business Name</th>
<th>Individual's Name</th>
<th>Office Location Where Professional Services will be Provided (City/State)</th>
<th>Individual's DPOR Address</th>
<th>DPOR Type</th>
<th>DPOR Registration Number</th>
<th>DPOR Expiration Date</th>
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<tr>
<td>Dovetail Cultural Resource Group I, Inc.</td>
<td>0668553-1</td>
<td>Incorporated</td>
<td>Active</td>
<td>N/A – Dovetail Cultural Resource Group is providing non-professional services and does not require an office DPOR certification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whitman, Requardt &amp; Associates, LLP</td>
<td>John Patrick Maddox, PE</td>
<td>9030 Stony Point Parkway, Suite 220 Richmond, VA 23235</td>
<td>2825 Willbrook Drive Richmond, VA 23233</td>
<td>Professional Engineer</td>
<td>0402026613</td>
<td>01-31-2014</td>
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<tr>
<td>Quinn Consulting Services, Inc.</td>
<td>Kaushik Vyas</td>
<td>14160 Newbrook Dr, Ste 220 Chantilly, VA 20151</td>
<td>10170 Spring Drive Gordonsville, VA 22942</td>
<td>Professional Engineer</td>
<td>0402039004</td>
<td>06-30-2014</td>
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<tr>
<td>KDR Real Estate Services, Inc.</td>
<td>Allen G. Dorin Jr.</td>
<td>2500 Grenoble Road Richmond, VA 23294</td>
<td>2500 Grenoble Road Richmond, VA 23294</td>
<td>Real Estate Appraiser</td>
<td>4001000562</td>
<td>11-30-2013</td>
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CISM0180 CORPORATE DATA INQUIRY

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:
MONITOR INDICATOR:
CHARTER FEE: MON NO: MON STATUS: MONITOR DTE:
R/A NAME: CT CORPORATION SYSTEM

STREET: 4701 COX RD STE 301 AR RTN MAIL:

CITY: GLEN ALLEN STATE: VA ZIP: 23060 6802
R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 01/05/04 LOC : 143
ACCEPTED AR#: 212 16 1202 DATE: 10/12/12 HENRICO COUNTY
CURRENT AR#: 212 16 1202 DATE: 10/12/12 STATUS: A ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
12 100.00

(Screen Id:/Corp_Data_Inquiry)
CERTIFICATE OF FACT

I Certify the Following from the Records of the Commission:

On August 10, 2000, a statement of registration as a registered limited liability partnership was filed in this office by Whitman, Requardt & Associates, LLP, a Maryland registered limited liability 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:
June 19, 2012

[Signature]
Joel H. Peck, Clerk of the Commission
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 May 30, 2012.

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
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
<table>
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<th>F134320 - 3</th>
<th>STATUS: 00 ACTIVE</th>
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<td>SABRA, WANG &amp; ASSOCIATES, INC.</td>
<td>DATE OF CERTIFICATE: 06/30/1998</td>
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<td>R/A NAME:</td>
<td>RAYMOND H SUTTLE JR</td>
<td>R/A STATUS: 4</td>
<td>ATTORNEY EFF. DATE: 04/14/11</td>
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<td>PENALTY INTEREST TAXES BALANCE TOTAL SHARES</td>
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LLCM3220 LLC DATA INQUIRY

LLC ID: S290560 - 4 STATUS: 00 ACTIVE STATUS DATE: 04/27/09

LLC NAME: H & B Surveying and Mapping, LLC

DATE OF FILING: 04/27/2009 PERIOD OF DURATION: INDUSTRY CODE: 00

STATE OF FILING: VA VIRGINIA MERGER INDICATOR:

CONVERSION/DOMESTICATION INDICATOR:

PRINCIPAL OFFICE ADDRESS

STREET: 612 HULL STREET STE 101B

CITY: RICHMOND STATE: VA ZIP: 23224-0000

REGISTERED AGENT INFORMATION

R/A NAME: TIMOTHY H GUARE

STREET: TIMOTHY H GUARE PLC

6802 PARAGON PL STE 100

CITY: HENRICO STATE: VA ZIP: 23230-0000

R/A STATUS: 4 MEMBER OF VSB EFF DATE: 07/02/09 LOC: 143 HENRICO COUNTY

YEAR FEES PENALTY INTEREST BALANCE

13 50.00

(Screen Id:/LLC_Data_Inquiry)
CISM0180 CORPORATE DATA INQUIRY

04/30/13 14:24:34

CORP ID: 0492551 - 7 STATUS: 00 ACTIVE STATUS DATE: 12/01/08

CORP NAME: QUINN CONSULTING SERVICES INCORPORATED

DATE OF CERTIFICATE: 10/24/1997 PERIOD OF DURATION: INDUSTRY CODE: 00

STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK

MERGER IND: S SURVIVOR CONVERSION/DOMESTICATION IND:

GOOD STANDING IND: Y MONITOR INDICATOR:

CHARTER FEE: 50.00 MON NO: MON STATUS: MONITOR DTE:

R/A NAME: JOHN H QUINN JR

STREET: 2208 S KNOLL ST ARRTN MAIL:

CITY: ARLINGTON STATE: VA ZIP: 22202 2134

R/A STATUS: 4 ATTORNEY EFF. DATE: 10/24/97 LOC: 106

ACCEPTED AR#: 212 14 5571 DATE: 09/11/12 ARLINGTON COUNTY

CURRENT AR#: 212 14 5571 DATE: 09/11/12 STATUS: A ASSESSMENT INDICATOR: 0

YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
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<tr>
<td>R/A Name:</td>
<td>ALLEN G DORIN JR</td>
</tr>
<tr>
<td>Street:</td>
<td>2500 GRENOBLE RD</td>
</tr>
<tr>
<td>City:</td>
<td>RICHMOND</td>
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CISM0180 CORPORATE DATA INQUIRY

| CORP ID: | 0478633 - 1 |
| STATUS: | 00 ACTIVE |
| STATUS DATE: | 01/29/97 |
| CORP NAME: | ENGINEERING & MATERIALS TECHNOLOGIES, INC. |
| DATE OF CERTIFICATE: | 01/29/1997 |
| PERIOD OF DURATION: | |
| INDUSTRY CODE: | 70 |
| STATE OF INCORPORATION: | VA VIRGINIA |
| STOCK INDICATOR: | S |
| MERGER IND: | CONVERSION/DOMESTICATION IND: |
| GOOD STANDING IND: | Y |
| MONITOR INDICATOR: | |
| CHARTER FEE: | 50.00 |
| MON NO: | |
| MON STATUS: | |
| MONITOR DTE: | |
| R/A NAME: | SHAHZAD S MOOSA |
| STREET: | 7857 COPPERMINE DR |
| CITY: | MANASSAS |
| STATE: | VA |
| ZIP: | 20109 |
| R/A STATUS: | 2 OFFICER |
| EFF. DATE: | 07/20/06 |
| LOC: | 176 |
| ACCEPTED AR#: | 213 01 1156 |
| DATE: | 11/28/12 |
| PRINCE WILLIAM |
| CURRENT AR#: | 213 01 1156 |
| DATE: | 11/28/12 |
| STATUS: A |
| ASSESSMENT INDICATOR: | 0 |
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| INTEREST | |
| TAXES | |
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<td>CHARLES W PAYNE JR</td>
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<td>725 JACKSON ST STE 200</td>
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BOARD FOR CONTRACTORS
CLASS A CONTRACTORS LICENSE
CORMAN CONSTRUCTION INC
12001 GUILFORD RD
ANNAPOLIS JUNCTION MD 20701 0160

CLASSIFICATIONS: H/H

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

SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE

COMMONWEALTH OF VIRGINIA
BOARD FOR CONTRACTORS - CLASS A
CONTRACTOR LICENSE - CLASSIFICATIONS: H/H

NUMBER: 2701 014794A
CORMAN CONSTRUCTION INC
12001 GUILFORD RD

ANNAPOLIS JUNCTION MD 20701 0160
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY BRANCH OFFICE REGISTRATION

PROFESSIONS: ENG

WHITMAN, REQUARDT AND ASSOCIATES LLP
CENTRAL PARK TOWN CENTER
1320 CENTRAL PARK BLVD
SUITE 224
FREDERICKSBURG, VA 22401
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY BRANCH OFFICE REGISTRATION

PROFESSIONS: ENG

WHITMAN REQUARDT AND ASSOCIATES
9030 STONY POINT PKWY
SUITE 220
RICHMOND, VA 23235
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY BRANCH OFFICE REGISTRATION

PROFESSIONS: ENG

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

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

PROFESSIONS: ARC, ENG, LS, LA

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

EXPIRES ON
12-31-2013

NUMBER
0407001676

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

PROFESSIONS: LS

H & B SURVEYING & MAPPING LLC
612 HULL ST
SUITE 101B
RICHMOND, VA 23224
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA
9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 387-8500

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

PROFESSIONS: ENG

QUINN CONSULTING SERVICES INC
14160 NEWBROOK DR
SUITE 220
CHANTILLY, VA 20151

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
12-31-2014

NUMBER
0226 007129

REAL ESTATE BOARD
REAL ESTATE CORPORATION, PARTNERSHIP, ASSOCIATION LICENSE
POST IN A CONSPICUOUS PLACE
THIS LICENSE TO BE KEPT IN CUSTODY AND CONTROL OF PRINCIPAL BROKER

KDR REAL ESTATE SERVICES INC
2500 GRENOBLE RD
RICHMOND, VA 23294

Gorden N. Dixon, Director

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY REGISTRATION

PROFESSIONS: ENG

DMY ENGINEERING CONSULTANTS, LLC
45662 TERMINAL DRIVE
SUITE 110
DULLES, VA 20166

Gordon N. Dixon, Director
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY REGISTRATION

PROFESSIONS: ENG

ENGINEERING & MATERIALS TECHNOLOGIES, INC
7857 COPPERMINE DR
MANASSAS, VA 20109

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

George R. Brown, Director

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA
9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

EXPIRES ON
12-31-2013

NUMBER
0407005994
DPOR’s for Key Personnel Practicing or Offering to Practice Professional Services in Virginia
DPOR Licenses for Services Not Regulated by the Board for Architects, Professional Engineers, Land Surveyors, Certified Interior Designers, or Landscape Architects
Attachment 3.3.1

Key Personnel Resumes
**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel anticipated for the Project.</th>
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<tbody>
<tr>
<td><strong>a. Name &amp; Title:</strong> Jo Ellen Sines, DBIA – Vice President of Project Development</td>
</tr>
<tr>
<td><strong>b. Project Assignment:</strong> Design-Build Project Manager</td>
</tr>
<tr>
<td><strong>c. Name of Firm with which you are now associated:</strong> Corman Construction, Inc.</td>
</tr>
<tr>
<td><strong>d. Years experience:</strong> With this Firm <em>33</em> Years With Other Firms <em>1</em> Years</td>
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<td>Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen(15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):</td>
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**Corman Construction, Inc.**

