Design Build Project for Fall Hill Avenue Widening and Mary Washington Boulevard Extension

RFQ No: C00088699DB59

Submitted to: Virginia Department of Transportation
Submitted by: General Excavation Inc.
In association with: RK&K

May 2, 2013
3.2- LETTER OF SUBMITTAL

Mr. Bill Arel, PE
Alternate Project Delivery Office
Virginia Department of Transportation
1401 East Broad Street
Annex Building 8th Floor
Richmond, Virginia 23219

Re: Fall Hill Avenue Widening and Mary Washington Boulevard Extension; RFQ No.: C00088699DB59

Dear Mr. Arel:

General Excavation Inc. (GEI) is pleased to present this Statement of Qualifications (Section 3.2) for the above-referenced project to the Virginia Department of Transportation (VDOT). GEI is a full-service prime contractor specializing in heavy highway, site development, and utility construction and has extensive experience with public sector road and bridge construction work in Virginia. Furthermore, GEI is currently active in Design/Build highway work and has successfully completed similar projects for public agencies for the last 29 years and has never failed to complete a contract. In fact, GEI has successfully delivered over $500 million of transportation and utility improvements throughout the Commonwealth of Virginia; including over $200 million since 2007. We look forward to the opportunity to work with the Department to successfully complete the Fall Hill Avenue Widening and Mary Washington Boulevard Extension. GEI is the overall authority on the project as well as the Lead Contractor.

We have combined our talents with Rummel, Klepper & Kahl, LLP (RK&K) because of their quality engineering documents, thoroughness of planning evaluation and analysis, and their flexible and open communication style has been touted by their DOT clients as being the best among the best. Additionally, their professional staff has an intimate knowledge of the many transportation guidelines and procedures affording them the ability to provide VDOT with the critical expertise necessary to manage all elements of the planning, design and construction process of the Fall Hill Avenue Widening and Mary Washington Boulevard Extension project. GEI and RK&K bring VDOT a confident and reputable team capable of completing this project on time, on budget, and in the most efficient means possible. Rest assured the GEI Team presented in this submission is comprised of confident and committed personnel with proven delivery of VDOT’s requirements to meet or exceed the quality, safety and schedule demands of this Project.

3.2.1 – Full Legal Name and Address of the Offeror: General Excavation, Inc. • 9757 Rider Road • Warrenton, VA 20187

3.2.2 – Offeror’s Point of Contact: Mr. Scott C. Hunter, Vice President • 9757 Rider Road • Warrenton, VA, 20187 • 540.439.2202 • 540.439.3795 fax • Email: shunter@gei-vq.com

3.2.3 – Offeror’s Principal Officer: Mr. Scott C. Hunter, Vice President • 9757 Rider Road • Warrenton, VA, 20187 • 540.439.2202

3.2.4 – Offeror’s Corporate Structure: General Excavation, Inc. is structured as a Virginia Corporation. GEI will take full financial responsibility for the Project. Mr. Scott Hunter will take financial responsibility for the Project. There are no liability limitations. GEI will be responsible for administering the contract, providing the bond, scheduling, quality control, supervising construction, safety, maintenance of traffic (MOT), and coordination of all subcontractors and trades.

3.2.5 – Full legal name of Lead Contractor and Lead Designer: General Excavation Inc. (GEI) is Offeror and Lead Contractor. Rummel Klepper & Kahl, LLP (RK&K) is the Lead Designer.
3.2.6 – Affiliated/Subsidiary Companies: General Excavation, Inc. does not have any affiliated and/or subsidiary companies.

3.2.7 – Certificate Regarding Debarment Forms: The Certificate Regarding Debarment Form(s) Primary Covered Transactions and Certificate Regarding Debarment Form(s) Lower Tier Covered Transactions is provided in the Appendix.

3.2.8 – Offeror’s VDOT Prequalification Evidence: General Excavation, Inc.’s prequalification number is G181. General Excavation, Inc.’s prequalification status is active.

3.2.9 – Surety or Insurance Company Letter: The required Surety or Insurance Company letter stating that the General Excavation, Inc. is capable of obtaining a performance and payment bond based on the current contract value is included herein.

3.2.10 – Professional Services Evidence: The matrix in this section delineates the respective state registrations and licensures of the GEI Team. The Offeror and all team members are eligible at the time of the SOQ submittal, under the law and relevant regulations, to offer and to provide any services proposed or related to the Project. Respective copies of the business and individual licenses may be found in the Appendix.

3.2.11 – DBE Participation Goal: GEI supports the Disadvantaged Enterprise (DBE) program and commits to achieving a DBE participation goal of fifteen percent (15%) for the entire value of the contract.

Scott C. Hunter, Vice President
General Excavation, Inc.

When reviewing our Statement of Qualifications, please note that each team member with design-build experience and projects have been designated with the logo.

Our Key Personnel Team proposed for this project is comprised of D-B professionals that have successfully worked together on past projects such as the McIntire Interchange project and the proposal development of the Route 29 D-B project, both located in Charlottesville, Virginia. It is because of our great working relationship that we have decided to team for this project.

VDOT is an extremely important client of ours and we thank you for this opportunity to present our Statement of Qualifications. Please do not hesitate to contact me if you have any questions, need clarification or require additional information regarding this Statement of Qualifications.

Sincerely,

Scott C. Hunter, Vice President
General Excavation, Inc.
3.3 TEAM STRUCTURE

The D-B method of project delivery requires a team that is cooperative, has experience working together, can reach consensus on many issues, and achieve results for VDOT and all stakeholders. The firms and Key Personnel represented on the GEI Team have been chosen to lead this effort based on their proven track record of working cooperatively and constructively in a team environment. Our ability to achieve positive results on transportation projects has been proven for over 25 years by each firm on the team.

General Excavation, Inc. (GEI) will serve as the Offeror and Lead Design-Build Contractor for the Fall Hill Widening and Mary Washington Boulevard Extension Design Build project. GEI’s role will include managing the entire project, supervising construction and performing major work elements. GEI will be responsible for the success of the team in meeting VDOT’s expectations. The project will be managed and staffed from GEI’s office in Warrenton, VA which is less than 36 miles to the site.

Rummel, Klepper & Kahl, LLP (RK&K) will serve as the Lead Designer for this project. RK&K employs a staff of 875 engineers, planners, environmental specialists, surveyors, designers, draftsmen/CADD technicians, construction managers, inspectors, and support personnel including over 80 professional engineers registered in Virginia. RK&K is ranked 93rd on the 2012 Engineering News Record’s listing of the “Top 500 Design Firms.” Their team proposed for this project excels in resolving complex infrastructure and permitting challenges. They consistently produce innovative, safe and efficient designs to enable their DOT clients to plan for the future. The project will be managed from RK&K’s Richmond, VA office with additional support from Fairfax and Virginia Beach offices, as needed.

3.3.1 KEY PERSONNEL

GEI has structured a highly-skilled team with knowledge of the design-build (D-B) process and the scope of work included in the Fall Hill Widening and Mary Washington Boulevard Extension D-B (the “Project”), as well as a commitment to quality and value. Previous working relationships, as noted in Section 3.4 and more importantly, reputations in the industry were key criteria used to make the decision for GEI and RK&K to team for this Project. The Key Personnel selected offer extensive road and bridge construction and design expertise. The chart introduces our Key Personnel proposed for this project. Full resumes for each can be found in the Appendix.

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<thead>
<tr>
<th>Section</th>
<th>Role</th>
<th>Name</th>
<th>Firm</th>
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<tbody>
<tr>
<td>3.3.1.1</td>
<td>Design-Build Project Manager</td>
<td>Scott C. Hunter</td>
<td>General Excavation, Inc.</td>
</tr>
<tr>
<td>3.3.1.2</td>
<td>Quality Assurance Manager</td>
<td>George P. Romack, PE</td>
<td>EBA Engineering, Inc.</td>
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<td>3.3.1.3</td>
<td>Design Manager</td>
<td>Gary S. Johnson, PE, DBIA</td>
<td>RK&amp;K, LLP</td>
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<td>3.3.1.4</td>
<td>Construction Manager</td>
<td>Page Gallihugh</td>
<td>General Excavation, Inc.</td>
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<td>3.3.1.5</td>
<td>Lead Environmental Manager</td>
<td>Kyle Springs, PWS, PWD</td>
<td>Bowman Consulting Group, Ltd.</td>
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<td>3.3.1.6</td>
<td>Lead Right-of-Way Manager</td>
<td>Ronald Van Cleve</td>
<td>Bowman Consulting Group, Ltd.</td>
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Our Key Personnel Team is comprised of the below described experienced D-B professionals. Each team member has D-B experience as is designated with the d+b logo.

**Design-Build Project Manager (DBPM) – Scott C. Hunter** will coordinate the entire team and be the point of contact throughout the duration of this project. Mr. Hunter will be responsible for the overall project, construction quality management, and administration of the contract. Building on his D-B experience, he will work closely with the key personnel to make sure the project remains on schedule and is in compliance to VDOT’s specifications and requirements. Ultimately, he is responsible to ensure that the GEI/RK&K Team is performing at high levels of productivity and being responsible for their roles on the team.

**Quality Assurance Manager (QAM) – George P. Romack, PE (EBA)** will report directly to the DBPM and will have direct, independent access to VDOT. Mr. Romack will make sure that work is performed and carried out in conformance with the contract requirements and the “approved for construction” documents. He will report directly to the DBPM, but will remain independent and impartial for all Quality Assurance concerns. If issues arise during any construction phase, he will immediately inform Scott Hunter, the DBPM. However, Mr. Romack has full
authority to cease work if he feels necessary.

**Design Manager – Gary S. Johnson, PE, DBIA (RK&K)** will be responsible for Design Quality Assurance and Quality Control (QA/QC), coordinating and incorporating all design disciplines, conformance to standards and ensuring all contractual requirements are met. In addition, he will primarily lead the effort of design, plans and specification reviews to ensure constructability of the project. Mr. Johnson has 19 years of project management, design and construction inspection experience in structures, roadways, and mass transit stations. He has managed a number of projects in the $35 million range. His extensive project management experience, formal training and hands-on participation in inspection, design and construction engineering assignments afford him in-depth knowledge of project requirements that are relevant to this project. Mr. Johnson is a current and active member of the VTCA Engineering Consultant Leadership Committee, he is a Certified NBIS Inspection Team Leader, and a certified DBIA professional.

**Construction Manager – Page Gallihugh (GEI)** is responsible for the day-to-day construction operations of the project and reports directly to the DBPM. Mr. Gallihugh has more than 23 years of experience in heavy highway construction and was the construction manager overseeing all field operations associated with GEI’s Pacific Boulevard Widening D-B project. He, in a management role, has delivered similar projects to the VDOT including the $14 million Route 208-Courthouse Road project in Spotsylvania County and the $12 million University Boulevard project in Gainesville, Virginia.

**Lead Environmental Manager – Kyle Springs, PWS, PWD (Bowman)** will report directly to the Design Manager. Mr. Springs is a Sr. Project Manager in Bowman’s Environmental Group. His expertise includes managing and providing support for wetland and stream delineations, perennial stream determinations, 404/401 environmental permitting and monitoring, threatened and endangered species coordination, cultural resources coordination, NEPA documentation, VDOT State Environmental Review Process (SERP), Local Environmental Review Process (LERP), drainage improvement projects, residential and commercial development, wetland and stream mitigation, nutrient offset coordination, and preservation projects pertaining to wetlands, streams, surface waters, culverts and bridge replacements, retention basins, and Chesapeake Bay / Atlantic Ocean Preservation Act requirements for Resource Protection and Management Areas.

**Lead Right-of-Way Manager – Ronald Van Cleve (Bowman)** will report directly to the DBPM and will lead the efforts for acquisition of right of way, and permanent and temporary easements required for construction. The ROW Manager will work closely with our Utility Manager, a position identified as key “support” personnel, to ensure the right of way and easements are adequate to accommodate utility relocations. Mr. Van Cleve’s specific expertise is with land rights issues and managing ROW agents, appraisers, appraisal reviewers, title & settlement/companies and survey crews. He is an experienced Sr. ROW Project Manager who has managed, as well as provided negotiation and property management services on VDOT projects; I495 HOT LANES D-B Project, Fairfax, 10th Street Project in Roanoke and currently on the Route 229 Project in Culpeper.

**Public Relations Manager – Owen L. Peery, PE (RK&K).** In addition to the Key Personnel described above, Mr. Peery joins our team as the Public Relations Manager. Mr. Peery will report directly to the DBPM, and will have an open line of communication to third party representatives and VDOT. As Public Relations Manager, he will initiate and facilitate public hearings and communication necessary to announce lane closures and timing of other construction milestones. He has managed approximately 100 VDOT projects or assignments over the past 15 years and leads public meetings and workshops as an expert in his field. His public relations skills and ability to interact with the public leads to successful outcomes on high visibility projects. For example, he led the public outreach program for the Route 250 Bypass Interchange at McIntire Road in Charlottesville. Mr. Peery led meetings and presentations with the public, an appointed Steering Committee, City Council, Board of Architectural Review and the local media.

### 3.3.2 ORGANIZATION CHART

The Organizational Chart on the following page depicts VDOT identified key personnel, the major functions they will perform, and the designated reporting structure of the team for the Fall Hill Avenue Widening and Mary Washington Boulevard Extension. The thick black lines reflect the reporting relationships. The dotted red lines reflect open lines of communication between the various members of the team and stakeholders.
*** Denotes Key Personnel for which resumes have been included in the Appendix Section 3.3.1

* Positions without individual names will be assigned to experienced professionals when availability can be determined.
Organizational Narrative: The Virginia Department of Transportation (VDOT) is the owner and entity that General Excavation, Inc. shall enter into a contract with to successfully complete this project. VDOT’s Project Manager shall coordinate the administration of the contract and other matters related to the project with our DBPM, Scott Hunter. He will be the single point of contact between the GEI Team and VDOT. In addition to the DBPM, a link has been provided to the Quality Assurance Manager and to the third party representatives. It is understood that from time to time the VDOT Project Manager may need and/or request access to other members of the GEI Team. If such access is requested, it shall be provided through direct communication or indirectly through the DBPM at the discretion and desire of VDOT.

Design-Build Management Team: The D-B Management Team, led by the D-B Manager, is comprised of the key personnel. The D-B Management Team will create the vision for the project and support staff ultimately leading to a successful delivering.

Design Management Team: The design management team will be led by the Design Manager, Gary Johnson, PE, DBIA.

**Design Q/C Manager, Tommy Peacock, PE (RK&K)** will report directly to the Design Manager and will implement the design Q/C plan developed by the Design Manager and Q/A Manager. He has more than 30 years of experience, and has been responsible for the management and leadership of countless transportation projects and contracts including numerous on-call assignments and D-B projects.

**Lead Roadway Engineer, Ryan Masters, PE (RK&K)** will report directly to the Design Manager and serve as the second point of contact for design. Mr. Masters brings his more than 13 years of experience in the transportation field, focusing on roadway and intersection design projects to this project. He will be responsible for the development of the proposed roadway design. He has worked on numerous interstate road widening projects and has been involved with several PPTA projects including the VDOT I-495 HOT Lanes Plan Review, Northern Virginia (PPTA) and the I-264/MLK Freeway IJR, City of Portsmouth, VA (PPTA). Additionally, Mr. Masters is currently the Lead Roadway Engineer on the Route 250 Bypass Interchange at McIntire Road in the City of Charlottesville.

**Lead Structural/Bridge Engineer, Sagar Adivareker, PE (RK&K)** will report directly to the Design Manager and will be in charge of structural engineering, including but not limited to bridge, foundation, and retaining and sound wall designs. Mr. Adivarekar has structural engineering experience related to bridge and building design. His experience includes design of superstructure and substructure elements for steel and precast AASHTO girder bridges, as well as miscellaneous structures such as strain poles, mast arms, concrete and steel sheet piles and box culverts. Additionally, his expertise includes coordination of different disciplines for D-B projects, as well as post design services.

**Lead Drainage/Hydraulics Engineer, Michael J. Hogan, PE (RK&K)** will report directly to the Design Manager. Mr. Hogan has more than 13 years of advanced technical roadway and drainage training and experience on both rural and urban design projects. His project experience includes various types of municipal and roadway design projects on new location, reconstruction and widening, and major drainage improvement projects.

**Lead ITS/ Lighting Engineer, Barry L. Brandt, PE (RK&K)** will report directly to the Design Manager. Mr. Brandt is experienced in designing traffic signals, roadway lighting, ITS devices, and other traffic control devices such as highway signing and pavement markings. He is familiar with the Manual on Uniform Traffic Control Devices, the IES RP-8 Standard Recommended Practice for Roadway Lighting, the National Electrical Code, the AASHTO Roadside Design Guide, and other applicable guidelines pertaining to traffic signal, roadway lighting and ITS design. He has been the project manager for 14 traffic engineering and ITS contracts worth more than $31 million in design fees.

**Lead Signing, Striping & Traffic Signals Engineer, Stuart M. Samberg, EIT (RK&K),** is a Transportation Engineer with seven years of experience. Mr. Samberg was involved on the I-4744: I-40 Widening & Signing (Design Build) project where he was an engineer for roadway design, quantity takeoffs, traffic control design, signing design, traffic analysis, and special noise wall studies. His client’s include multiple municipalities of differing sizes, State DOTs and Federal Military Installations.

**Lead Sign Level Surveyor, Les Byrnside, LS (H&B)** will report directly to the Design Manager and will be
Responsible for providing verification of the vertical and horizontal survey data provided in the Informational Documents, as well as provide all survey services related to this project. Mr. Burnside has performed surveys in a myriad of conditions and project types that range from roadways, streets and entrances major highways to large boundary surveys encompassing thousands of acres. He also has more than 25 years of experience with the VDOT and the FHWA projects and has served as the Project Manager on the most recent VDOT Statewide Limited Services Contract for Surveying, Mapping and Utility Services.

**Lead Traffic Engineer, Rich Clifton, PE, PTOE** will report directly to the Design Manager. Mr. Clifton is an experienced transportation engineer and planner and brings more than 27 years of experience to this project. He specializes in the area of corridor development, traffic calming, parking needs and mobility of urban arterial and interstate roadway systems for capacity and traffic management.

**Lead E&S Control Engineer, Sheila Reeves, PE, CFM (RK&K)** will report directly to the Design Manager. Mrs. Reeves is experienced in erosion and sediment control design and other water resources engineering services for transportation projects. She has more than 11 years engineering experience with a focus on NPDES permit compliance consulting, stormwater management plan development, water resources engineering and GIS integrated solutions. Her experience also includes general civil/land development engineering and environmental permit preparation. She is responsible for hydrologic analysis, hydraulic design/analysis, stormwater management plan design, watershed studies and master planning for a variety of municipal, commercial and residential development projects. Mrs. Reeves was the Project Engineer on the I-4744 Design Build, I-40 from East of SR 1652 (Harrison Ave.) to East of SR 1319 (Jones Franklin Rd.) in Wake County, NC. She was responsible for the design of two stormwater Best Management Practices (BMPs) within the I-40/US-1 (Crossroads) Interchange.

**Lead Noise Analysis Designer, Kevin Hughes (RK&K)** will report directly to the Design Manager. Mr. Hughes is RK&K’s lead Noise Analyst and Sound Barrier Design Project Coordinator and brings more than 25 years of experience to this project. His specific noise analysis experience includes identification of noise sensitive areas, evaluating existing noise environments through field reconnaissance and monitoring, determining community impacts and need for noise abatement, predicting future traffic noise levels using the FHWA Traffic Noise Model (TNM), determining reasonableness and feasibility, evaluating cost-effective mitigation measures, preparation of technical reports, and participating in community meetings. Furthermore, he has prepared contract plans for many noise abatement projects.

**Lead Landscape Architect, David Mitchell, RLA, LEED AP (RK&K)** will report directly to the Design Manager. Mr. Mitchell will work closely with the Design Team to deliver landscape plans. He understands the importance of safe design for pedestrians and vehicular traffic, LEED®/low impact site development and bridges the gap between the built and natural environments. Mr. Mitchell has 18 years of experience in site grading, planting plans, conceptual site planning and preparation of construction documents.

**Lead Geotechnical Design Engineer, Edward Drahos, PE (Schnabel)** will report directly to the Design Manager and will review the GDR provided with the RFQ Information Documents. He will provide all geotechnical and materials testing. He has managed hundreds of construction and testing projects for all types of public infrastructure projects including VDOT.

**Lead Water and Sewer Engineer, David W. Plum, PE (RK&K)** is a utility planning expert with 33 years of management, operations, design, and construction services experience. His engineering design experience includes water distribution and storage, wastewater collection and pumping stations, stormwater management and drainage, roadways, and general civil/site development. His experience also includes water line replacement, water distribution system hydraulic modeling, water main sizing, railroad crossing, sub-aqueous crossing, trenchless technology, small diameter water main construction, construction phase engineering services, environmental assessment/permitting, and D-B project delivery.

**Quality Assurance Management Team**

The Quality Assurance Management Team, led by **George Romack (EBA)** will develop the QA/QC plan that complies with VDOT’s “Minimum Requirements for QA/QC on Design/Build and Public/Private Transportation Act projects,” dated January 2012. The QAM will meet with the Design Manager to discuss and incorporate the Design QA/QC portion of the overall plan, including design checklists and procedures. Once the draft plan is finalized, the QAM and DBPM will meet to review and finalized the report. The final plan will be presented and submitted to...
VDOT at the first meeting held following VDOT’s Notice to Proceed. At a minimum, the plan will establish testing and reporting standards for the project and will ensure all plan requirements for design and construction are met. In addition to providing the testing and inspections required of the quality assurance team, the QAM will monitor the design and construction Q/C practices and review Q/C reports to ensure compliance.

- Q/A Testing and Inspections personnel will be provided by EBA and report directly to the QAM. The Q/A inspectors and technicians shall provide unrestricted access to the construction site to perform their independent tasks without involvement or influence from the construction manager, crews, or Q/C Manager except to cooperate fully with legitimate concerns or requests.

- The Independent Q/A Testing Lab will be provided by Engineering and Materials Technologies, Inc. The testing lab will report directly to the QAM.

Construction Management Team

The Construction Management Team, led by the Construction Manager, will be responsible for all construction efforts on the Project. The construction team will be involved in the design process, as needed, to identify any constructability issues or improvements to the design.

- **The Bridge Construction Manager, David Graham (Fairfield-Echols),** will report to the Construction Manager. Mr. Graham will manage the construction of the Fall Hill Avenue Bridge over Interstate 95 coordinating the efforts of Fairfield-Echols with the Construction Manager. Mr. Graham, while employed with Fairfield Echols, worked with GEI as a bridge subcontractor on numerous projects including the Route 340 – Overall Run project ($11.3 million) and the Route 340 – Jeremy’s Run project ($8.3 million).