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<tr>
<th>Vice President of Project Development</th>
<th>2006 – Present</th>
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<tbody>
<tr>
<td>Ms. Sines is integral in senior management with a concentration in managing Projects in Innovating Contracting, including 11 Design-Build projects, totaling over $1.1billion and completed on schedule and on budget. Relevant projects include:</td>
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<tr>
<td>• VDOT Design-Build I-64/Route 15 (Zion Crossroads) – Louisa County, VA – $6.6 million – Senior DBPM – 2012 – 2013</td>
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<tr>
<td>• MSHA Design-Build I-70 Phase 2D – Frederick County, MD – $35.4 million – DBPM – 2010 – 2013</td>
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<td>• Design-Build East Deer Park Road/Bridge Rehab. – Montgomery County, MD – $0.5 million – DBPM – 2009</td>
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<td>• MSHA Design-Build MD 924 from MD 22 to Maulsby Avenue (Project encompassed historically- significant “Main Street,” Armory and Harford County Courthouse) – Bel Air, MD – $7.6 million – DBPM – 2006 – 2008</td>
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<table>
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<tr>
<th><strong>Corman Construction, Inc.</strong></th>
<th><strong>Senior Project Manager/DBPM/Operations Manager</strong></th>
<th><strong>2003 – 2006</strong></th>
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<td>Tasks and responsibilities include project oversight including scheduling, cost control, and planning to identify and mitigate potential delays resulting from design and/or constructability issues that keep projects on track. Relevant Projects included:</td>
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<td>• NPS Monocacy Aqueduct (historic 1830s C&amp;O Canal aqueducts) – Dickerson, MD – $5.9 million – Senior Project Manager – 2002 – 2005</td>
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<table>
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<th><strong>Corman Construction, Inc.</strong></th>
<th><strong>Project Manager/Engineer</strong></th>
<th><strong>1994 – 2003</strong></th>
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<tr>
<td>Performed Project Manager/Project Engineer duties on heavy highway, bridge and utility jobs for MSHA, VDOT and DelDOT.</td>
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<td>• MSHA Design-Build MD 32 Samford Road – Fort Meade, MD – $6.6 million – DBPM – 2000 – 2001</td>
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| **e. Education:** Name & Location of Institution(s)/Degree(s)/Year/Specialization: |
| University of Pittsburgh – Johnstown, Pennsylvania/B.S./1980/Civil Engineering |
| Design-Build Institute of America (DBIA)/2004/#D651 |

| **f. Active Registration:** Year First Registered/ Discipline/VA Registration #: |
| N/A |

| **g. Document the extent and depth of your experience and qualifications relevant to the Project:** |
| 1. Note your specific responsibilities and authorities for each assignment, not those of the firm. |
| 2. Note whether experience is with current firm or with other firm. |
| 3. Provide beginning and end dates for each assignment. |
| (List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.) |

| **Project Name:** Design-Build I-64/Route 15 (Zion Crossroads) Interchange Improvements – Louisa County, VA |
| **Project Role:** Design-Build Project Manager |
| **Client/Owner:** Virginia Department of Transportation |
| **Beginning and End Dates:** September 2012 – April 2014 (Estimated) |
| **With Current Firm?:** Yes |

Specific Responsibilities/Authorities: As **Design-Build Project Manager** on this $6.9 million project, Jo Ellen is responsible for the design and construction from procurement to completion. She manages the design team during drawing preparation for bid, assists in determining extent of exploration (such as geotechnical, utility and HAZMAT), integrates job team and participates in
Project includes realigning existing interchange into Virginia’s first Diverging Diamond Interchange (DDI) to improve traffic operations and increase safety at the interchange and along Route 15. Project includes design/construction of a DDI, widening Route 15 and Route 15/I-64 interchange on/off ramps, ROW, lighting, drainage, signals, signing/pavement marking, SWM, TMP, E&SC, and utility relocations.

| Project Name: Design-Build MD 30 Hampstead Bypass – Hampstead, MD |
| Client/Owner: Maryland State Highway Administration |

Specific Responsibilities/Authorities: As Design-Build Project Manager, Jo Ellen was responsible for design and construction of this $41 million project from procurement to job completion. Pre-bid, she developed technical approach with designer and prepared best value submission. Post-bid, she oversaw and managed design/construction coordination, assisted in determining extent of explorations such as geotechnical, utility and hazmat; integrated the job team and actively participated in-plan development, in-house reviews, and reviews with owners and agencies. She assisted in preparation of project schedule (integrate design and construction), oversaw construction activities, led the Team in environmental stewardship program, provided construction management expertise to the Corman Project Team including Public Relations duties and led the partnering process. Responsible for construction quality oversight.

Project included a 4.5-mile new 2-lane asphalt roadway with 8 cross culverts, 4 bridges, 2 noise walls, storm drainage, lighting, 900,000 cu yd of excavation including 236,000 cu yd of rock, utility relocations, 3 roundabouts and 13 new SWM ponds. Project included a bog turtle habitat requiring special design accommodations. There were 22 design packages in all. Partnering project with “A” ratings in MOT, environmental and contractor performance. Worked 292,092 manhours with one recordable incident.

| Project Name: Design-Build I-70 Phase 2D – Frederick, MD |
| Client/Owner: Maryland State Highway Administration |

Specific Responsibilities/Authorities: As Design-Build Project Manager on this $35.4 million project, Jo Ellen works with the design and permitting team developing/coordinating/reviewing designs, integrating job team, participates in in-house, owner and agency reviews, assists in preparing the schedule (integrating design and construction), oversees construction, provides construction management expertise and project management, and leads the team in the environmental stewardship program and partnering.

Interchange reconstruction including widening approximately one mile of Interstate 70 under heavy traffic (adding one through lane and one auxiliary lane in each direction), ramp realignments/replacements, and adjusting the vertical profile(s) of mainline I-70 and ramps. In addition, replacement of the two I-70 bridges (EB and WB) over East South Street and MTA tracks, 2 new traffic signals, 2 new track crossings, E&SC, pond reconstruction, SWM, drainage, utility relocations, retaining walls, ITS, signing and coordination with FAA. Partnered and shared public outreach program with MSHA. Extensive TMP, permitting and railroad requirements.

| Project Name: Design-Build MD Route 216 US 29 to I-95 – Howard County, MD |
| Client/Owner: Maryland State Highway Administration |
| Beginning and End Dates: Sept 2002-June 2005 |

Specific Responsibilities/Authorities: As Design-Build Project Manager, Jo Ellen was responsible for integrating the job team for this $21 million project. She developed/coordinated reviewed designs with design/permitting partner, partnered with the Project Management Team on innovative solutions, including bifurcating east and westbound roadways to reduce earthwork, established Design-Build procedures, phasing and design deliverable schedule. She worked with staff on project management, including planning, QC scheduling and cost management; developed procurement approaches and was responsible for all design and construction. WR&A coordinated with Jo Ellen to address questions concerning the preliminary plans.

Design/construction of a 2-mile realignment of MD 216 as a dual-divided highway with 2 signalized intersections, roundabouts, a new off-ramp from I-95, 167,000 SF noise walls, box culvert extensions, utility coordination, installation/relocation of electric, water, sewer, gas, fiber optic, and cabling, E&SC, storm drainage, SWM (11 new ponds), roadway construction, signing, striping, signals and lighting.

| Project Name: Design-Build MD Route 30 Route 15/I-64 Interchange – Virginia |
| Client/Owner: Virginia Department of Transportation |
| Beginning and End Dates: Apr. 2015-June 2018 |

Specific Responsibilities/Authorities: As Design-Build Project Manager, Jo Ellen was responsible for design and construction of this $30 million project from procurement to job completion. Pre-bid, she developed technical approach with designer and prepared best value submission. Post-bid, she oversaw and managed design/construction coordination, assisted in determining extent of explorations such as geotechnical, utility and hazmat; integrated the job team and actively participated in-plan development, in-house reviews, and reviews with owners and agencies. She assisted in preparation of project schedule (integrate design and construction), oversaw construction activities, led the Team in environmental stewardship program, provided construction management expertise to the Corman Project Team including Public Relations duties and led the partnering process. Responsible for construction quality oversight.

Project included realigning existing interchange into Virginia’s first Diverging Diamond Interchange (DDI) to improve traffic operations and increase safety at the interchange and along Route 15. Project includes design/construction of a DDI, widening Route 15 and Route 15/I-64 interchange on/off ramps, ROW, lighting, drainage, signals, signing/pavement marking, SWM, TMP, E&SC, and utility relocations.
ATTACHMENT 3.3.1
KEY PERSONNEL RESUME FORM

### Brief Resume of Key Personnel anticipated for the Project.

**a. Name & Title:** Kaushik Vyas, P.E. – Quality Assurance Manager

**b. Project Assignment:** Quality Assurance Manager

**c. Name of Firm with which you are now associated:** Quinn Consulting Services, Inc.

**d. Years experience:**
- With this Firm: **3** Years
- With Other Firms: **24** Years

Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):

#### Quinn Consulting Services, Inc.
**Quality Assurance Manager**  
**March 2010 – Present**
As Quality Assurance Manager, Mr. Vyas works exclusively on VDOT Design-Build projects in lead QA and QC roles.

- **VDOT Design-Build I-64, Exit 91 Interchange** – Augusta County, VA – $21.07 million
- **VDOT Design-Build Sycolin Road** – Loudoun County, VA – $12.18 million
- **VDOT Design-Build I-495 Capital Beltway Express Lanes PPTA** – Fairfax County, VA – $1.4 billion

#### TRC (formally Site-Blauvelt)
**Transportation Engineer in QA/QC Department**  
**April 2001 – March 2010**
As Quality/Transportation Engineer, performed overall QA Control in line with VDOT PPTA Project QA/QC Guidelines.

- **Design-Build Route 15 Widening** – Prince William County, VA – $40 million
- **Design-Build Linton Road Widening** – Prince William County, VA – $20 million
- **VDOT Design-Build VDOT Route 895 Pocahontas Parkway PPTA** – Richmond, VA – $314 million
- **Spriggs Road Widening** – Prince William County, VA – $30 million
- **VDOT I-95/Route 627 Interchange** – Stafford County, VA – $35 million

#### Gujarat Electricity Board
**Civil Engineer in QA/QC Department**  
**March 1985 – March 2000**
As a Civil Engineer, Mr. Vyas worked in Power Plants (Generation Wing), dealt with construction and maintenance of plant and technical matters of thermal power plant projects, as well as QA/QC of construction works. He also performed land acquisition.