- **The Construction Q/C Manager, Lee C. Yowell, PE, CCM, DBIA (RK&K),** will report to the Construction Manager. The overall responsibility for the construction Q/C rests with the Construction Manager. Mr. Yowell will support the Construction Manager in the communication and execution of the construction Q/C plan. Collectively, they will ensure that all work performed meets the specifications of the project. Mr. Yowell will be responsible for ensuring that all construction Q/C testing is provided in a timely manner including appropriate equipment and personnel. RK&K’s inspectors, assigned to the project by Mr. Yowell, will provide the inspections and testing frequencies required by the QA/QC plan. The RK&K inspectors will make field recommendations to the Construction Superintendent. If a disagreement between the inspector and construction superintendent arise, the issue will be brought to the attention of the construction Q/C manager and construction manager for resolution.

- **The Administrative Project Manager, Brian Harris (GEI),** will support the efforts of the Construction Manager by administration of subcontractors, purchasing, project scheduling, and assisting in management of field construction activities. In addition, Mr. Harris will assist the DBPM in facilitating dialogue between the design team, construction team, governmental review agencies, and third party participants. Mr. Harris has more than 25 years of experience, including eight years in the Fredericksburg area, managing engineering and construction disciplines, administration of contracts, and schedules.

- **The Utility Relocation Manager, Shea Ridings (ATCS),** has been identified for the Project because we recognize the success of the Project will greatly be increased with the expeditious relocation of the utilities in conflict. He will provide coordination with the utility companies. He will make sure personal connections to the utility companies are in place to facilitate timely responses and mobilization of their work forces. In addition, he will ensure responsibility of this effort from Notice of Intent to the Award to Final Completion.

The **Construction Superintendent,** to be assigned by GEI prior to construction mobilization, will report to the Construction Manager. He will direct GEI’s various trade foremen to successfully complete the work. He, and the Administrative Project Manager, will work closely together making sure the proper equipment and material is provided to the foreman and subcontractors to complete their work. The Construction Superintendent will work closely with RK&K’s field Q/C inspectors making sure the work is completed in accordance with the plans and specifications. He will cooperate fully with the field inspectors in regards to making necessary corrections in the field.

Right of Way Management Team

The Right of Way Management Team, led by **Mr. Ronnie Van Cleve (Bowman),** will be responsible for all right
of way/easement acquisition efforts on the Project. This Team will be involved in the design process, as needed, to become familiar with the design of the plans and to ensure awareness as to why certain right of way or easements may have to be acquired.

- Negotiations will be handled by Mr. Tom Phillips (Bowman). Mr. Phillips has more than 25 years of experience acquiring right of way on VDOT projects and performing similar services on projects in the Cities of Lynchburg and Chesapeake, VA and Lee County, VA.

- Acquisition Exhibits will be prepared by Bowman. Although acquisition plats are no longer required by VDOT, it is anticipated that some property owners will need an exhibit during negotiations to understand the impacts to their property.

- Appraisals will be completed by Mountain Empire Appraisal Services, LLC and Stuchell Valuations. Both are approved by VDOT to perform appraisal services and have a combined 23 years of experience preparing property appraisals on VDOT projects, performing similar services on projects such as: Dominion Boulevard, Chesapeake, VA; Midtown Tunnel, Cities of Portsmouth and Norfolk, VA; Route 229, Culpeper, VA; Route 50 Widening, Loudoun, VA; and Massaponax Church Road Widening.

- Appraisal Reviews will be provided by Harrison Chavis & Associates, Inc. The firm is approved by VDOT to perform appraisal services and have 23 years of experience providing property appraisal review services on VDOT projects, performing similar services on projects such as: Fairfax County Parkway; Walmsley Boulevard, Richmond, VA; and West Broad Street, Henrico County, VA.

- Title Reports and Settlement Services will be provided by Metro Title Services, LLC. Catherine Strayhorne, President of Metro Title, has more than 30 years of experience preparing title reports and providing settlement services.

Environmental Management Team

The Environmental Management Team, led by Kyle Springs, PWS, PWD (Bowman), will be responsible for ensuring the work performed by the DB Team is in compliance with federal and state environmental regulations, and specific project commitments are implemented. Mr. Springs has served on a number of D-B projects where he managed the environmental aspects of the projects.

The Environmental Team will review the design plans and construction activities to ensure consistency with environmental documents, commitments and permits. Wetland delineation and permitting shall be provided by Jessica Fleming, PWD, QEP (Bowman). Ms. Fleming will report directly to Mr. Springs.

The Wetland Delineation & Environmental Permitting Coordinator, Jessica Fleming, PWD, QEP (Bowman) will report directly to the Lead Environmental Manager and will lead the efforts of environmental permitting and compliance. Ms. Fleming has more than 12 years of experience related to wetlands, streams, natural resources, and the environment. Her experience includes performing wetland delineations and environmental constraints analyses, preparing and coordinating wetland permit applications, conducting construction, mitigation, and water quality monitoring, completing Chesapeake Bay Preservation Area (CBPA) studies including perennial flow determinations, Resource Protection Area (RPA) delineations, and water quality impact assessments (WQIA), conducting threatened and endangered species evaluations, and managing NEPA compliance documents and Environmental Site Assessments. She has experience coordinating projects with the U.S. Army Corps of Engineers (USACE) Norfolk District, the Virginia Department of Environmental Quality (DEQ), the Virginia Marine Resources Commission (VMRC), and local jurisdictions.

**SUMMARY:** The team structure provided above provides significant experience in design/build, VDOT design and construction, right of way acquisition, utility relocation, and environmental permitting and compliance experience necessary to successfully complete the project.
3.4 TEAM EXPERIENCE

The D-B Team for this project has been strategically structured to offer VDOT experienced professionals that are well-suited to meet the specific needs and requirements of the Fall Hill Avenue Widening and Mary Washington Boulevard Extension project, and to enhance team relationships and facilitate performance.

**General Excavation, Inc. (GEI)** is a full-service prime contractor specializing in heavy highway, site development, and utility construction. Additionally, GEI has experience with public sector road and bridge construction work in Virginia. GEI is currently active in D-B highway work and has successfully completed similar projects for public agencies for the last 29 years; including the recently completed the D-B Pacific Blvd. Widening project in Loudoun County, VA. GEI has successfully delivered over $500 million of transportation and utility improvements throughout VA; including over $200 million since 2007. GEI’s portfolio of successfully completed projects reflects their strong local knowledge and reputation of completing quality projects on time and within budget. GEI not only brings its experience in the D-B process, but also key team member expertise to be applied to this Project.

**Rummel, Klepper & Kahl, LLP (RK&K)** is a multi-disciplinary consulting firm providing a wide range of planning and design services for infrastructure design and rehabilitation, including the design of roadways, and bridges. RK&K services an array of federal, state, and local clients from four Virginia offices, and ten additional offices throughout the Mid-Atlantic and Southeast US. They provide complete transportation planning, highway design and traffic engineering services to all levels of public and private sector clients. RK&K’s services range from the transportation planning of major bridges, highways and intersections to traffic impact analyses, signal design, and corridor studies. RK&K’s experience in rural and urban areas, corridors, and central business districts dealing with highway, bridge, and railway projects have given them the experience necessary to become prequalified with multiple departments of transportation.

RK&K is a trusted partner to VDOT on D-B projects. RK&K was recently re-selected for the D-B Staff Augmentation Services contract for VDOT. Under this contract, RK&K developed the design and contract documents to be advertised by VDOT for procurement. For three years, RK&K conducted this service and the client was so satisfied, RK&K was re-selected for another three-year term. RK&K recently completed a complex widening project along Onville/Garrisonville Rd. in the Fredericksburg District. Therefore, we have formed a great working relationship with the District personnel in all disciplines.

As an Award Winning Firm, RK&K was recently presented with the Virginia Transportation Construction Alliance (VTCA) Engineering Award for the Main Street Improvements project in the Town of Blacksburg, VA. This project was the top submittal in the category of “Projects Smaller than $10 Million.” The award recognizes outstanding design work in the Transportation Industry on transportation projects in Virginia.

**SUMMARY:** GEI’s Virginia construction experience, large full-time work force, diverse in-house capabilities, extensive VDOT bid-build experience, and previous D-B experience, coupled RK&K’s extensive D-B experience in Virginia, makes the GEI/RK&K Team uniquely qualified to manage and complete this Project within our promised budget and schedule.

**SUBCONTRACTORS / SUBCONSULTANTS**

We have judiciously selected the firms described below to meet the needs of VDOT on this project and to further enhance the GEI/RK&K Team capabilities.

**Fairfield-Echols, LLC** has constructed projects for VDOT since 1963. Fairfield has completed in the past 50 years in excess of 200 bridge projects, with several being over interstate highways. Most recent projects include the $4M Erickson Ave. over I-81 and the new $3M two span bridge over I-81 on Carrier Drive, both in Harrisonburg, VA. Fairfield also completed a number of bridges on the Interstate system that carry interstate traffic. In addition, they completed the $11M bridge on Jeremy’s Run as a subcontractor to GEI.

**EBA Engineering, Inc. (EBA)** is a multi-disciplinary engineering firm employing experts for every contingency including expert highway/roadway design engineers, traffic engineers, drainage design engineers, and other transportation engineering staff. Their team proposed for this project offer experience, technical knowledge, and expertise in both the public and private sectors on projects ranging from interstate highways to low-volume rural roads.
Bowman Consulting Group’s staff of environmental scientists and engineers identifies and resolves environmental challenges and ensures regulatory compliance. Bowman’s services include analyses tailored to the requirements of specific local jurisdictions, as well as supporting efforts to obtain and comply with local, state and federal permits. They are well-versed in the nuances of environmental laws and regulations and are adept at navigating this regulatory maze. Bowman’s breadth of related multi-disciplinary services allows them to ensure efficient utilization of real estate assets, ultimately translating constraints into opportunities. In addition, Bowman is VDOT prequalified to ROW acquisition.

Schnabel Engineering, Inc. provides a full range of geotechnical and dam engineering capabilities including subsurface explorations, soil testing, engineering analysis, design recommendations, and construction phase services. These services include concrete and steel testing, environmental assessments, wetland delineations, and environmental remediation designs. Schnabel’s geotechnical design specialists develop documents for projects such as ground improvements, excavation, bridges and tunnels, and specialty foundations including detailed design recommendations, and complete plans and specifications.

H&B Surveying and Mapping, LLC (H&B) a certified, woman-owned business, is a full service land surveying firm led by a team of professionals with over 100 years of combined experience. H&B’s management and personnel have extensive experience in all phases of land surveying and aerial photogrammetry that involves surveying streets and highways throughout the Commonwealth of Virginia that are part of the VDOT system.

Dovetail Cultural Resources Group, Inc. (Dovetail) is a full-service DBE/SWaM certified, Cultural Resource Management firm. Dovetail’s ability to combine architectural history surveys with archaeological investigations and archival research provides a cost-effective approach to preservation compliance, while their in-depth knowledge of preservation law helps prevent costly project delays. They have extensive experience in and around the Fall Hill Avenue project area including conducting the data recovery excavations at site 44SP0519, a Civil War confederate camp site located approx. 0.25 miles south of the project. Dovetail also served as the consultants for Route 3 Widening project located approximately one mile west of the Fall Hill project area.

Engineering & Materials Technologies, Inc. (E.M. Tech) is a DBE certified, full service engineering firm providing geotechnical, structural and forensic engineering, consulting, materials testing, and construction quality control/quality assurance services. E.M. Tech’s fully equipped in-house materials laboratory provides design and testing services that support engineering and consulting services.

ATCS, PLC, a SWaM certified firm, has provided utility coordination on over 100 transportation projects throughout the Northern VA and Fredericksburg Districts. They are currently performing the utility coordination on multiple transportation projects for the VDOT in these areas. An example is the Rt. 50/Courthouse project which is federally funded. ATCS performs as the project liaison between the project staff and the affected utility owners, coordinating field meetings, mitigating conflicts, and providing technical guidance to the contractor with assisting in conflict resolutions.

Accumark, Inc., a certified SWaM business, will provide Subsurface Utility Locating Services as part of this work. Accumark employs a team of professionals trained in utility designation, vacuum excavation, CADD design, research and documentation. Their Senior Designators and Senior Field Technicians each have a minimum of eight years of experience in the field.

Firm descriptions for the following subconsultants can be found under Section 3.3 Team Structure: Mountain Empire Appraisal Services and Stuchell Valuations (Appraisals); Harrison Chavis & Associates (Appraisal Review); and Metro Title Services, LLC (Title Reports/Settlements).

Collective Team Experience: Individual company experience is important, but experience amongst the team members is of paramount importance when it comes to D-B projects. The GEI Team proposed for this Project has successful experience working together and for this reason, we have decided to team on this project. For example, GEI and Fairfield-Echols are working with RK&K and Schnabel on the construction of the McIntire Interchange project, which is listed as one of our “design experience” projects. GEI, RK&K, and Schnabel also worked together on the nine-month long proposal development for the Route 29 D-B project in Charlottesville. With GEI as the subcontractor, RK&K as the lead designer and Schnabel providing geotechnical support, this team was successfully shortlisted on a road and bridge project for Loudoun Water. We will take what we have learned from working together in the past and apply it to this relationship for this project.
3.5 PROJECT RISKS

Risk Overview and Experience: GEI and our design partner RK&K have a firm understanding of project risk and how to manage that risk. Working with VDOT, RK&K has conducted or have been a part of a number of VDOT risk meetings, including the following projects’ design-build projects:

- Waxpool Road Interchange
- Route 27/ Route 244 Interchange
- Route 460 connector
- Middle Ground Boulevard
- I-66 ATM Project
- Seminary Road Bridge
- Vienna Metro Ramp
- Rolling Road Loop

From this first-hand experience working with VDOT, we understand how to allocate risk and who is in best position to manage the risk, we can also better position our team, and VDOT, to control and manage risk items specific to this project.

Design Build Experience: The GEI/RK&K Team has relevant D-B experience and have designated Design Build Institute of America (DBIA) Professionals on staff. This first-hand knowledge of the inner workings of design build projects better positions our team to manage risk items. We know that it is not always in the best interest of VDOT for the design-builder to take all of the risk and we know how to manage risk and will work with VDOT to clearly assign it.

Quantifying Risks: Having an idea of a risk item is not enough to start the risk management process—it must be quantified and compared against other risk items. A common practice of risk assignment used by both GEI and RK&K is a two-tiered approach. The two tiers are probability of occurrence and impact from the occurrence. If each one of these tiers is given a weight of 1 to 3, they can be multiplied together and the highest outcome (maximum of 9) can then be focused on.

Assignment of Risk: We know the golden rule of risk management—assign risk to those parties that can best manage the risk. We also know the precursor to that rule, which are the options available once a risk item is identified. Those options are to avoid the risk, mitigate the risk, or assign the risk. Once the determination is made to assign the risk, then the golden rule is applied. In terms of design-build projects, there are three general options: assign to the owner, assign to the design-builder, or assign shared responsibility.

The GEI Team carefully reviewed the documents contained in the RFP Information Package, conducted multiple field visits under different weather conditions as well as traffic conditions, and based on local knowledge determined which risks are critical to the Project. The three risks noted below and on the following pages represent topics that we felt are important to the citizens of Fredericksburg, local businesses, impacts to congestion on local roads, and critical path items in the project schedule.

RISK #1 – UTILITY RELOCATION

Why the Risk is Critical: The relocation of utilities is a critical risk to VDOT, the City of Fredericksburg, and other stakeholders because of the potential impact to the project schedule and cost. Delays to the project schedule could be realized if coordination with the various utility owners is not initiated early. The priorities of the utility companies for relocation and installation may not coincide with the milestones in the schedule due to their work load or if an emergency restoration event occurs. Although the cost risk to VDOT is minimized through design-build project delivery, it can still have an impact on the project. Increased relocation costs could occur during the “cost responsibility determination” process depending upon the utilities prior rights or if a comprehensive agreement is in place. Due to the preliminary nature of the plans during the solicitation phase, it is difficult to near impossible to receive cooperation from the utility companies and to establish accurate relocation estimates. These utility risks can be overcome. There are, however, unique characteristics such as the alignment of Mary Washington Boulevard is in conflict with several Dominion/Virginia Power electrical towers and the Fall Hill Avenue alignment having significant number of varying utilities running parallel to the right of way that do complicate the coordination efforts.

Impact the Risk will have on the Project: Utility relocation, as noted in our explanation of why the risk is criti-
3.5 Project Risks

Fall Hill Avenue Widening and Mary Washington Boulevard Expansion

3.5 Project Risks

...cal, can impact the project schedule and scope if not managed properly. Schedule impacts could occur due to certain tasks and procedures that have to be followed and being at the mercy of designers and staff employed by the utilities themselves. The utility corridor will need to be established prior to the preparation of the necessary easement documents. In order for the utility corridor to be determined and easement plats to be created, the design plans must be advanced to a certain level, beyond what is typically provided during the solicitation phase. In addition, certain relocation efforts will have to be completed by the utility owner due to state regulations. Project costs can escalate based on the determination of prior rights, numbers of poles to be relocated or additional right of way to be obtained due to relocation. Schedule delays on construction projects equal increased project costs.

Mitigation Strategies: The utility companies may not recognize the importance of this project is to the Fredericksburg area because it will not directly improve their services. Our mitigation strategy to minimize schedule delays and impacts to the project budget are as follows:

- Identification of a Utility Relocation Manager as a key position within our Team’s organization.
- Identification of known utilities during the RFP phase of the project.
- Reaching out to the utility companies during the RFP phase of the project.
- Begin discussions and negotiations with the utility companies immediately following notice of intent to award. Although final plans will not have advanced from what will be provided in the RFP, notice will have been served and a point of contact will be established.
- Provide advanced designs for the relocation of the utilities to reduce the scope of work and lead time required of the utility company.
- Facilitate relocation by “self-performing” certain aspects of relocation such as; installation of conduits or adjustments of utilities in place by using the “slack” in the line.

VDOT or other Agency Role in addressing Risk: No role is anticipated from VDOT or any other state agency. The GEI Team may request the support of VDOT and/or the City of Fredericksburg for assistance in expediting responses from the various utility companies, but GEI will be taking all of the risk associated with utility relocation.

RISK #2 – MAINTENANCE OF TRAFFIC DURING CONSTRUCTION

Why the Risk is Critical: Maintaining traffic flow through the construction corridor is critical on all roadway improvements. However, on this project it is extremely critical, due to the proximity of the project to Mary Washington Hospital and the Central Park retail center. Maintenance of traffic along existing Mary Washington Boulevard during construction is critical to avoid delays into the hospital, especially with regards to the emergency and trauma center. The construction operations cannot have an impact on response times for emergency vehicles, doctors and staff, or cause delays to patients. In addition, the project is a vital link for the City between Route 1 and Central Park. Over the course of construction, traffic congestion and long delays may be increased due to holiday traffic from Central Park and the “choke” point along Fall Hill Avenue east of Westen Lane to the roundabout.

Impact the Risk will have on the Project: The greatest impact that improper Maintenance of Traffic (MOT) design and implementation will have on the project is prohibiting ingress/egress for Mary Washington Hospital. The GEI Team recognizes that delays into the hospital are unacceptable. Delays could mean whether or not a patient receives the urgent medical care required. It was noted in review of the RFQ informational files that the majority of those attending public hearings have expressed support for the Project. If a proper MOT plan is not prepared and implemented, support for the project may diminish. Public opinion against the project could increase simply because of the inconvenience of delays associated with moving through the corridor. If this were to occur on a routine basis a negative view of the project would begin to occur defeating the purpose of improving transportation throughout the City of Fredericksburg.

Mitigation Strategies: A strong and well thought out Transportation Management (TMP) plan, not just a Maintenance of Traffic (MOT) plan, will adequately address the risks and mitigation strategies for the project. The ultimate TMP will provide for safe and efficient movement at traffic through and around the work zone and protect workers and equipment. One aspect that has worked well for RK&K on past project is the identification of “critical areas”
3.5 Project Risks

Fall Hill Avenue Widening and Mary Washington Boulevard Expansion

along the corridor which will receive extra detail in the TMP. RK&K’s specific experience with Roundabout TMPs will also help mitigate the risks associated with maintenance of traffic.

Pedestrian traffic is significant along the corridor and must not be overlooked. Pedestrian and bicycle considerations will be fully considered and implemented in our TMP.

One often overlooked aspect of TMPs is crossovers and the needs for pavement wedges adjacent to traffic. With the roadway design team working shoulder-to-shoulder with the construction team, these items will be fully incorporated and implemented.

VDOT or other Agency Role in addressing Risk: None. The GEI Team takes all of the risk associated with maintenance of traffic during construction.

RISK #3 – EXISTING SUBSURFACE CONDITIONS

Risk Identification: The Geotechnical Data Report (GDR) provided with the RFQ Information Package indicates the site geology is very complex. The project site is underlain by several Coastal Plain soil units all formed by alluvial deposition, overlaying Piedmont residual soils derived from weathering of the underlying rock. The GDR indicated that the contact between the Coastal Plain soils and the underlying Piedmont residual soils was difficult to discern. Existing fill soils, relatively deep on parts of the site, were encountered overlying the Coastal Plain soils in several of the borings drilled for the GDR.

Four Coastal Plain geologic units were identified in the GDR. Pliocene Sands and Gravels were described as interbedded gravelly sand, sandy gravel, and sand with lesser amounts of clay and silt beds. The Bacon Castle Formation in its upper portion is described as sandy and clayey silt and silty clay with interbedded layers of fine sand. The Mooring Unit of Oaks and Coch soils occur as surficial deposits of high level terraces along the Rappahannock River reportedly described as sand and sandy gravel with well-rounded pebbles, cobbles, and boulders. The Potomac Formation is described as pebbly, poorly sorted sand interbedded with sandy clay and silt and minor organic rich clay and silt layers. The silts and clays of the Potomac Formation are typically highly plastic and are commonly called “marine clay.” Slope failures are common in this formation due to the stiff-fissured nature of these materials. Depending on drainage conditions, some of the silt and clay soils could also be wet and soft.

The residual soils, formed by the in-place weathering of the parent bedrock, are derived from the underlying Cambrian-age gneiss of the Ta River Metamorphic Suite or the late Paleozoic-age gneiss and schist of the Po River Metamorphic Suite. The residual soil profile typically grades downward gradually from fine-grained, highly-plastic soils to coarse-grained soils at greater depth. A transitional zone of highly weathered rock (HWR) of varying thickness occurs between the coarse-grained residual soils and the underlying bedrock. Weathering of the parent bedrock is generally more rapid along fracture zones, and irregular patterns of differential weathering may also result in zones of rock and HWR embedded within the more completely weathered coarse-grained soils. Therefore, the bedrock surface in the vicinity of the project site should be expected to be irregular.

The GDR indicates a concealed extension of the Fall Hill Thrust Fault crossing under Fall Hill Avenue at the approximate location of its bridge over I-95. The smaller Fall Hill Thrust Fault is a part of the larger Stafford Fault system. The Fall Hill Thrust Fault is a high-angle reverse fault that strikes northeast.