- **Gandhinagar Thermal Power Plant** – Gandhinagar, India – Gujarat Electricity Board
- **Ukai Thermal Power Plant** – Gandhinagar, India – Gujarat Electricity Board
- **Transmission Circle Office – Nadiad, Gujarat, India** – Gujarat Electricity Board

**e. Education:**
**Name & Location of Institution(s)/Degree(s)/Year/Specialization:**
- **Gujarat University – Ahmedabad, India/B.S./1983/Civil Engineering**

**f. Active Registration:**
**Year First Registered/Discipline/VA Registration #:**
- Professional Engineer/Virginia/2004/#039004

**g. Document the extent and depth of your experience and qualifications relevant to the Project.**
1. **Note your specific responsibilities and authorities for each assignment, not those of the firm.**
2. **Note whether experience is with current firm or with other firm.**
3. **Provide beginning and end dates for each assignment.**

(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)

**Project Name:** I-495 Capital Beltway Express Lanes Design-Build – Fairfax County, VA

**Project Role:** Resident Area/Quality Assurance Engineer

**Client/Owner:** Virginia Department of Transportation

**Beginning and End Dates:** November 2010 – Early 2013 (Estimated)

**With Current Firm?:** Yes

**Specific Responsibilities/Authorities:** Resident Area/Quality Assurance Engineer on this $1.4 billion public-private Capital Beltway Project that includes widening of approximately 14 miles of High Speed, High Traffic flow Interstate, widening/replacement of over 50 bridges, construction of new HOV toll lanes, upgrades to 12 key interchanges and new soundwalls and carpool ramps. Responsibilities included oversight of quality control operations; daily staff assignments in the field; analyzing and interpreting project plans and specifications; participating in weekly progress meetings; working closely with contractors to identify and resolve problems; monitoring and reviewing daily diaries prepared by inspection staff; preparing deficiency and non-compliance reports; ensuring materials testing was performed in accordance with project specific QA/QC Plan and VDOT QA/QC Minimum Standards for Design-Build and PPTA Projects; working directly with General Contractor, Engineering and VDOT oversight personnel to discuss and/or recommend resolutions for field construction problems.
<table>
<thead>
<tr>
<th>Project Name: Route 15 Widening Design-Build – Prince William County, VA</th>
<th>Project Role: Quality Assurance Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client/Owner: Prince William County, VA</td>
<td>Beginning and End Dates: November 2007 – November 2010</td>
</tr>
<tr>
<td>With Current Firm?: No</td>
<td>Specific Responsibilities/Authorities: <strong>Quality Assurance Manager</strong> on this five phased widening of Route 15 from Route 66 Interchange to Sudley Road involving Old Carolina Road, Heathcote Boulevard and Waterfall Road Widening. Project also included three bridges. Provided coordination with QA/QC Teams for execution of the work according to plans and VDOT Specifications. Responsibilities included checking test reports, daily reports, safety reports, environmental reports, coordination with companies for utility relocations and also with public relations in regards to the project.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Name: Route 895 (PPTA) Design-Build – Richmond, VA</th>
<th>Project Role: Quality Assurance Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client/Owner: Virginia Department of Transportation</td>
<td>Beginning and End Dates: April 2001 – July 2002</td>
</tr>
<tr>
<td>With Current Firm?: No</td>
<td>Specific Responsibilities/Authorities: <strong>Quality Assurance Manager</strong> on this project that involves monitoring the James River crossing of I-95 using a segmental bridge. This bridge was built using a very advanced technique called the balanced cantilever method and was cast in place with traveling formwork. Responsible for studying the complex reinforcement plans, river crossing segmental drawings, and the pier table structure detailed drawings in order to methodically check and inspect the reinforcement of the critical river crossings. Also inspected the post tensioning of strands for the river crossing segments and reviewed the schedule of nodes and stressing data.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Name: Linton Hall Road Widening – Prince William County, VA</th>
<th>Project Role: Quality Assurance Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client/Owner: Prince William County, VA</td>
<td>Beginning and End Dates: November 2007 – November 2010</td>
</tr>
<tr>
<td>With Current Firm?: No</td>
<td>Specific Responsibilities/Authorities: Served as the <strong>Quality Assurance Manager</strong> providing coordination with QA/QC Teams for execution of the work according to plans and VDOT Specifications. Project included bridge over Broad Run Creek and Roadway Widening up to Route 28. Responsibilities included checking test reports, daily reports, safety reports and environmental reports. Also worked closely with utility companies during facility relocations and addressed public inquiries as related to the project.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Name: Spriggs Road Improvements – Prince William County, VA</th>
<th>Project Role: Quality Assurance Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>With Current Firm?: No</td>
<td>Specific Responsibilities/Authorities: <strong>Quality Assurance Manager</strong> of this project, which included widening of Spriggs Road to make it a four-lane divided highway between Minnieville Road and Hoadly Road. Project also included the construction of access roads, MSE walls and utility relocation. Responsibilities included interpreting geotechnical reports as related to actual field conditions and recommending solutions when unsuitable soils were encountered. Monitored ongoing roadway drainage work and soil stabilization work and prepared daily reports, pay item summaries, and project schedule reports.</td>
</tr>
</tbody>
</table>
### Brief Resume of Key Personnel anticipated for the Project.

**a. Name & Title:** John Maddox, P.E. – Senior Vice President

**b. Project Assignment:** Design Manager

**c. Name of Firm with which you are now associated:** Whitman, Requardt and Associates, LLP

**d. Years experience:** With this Firm _17_ Years With Other Firms _10_ Years

Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):

<table>
<thead>
<tr>
<th>Firm/Project</th>
<th>Positions/Project Manager</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whitman, Requardt and Associates, LLP</td>
<td>Various Positions/Project Manager</td>
<td>July 1995 – Present</td>
</tr>
<tr>
<td></td>
<td>Mr. Maddox has served as Project Manager on VDOT projects continuously from August 1997 to the present including:</td>
<td></td>
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<tr>
<td></td>
<td>• Route I-81 Bridge over the New River and Improvements to Exit 105 – Project Manager – 2011-Present ($70 million)</td>
<td></td>
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<tr>
<td></td>
<td>• Route I-81/Route 220 Interchange – Project Manager – 2007-2011 ($70 million)</td>
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<td></td>
<td>• VDOT NOVA District Location and Design On-Call Contract – Contract Manager – 2008-Present</td>
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<tr>
<td></td>
<td>• Fairfax County Parkway Widening and Interchange at Fair Lakes Parkway – Project Manager – 2001-Present ($44 million)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• VDOT Statewide Location and Design On-Call Contract – Contract Manager – 2008-2011</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Route I-81 Widening and Bridge Replacement over Buffalo Creek – Project Manager – 1999-2007 ($27 million)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Route I-81 Widening and Bridge Replacement over Maury River – Project Manager – 1999-2006 ($18 million)</td>
<td></td>
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<tr>
<td></td>
<td>• Route 29 Bypass Sweet Briar Interchange – Project Manager – 1996-2005 ($35 million)</td>
<td></td>
</tr>
</tbody>
</table>

**e. Education:** Name & Location of Institution(s)/Degree(s)/Year/Specialization:

- West Virginia Institute of Technology (Now a part of West Virginia University) – Montgomery, West Virginia/B.S./1985/Civil Engineering

**f. Active Registration:** Year First Registered/ Discipline/VA Registration #:

- Professional Engineer/Virginia/1996/#026613

**g. Documentation:** Document the extent and depth of your experience and qualifications relevant to the Project.

1. Note your specific responsibilities and authorities for each assignment, not those of the firm.
2. Note whether experience is with current firm or with other firm.
3. Provide beginning and end dates for each assignment.

(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)

**Project Name:** Fairfax County Parkway Interchange at Fair Lakes Parkway – Fairfax County, VA

**Project Role:** WR&A Design Project Manager

**Client/Owner:** Virginia Department of Transportation

**Beginning and End Dates:** October 2001 – Estimated March 2013 (Under Construction)

**With Current Firm?:** Yes

Specific Responsibilities/Authorities: Mr. Maddox is the WR&A Design Project Manager responsible for the design of a $44 million project, which widens FCP from four to six lanes for 2.3 miles and provides an interchange at Fair Lakes Parkway and Monument Drive. The interchange includes two new bridges and over 43,000 sf of retaining walls. The project also required the design of over 70,000 sf of noise walls. The FCP Bridge over Route 50 was widened from four to six lanes. The Fairfax County Parkway was elevated over Monument Drive requiring coordination with power transmission to raise the power lines approximately 25 feet. WR&A also provided design services for the utility relocation for the project. The project also includes an extensive MOT plan with multiple phases of construction for maintaining over 45,000 vpd during the construction of the project. Mr. Maddox provides oversight and coordination for all elements of the project including roadway, hydraulic, SWM, structural, utility relocation, traffic engineering, environmental permits, traffic forecast and analysis, and public involvement.

**Project Name:** Route 123 Interchange at Route 1 – Prince William County, VA

**Project Role:** WR&A Design Project Manager

**Client/Owner:** Virginia Department of Transportation

**Beginning and End Dates:** December 2007 – December 2014 Advertisement

**With Current Firm?:** Yes

Specific Responsibilities/Authorities: Mr. Maddox is the WR&A Design Project Manager responsible for the design of a $70 million project, which includes a tight urban interchange at Route 123 and Route 1 and the widening from four to six lanes 1.7 miles of Route 1 and Route 123. The project requires two new bridges; Route 123 over Route 1 and Route 123/Belmont Bay Drive over CSXT Railroad. Route 123 and the connecting ramps are elevated on MSE retaining walls to
reduce the right-of-way impacts of the project. The replacement of the existing bridge over Marumsco Creek required a detailed analysis of the FEMA floodplain. A complex MOT plan is also required to maintain traffic operations during multiple phases of construction including a complete traffic analysis of each phase of construction. The design includes a complex Type C Category V TMP analyzing all phases of construction. The project includes extensive utility relocation and coordination, which WR&A is providing design services for over 14,500 LF of water and over 5,000 LF of sewer relocation. Mr. Maddox provides oversight and coordination for all elements of the design including surveys, roadway, hydraulics, SWM, structural, geotechnical, traffic engineering, ITS, TMP, traffic forecasting and analysis, permitting and public involvement.

**Project Name:** I-81 Widening and Bridge Replacements over Buffalo Creek and Maury River – Rockbridge County, VA  
**Project Role:** WR&A Design Project Manager  
**Client/Owner:** Virginia Department of Transportation  
**Beginning and End Dates:** August 1999 – December 2007  
**With Current Firm?:** Yes

Specific Responsibilities/Authorities: Mr. Maddox was the WR&A Design Project Manager responsible for the design of both projects under a single design contract. The project construction totaled $45 million and included widening 2 miles of I-81 from four to six lanes. The project included the replacement of the I-81 Bridge over Buffalo Creek with an approximate length of 600 feet and the bridge over Maury River with an approximate length of 800 feet. The design included a complex maintenance of traffic plan to maintain two lanes of traffic in each direction during all phases of construction. Mr. Maddox provided oversight and coordination for all elements of the design, including roadway, hydraulic, SWM, structural, geotechnical, environmental permits and public involvement. Duties included coordination of the design with FHWA and VDOT staff. The projects received the 2008 ACEC Grand Award and the Buffalo Creek was awarded the “VDOT Virginia Statewide Construction Quality Award” and NPHQ Award “Breaking the Mold”.

**Project Name:** Route 29 Bypass Sweet Briar Interchange – Amherst County, VA  
**Project Role:** WR&A Design Project Manager  
**Client/Owner:** Virginia Department of Transportation  
**Beginning and End Dates:** 1996 – 2005  
**With Current Firm?:** Yes

Specific Responsibilities/Authorities: Mr. Maddox served as the WR&A Design Project Manager for the design of a $35 million project, which included the relocation and extension of existing Route 29 to Business Route 29 by elevating the four-lane divided roadway a maximum of 28’ over the proposed Route 29 Bypass. The innovative design separated the local traffic on Business Route 29 from the high speed traffic on the Bypass. Rutledge Creek and its associated FEMA Floodplain traversed the project through four box culverts requiring a detailed analysis to ensure the 100-year floodplain was not impacted by the project. A complex sequence of construction and the maintenance of traffic plan were required to extend the Bypass and Route 624 under the Norfolk Southern Railway. The railroad effort included a one-mile relocation of the track and the construction of two railroad bridges, requiring extensive coordination with Norfolk Southern. Mr. Maddox provided oversight and coordination for all elements of the design including traffic forecast and analysis, interchange design, railroad relocation, highway design, three new highway bridges and two railroad bridges, retaining walls, drainage, stormwater management and public involvement.

**Project Name:** I-81 Bridge Replacement over the New River and Exit 105 Modifications – Montgomery and Pulaski Counties, VA  
**Project Role:** WR&A Design Project Manager  
**Client/Owner:** Virginia Department of Transportation  
**Beginning and End Dates:** February 2011 – December 2017 Advertisement  
**With Current Firm?:** Yes

Specific Responsibilities/Authorities: Mr. Maddox is the WR&A Design Project Manager responsible for the design of the $70 million project, which includes 1.72 miles of improvements to the existing four-lane divided interstate. The improvements consist of the replacement of the existing two-lane bridges over the New River with three-lane bridges in each direction. The bridges are approximately 1,600 feet long and are 80 feet above the river. I-81 will be widened to provide deceleration and acceleration lanes along I-81. The design includes a complex Type B Category IV TMP for multiple phases of construction. The project includes the replacement of the Route 232 bridge over I-81. The project is being developed under a “Turnkey Delivery” and Mr. Maddox is providing oversight and coordination for all elements of the design including surveys, roadway, hydraulics, SWM, structural, geotechnical, and traffic engineering, ITS, TMP, environmental permits and utility design. Additionally, the project includes public outreach including stakeholder meetings, a citizen information meeting and a public hearing. Mr. Maddox also leads monthly meetings with VDOT, subconsultants and key staff, to ensure all elements of the project are proceeding on schedule. The scheduling is enhanced by utilizing CMP scheduling to clearly define the critical path of the design, environmental and right-of-way tasks.
# KEY PERSONNEL RESUME FORM

**Brief Resume of Key Personnel anticipated for the Project.**

<table>
<thead>
<tr>
<th>a. Name &amp; Title:</th>
<th>Peter Bernat – Senior Project Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Project Assignment:</td>
<td>Construction Manager</td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated:</td>
<td>Corman Construction, Inc.</td>
</tr>
<tr>
<td>d. Years experience:</td>
<td>With this Firm 22 Years With Other Firms 2 Years</td>
</tr>
<tr>
<td></td>
<td>Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):</td>
</tr>
<tr>
<td>Mr. Bernat’s distinguished career spans over 24 years assigned to design-build/design-bid-build, fast-track bridges, large-scale transportation infrastructure and complex utility projects. For the past 6 years, Mr. Bernat has been the Senior Project Manager of the CK Constructors JV for VDOT’s $236 million Telegraph Road Project. Under Mr. Bernat’s leadership, the project met all six milestones to date with the Substantial Completion milestone achieved 112 days in advance of the contract requirement and is on schedule to finish months ahead of the final completion date.</td>
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</tr>
</tbody>
</table>

**Corman Construction, Inc. Senior Project Manager 2005 – Present**

Mr. Bernat’s assignments include large-scale Design-Build and Design-Bid-Build transportation infrastructures and fast-track bridges, where he tackles projects with a proactive management approach leading to successful completion. Tasks and responsibilities include scheduling, cost control, and planning future work to identify and mitigate potential delays resulting from design and/or constructability issues that keep projects on track.

- **VDOT I-95 Telegraph Road Interchange Improvement** – Alexandria, VA – $236.3 million – 2007 – 2012
- **MSHA Woodrow Wilson Bridge MD 210, MB-3** – Oxon Hill, MD – $44.6 million – 2005 – 2007

**Corman Construction, Inc. Project Manager/Construction Manager 1998 – 2005**

Managed the following projects where he supervised engineers on all aspects of construction:

- **MSHA Design-Build MD Route 216 US 29 to I-95** – Laurel, MD – $21.1 million – 2002 – 2005
- **VDOT Chippenham Parkway** – Chesterfield County, VA – $1.9 million – 1999 – 2002
- **VDOT I-95 at Walthall Interchange** – Chesterfield County, VA – $4.9 million – 1998-2001

**Corman Construction, Inc. Senior Project Engineer 1993 – 1997**

Mr. Bernat was responsible for all aspects of project management, including cost control, projection analysis, scheduling, subcontractor coordination, public relations, submittals, material procurement and owner relations for bridge and water main projects.

<table>
<thead>
<tr>
<th>e. Education:</th>
<th>Name &amp; Location of Institution(s)/Degree(s)/Year/Specialization: University of Texas – Austin, Texas/1989-1990/Civil Engineering Major</th>
</tr>
</thead>
<tbody>
<tr>
<td>f. Active Registration:</td>
<td>Year First Registered/ Discipline/VA Registration #: 2010/VDOT Erosion &amp; Sediment Control Contractor Certification/#5454C 2012/Virginia DCR Responsible Land Disturber Certification/#37435</td>
</tr>
<tr>
<td>g. Document the extent and depth of your experience and qualifications relevant to the Project.</td>
<td>(List at least three (3), but no more than five (5) projects for which you have performed a similar function.)</td>
</tr>
<tr>
<td>1.</td>
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<tr>
<td>2.</td>
<td>Note whether experience is with current firm or with other firm.</td>
</tr>
<tr>
<td>3.</td>
<td>Provide beginning and end dates for each assignment.</td>
</tr>
</tbody>
</table>

**Project Name:** Telegraph Road Interchange Improvement – Alexandria, VA  
**Project Role:** Senior Project Manager  
**Client/Owner:** Virginia Department of Transportation  
**Beginning and End Dates:** December 2007 – December 2012  
**With Current Firm?:** Yes  

Specific Responsibilities/Authorities: As Senior Project Manager for this $236.3 million fast-track joint venture project, Mr. Bernat oversees 14 engineers, a jobsite workforce of over 200, 39 subcontractors, and manages all aspects of construction. He is the joint venture’s primary contact with VDOT and holds responsibility for contract administration of the project. This project commands major interim milestone coordination from a demanding schedule with incentive/disincentive clauses, is the largest design-bid-build in Virginia and the final major undertaking of the Woodrow Wilson Bridge project.
In 2010, Mr. Bernat led an effort to reduce traffic congestion by revising the MOT from its original 6 phases and 16 sub-phases to 3 phases with 10 sub-phases, thus improving travel conditions for the public. He was instrumental in developing alternate schedules and work areas that kept the project on track when unanticipated utility conflicts were discovered. Also, under Peter’s leadership, the project met all six milestones to date with the last milestone completed 29 days ahead of the contract milestone date. Substantial completion for entire project was achieved four months early on August 25, 2012.

Relevant project features include: Reconstruction of the Telegraph Road Interchange, widening/reconstruction of approx. 2.5 miles of Interstate I-95/1-495 with 11 ramps and bridges, MSE walls and bridge approaches, ITS, signalization, lighting, and signing, complex maintenance of traffic involving an ADT of 160,000, design and construction of sound walls, bridge widening at B617.

**Project Name:** Design-Build MD Route 216 US 29 to I-95 – Laurel, MD  
**Project Role:** Construction Manager  
**Client/Owner:** Maryland State Highway Administration  
**Beginning and End Dates:** October 2002 – April 2005  
**With Current Firm?: Yes**

Specific Responsibilities/Authorities: As Construction Manager for this $21.1 million project, Mr. Bernat managed this design-build project with a partnered, hands-on, 24/7 approach, which ultimately resulted in an on-time, on-budget, award winning project. Mr. Bernat supervised project engineers and superintendents and oversaw all field work. Unparalleled partnering was essential and contributed to effective communication with everyone, specifically the utility companies, homeowners, and agencies. Peter also directed construction, including Quality Control to ensure materials and work met contract requirements/plans/specifications, oversaw the design team and chaired in-house working sessions for design development and reviews, participated in design review meetings with owner and MDE where real-time problem solving occurred, obtained permits, was the Design-Build Team’s Public Relations Coordinator and spokesperson at community meetings, served as utility coordinator.

Relevant project features include design and construction of a two-mile realignment of MD 216 as a dual-divided highway, new off-ramp from southbound I-95 to westbound MD 216 roundabout reconstruction, phased maintenance of traffic, roadway construction included widening, signing, striping, signalization, and lighting, 167,000 SF noise walls and box culvert extensions, coordinated installation/relocation of electric, water, sewer, gas, petroleum, fiber optic, and cabling, stormwater management (11 new ponds), erosion & sediment control, storm drainage, and Hammond Branch improvements, completed on-time, under budget without a work-zone accident or lost-time injury.

Project received 3 awards, including MDQI Partnering and Major Roadway Awards of Excellence, “A” rating from the owner, and PCI award for Best Custom Transportation Design.

**Project Name:** Woodrow Wilson Bridge MD 210, MB-3 – Oxon Hill, MD  
**Project Role:** Senior Construction Manager  
**Client/Owner:** Maryland State Highway Administration  
**Beginning and End Dates:** May 2005 – December 2007  
**With Current Firm?: Yes**

Specific Responsibilities/Authorities: As Senior Construction Manager for this $44.6 million Interchange project, Mr. Bernat led this project team earning “A” ratings from the owner, as well as 3 MDQI Awards of Excellence in Partnering, Structure and Major Roadway. Mr. Bernat oversaw the project from start to finish, managed a staff of engineers, worked hand-in-hand with the superintendents to schedule, coordinated and supervised field operations, and was the primary contact with owner. Mr. Bernat possesses strong qualifications in scheduling, cost control, and advance study and planning future work to identity and mitigate potential delays resulting from design and/or constructability issues. Mr. Bernat was the primary conduit of information to VDOT and PCC, VDOT’s general engineering consultant (GEC).

Relevant project features include a complete reconstruction of the MD 210 Interchange with I-95/1-495 (Capital Beltway), including widening I-95 from 6 lanes to 12 lanes with new on and off ramps, construction of three ramps totaling 4,008 LF, realignment/transformation of the Oxon Hill Road/MD 210 Intersection into a grade-separated interchange, grading and drainage systems, 85,000 tons asphalt, 5 retaining walls (one CIP and four MSE), 2 stormwater management ponds and erosion and sediment control, demolition/bridge construction Route 210 over I-495 and construction of Route 210 over Oxon Hill Road, ITS, overhead signs and signalization, complex phased construction required an extensive tie-back system to support adjacent bridges and roadway.