Why this Risk is Critical and Associated Mitigation Strategies: The unknowns of the subsurface conditions place financial and schedule risk on the D-B team and therefore the project; examples are described below:

Example 1 – Presence of Potomac Clays: According to the GDR, Potomac Clays (aka Marine Clays) are likely present on site. These soils could be encountered along the extension of Mary Washington Boulevard to Fall Hill Avenue where cuts up to about 30 feet high are anticipated and possibly in other areas of the site. Potomac Clays are considered to be stiff-fissured clays and VDOT requires that the stability of slopes in these soils be analyzed using residual strengths, the lowest possible clay strength. The boring logs in the GDR did not include the geologic units which makes it difficult to assess the magnitude of the risk, thus increasing the financial and schedule risk on the D-B team.

Mitigation: The D-B team will perform soil test borings for the final geotechnical report to evaluate the presence of Potomac Clays in deep and/or critical cut slopes. These soils can typically be identified by their plasticity, color, stiffness, and often by the presence of fissures. Direct shear tests will be performed to evaluate the residual strength
of these soils for slope stability analysis. If Potomac Clays are present, cut slopes will have to be flattened from the normal 2H:1V slopes to about 4H:1V or flatter. Other alternatives include construction several types of retaining wall and soil nailing.

**Example 2 – Potentially Unsuitable Soils:** The GDR indicates potentially unsuitable soils in 29 of the 99 borings drilled for this project. Reasons for potential undercut include the presence of high-plasticity soils, soils with low CBR values, and soils with low to marginal consistency based on an SPT N value of 6 or less. High moisture content, while not specifically cited in the GDR, is another reason for potential unsuitable soils. Organic fill soils were also present in the existing ball fields on the south side of Fall Hill Avenue east of I-95 (approximate Station 142+00 to 150+00) to a depth of about 17 feet. This fill is believed to represent wasted fill materials from previous off-site developments. Risks include issues with slope stability, settlement, and pavement support.

**Mitigation:** The final geotechnical exploration will include additional borings to better outline areas of potentially unsuitable soils. The exploration will also obtain samples for laboratory testing to include natural moisture contents, Atterberg limits, Standard Proctor tests, CBR tests, and shrink-swell tests. The report will include alternatives to mitigate these soils including undercut and replacement, stabilizing by aeration and drying or by chemical means.

**Example 3 – Bridge Foundations:** The GDR indicates the presence of variable elevations of highly-weathered rock (HWR) and rock in the area of the Falls Hill Avenue Bridge over I-95. At this location, the surface of the HWR varies by about 17 feet and the surface of the rock varies by about 43 feet. These materials are the likely bearing strata for bridge foundations. The variable bearing strata increases the risk of additional costs and schedule delays during construction. In addition, some filling will be needed to construct the abutment approaches, mostly on the south side of east abutment, which could result on downdrag on some of the foundations.

**Mitigation:** The final geotechnical exploration will include additional borings to confirm the elevation of the bearing strata. Drivability analyses will be performed to help the D-B contractor in selecting a suitable hammer to drive the piles if driven piles are used to support the bridge. Consolidation and/or in-situ testing will be performed to evaluate potential embankment fill settlements.

**Example 4 – Possible Shallow Rock and Ground Water:** The GDR indicates the presence of shallow HWR/rock and shallow ground water in some areas of the site. The GDR did not include any stabilized (24-hr) water levels in the borings drilled for that study. These conditions present risk of additional construction costs to mitigate.

**Mitigation:** The final geotechnical report will include stabilized ground water levels in boreholes and in temporary observation wells. This data will be used in evaluation of slope stability and in evaluation of the need for underdrains in addition to standard pavement edge drains. Borings drilled for the roadway, stormwater basins and culverts will also be used to evaluate possible rock excavation.

**Example 5 – Possible Sulfidic Materials:** Acid drainage has been identified as a potential problem in the Fredericksburg, Virginia area by the Virginia Center for Transportation Innovation and Research. The GDR indicates that 37% of the samples tested for Acid-Base Accounting showed a deficiency of net neutralizers with values ranging from 0.3 to 2.5 tons of CACO3/1000 tons of material. The GDR also indicates the design builder shall consider mitigation of this condition when the neutralization deficiency exceeds 5 tons of CACO3/1000 tons of material. Mitigation is necessary to minimize acidic ground water seeps, the formation of iron-stained surfaces and degradation to vegetation or concrete surfaces. The GDR also indicates the design builder shall consider remediation where the soil pH values are less than 5.5. The pH was less than 5.5 for 95% of the samples tested. Although the risk of acid drainage appears to be low based on the Acid-Base Accounting since the deficiencies of net neutralizers were less than half of the recommended action level, there still appears to be some risk that these soils will be encountered based on the low pH soils encountered on site.

**Mitigation:** The final geotechnical report will include additional chemical testing to evaluate whether acid drainage is anticipated on this site. Mitigation will include design recommendations and a special provision for neutralizing this potential if necessary.

**Role of VDOT and other Agencies:** The team fully expects to manage the risks associated with the existing subsurface conditions. No role is anticipated from VDOT or any other state agency other than oversight.
ATTACHMENT 3.1.2

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

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>
<thead>
<tr>
<th>Statement of Qualifications Component</th>
<th>Form (if any)</th>
<th>RFQ Cross reference</th>
<th>Included within 15-page limit?</th>
<th>SOQ Page Reference</th>
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<td>Section 3.1.2</td>
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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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**DBE statement within Letter of Submittal** confirming Offeror is committed to achieving the required DBE goal  
NA | Section 3.2.11 | yes | 2 |

**Offeror’s Team Structure**

| Identity of and qualifications of Key Personnel | NA | Section 3.3.1 | yes | 3-9 |
| Key Personnel Resume – DB Project Manager | Attachment 3.3.1 | Section 3.3.1.1 | no | A-52 – A-53 |
| Key Personnel Resume – Quality Assurance Manager | Attachment 3.3.1 | Section 3.3.1.2 | no | A-54 – A-55 |
| Key Personnel Resume – Design Manager | Attachment 3.3.1 | Section 3.3.1.3 | no | A-56 – A-57 |
| Key Personnel Resume – Construction Manager | Attachment 3.3.1 | Section 3.3.1.4 | no | A-58 – A-59 |
| Key Personnel Resume – Lead Environmental Manager | Attachment 3.3.1 | Section 3.3.1.6 | no | A-60 – A-61 |
| Key Personnel Resume – Lead Right of Way Manager | Attachment 3.3.1 | Section 3.3.1.7 | no | A-62 – A-63 |
| Organizational chart | NA | Section 3.3.2 | yes | 5 |
## ATTACHMENT 3.1.2

**Project:** U000-111-233, P101, R201, C501, B609  
**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

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ATTACHMENT 2.10

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

RFQ NO. C00088699DB59
PROJECT NO.: U000-111-233, P101, R201, C501, B609

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 02/26/13 (Date)
2. Cover letter of RFQ Addendum #1 04/08/13 (Date)
3. Cover letter of 

______________________________
SIGNATURE

______________________________
DATE

May 1, 2013

Scott C. Hunter, Vice President
PRINTED NAME AND TITLE
**ATTACHMENT 3.2.6**

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

**Affiliated and Subsidiary Companies of the Offeror**

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

- [x] The Offeror does not have any affiliated or subsidiary companies.
- [ ] Affiliated and/or subsidiary companies of the Offeror are listed below.

<table>
<thead>
<tr>
<th>Relationship with Offeror (Affiliate or Subsidiary)</th>
<th>Full Legal Name</th>
<th>Address</th>
</tr>
</thead>
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</tbody>
</table>
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 5/1/13  Date  Vice President  Title

General Excavation, 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  4/23/13  Director, Transportation
Date
Title

Rummel, Klepper & Kahl, LLP (RK&K)

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] [Title]

Fairfield Echols, LLC
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 __________________________  April 5, 2013  First Executive VP
Date

__________________________
EBA Engineering, Inc.
Name of Firm

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] [Date] 4/8/2013

Signature Date

[Title]

Title

[Name of Firm] Bowman Consulting Group, Ltd.

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS
(To be completed by a Sub-consultant)

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 proposal.

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

[Signature]
April 17, 2013

Vice President

[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 __________

Title ___________________________

Name of Firm ___________________________

Dovetail Cultural Resource Group
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  4/10/13  Title

H&J Surveying and Mapping LLC
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] April 5, 2013 [Date] Senior Reviewer [Title]

Schnabel Engineering Consultants, 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]  April 15, 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]
Date
Title

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  Title

HARRISON CHAVIS & ASSOCIATES, INC
Name of Firm
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 Title

Name of Firm

Mountain Empire Acquisitions LLC
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS
(To be completed by a sub-consultant)

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 proposal.

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

[Signature]

April 10, 2013

President

Signature

Date

Title

Accumark, 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: [Signature]  Date: 4/16/2013  Title: owner

Stuchell Valuations

Name of Firm
Offeror's VDOT Prequalification Certificate
GENERAL EXCAVATION, INC.
Vendor Number: G181

In accordance with the Regulations of the Virginia Department of Transportation, you are hereby notified that the following Rating and Classifications have been assigned to you by the Commissioner:

PREQUALIFIED

Work Classes:
- GRADING: MINOR STRUCTURES; INCIDENTAL CONCRETE; UNDERGROUND UTILITIES

Issue Date: 03/22/2012
This Rating and Classification will Expire: 05/31/2013

Suzanne FR Lucas Prequalification Officer
May 1, 2013

Mr. Bill Arel, PE
Alternate Project Delivery Office
Virginia Department of Transportation
1401 East Broad Street
Annex Building 8th Floor
Richmond, VA 23219

RE: General Excavation, Inc.
VDOT Design/Build Project
Fall Hill Avenue Widening and Mary Washington Boulevard Extension
RFQ No.: C00088699DB59

Dear Mr. Arel:

Zurich American Insurance Company and/or its subsidiary, Fidelity and Deposit Company of Maryland, have provided surety credit to General Excavation, Inc. for single projects of $25 million and aggregate program up to $50 million. Zurich/F&D is rated "A" (Excellent) with a financial size category of XV ($2 billion +) by AM Best and has a US Treasury Limit exceeding $300 million.

If General Excavation, Inc. is awarded a contract for the referenced project and requests that we provide the necessary Performance and/or Payment Bonds, we will be prepared to execute the bonds subject to our acceptable review of the contract terms and conditions, bond forms, appropriate contract funding and any other underwriting considerations at the time of the request.