The project maintained the best safety record among the Maryland Woodrow Wilson Bridge contracts and was completed on schedule and under budget ($2 million below the owner's $46.2 million budget).
ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: Nicholas Nies – Senior Environmental Planner
b. Project Assignment: Lead Environmental Manager
c. Name of Firm with which you are now associated: Whitman, Requardt and Associates, LLP
d. Years experience: With this Firm <1 Years With Other Firms 12 Years
   Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen(15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):

   **Whitman, Requardt and Associates, LLP** Senior Environmental Planner August 2012 – Present
   Mr. Nies is serving as the **Lead Environmental Project Manager** on VDOT projects including:
   - **VDOT Tri-County Parkway**, Environmental Impact Statement and Section 4(f) Evaluation – Project Manager – 2008 – Present
   - **I-81 Corridor Improvement** Study Tier 2 I-77/I-81 Overlap, Environmental Assessment – Project Manager–2013–Present

   **Virginia Department of Transportation** Various Positions February 2002 – August 2012
   Mr. Nies has 10 years of experience working directly with VDOT environmental programs within the Environmental Division and served as the **Lead Environmental Project Manager** on VDOT projects from **June 2006 to August 2012** including the following notable projects:
   - **Tri-County Parkway** Environmental Impact Statement and Section 4(f) Evaluation – Project Manager– 2008 – August 2012
   - **I-64 Peninsula** Study Environmental Impact Statement – Project Manager – 2010 – August 2012
   - **Route 460 Interchange and Southgate Drive** Environmental Assessment – Project Manager – 2011 – August 2012
   - **I-95 Rappahannock River Crossing/Access Study** and Environmental Assessment – Project Manager – 2010 – August 2012
   - **Coalfields Expressway PPTA/Design-Build** Multiple Reevaluations of Environmental Impact Statement and Environmental Assessment – Project Manager – 2008 – August 2012
   - **I-81 Corridor Improvement** Study Tier 2 I-77/I-81 Overlap Study, Environmental Assessment – Project Manager – 2007 – August 2012
   - **Downtown Tunnel, Midtown Tunnel, Martin Luther King Freeway** Extension PPTA/Design-Build Environmental Assessment – Project Manager – 2010 – 2011
   - **Martin Luther King Freeway Extension** Environmental Assessment and Section 4(f) Evaluation – Project Manager 2008 – November 2009
   - **Bridgewater Bypass** Environmental Assessment – Project Manager – 2006 – 2009
   - **Harrisonburg Southeast** Connector Environmental Impact Statement – Project Manager – 2006 – 2007

   Worked directly with VDOT environmental programs as a Project Manager, a Program Planner, and Environmental Specialist. He has managed VDOT’s Partnering program for regulatory agency coordination with the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, and Federal Highway Administration. He has provided documentation of NEPA commitments in VDOT Environmental Divisions Comprehensive Environmental Data and Reporting System.

   **Fairfax County Dept. of Public Works and Environmental Services** Urban Forester January 2000 – February 2002
   As an Urban Forester for Fairfax County, Mr. Nies managed an environmental program to protect and preserve rural and urban forest resources; presented complex environmental information to government officials and citizens through governmental briefings, public meetings and publications; collected and analyzed environmental data to be used in program activities.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
   **George Mason University** – Fairfax County, VA/M.A./Transportation Policy, Operations and Logistics/2007

f. Active Registration: Year First Registered/ Discipline/VA Registration #: N/A

g. Document the extent and depth of your experience and qualifications relevant to the Project.
   1. Note your specific responsibilities and authorities for each assignment, not those of the firm.
   2. Note whether experience is with current firm or with other firm.
   3. Provide beginning and end dates for each assignment.
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<tr>
<th>Project Name</th>
<th>Project Role</th>
<th>Client/Owner</th>
<th>Beginning and End Dates</th>
<th>With Current Firm?</th>
<th>Specific Responsibilities/Authorities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tri-County Parkway Location Study Environmental Impact Statement and Section 4(f) Evaluation – Fairfax, Loudoun and Prince William Counties, VA</td>
<td>Project Manager</td>
<td>Virginia Department of Transportation</td>
<td>March 2008 – August 2012 with VDOT and August 2012 – September 2013 (Estimated)</td>
<td>Yes since August 2012</td>
<td>Mr. Nies is the Project Manager responsible for the scope, schedule, and deliverables from CTB action on alternatives as presented in Draft Environmental Impact Statement (DEIS) through the Final Environmental Impact Statement (FEIS). Work also includes preparation of a Reevaluation of the DEIS and Section 4(f) Evaluation. As part of the Section 4(f) Evaluation a least harm analysis is being developed to comply with new regulations at 23 CFR 774. A complex Programmatic Agreement (PA) to minimize and mitigate the new 10-mile highway projects effect to Historic resources (which includes key resources like the Manassas Battlefield, Manassas Battlefield Historic District, Dunklin Monument and gravesite, other cemeteries, the Unfinished Railroad and contributing elements to the Historic District) under Section 106 of the National Historic Preservation Act is being prepared. The PA is being developed in consultation with federal, state, local government agencies and citizens and Mr. Nies is providing oversight and coordination for all commitments under consideration. Once these commitments have been agreed upon, they will be incorporated into the Record of Decision and be binding commitments in design and construction phases. Additionally, as the Project Manager Mr. Nies’ responsibilities includes public outreach and coordination with the National Park Service and the Advisory Council on Historic Preservation.</td>
</tr>
<tr>
<td>I-64 Peninsula Study Environmental Impact Statement – Multiple Locations, VA</td>
<td>VDOT Project Manager</td>
<td>Virginia Department of Transportation</td>
<td>August 2010 – August 2012 with VDOT and August 2012 – March 2013</td>
<td>Yes since August 2012</td>
<td>Mr. Nies served as the VDOT Project Manager responsible for the identification of transportation needs and the evaluation of the impacts of proposed improvements to meet those needs along 75 miles of the I-64 corridor (Richmond to Hampton). Duties included development of the EIS approach; multiple presentation to Richmond and Hampton Roads MPO’s; agency coordination; review and approval of all project deliverables, including the review of potential impacts to multiple Section 4(f) and Section 106 of the National Historic Preservation Act resources. Resources identified and assessed included ten battlefields (Seven Pines, Cold Harbor, Battle of Williamsburg, Battle of Yorktown, etc.), ten archaeological sites (Shockoe Hill Burying Ground, Confederate Peninsula Defenses, etc.), and eight architectural resources (Shockoe Hill Cemetery, Cedar Knoll, Colonial National Historic Park/Colonial Parkway, etc.) Additionally, Mr. Nies coordinated and assisted in the initiation and development of a Programmatic Agreement for Section 106; and management and review of all activities and deliverables of the Project Team.</td>
</tr>
<tr>
<td>Coalfields Expressway Location Study (PPTA/Design-Build) – Multiple Reevaluations of Environmental Impact Statement and Environmental Assessment – Multiple Counties, VA</td>
<td>VDOT Project Manager</td>
<td>Virginia Department of Transportation</td>
<td>March 2008 – August 2012</td>
<td>No</td>
<td>Mr. Nies was the VDOT Project Manager responsible for multiple reevaluations, including the preparation of an Environmental Assessment of the Environmental Impact Statement completed for a new, 59-mile highway project. Duties included the management of the schedule, and project deliverables; addressing potential impacts to Section 4(f) and Section 106 resources, including the development of avoidance alternatives; conducting multiple public hearings; addressing public and agency comments; responding to media and agency inquires; and managing all activities of the Project Team, including coordination with the Office of Transportation Public-Private Partnerships.</td>
</tr>
</tbody>
</table>
### Brief Resume of Key Personnel anticipated for the Project.

| a. Name & Title: Allen G. Dorin, Jr., MAI, SRA, R/W-NAC - President |
| b. Project Assignment: Lead Right-of-Way Manager |
| c. Name of Firm with which you are now associated: KDR Real Estate Services, Inc. |
| d. Years experience: With this Firm 11 Years With Other Firms 26 Years |

Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked):

**KDR Real Estate Services, Inc.**  
**President and Principal-in-Charge**  
February 2002 – Present  
President and Principal-in-Charge of all company right-of-way and easement acquisition projects. Responsible for marketing, project cost estimation, preliminary needs assessment, project scoping, client contractual arrangements, subcontracting, personnel assignments, appraisal issues, invoicing approval, and overall project administration.

**Knight Dorin & Rountrey**  
**President and Director of ROW Division**  
April 1986 – February 2002  
President and Director of Right-of-Way Division. Responsible for marketing, project cost estimation, preliminary needs assessment, project scoping, client contractual arrangements, subcontracting, personnel assignments, appraisal issues, invoicing approval, and overall project administration. Also conducted appraisals for right-of-way acquisition projects and testified as Expert Witness in condemnation trials.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:  
Virginia Commonwealth University – Richmond, VA/M.S./1975/Real Estate and Urban Development  
University of Virginia – Charlottesville, VA/B.S./1972/Commerce

f. Active Registration: Year First Registered/Discipline/VA Registration #:  
1992/Virginia Real Estate Appraiser License – Certified General/#4001000562  
1979/Virginia Real Estate Broker License/#0225108043

g. Document the extent and depth of your experience and qualifications relevant to the Project.  
1. **Note your specific responsibilities and authorities for each assignment, not those of the firm.**  
2. **Note whether experience is with current firm or with other firm.**  
3. **Provide beginning and end dates for each assignment.**  
(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)  

**Project Name:** Fall Hill Avenue Bridge Replacement Over Rappahannock Canal – Fredericksburg, VA – 12 parcels  
**Project Role:** Right-of-Way Manager  
**Client/Owner:** City of Fredericksburg  
**Beginning and End Dates:** June 2011 – January 2013  
**With Current Firm?:** Yes  

Specific Responsibilities/Authorities: As **Right-of-Way Manager** of this $3.2 million project, Al negotiated contract with client, consulted with city official and engineer regarding valuation and acquisition issues, conferred with client and city on project scoping, prepared and approved contract with client, approved invoices, responsible for overall project administration including working closely with KDR staff.

This project is contiguous to the proposed Fall Hill Avenue project and involves many of the same historical conditions, restrictions, and easements. It also includes coordination with the same utility companies including Dominion Electric (transmission and secondary) and Verizon.

There were two properties on this project that were encumbered with historic conservation easements. The easements stipulated that the property boundaries could not be re-configured. The remedy to the situation so that the road could be constructed involved converting proposed acquired right-of-way to a permanent easement to avoid changing the property boundary lines.

**Project Name:** Boulevard Safety and Improvement Project – Colonial Heights, VA – 39 parcels  
**Project Role:** Right-of-Way Manager  
**Client/Owner:** Subconsultant to Lochner for the City of Colonial Heights  
**Beginning and End Dates:** June 2009 – December 2012  
**With Current Firm?:** Yes  

Specific Responsibilities/Authorities: As **Right-of-Way Manager** on this $9.5 million project, Mr. Dorin attended public meetings and addressed right-of-way acquisition process with landowners in attendance, negotiated contract with the client,
assisted in preliminary design and recommended changes to minimize acquisition costs, consulted with city officials and engineer client regarding valuation and acquisition issues on two historic properties, conferred with client and city on project scoping, prepared and approved contract with client, approved invoices, responsible for overall project administration including working closely with KDR staff.