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

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

Sincerely,
Zurich American Insurance Company
Fidelity and Deposit Company of Maryland

Theresa S. Stump, Attorney-In-Fact

scottins.com
Insurance, Bonds, Benefit Services and Financial Management
With Captive Insurance Operations in Grand Cayman
Founded 1864
DPOR and SCC Registrations
### 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>SCC Information (3.2.10.1)</th>
<th>DPOR Information (3.2.10.2)</th>
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<td>General Excavation, Inc.</td>
<td>020067-9</td>
<td>S-Corp</td>
<td>Active</td>
<td>9757 Rider Road Warrenton, VA 20187</td>
<td>Class A Contractor</td>
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<td></td>
<td></td>
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<td>ENG</td>
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<td>ENG, LS</td>
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<td>LLP</td>
<td>Good</td>
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<td>Fairfield-Echols, LLC</td>
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<td>Active</td>
<td>First Union Tower 10 Jefferson</td>
<td>Contractor (Class A)</td>
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<td></td>
<td>St., Suite 1400 Roanoke, VA 24011</td>
<td>270511607A</td>
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<tr>
<td>EBA Engineering, Inc.</td>
<td>F123900-5</td>
<td>Corp.</td>
<td>Active</td>
<td>714 Westwood Office Park,</td>
<td>ENG</td>
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<tr>
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<td></td>
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<td></td>
<td>Fredericksburg, VA 22401</td>
<td>0411000871</td>
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## ATTACHMENT 3.2.10
### State Project No. U000-111-233, P101, C501, R201, B609
### SCC and DPOR Information

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<tr>
<th>Company Name</th>
<th>Registration Number</th>
<th>Type</th>
<th>Address</th>
<th>City, State</th>
<th>Zip Code</th>
<th>State</th>
<th>Date of Activation</th>
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<tbody>
<tr>
<td>Bowman Consulting Group, Ltd.</td>
<td>04481982</td>
<td>S</td>
<td>3951 Westerre Parkway, Suite 150,</td>
<td>Richmond, VA</td>
<td>23233</td>
<td>ENG</td>
<td>0411000610</td>
</tr>
<tr>
<td>ATCS, PLC</td>
<td>S0048720</td>
<td>LLP</td>
<td>2553 Dulles View Drive, Suite 30</td>
<td>Herndon, VA</td>
<td>20171</td>
<td>ENG, LS</td>
<td>0413000006</td>
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<tr>
<td>Dovetail Cultural Resources</td>
<td>06685531</td>
<td>Corporation</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>H&amp;B Survey &amp; Mapping, LLC</td>
<td>S290560-4</td>
<td>LLC</td>
<td>612 Hull Street, 101B</td>
<td>Richmond, VA</td>
<td>23224</td>
<td>LS</td>
<td>0407005432</td>
</tr>
<tr>
<td>Schnabel Engineering Consultants, Inc.</td>
<td>07126741</td>
<td>Corporation</td>
<td>One West Cary Street,</td>
<td>Richmond, VA</td>
<td>23220</td>
<td>ENG</td>
<td>0411000700</td>
</tr>
<tr>
<td>Engineering &amp; Materials Technologies, Inc.</td>
<td>04786331</td>
<td>Corporation</td>
<td>408 Four Seasons Drive,</td>
<td>Charlottesville, VA</td>
<td>22901</td>
<td>ENG</td>
<td>0411000698</td>
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<tr>
<td>Metro Title Services, LLC</td>
<td>S0921587</td>
<td>LLC</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Harrison, Chavis &amp; Associates, Inc.</td>
<td>03578929</td>
<td>Corporation</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Mountain Empire Acquisitions, LLC</td>
<td>T0441891</td>
<td>LLC</td>
<td>PO Box 6506</td>
<td>Portsmouth, VA</td>
<td>23703</td>
<td>Business L</td>
<td>4008001754</td>
</tr>
<tr>
<td>Accumark, Inc.</td>
<td>0440745-8</td>
<td>Corporation</td>
<td>9500 King Air Court</td>
<td>Ashland, VA</td>
<td>23005</td>
<td>ENG</td>
<td>0407005172</td>
</tr>
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<td>Stuchell Valuations</td>
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<td></td>
<td>* SCC registration does not apply</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>this is a sole proprietorship</td>
<td></td>
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</tr>
</tbody>
</table>
### SCC and DPOR Information

#### DPOR INFORMATION FOR INDIVIDUALS (RFQ Sections 3.2.10.3 and 3.2.10.4)

<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>
</tr>
</thead>
<tbody>
<tr>
<td>RK&amp;K, LLP</td>
<td>Gary Sebastian Johnson, PE, DBIA</td>
<td>Richmond, VA</td>
<td>3808 Ivory Court Richmond, VA 23233</td>
<td>Professional Engineer</td>
<td>0402033863</td>
<td>9-30-2013</td>
</tr>
<tr>
<td>RK&amp;K, LLP</td>
<td>Owen Lee Peery, PE</td>
<td>Richmond, VA</td>
<td>801 East Main Street, Suite 100 Richmond, VA 23219</td>
<td>Professional Engineer</td>
<td>0402046882</td>
<td>10-31-2013</td>
</tr>
<tr>
<td>RK&amp;K, LLP</td>
<td>Ryan Wendell Masters, PE</td>
<td>Richmond, VA</td>
<td>9506 Indianfield Drive, Mechanicsville, VA</td>
<td>Professional Engineer</td>
<td>0402038025</td>
<td>6-30-2013</td>
</tr>
<tr>
<td>RK&amp;K, LLP</td>
<td>Michael John Hogan, Jr., PE</td>
<td>Richmond, VA</td>
<td>14906 Mill Flume Ct. Midlothian, VA 23112</td>
<td>Professional Engineer</td>
<td>0402038783</td>
<td>1-31-2014</td>
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<tr>
<td>RK&amp;K, LLP</td>
<td>Shelia Stallings Reeves, PE</td>
<td>Richmond, VA</td>
<td>11707 Westbury Bluff Drive, Midlothian, VA 23114</td>
<td>Professional Engineer</td>
<td>0402049765</td>
<td>11-30-2013</td>
</tr>
<tr>
<td>RK&amp;K, LLP</td>
<td>Barry L. Brandt, PE</td>
<td>Baltimore, MD</td>
<td>554 Charlington Drive Serverna Park, MD 21146</td>
<td>Professional Engineer</td>
<td>0402048084</td>
<td>9-30-2014</td>
</tr>
<tr>
<td>RK&amp;K, LLP</td>
<td>Richard Denne Clifton, PE</td>
<td>Newport News, VA</td>
<td>10 Dorothy Drive Poquoson, VA 23662</td>
<td>Professional Engineer</td>
<td>0402033768</td>
<td>6-30-2013</td>
</tr>
<tr>
<td>EBA Engineering, Inc.</td>
<td>George Patton Romack, PE</td>
<td>Fredericksburg, VA</td>
<td>96 Hamlin Drive Fredericksburg, VA 22405</td>
<td>Professional Engineer</td>
<td>0402041824</td>
<td>2-28-2014</td>
</tr>
<tr>
<td>Bowman Consulting Group, LTD</td>
<td>Kyle Taylor Springs, PWD</td>
<td>Richmond, VA</td>
<td>3951 Westerre Pkwy. Suite 150, Richmond, VA 23233</td>
<td>Professional Wetland Delineator</td>
<td>3402000131</td>
<td>8-31-2014</td>
</tr>
<tr>
<td>Bowman Consulting Group, LTD</td>
<td>Jessica Lynn Fleming, PWD</td>
<td>Chantilly, VA</td>
<td>5316 Danbury Forest Drive, Springfield, VA 22151</td>
<td>Professional Wetland Delineator</td>
<td>3402000115</td>
<td>8-31-2013</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>Company / Consultant</th>
<th>Name</th>
<th>Address</th>
<th>City, State</th>
<th>Role</th>
<th>License No.</th>
<th>Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATCS, PLC</td>
<td>Pedro Luis Capestany, PE</td>
<td>Herndon, VA</td>
<td>43643 Oleary Lane South Riding, VA 20152</td>
<td>Professional Engineer</td>
<td>0402034654</td>
<td>7-31-2013</td>
</tr>
<tr>
<td>Schnabel Engineering Consultants, Inc.</td>
<td>Edward George Drahos, PE</td>
<td>Richmond, VA</td>
<td>14410 Galloway Court Midlothian, VA 23113</td>
<td>Professional Engineer</td>
<td>0402015605</td>
<td>7-31-2013</td>
</tr>
<tr>
<td>H&amp;B Survey &amp; Mapping</td>
<td>Leslie Ray Byrnside, LS</td>
<td>Richmond, VA</td>
<td>4100 Ketcham Drive Chesterfield, VA 23875</td>
<td>Licensed Surveyor</td>
<td>0403002362</td>
<td>6-30-2013</td>
</tr>
<tr>
<td>Engineering &amp; Materials Technologies, Inc.</td>
<td>Shahzad Sultman Moosa, PE</td>
<td>Manassas, VA</td>
<td>7857 Coppermine Dr. Manassas, VA 20109</td>
<td>Professional Engineer</td>
<td>0402021398</td>
<td>7-31-2014</td>
</tr>
<tr>
<td>Accumark, Inc.</td>
<td>WC Labaugh, III</td>
<td>Richmond, VA</td>
<td>2418 Mountainbrook Drive, Richmond, VA 23233</td>
<td>Professional Engineer</td>
<td>0402010372</td>
<td>8-31-2013</td>
</tr>
<tr>
<td>Harrison Chavis Associates, Inc.</td>
<td>Harrison M. Chavis</td>
<td>Richmond, VA</td>
<td>PO Box 11536</td>
<td>Real Estate Appraiser</td>
<td>0401000011</td>
<td>10-31-2013</td>
</tr>
<tr>
<td>Stuchell Valuations</td>
<td>Richard David Stuchell</td>
<td>Fredericksburg, VA</td>
<td>10012 Shadowridge Court, Fredericksburg, VA 22407</td>
<td>Certified General Real Estate Appraiser</td>
<td>4001011856</td>
<td>11-30-2014</td>
</tr>
<tr>
<td>Mountain Empire Acquisitions, LLC</td>
<td>Allen A. Armstrong</td>
<td>Portsmouth, VA</td>
<td>328 Shrike Drive Buda, TX 78610</td>
<td>Certified General Real Estate Appraiser</td>
<td>4001014986</td>
<td>7-31-2014</td>
</tr>
</tbody>
</table>
Commonwealth of Virginia

State Corporation Commission

I Certify the Following from the Records of the Commission:

GENERAL EXCAVATION, INC. is a corporation existing under and by virtue of the laws of Virginia, and is in good standing.

The date of incorporation is March 28, 1983.

Nothing more is hereby certified.

Signed and Sealed at Richmond on this Date:
August 14, 2009

Joel H. Peck, Clerk of the Commission
Commonwealth of Virginia

STATE CORPORATION COMMISSION

Richmond, August 14, 2009

This is to certify that the certificate of incorporation of

GENERAL EXCAVATION, INC.

was issued and admitted to record in this office and that the said corporation is authorized to transact its business subject to all Virginia laws applicable to the corporation and its business. Effective date: March 28, 1983

State Corporation Commission
Attest:

[Signature]
Clerk of the Commission

CIS0502
GENERAL EXCAVATION, INC.

General
SCC ID: 02400679
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 3/28/1983
Status: Active
Shares Authorized: 20000

Principal Office
9757 RIDER ROAD
WARRENTON VA 20187

Registered Agent/Registered Office
RUSSELL A JENKINS
9757 RIDER RD
WARRENTON VA 20187
FAQUIER COUNTY 130
Status: Active
Effective Date: 1/29/2009
COMMONWEALTH OF VIRGINIA
STATE CORPORATION COMMISSION
Office of the Clerk

May 22, 2012

CT CORPORATION SYSTEM
4701 COX RD STE 301
GLEN ALLEN, VA 23060-8802

RECEIPT

RE: RUMMEL, KLEPPER & KAHL, LLP

ID: K000417-8
DCN: 12-05-22-0543

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 22, 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

GPACCEPT
CIS0436

P.O. Box 1197, Richmond, VA 23219-1197
Tyler Building, First Floor, 1100 East Main Street, Richmond, VA 23219-3630
Clerk's Office (804) 371-9733 or (888) 722-2551 (toll-free in Virginia) www.scc.virginia.gov/clerk
Telecommunications Device for the Deaf-TDD/Voice: (804) 371-8206

9757 Rider Road, Warrenton, VA 20187 – www.gei-va.com
Commonwealth of Virginia

State Corporation Commission

CERTIFICATE OF FACT

I Certify the Following from the Records of the Commission:

On September 25, 2001, a statement of registration as a foreign registered limited liability partnership was filed in this office by Rummel, Klepper & Kahl, LLP, a Maryland limited liability partnership.

This certificate of registration is in effect as of this date.

Nothing more is hereby certified.

Signed and Sealed at Richmond on this Date:
January 24, 2013

Joel H. Peck, Clerk of the Commission

CIS0357
Commonwealth of Virginia

STATE CORPORATION COMMISSION
Richmond, January 2, 1996

This is to certify that a certificate of authority to transact business in Virginia was this day issued and admitted to record in this office for

EBA Engineering, Inc.

a corporation organized under the laws of MARYLAND
and that the said corporation is authorized to transact business in Virginia, subject to all Virginia laws applicable to the corporation and its business.

State Corporation Commission
Attest:

William J. Bridge
Chief of the Commission
EBA Engineering, Inc.

General
SCC ID: F1239005
Entity Type: Foreign Corporation
Jurisdiction of Formation: MD
Date of Formation/Registration:
10/22/1997
Status: Active
Shares Authorized: 1000000

Principal Office
4813 SETON DRIVE
BALTIMORE MD21215

Registered Agent/Registered Office
CT CORPORATION SYSTEM
4701 COX RD STE 301
GLEN ALLEN VA 23060
HENrico COUNTY 143
Status: Active
Effective Date: 1/5/2004

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

Fairfield-Echols, LLC

General
SCC ID: G1655795
Entity Type: Limited Liability Company
Jurisdiction of Formation: VA
Date of Formation/Registration:
8/11/2008
Status: Active

Principal Office
FIRST UNION TOWER
50 S JEFFERSON ST STE 1400
ROANOKE VA24011

Registered Agent/Registered Office
TAILORED P & E COMPANY
WOODS ROGERS ROANOKE TOWER
STE 1400
50 S JEFFERSON ST
ROANOKE VA 24011
ROANOKE CITY 217
Status: Active
Effective Date: 3/1/2008

Select an action
File a registered agent change
File a registered office address change
Resign as registered agent
File a principal address change
Pay annual registration fee
Order a certificate of good standing
Submit a FF for processing (What can I submit?)
View efile transaction history
Manage email notifications

New Search  Home
BOWMAN CONSULTING GROUP, LTD.

General
- SCC ID: 04481982
- Entity Type: Corporation
- Jurisdiction of Formation: VA
- Date of Formation/Registration: 6/7/1995
- Status: Active
- Shares Authorized: 360000

Principal Office
- 3863 CENTERVIEW DRIVE
  SUITE 300
  CHANTILLY VA20151

Registered Agent/Registered Office
- ROBERT A HICKLEY
  3863 CENTERVIEW DR STE 300
  CHANTILLY VA 20151
  FAIRFAX COUNTY 129
  Status: Active
  Effective Date: 5/13/2004

ATCS, P.L.C.

General
- SCC ID: 50048720
- Entity Type: Limited Liability Company
- Jurisdiction of Formation: VA
- Date of Formation/Registration: 6/30/1994
- Status: Active

Principal Office
- 2553 DULLES VIEW DR STE 300
  HERNDON VA 20171

Registered Agent/Registered Office
- WILLIAM A CARUTHERS
  2553 DULLES VIEW DRIVE, SUITE 300
  HERNDON VA 20171
  FAIRFAX COUNTY 129
  Status: Active
  Effective Date: 10/6/2010
Schnabel Engineering Consultants, Inc.

**General**
- SCC ID: 07126741
- Entity Type: Corporation
- Jurisdiction of Formation: VA
- Date of Formation/Registration: 8/12/2009
- Status: Active
- Shares Authorized: 10000

**Principal Office**
- 1054 TECHNOLOGY PARK DR
- GLEN ALLEN VA23059

**Registered Agent/Registered Office**
- CT CORPORATION SYSTEM
- 4701 COX RD STE 301
- GLEN ALLEN VA 23060
- HENRICO COUNTY 143
- Status: Active
- Effective Date: 6/16/2011

Dovetail Cultural Resources, Inc.

**Dovetail Cultural Resources Group I, Inc.**

**General**
- SCC ID: 06685531
- Entity Type: Corporation
- Jurisdiction of Formation: VA
- Date of Formation/Registration: 11/30/2006
- Status: Active
- Shares Authorized: 1000

**Principal Office**
- 300 CENTRAL RD
- STE 200
- FREDERICKSBURG VA22401

**Registered Agent/Registered Office**
- CHARLES W PAYNE JR
- 725 JACKSON ST STE 200
- FREDERICKSBURG VA 22401
- FREDERICKSBURG CITY 206
- Status: Active
- Effective Date: 11/30/2006
H&B Survey & Mapping, LLC

H & B Surveying and Mapping, LLC

General

SCC ID: 52903504
Entity Type: Limited Liability Company
Jurisdiction of Formation: VA
Date of Formation/Registration:
4/27/2009
Status: Active

Principal Office
612 HULL STREET STE 101B
RICHMOND VA23224

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

Business Entity Details

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

New Search | Home

Engineering & Materials Technologies, Inc.

SCC eFile > Entity Search > Entity Details

ENGINEERING & MATERIALS TECHNOLOGIES, INC.

General

SCC ID: 04766331
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration:
1/29/1997
Status: Active
Shares Authorized: 5000

Principal Office
7857 COPPERMINE DRIVE
MANASSAS VA20109

Registered Agent/Registered Office
SHAHZAD S MOOSA
7857 COPPERMINE DR
MANASSAS VA 20109
PRINCE WILLIAM COUNTY 176
Status: Active

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

New Search | Home

9757 Rider Road, Warrenton, VA 20187 – www.gei-va.com
Accumark, Inc.

General
- SCC ID: 04407458
- Entity Type: Corporation
- Jurisdiction of Formation: VA
- Date of Formation/Registration: 1/30/1995
- Status: Active
- Shares Authorized: 500

Principal Office
- 9500 KING AIR COURT
  - ASHLAND VA 23005

Registered Agent/Registered Office
- S CRAIG MARTIN
  - 9500 KING AIR CT
  - ASHLAND VA 23005
  - HANOVER COUNTY 142
  - Status: Active
  - Effective Date: 1/5/2012

Metro Title Services, LLC

General
- SCC ID: S0921587
- Entity Type: Limited Liability Company
- Jurisdiction of Formation: VA
- Date of Formation/Registration: 2/19/2003
- Status: Active

Principal Office
- 450 W BROAD ST #301
  - FALLS CHURCH VA 22046

Registered Agent/Registered Office
- ROBERT J STRAYHORNE
  - LAW OFFICES OF ROBERT J
  - STRAYHORNE PLLC
  - 450 W BROAD ST STE 301
  - FALLS CHURCH VA 22046
  - FALLS CHURCH CITY (FILED IN
    ARLINGTON COUNTY) 304
  - Status: Active
  - Effective Date: 10/26/2011
General Excavation, Inc.

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA
9900 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

BOARD FOR CONTRACTORS
CLASS A CONTRACTOR
"CLASSIFICATIONS" H/H SDS

GENERAL EXCAVATION INC
9757 RIDER ROAD
WARRENTON, VA 20187

RK&K, LLP

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA
9900 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

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

PROFESSIONS: ENG

RUMMEL KLEPPER & KAHLLLP
RK&K
2100 EAST CARY ST
SUITE 309
RICHMOND, VA 23223

RUMMEL KLEPPER & KAHL LLP
2901 S. LYNNHAVEN RD
SUITE 300
VIRGINIA BEACH, VA 23452

9757 Rider Road, Warrenton, VA 20187 – www.gei-va.com
Schnabel Engineering Consultants, Inc.

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

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

PROFESSIONS: ENG

SCHNABEL ENGINEERING CONSULTANTS, INC
ONE CARY STREET
RICHMOND, VA 23220

H&B Survey & Mapping, LLC

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

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

PROFESSIONS: LS

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

G & J E VALUATION INC.
540-439-2202

9757 Rider Road, Warrenton, VA 20187 – www.gei-vi.com
Mountain Empire Acquisitions, LLC

Details of license number 4008001754

Name: MOUNTAIN EMPIRE ACQUISITIONS LLC
License Number: 4008001754
License Description: Appraisal Business Registration
Business Type: L
Address: PO BOX 6506
PORTSMOUTH, VA 23701
Initial Certification Date: November 5, 2012
Expiration Date: November 30, 2014

Complaints

No Open Complaints

"Open Complaints" reflect only those complaints against regulated for which a departmental investigation has determined that sufficient evidence exists to establish probable cause of a violation of the law or regulations. Only those cases that have proceeded through an investigation to the adjudication stage are displayed. State law prohibits the disclosure of any information about open complaints [Code of Virginia Section 54.1-108]. Members of the public may review official records and obtain copies only after a complaint investigation is closed.

No Closed Complaints

"Closed Complaints" reflect complaints against regulated closed since 1990. Cases closed without disciplinary action are purged after 11 years in accordance with DPOR's record retention policy.
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

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

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

GARY SEBASTIAN JOHNSON
3808 IVORY CT
RICHMOND, VA 23233

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

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

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COMMONWEALTH OF VIRGINIA

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

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

OWEN LEE PEERY
801 EAST MAIN ST STE 1000
RICHMOND, VA 23219

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

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

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

RYAN WENDELL MASTERS
9506 INDIANFIELD DR
MECHANICSVILLE, VA 23116

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

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

MICHAEL JOHN HOGAN JR
14906 MILL FLUME CT
MIDLOTHIAN, VA 23112

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

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

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

SHEILASTALLINGS REEVES
11707 WESTBURY BLUFF DR
MIDLOTHIAN, VA 23114

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

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

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

BARRY L BRANDT
554 CHARINGTON DR
SEVERN PARK, MD 21146

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
EBA Engineering, Inc.

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPRES ON: 02-28-2014

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

PROFESSIONAL ENGINEER LICENSE

GEORGE PATTON ROMACK
96 HAMLIN DR
FREDERICKSBURG, VA 22405

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

Gordon W. Dixon, Director
Accumark, Inc.

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA
9960 Mayland Dr., Suite 400, Richmond, VA 22233
Telephone: (804) 367-8500

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

W C LABAUGH III
2418 MOUNTAINBROOK DRIVE
RICHMOND, VA 23233

(here signature)

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

Stuchell Valuations

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA
9960 Mayland Dr., Suite 400, Richmond, VA 22233
Telephone: (804) 367-8500

REAL ESTATE APPRAISER BOARD
CERTIFIED GENERAL REAL ESTATE APPRAISER

RICHARD DAVID STUCHELL
10012 SHADOWRIDGE COURT
FREDERICKSBURG VA 22407

(here signature)

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

Harrison & Chavis & Associates, Inc.

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA
9960 Mayland Dr., Suite 400, Richmond, VA 22233
Telephone: (804) 367-8500

REAL ESTATE APPRAISER BOARD
CERTIFIED GENERAL REAL ESTATE APPRAISER

HARRISON M CHAVIS
PO BOX 11536
HENRICO VA 23230

(here signature)

9757 Rider Road, Warrenton, VA 20187 – www.gei-vu.com

A-50
Attachment 3.3.1

Key Personnel Resumes

General Excavation Inc.
540-439-2202

In association with: RK&K
**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

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

| a. Name & Title: | Scott C. Hunter – Vice President |
| b. Project Assignment: | Design-Build Project Manager |
| c. Name of Firm with which you are now associated: | General Excavation, Inc. |

**d. Years experience:**

- **With this Firm:** 5 Years
- **With Other Firms:** 21 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.):

**Vice President, General Excavation, Inc. (May 2007 – Present)**

As Vice President of General Excavation, Inc. Mr. Hunter has been responsible for the following:

- South King Street Widening, Phase I in Leesburg, VA ($4.5 million for Town of Leesburg) – Responsible-in-Charge for contract administration and project management. February 2012 – Present.
- Route 234 Park & Ride Project in Prince William County, VA ($5.3 million for VDOT) – Responsible-in-Charge for contract administration and project management. March 2012 – Present.
- Route 7 Traffic Flow Improvements Project in Loudoun County, VA ($3.7 million for Loudoun County) – Responsible-in-Charge for contract administration and project management. April 2012 – Present.
- Aldie Route 50 Traffic Calming Project in Loudoun County, VA ($3.7 million for VDOT) – Responsible-in-Charge for contract administration and project management. Project was completed $500,000.00 below contract award amount. September 2011 – December 2012.
- Pacific Boulevard Widening Design-Build Project in Loudoun County, VA ($1.9 million for VDOT) – Design-Build Project Manager responsible for complete oversight and delivery of project design, construction, quality management and contract administration. May 2010 – August 2012.
- Advance Detour and Access Road Construction Phase IV – I-66/Route 29 Linton Hall Road in Prince William County, VA ($9.3 million for VDOT) - Responsible-in-Charge for contract administration and project management. May 2010 – September 2011.
- Dulles Corridor Metrorail Design-Build Project in Fairfax County, VA ($0.8 million as a subcontractor to Dulles Transit Partners, LLC for MWAA) - Responsible-in-Charge for contract administration and project management. January 2009 – January 2012.