The project involved a road widening and shoulder enhancement of the main commercial corridor through the City of Colonial Heights. Being part of U.S. Route 1, which extends along the Eastern Seaboard, there were many structures of considerable age that posed as possible historic buildings. Based on a study conducted by private cultural resource survey, planning, and management consultant, there were five structures identified as potential contributing elements to the Colonial Heights Historic District, which was determined eligible for listing in the National Register of Historic Places in 1988. One of the structures, which had several tenant occupants, was to be demolished for the construction of the proposed project. Several alternatives were discussed while awaiting the results of the study. The other building was outside the limits of construction, but loss of parking and access resulted in severe damages to the remainder of these historic properties.

**Project Name:** Garrisonville – Aquia Transmission Line Project – Stafford County, VA – 39 parcels  
**Project Role:** Right-of-Way Manager  
**Client/Owner:** Dominion Virginia Power  
**Beginning and End Dates:** May 2008 – July 2009  
**With Current Firm?:** Yes  
**Specific Responsibilities/Authorities:** As Right-of-Way Manager on this project, Al negotiated contract with client, prepared and approved contract with client, approved invoices, responsible for overall project administration including working closely with KDR staff and utility owners.

This project was performed for Dominion Electric Transmission Group. This is the same utility company and group that Al will be required to negotiate and coordinate with on the Fall Hill Avenue project, so he will likely be dealing with the same individuals with whom he already has a pre-established working relationship.

**Project Name:** Design-Build Virginia Capital Trail – New Market Phase – Charles City and Henrico Counties, VA – 31 parcels  
**Project Role:** Right-of-Way Manager  
**Client/Owner:** Virginia Department of Transportation  
**Beginning and End Dates:** May 2012 – September 2013 (Projected)  
**With Current Firm?:** Yes  
**Specific Responsibilities/Authorities:** As Right-of-Way Manager on this $7 million project, Mr. Dorin negotiated contract with client, consulted with city official and engineer regarding valuation and acquisition issues, conferred with client and city on project scoping, prepared and approved contract with client, approved invoices, responsible for overall project administration including working closely with KDR staff. Two properties involved conservation easements, one owned by the Virginia Outdoor Foundation and the other by the Nature Conservancy. The negotiation challenge was the interpretation of the easement agreements by the appraiser and whether or not the concluded value could be separated between the fee and easement owners, similar to the issue expected on the Fall Hill Avenue project.
Attachment 3.4.1(a)

Lead Contractor
Work History Forms
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)

Virginia Dept. of Transportation

I-95/I-495

6/30/13

6/30/13 (est)

6/30/13

$236,393

TOTAL: $260,304 (est)

GEC

$267.9 million

TOTAL: $260,304 (est)

(g) Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement (in thousands)

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.

PROJECT FEATURES/NARRATIVE

This fast-track, Corman (lead) Joint Venture project consisted of reconstructing the Telegraph Road Interchange and widening/reconstructing approximately 2.5 miles I-95/I-495, west of Route 1 to the Eisenhower Connector exit to enable traffic to enter and exit Virginia by crossing the new Woodrow Wilson Bridge. Improvements included roadway/bridge reconstruction, intersection, and utility relocations. The new grade-separated interchange provided access to eastbound Huntington Avenue and North Kings Highway from the Beltway Outer Loop and southbound Telegraph Road, through elevated ramps over Telegraph Road, opposed to signalized intersections, and refined traffic flow and provided easier/safer pedestrian access. The scope included constructing 11 ramps and bridges totaling 380,000 SF of bridge deck, driving approximately 80,000 LF of concrete and steel piles, drainage improvements, micro-tunneling, 11 box culverts, 36,500 CY low permeability concrete, new traffic systems, lighting, traffic and overhead signs, traffic management system upgrades, guardrails, landscaping, 25,000 SF of temporary retaining walls with soil anchors, E&S controls that include General Water Permits, and an environmental mitigation project at nearby Cameron Run Wetlands. There were improvements to 24 lane miles with 321,000 SF of roadway paving, milling and resurfacing, extensive MOT, pavement marking, approximately 500,000 CY of excavation, 23 retaining and MSE walls, four sound walls, ADA handicap ramps, and storm drainage with six stormwater management ponds.

This was a complex project with an aggressive schedule as it is intertwined with existing traffic patterns MOT on existing local roads and the new Woodrow Wilson Bridge projects that must be accommodated while working over water, rail systems and on the Capital Beltway, considered one of the busiest roads in the country. Weekly progress meetings were held with the owner, as well as meetings dealing with MOT, scheduling and lane closures, to discuss coordination with the other ongoing projects. We also coordinated the work with the local city, police, fire and other emergency responders, and obtained required noise, grading and lane closure permits.

Construction occurred in six stages with 12 traffic shifts and commanded a large interim milestone coordination from a demanding schedule with incentive/disincentive clauses. The project met all six milestones to date with the Substantial Completion milestone achieved 112 days in advance of the contract requirement and is on schedule to finish months ahead of the final completion date.

CORMAN ROLE

Corman, as the lead JV member, was responsible for all aspects of construction, including highways and structures, MOT, environmental permits and protection, public relations, coordination with adjacent contracts, and utility protection and relocation.

Project required extensive coordination with adjacent projects, local residents, and utility companies, which were handled by Corman in conjunction with VDOT’s GEC. Daily coordination occurred onsite and weekly meetings were held at GEC offices to discuss work plans and public information.

CORNAL ROLE

Some roles were assigned to Corman personnel, including MOT, environmental permits and protection, public relations, coordination with adjacent contracts, and utility protection and relocation.

Corman personnel were responsible for all aspects of construction, including highways and structures, MOT, environmental permits and protection, public relations, coordination with adjacent contracts, and utility protection and relocation.

Project required extensive coordination with adjacent projects, local residents, and utility companies, which were handled by Corman personnel in conjunction with VDOT’s GEC. Daily coordination occurred onsite and weekly meetings were held at GEC offices to discuss work plans and public information.

LESSONS LEARNED

- Since effective coordination among all Woodrow Wilson Bridge projects was paramount, corridor coordination and job progress meetings were held to discuss issues/solutions, scheduling, partnering, safety, MOT, etc., which mitigated conflicts and eased the flow of each project.
- Due to excessive traffic congestion, Corman proposed MOT revisions to improve traffic flow, which eliminated four phases of traffic and reduced traffic shifts. These revisions were implemented with VDOT’s approval resulting in improved public traveling.
- Contract drawings showed no utility conflicts. As work began, it was clear many existed. Rather than wait to discover them, Corman proactively identified and recorded all existing utility locations for the entire project. As a result, the original schedule was maintained with extensive relocations coordinated with the schedule.
- In 2009, there were nine recordable incidents after 661,000 manhours. The JV developed “The Safety Time” Program, which required crews to stop for five minutes at 9:00 am, 11:00 am and 1:30 pm to inspect, discuss, and immediately correct safety issues. Topics included identifying potential safety risks, reviewing methods, tools and equipment used, evaluating/discussing if work is performed the safest way and what can be done to improve safety, and reviewing housekeeping (tripping, falling, pinching, struck-by hazards, etc.). Instituting this program significantly reduced injuries.
ATTACHMENT 3.4.1(a)
LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location
Design-Build MD 30 Hampstead Bypass
Hampstead, MD

b. Name of the prime design consulting firm responsible for the overall project design.
Whitney Bailey Cox & Magnani, LLC

Maryland Department of Transportation/State Highway Admin.
707 N. Calvert Street, Baltimore, MD 21202
Lisa Choplin - 410-545-8824
LChoplin@sha.state.md.us

12/4/08
09/2009 Due to owner-directed change orders

$40,137
$43,294 Due to owner-directed change orders

Total Project Value $43.3 million

5.4 miles of two-lane asphalt road constructed to return Hampstead to its residents by allowing heavy commuter and commercial traffic to bypass the town center and mitigate gripping rush-hour congestion. There were numerous stream/wetland crossings and four bridges spanning them, three new roundabouts with lighting, new storm drainage, extensive stormwater management facilities, water/sewer relocations, eight cross culverts, approx. 900,000 CY cut-to-fill, including 236,000 CY of rock excavation, signing, pavement markings, traffic signals, ROW acquisition, two major traffic tie-ins, and BGE, Verizon and Adelphia utility relocations. Milled/resurfaced tie-in connections at the north and south termini points. Highway lighting was installed at the roundabouts and maintained traffic at the north and south tie points and at each roadway crossing. One noise wall is adjacent to the Singer Heights community and the other is adjacent to the Westwood Community totaling 3,500 LF. Approximately 1,040’ of temporary road was constructed as a detour to maintain traffic while bridge and approach roadway was constructed on an existing alignment. Worked with adjacent residents to maintain access, reset fences, and rebuild driveways. Temporary fencing protected students from the construction zone as a middle and high school was in close proximity. An Alternative Technical Concept shifted an alignment of a road to avoid a costly noise barrier and replacing with earth wall and transportation to the project site; initiating the reduction of LOD to minimize disturbances and avoid unnecessary clearing; designing/constructing SWM weir walls for less maintenance, reducing seepage and erosion compared to risers and barrels, and providing long-term sustainability; and using grass channels to provide water quality benefits and shut-off valves in ponds in the influence of the Bog Turtle Habitat.

SCOPE AND COMPLEXITY SIMILARITIES TO FALL HILL
- Roadway
- Retaining Walls
- Box Culvert
- Environmental Permits
- Pedestrian Crossings
- Geotechnical
- Hydraulics and SWM
- Boring/Jacking of Pipe
- Complex MOT Plan
- Roundabouts

SIZE OF PROJECT: $43.3 million

KEY STAFF ON THIS PROJECT: Jo Ellen Sines – Proposed Design-Build Project Manager

VERIFIABLE EVIDENCE OF GOOD PERFORMANCE
Project was awarded on best value and set a precedent as the first Maryland SHA Design-Build to include a bridge design by the Design-Builder. All E&S incentives were earned with a final average E&S inspection score of 97.9%. Corman received the maximum incentives available; additional incentives were earned for environmental design mitigation (preserving additional wetlands and minimizing clearing and grubbing). Project maintained “A” ratings in environmental, MOT and contractor performance. One regulator noted that this project with its total commitment to E&S control may have saved the bog turtle habitat for the State of Maryland.

AWARDS
- 2010 DBIA National and Mid-Atlantic Region Design-Build Excellence Awards for a Transportation Project Under $50 million.
- 2010 ARTBA “Globe” Environmental Award – Local & Secondary Roads – $10 million – $100 million
- 2010 MdQI Awards of Excellence for Environmental, Green Transportation & Consultant Highway Design

LESSONS LEARNED
- Task force approval and partnering utilized throughout the design and construction phases resulted in proper communication between all parties including the owner.
- A plan was designed by a subconsultant and work constructed, when a sight distance problem was detected. After further investigation, the design was at fault. A re-design was required at no expense to the state and the road reconstructed. Corman added resources to mitigate a schedule delay. Lesson learned was to employ more stringent design QC for subcontractor work.
- Due to proximity to the local Regional High School, extensive “Up Front” meetings with all stakeholders resulted in an effective pedestrian and bicycle plan within the Transportation Management Plan (TMP).
ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location
Design-Build MD Route 216
US 29 to I-95
Howard County, MD

b. Name of the prime design consulting firm responsible for the overall project design.
Rummel, Klepper & Kahl, LLP

Maryland Department of Transportation/State Highway Admin.
707 N. Calvert St., Baltimore, MD 21202
Lisa Choplin - 410-545-8824
LChoplin@sha.state.md.us

Businesses

Project included realignment and widening of a busy cross county commuter route which included extensive noise wall construction including architectural treatments which won an award for context sensitive solutions, and construction of a new turn lane at MD 216 and Leishear Road. Sound absorptive wall panels (wall caissons) construction spread over 15,000 LF along both sides of the new roadway and a comprehensive landscape plan. Sound absorptive wall panels contained an intricate art neural and rustic brick patterns including a Maryland landscape cast the precast concrete panels using form liners to generate a visual interest from the traveling public. Work also included E&S, storm drainage, SWM (11 new ponds), roadway construction and overlay of existing pavement, signing, pavement marking, improvements to Hammond Branch stream. Corman instituted an environmental stewardship program. Unparalleled partnering was essential and contributed to effective communication with all involved. The project included the reconfiguration and reconstruction of the existing roundabout at the I-95/Route 29 Interchange at Route 216.

A rolling design was utilized with 6 packages enabling Corman to start work as soon as possible. Midway through design development, team reacted to an owner request to change the design speed of Leishear Road. DB Team worked side-by-side during the entire process to prioritize MDE design reviews for SHA projects. This helped to reduce the lengthy review cycles and enabled installation of several critical cross culverts prior to inventory.

The Corman Design-Build team partitioned the project into three phases, which dictated design and construction flow. Frequent meetings were held to develop and finalize plans prior to construction. In the early stages, Corman and the designer developed a plan to bifurcate the proposed MD 216 roadway in order to balance the earthwork. This effort cut months off the schedule and... benefit by reducing impact to wetlands and buffers. It also reduced heavy-equipment traffic through adjacent neighborhoods thereby minimizing noise, safety risks, wear on infrastructure and inconvenience to local communities and businesses as well as the construction of a new off ramp from I-95 to MD 216 on the heavily traveled section of I-95 between Baltimore and Washington.

c. Contact information of the Client or Owner and their Project Manager who can verify Firm’s responsibilities.

Design-Build MD Route 216
US 29 to I-95
Howard County, MD

Rummel, Klepper & Kahl, LLP

Maryland Department of Transportation/State Highway Admin.
707 N. Calvert St., Baltimore, MD 21202
Lisa Choplin - 410-545-8824
LChoplin@sha.state.md.us

(Original)
11/2004
05/2005 (due to owner-directed change orders)

$20,435
$21,116
$21,116

Project earned environmental impact reduction incentives, and maintained “A” ratings in MOT, environmental and contractor performance. These efforts yielded successful results as the project was completed on-time, under budget without a work-zone accident or lost-time injury and serves as a testament to the team functioning as a true partnership.

AWARDS
• 2006 PCI Bridge Design Award - Best Custom Transportation Design
• 2006 MDQI Award of Excellence for Partnering – Major Project
• 2006 MDQI Award of Excellence for Major Roadway Project

LESSONS LEARNED
• During early stages of design on the project, it became apparent that Environmental review times were excessive. DB Team worked with SHA leadership to facilitate a process to prioritize MDE design reviews for SHA projects. This helped to reduce the lengthy review cycles and enabled installation of several critical cross culverts prior to the stream restriction period.
• Corman successfully managed a complex situation of precast supplier going bankrupt during the project. This was accomplished with high level communications and frequent visits by the Corman Team to the supplier for quality control and panel inventory.
• An effective community outreach program proved successful in partnering with the local community businesses and homeowners.

PROJECT FEATURES/NARRATIVE
Design and construction of two-mile realignment of MD 216 as a dual-divided highway with two signalized intersections and a new off-ramp from I-95 South to MD 216 West and reconstruction of Leishear and Crest Roads. Earthwork operations in excess of 200,000 CY, box culvert extensions, utility coordination, installation and/or relocation of electric, water, sewer, gas, petroleum, fiber optic, and cabling. Extensive 167,000 SF noise wall (sound wall caissons) construction spread over 15,000 LF along both sides of the new roadway and a comprehensive landscape plan. Sound absorptive wall panels contained an intricate art neural and rustic brick patterns including a Maryland landscape cast the precast concrete panels using form liners to generate a visual}

d. Contract Completion Date (Original)

11/2004

05/2005 (due to owner-directed change orders)

$20,435
$21,116
$21,116

(Actual or Estimated)

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e. Contract Completion Date

11/2004

05/2005 (due to owner-directed change orders)

$20,435
$21,116
$21,116

(Actual or Estimated)

VERIFIABLE EVIDENCE OF GOOD PERFORMANCE
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• 2006 MDQI Award of Excellence for Major Roadway Project

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• An effective community outreach program proved successful in partnering with the local community businesses and homeowners.

f. Contract Value

Original Contract Value
Final or Estimated Contract Value

$20,435
$21,116
$21,116

(g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)

$21,116

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.

CORMAN ROLE
As Design-Builder, Corman was responsible for all aspects of design and construction, including highways and structures, MOT, environmental permits and protection, public relations, utility coordination/ relocations, extensive storm water management facilities and improvements to an existing stream. Project included extensive noise wall construction including architectural treatments which won an award for context sensitive solutions, and construction of a new turn lane at MD 216 and Leishear Road.

Project included realignment and widening of a busy cross county commuter route which included extensive traffic phasing within the neighborhood to maintain access for homeowners and local businesses as well as the construction of a new off ramp from I-95 to MD 216 on the heavily traveled section of I-95 between Baltimore and Washington.
ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Name of the prime / general contractor responsible for overall construction of the project</th>
<th>c. Contact information of the Client and their Project Manager who can verify Firm’s responsibilities</th>
<th>d. Construction Contract Completion Date (Original)</th>
<th>e. Construction Contract Completion Date (Actual or Estimated)</th>
<th>f. Contract Value (in thousands)</th>
<th>g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAIRFAX COUNTY PARKWAY INTERCHANGE AT FAIR LAKES PARKWAY</td>
<td>Shirley Contracting Company, LLC</td>
<td>WR&amp;A ROLE</td>
<td>10/2013</td>
<td>05/2013 Under Construction</td>
<td>$43,961</td>
<td>$43,961 (Est.) Under Construction</td>
</tr>
<tr>
<td>Location: Fairfax County, VA</td>
<td>Name of Client: VDOT</td>
<td>Phone: (703) 259-1723</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Name: Whitman, Requardt and Associates, LLP was selected as the prime designer to provide engineering services to VDOT for the study and final design of an interchange at the intersection of the Fairfax County Parkway and Fair Lakes Parkway/Monument Drive intersection. WR&A completed approximately 90% of the design services for the project. The project was partially funded with ARRA funding for construction, which required extensive coordination with FHWA.

**PROJECT FEATURES/NARRATIVE**

- **Roadway Reconstruction and Widening** – 2.5 miles of Fairfax County Parkway (FCP) was widened into the median increasing the number of lanes from 4 to 6 through the I-66 and Route 50 interchanges and 0.7 miles was totally reconstructed to facilitate raising FCP up and over Fair Lakes Parkway and Monument Drive. Over 3,000 feet of Fair Lakes Parkway was widened/reconstructed to provide additional turn lanes.

- **Interchange Design** – The project included the design of a Split-Diamond Interchange to provide access to both Fair Lakes Parkway and Monument Drive. The four ramps with over 7,000 feet in length. The ramps intersected Fair Lakes Parkway and Monument Drive at coordinated signalized intersections with multi-lane approaches. WR&A assisted VDOT in coordinating the design of the project with the Fairfax County Park Authority for constructing a drainage outfall into the park and connecting the pedestrian facilities to Rocky Run Stream Valley Trail in the park. The design of the trail through the interchange was of significant concern to the Park Authority.

- **Traffic Control Devices** – The project included freeway overhead signing for the I-66, Fair Lakes Parkway and Route 50 interchanges including ITS facilities. Signals were designed for 7 intersections with coordinated signal timing plans to ensure the efficient flow of traffic through the project.

- **Design QA/QC** – WR&A assisted VDOT in developing the plans and specifications for the interchange. The final design of the bridge and retaining walls included an architectural finish of ashlar stone.

- **Verifiable Evidence of Good Performance**
  - Traffic operations during each phase of construction have improved over the existing traffic operations. The Fair Lakes League, a Business and Homeowners’ Association, has expressed great satisfaction with traffic operations even during the holiday shopping season.
  - The aesthetic features on the bridges, retaining walls and sound barriers have been recognized for allowing the project to fit the context of the Fair Lakes Community.

**SCOPE AND COMPLEXITY SIMILARITIES TO FALL HILL AVENUE**

- **Roadway**
- **Retaining Walls**
- **Bridge**
- **Box Culverts**
- **Environmental Permits**
- **Utilities Design**
- **Coordination with Park Authority**
- **Design QA/QC**
- **Construction Engineering**
- **Public Involvement**

**SIZE OF PROJECT: $43.96 million**

**KEY STAFF ON THIS PROJECT:**

- John Maddox, P.E. – Proposed Design Manager
- Nassre.Obeed@VDOT.Virginia.gov

**WR&A ROLE**

Whitman, Requardt and Associates, LLP was selected as the prime designer to provide engineering services to VDOT for the study and final design of an interchange at the intersection of the Fairfax County Parkway and Fair Lakes Parkway/Monument Drive intersection. WR&A completed approximately 90% of the design services from our Whitman, Requardt and Associates office with the same staff as proposed for the Fall Hill Avenue project. The project was partially funded with ARRA funding for construction, which required extensive coordination with FHWA.

**LESSONS LEARNED**

1. Detailed traffic analysis of each phase of construction is essential to quality Transportation Management Plans.
2. Innovative approach to stormwater management is required to minimize right-of-way impacts.
3. Early public outreach results in true enhancements to the final project.
4. Early coordination with Virginia Dominion Power transmission line allowed the project to be accelerated to utilize federal ARRA funding.

**VERIFIABLE EVIDENCE OF GOOD PERFORMANCE**

- Traffic operations during each phase of construction have improved over the existing traffic operations. The Fair Lakes League, a Business and Homeowners’ Association, has expressed great satisfaction with traffic operations even during the holiday shopping season.
- The aesthetic features on the bridges, retaining walls and sound barriers have been recognized for allowing the project to fit the context of the Fair Lakes Community.
The project widened MD 237 from a two-lane rural section roadway to a four-lane divided highway incorporating pedestrian and bicycle facilities. The project features include:

- Roadway Reconstruction – Existing two-lane rural roadway was completely reconstructed to a four-lane urban-section divided roadway with left turn lanes at select intersections. The reconstructed roadway incorporated 5’ bike lanes, a raised landscape median, and 5’ pedestrian walkways throughout the entire limits of the project. Improved horizontal and vertical geometrics were enacted to meet current design criteria including raising the roadway profile 12” for a 2,200 LF vertical realignment at a major stream crossing for replacement of undersized pipes with a twin-cell box culvert. The alignment of the proposed roadway was shifted to avoid impacts to the historic Ehrenzer Cemetery and minimize impacts to St. Mary’s County Regional Park, a Section 4(f) resource.

- Intersection Reconstruction – Sixteen intersecting side streets required reconstruction including two with complete realignments. With adjacent properties having direct access, over 65 driveways and entrances were reconstructed.

- Drainage Culvert Replacement – One twin-cell box culvert was replaced.

Hydraulic Analysis and Stormwater Management (SWM) – The new closed storm drain system consisted of over 13,500 LF of drainage pipes. Eight new SWM ponds were constructed, initially constructed as sediment traps then converted over to landscaped SWM facilities as construction progressed.

Noise Analysis and Noise Barrier Design – Six noise walls, totaling over 1,700 LF were installed along residential communities. The noise wall consisted of reinforced concrete noise posts and panels with a simulated brick finish.

Geotechnical and Pavement Analysis/Design – Foundation design was provided for the noise wall and twin-cell box culvert. A temporary fabric wall was designed to maintain traffic at the culvert replacement to accommodate the raised roadway grade while maintaining traffic on the existing pavement. Roadway geotechnical and pavement design services included designing new roadway cuts/fills and new pavement using Falling Weight Deflectometer testing of existing pavement to remain and new pavement subgrade. The first use by MSHA of bank run gravel as the pavement base course was recommended by WR&A and approved by SWMA on this project. Local sources of bank run material were tested and accepted for use on the project.

Drainage Culvert Replacement – Underthesized culverts at a significant stream crossing were replaced with a twin-cell box culvert to eliminate flooding and closing of the existing roadway. A temporary culvert was installed for construction of the culvert and a stone stream grade control structure was designed and constructed to promote fish traffic while maintaining upstream hydrology needed for the preservation of existing wetlands. The new box culvert was supported on ‘H’ piers with one cell passing the normal flow and a second cell used as an animal passage and floodplain overflow. A circular overflow culvert was also installed to provide additional capacity for major storm events.

Utility Relocation Design and Coordination – Utility relocation consisted of designing and installing over 10,000 LF of 12” ductile iron water pipe, 6,000 LF of 6” and 8” gas line, 350 feet of low pressure sanitary sewer with grinder pumps and coordination with utility companies for the relocation of aerial electric, telephone and cable television.

Maintenance of Traffic – Extensive multi-phase maintenance of traffic plans were required to maintain traffic along all roadways and access to driveways/entrances. The project was divided into four distinct construction zones based on maintaining drainage within each zone. Temporary cross-overs from newly constructed pavement to the existing pavement were necessary as each portions of the project were completed.

Traffic Control Devices – Traffic Engineering services included the design and installation of five new traffic signals, signal interconnect, relocation of school flasher, new signing and pavement markings, and new intersection lighting.

Environmental Compliance – Construction occurred in an environmentally sensitive area requiring MSHA to retain an Independent Environmental Monitor (IEM) throughout the project duration as a permit condition. Close coordination with the IEM was required to maintain the project within the strict permit conditions.

Public Involvement – A public meeting was held to continue MSHA’s public involvement campaign and to inform the community of the final design elements and upcoming construction activities. Public information materials and advanced notification of traffic impacts were provided to MSHA on a continual basis to keep the public informed throughout construction.

Partnering During Design and Construction – WR&A participated in a 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.

WR&A ROLE
Whitman, Requardt and Associates, LLP was the prime design and environmental firm for this design-build project responsible for preparing final engineering design and environmental documents and approvals for the project.

NAME: DESIGN-BUILD MD 237 FROM MD 235 TO PEGG ROAD
Location: St. Mary’s County, MD

Name: Lane Construction Corporation
Name: Maryland State Highway Administration (MSHA)

Whitman, Requardt and Associates, LLP was the prime design and environmental firm for this procurement. The firm was the prime designer for this procurement. Public information materials and advanced notification of traffic impacts were provided to MSHA on a continual basis to keep the public informed throughout construction.

**PROJECT FEATURES/NARRATIVE**

- Roadway
- Hydrology and SWM
- Noise Barrier Design
- Utility Coordination

**SCOPE AND COMPLEXITY SIMILARITIES TO FALL HILL AVENUE**

- Geotechnical
- Pavement
- Geotechnical
- Pavement
- Geotechnical
- Pavement

**SIZE OF PROJECT:** $35.9 million

**VERIFIABLE EVIDENCE OF GOOD PERFORMANCE**

- The project design avoided the historic Ehrenzer Cemetery by utilizing remote sensing to determine location of existing grave sites within the right-of-way.

- A focus of the design was to minimize impacts to St. Mary’s County Regional Park, a Section 4(f) resource.

**LESSONS LEARNED**

- Early and continued coordination with utility companies is necessary to ensure utility relocations are compatible with construction sequence and operations.

- Early and continued coordination with environmental agencies is necessary to ensure wetland and waterway construction activities are being performed in strict compliance with all permit conditions.

- Maintaining traffic in adjacent lanes is more desirable than splitting traffic, which requires the Contractor to work in an isolated construction area.

- Early and continued coordination between all members of the Design-Build Team and owner are a necessity to develop constructible plans and resolve construction issues expediently.

- Substantial lead time needs to be provided to obtain power feed hook-ups for traffic signals; therefore, design of the signals need to be advanced early in the design phase.

**ATACHMENT 3.4.1(b)**

**LEAD DESIGNER- WORK HISTORY FORM**

**LIMIT 1 PAGE PER PROJECT**

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Name of the prime/ general contractor responsible for overall construction of the project.</th>
<th>c. Contact information of the Client and their Project Manager who can verify Firm’s responsibilities.</th>
<th>d. Construction Contract Date (Original)</th>
<th>e. Construction Contract Completion Date (Actual or Estimated)</th>
<th>f. Contract Value (in thousands)</th>
<th>g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement. (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DESIGN-BUILD MD 237 FROM MD 235 TO PEGG ROAD</td>
<td>Whitman, Requardt and Associates, LLP</td>
<td>Phone: (410) 545-8814</td>
<td>11/2010</td>
<td>October 31, 2011</td>
<td>$35,872</td>
<td>$3,022</td>
</tr>
<tr>
<td>St. Mary’s County, MD</td>
<td>Lane Construction Corporation</td>
<td>Phone: (410) 545-8814</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PROJECT NAME & LOCATION**

- Whitman, Requardt and Associates, LLP was the prime design and environmental firm for this procurement. Public information materials and advanced notification of traffic impacts were provided to MSHA on a continual basis to keep the public informed throughout construction.

**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 subcontractor.**
The proposed Route 123 interchange is in a highly urbanized area with future daily traffic volumes of approximately 90,000 on Route 1. Included as part of the engineering services is the design of three bridges (Route 123 over Route 1, Route 123/Belmont Bay Drive over the CSXT Railroad and Route 1 over Marumisco Creek). The interchange location will require extensive retaining walls due to adjacent development and the proximity of the railroad. The project widens Route 1 to six lanes from Mary’s Way to the Occoquan River for a distance of 1.2 miles. Route 123 is connected to Belmont Bay Drive (east of Route 1 across the railroad) and then extends northward along Route 123 to the I-95 interchange and widens Route 123 to six lanes. Belmont Bay Drive was extended across the CSXT railroad on new alignment to improve access to the Amtrak station. Horner Road and Occoquan Road are also widened under this project. WR&A prepared traffic studies and a traffic report approved by FHWA, developed traffic forecast and analysis models of existing and project year levels of service including roadway segments, ramp junctions and intersections for multiple interchange concepts. The project is located in the middle of the North Woodbridge redevelopment area and is a key element of the revitalization of the Route 1 Corridor entering Prince William County. The proposed bridge and retaining walls include architectural elements and extensive landscaping to make the project a “gateway” into the County. The project features include:

**Roadway Reconstruction and Widening** – The project involved the widening of 1.2 miles of Route 1 from the existing four lanes to six lanes with a raised median and 0.6 miles of Route 123 and Belmont Bay Drive. The urban typical section includes a 10-foot multi-use trail and a 5-foot sidewalk. With the existing pavement structure consisting of concrete pavement with multiple pavement widenings and overlays, the proposed pavement design required a complete pavement replacement on Route 1. The Route 1 profile was also raised by 7 feet at Marumisco Creek to prevent overtopping by the 25-year design storm event. The total roadways and streets reconstructed as part of this project is 3.6 miles.

**Interchange Design** – The project included the design of an urban compressed diamond interchange to replace the existing at-grade intersection of Route 1 and Route 123. The ramps are all coordinated signalized intersections with multiple turn lanes. The interchange design was confined by the CSXT Railroad, the bridge over the Occoquan River and the Occoquan Road/Dawson Beach Road intersection.

**Hydraulic Analysis** The total storm drainage system for the project included over 26,000 LF of pipe and over 370 drainage structures. The project required a detailed hydraulic analysis of Marumisco Creek to ensure the project had no impact on the 100-year floodplain. Two stormwater management facilities were designed for the project and an extensive stormwater drainage system was necessary to route the additional runoff to the facilities to reduce the number of features.

**Structural Design** – The bridge design efforts include the complete design of three bridges. The Route 1 Bridge over Marumisco Creek is a single span structure. This bridge will be constructed 7 feet above the existing structure and requires a three stage construction sequencing and challenging staged bridge demolition. The Route 123 interchange bridge over Route 123 is a two-span bridge and is 10 lanes wide with a total width of 160 feet and abutments consist of semi-integral concrete seats on steel piles with MSE retaining walls. The bridge over the CSXT is also a single span bridge and is 7 lanes wide with a total width of 160 feet and abutments consisting of semi-integral concrete seats on steel piles with MSE retaining walls. The design includes 1,650 feet of RW-3 retaining walls, 5,500 feet of MSE retaining walls and 400 feet of sound walls.

**Traffic Control Devices** – The project includes overhead and ground mounted signing for the interchange at Route 1 and Route 123. Signals were designed for seven intersections with coordinated signal timing plans to ensure the efficient flow of traffic through the project. The ITS design for the project included two variable message boards, conduits for fiber, a CCTV camera and a future parking management system for the Amtrak parking building.

**TMP Plans** – The project consisted of multiple stages of construction with a complex sequencing of construction. Some of the contributing factors to the challenging sequencing included: heavy traffic volumes, raising the profile 7 feet at Marumisco Creek, maintaining access to the adjacent businesses, full depth pavement replacement that included underdrainage, and maintaining all travel lanes and turning movements. The first major phase included widening of Route 1 and Occoquan Road while maintaining traffic on the existing roadway. The second major phase was construction of the interchange and widening of Route 123 while maintaining traffic on Route 123. An extensive traffic analysis is required for each stage of construction.

**Public Involvement** – WR&A has led a series of meetings with the local community to identify and address their concerns with the project design. Several meetings were held involving the local County Supervisor, homeowners, individual property owners, and developers. At the request of the Supervisor, meetings will be conducted to discuss landscaping and aesthetic features such as decorative lighting, streetscapes and architectural treatments on retaining walls and bridges that would be incorporated into the project and make the project a “Gateway” into the County.

**LESIONS LEARNED**
- Detailed traffic analysis of each phase of construction is essential to a quality Transportation Management Plan.
- Innovative approach to stormwater management is required to minimize right-of-way impacts.
- Early public outreach results in true enhancements to the final project.
- Establishing joint easements requirements early in the design is critical to the right-of-way acquisition.