**Project Manager, Lane Construction (Dec. 2006 – May 2007)**

During his five months as a Project Manager for Lane Construction, Mr. Hunter assisted the estimating and management staffs in the development of the 495 HOT Lanes Design-Build proposal.

**Vice President of Construction, Moore Brothers Company, Inc. (Jan. 2003 – Nov. 2006)**

- I-95/ Route 627 Interchange Project in Stafford County, VA ($46.0 million for VDOT) – Responsible-in-Charge for project construction. May 2002 – March 2006.


**e. Education:**

- **Name & Location of Institution(s)/Degree(s)/Year/Specialization:**
  - Virginia Military Institute, Lexington, Virginia – BS/1986/Civil Engineering

**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.)

Pacific Boulevard Widening – VDOT Design-Build Project – Loudoun County, VA
1. Design-Build Project Manager – Responsible-in-Charge for the overall design, right-of-way acquisition, construction, quality control, quality assurance, and contract administration for Pacific Boulevard Widening project in Loudoun County. Project value was $1,850,103 and consisted of constructing 2,100 LF of two lanes of secondary roadway; reconstructing and widening of 850 LF of two lanes of secondary roadway; building a new traffic signal at the intersection of Pacific Boulevard and Sterling Boulevard; providing power to the new signal; and relocating sanitary sewer facilities.
   2. General Excavation, Inc.
   3. May 20, 2010 – August 2012

Route 340 over Jeremy’s Run – VDOT – Page County, VA
1. Vice President - Principal-in-Charge of contract administration and project management. Supervised the Estimating Department in the development and preparation of the bid submission. During construction assisted the project management staff with preparation of subcontracts, scheduling, issuance of purchase orders, budgets, and cost controls. The value of this award winning project was $7,674,952 and consisted of construction a bridge over Jeremy’s Run. This project was recognized for its Excellence in Construction as the Best Project in the Staunton District in 2009.
   2. General Excavation, Inc.

Route 208 Courthouse Road, Spotsylvania Courthouse - Phase 1- Spotsylvania County, VA – VDOT
1. Vice President - Principal-in-Charge of contract administration and project management. Advised the Department with the development of a revised sequence of construction and maintenance of traffic plan to better facilitate the safe flow of traffic, school buses, and emergency service vehicles through the limits of the project during construction. Supervised the project management staff with the development of the schedule, scoping, procurement, coordination of public notices, environmental compliance, and cost controls measures. The value of this project was $13,463,486 and included construction of a new 4-lane divided roadway, traffic signals, stormwater management basins, environmental mitigation and other incidental construction activities on primary and secondary roadways.
   2. General Excavation, Inc.

I-66 HOV Lane Widening – Route 234 Bypass to Route 234 Business – VDOT Manassas, VA
1. Vice President – Construction/General Superintendent – Principal-in-Charge of construction management and administration for all field operations. The value of this project was $38 million and consisted of constructing 6.11 kilometers of HOV lanes (in each direction) in the median of I-66; 6.11 kilometers in each direction of pavement widening on the outside of I-66; bridge deck construction and widening I-66 EBL over Route 234 business; 5 box culverts – extensions to the outside of I-66; 260,000 cubic meters of excavation; 250,000 metric tons of bituminous asphalt paving; and more than 37,000 meters of temporary traffic barrier service.
   3. August 2004 – December 2006

I-95/Route 627 Interchange – VDOT – Stafford County, VA
1. Vice President – Construction/General Superintendent – Principal-in-Charge Supervised the on-site construction management staff and was the principle point of contact for the administration of the contract after award. Directed the field staff with regards to the assignment and allocation of resources, project management, quality control, and development of the construction schedule. The value of this project was approximately $46 million and included the construction of a new interchange on I-95; the construction of two bridges over I-95, one bridge over Route 1, and one over a stream; the reconstruction of approximately 5,000 LF of Route 1; 1.3 million cubic meters of excavation; 4,800 meters of storm drain; 167,000 metric tons of bituminous asphalt; 2,800 meters of water main; a new traffic signals; and permanent traffic signs. Of significant note is the savings of over $4 million that this project realized as a result of numerous VEPs that were approved throughout the duration of construction.
**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel anticipated for the Project.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Name &amp; Title: George P. Romack, PE – Senior Construction Manager</td>
</tr>
<tr>
<td>b. Project Assignment: Quality Assurance Manager</td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated: EBA Engineering, Inc.</td>
</tr>
<tr>
<td>d. Years experience: With this Firm 1 Years With Other Firms 40 Years</td>
</tr>
</tbody>
</table>

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):

**Senior Construction Manager – EBA Engineering, Inc. (August 2010 – present)**
Senior Construction Manager pursuing construction engineering and inspection contracts and providing construction engineering/management services as needed.

**District Construction Engineer – VDOT, Fredericksburg District (April 2006 – May 2010)**
Managed the District’s Materials Laboratory and contract administration program of maintenance and construction funded road and bridge contracts *exceeding VDOT target delivery goals* with 85% on time and 87% on budget for over 100 projects. Resolved challenges associated with *traffic detours up to three miles in length, accommodating the needs of local businesses, addressing environmental issues*, landowner access, construction techniques, field testing of high strength bolts, and project schedules. Provided assistance to the Central Office and Office of the Attorney General to mitigate claims and litigate a lawsuit from a property owner. Projects included an 8-span bulb tee structure on Route 624 Cat Point Creek in Richmond County, a high-profile, congested roadway widening of Route 639 Bragg Road in Spotsylvania County (*within two miles of the Fall Hill Avenue project*), and the construction of a new location of Route 208 Courthouse Bypass in Spotsylvania County. He led the Quality Assurance program to ensure CQIP goals were met by using regular “pre-QIP” reviews, peer reviews, and OJT.

**Area Construction Engineer – VDOT, Fredericksburg District (Jan. 2005 – April 2006)**
Provided direct engineering management of one third of the District’s contract administration program of maintenance and construction funded road and bridge contracts, interpreting contract specifications, resolving disputes, notice of intents and claims, reviewing CPM schedules and managing the Quality Assurance and quality control inspection and testing of materials. *Performed the duties of a QAM ensuring contract compliance with plans, specifications and materials testing frequencies as a subset of his total duties as Area Construction Engineer on projects such as the reconstruction of two miles of the inadequate secondary road and two major drainage structures on Route 610 Indiantown Road in King George; the reconstruction of a deficient bridge to a triple box culvert of Route 615 Deep Run on the Stafford/Fauquier County line coordinating staffing from two VDOT Districts; and the recoating of five bridges crossing I-95 in Spotsylvania and Stafford Counties.*

**Senior Engineer/Program Manager – Federal Highway Administration (FHWA) (1993-2004)**
Led the Federal Bridge and Tunnel Management Program nationwide, establishing standards of practice for inventory and maintenance activities associated with bridges and tunnels.

Led a team of structural engineers in programmatic research of bridge joints, heated bridge deck technologies, rules and regulations for federal bridge program and underwater bridge inspection program.

Highway Structural Engineer performing oversight of States’ compliance with federal construction and maintenance procedures.

**Structural Design Engineer – FHWA (1974-1977)**
Reviewed federally funded project designs, preparing basic bridge designs and providing engineering recommendations to management and division staff. Responsible for bridge design projects on National Park Service roadways located on the Natchez Trace Parkway, and structures on Defense Department facility at Warner Robbins AFB. Developed standard plans for the bridges in Southern Region of National Forest Service. Prepared rehabilitation plans for numerous structures owned by the Park Service, including two aqueducts on the C&O Canal, and bridges in Acadia and Rock

Provided design services related to bridges and special culverts.

**e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:**
Virginia Polytechnic University and State Institute - BS/1968/Civil Engineering

**f. Active Registration: Year First Registered/ Discipline/VA Registration #:**
2006/Civil Engineering/VA (#041824)

**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.)

**Route 610 Indiantown Road, King George County, VA**
1. VDOT Area Construction Engineer providing engineering services to ensure construction in accordance with the contract, plans, and specifications of two miles of an inadequate secondary road, and two major drainage structures. Managed the Quality Assurance inspection and materials testing, project staffing, budget, and schedule for this 1.54 one-mile project worth $1.6M finishing on time and under budget.
2. VDOT
3. 2005-2006

**Route 208 Courthouse Bypass, Spotsylvania County, VA**
1. VDOT District Construction Engineer resolving challenges associated with three miles of traffic detours, accommodating the needs of local businesses, addressing environmental issues, and providing assistance to the Office of the Attorney General to litigate a lawsuit from a property owner. He led his field staff in the management of the Quality Assurance inspection and materials testing, project staffing, budget, and schedule for this project 4.82km in length with a $15.6M final cost.
2. VDOT
3. 2006-2009

**DCE Route 624 Cat Point Creek, Richmond County, VA**
1. VDOT District Construction Engineer resolving issues pertaining to access, construction techniques, field testing of high strength bolts, and project schedule associated with this bridge replacement project to build an 8-span bulb tee structure. He led his field staff in the management of the Quality Assurance inspection and materials testing, project staffing, budget, and schedule for this bridge replacement and approach project with a $5.2M final cost delivering both on time and under budget.
2. VDOT
3. 2006-2008

**DCE Route 639 Bragg Road, Spotsylvania County, VA**
1. VDOT District Construction Engineer resolving numerous complaints and issues from business owners and residents along the road over access, dust, noise, etc. communicating regularly with inspection staff and the contractor to address the concerns, including meeting with the home owners onsite. Through effective oversight and involvement, the roadway widening project adding two signals and a noise abatement wall was finished 6 months early and within its $6.4M budget.
2. VDOT
3. 2008-2010

**DCE Route 630 Courthouse Road, Stafford County, VA**
1. VDOT District Construction Engineer leading informational meetings to engage public stakeholders under daily inconvenience by the major improvements, realignment and resurfacing of two miles of roadway being constructed in place. He led his field staff in the management of the Quality Assurance inspection and materials testing, project staffing, budget, and schedule delivering both on time and on budget at $3.2M.
2. VDOT
3. 2006-2008
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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</thead>
<tbody>
<tr>
<td>a. Name &amp; Title: Gary S. Johnson, PE, DBIA – Senior Manager, Structures</td>
</tr>
<tr>
<td>b. Project Assignment: Design Manager</td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated: RK&amp;K, LLP</td>
</tr>
<tr>
<td>d. Years experience: With this Firm 2.5 Years With Other Firms 17 Years</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>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.):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Manager, Structures – RK&amp;K, LLP (Sept. 2010 – present)</td>
</tr>
</tbody>
</table>
As Senior Manager for Structures, Mr. Johnson is responsible for bridge design and design-build projects in Virginia. He has more than 19 years of project management, design and construction inspection experience in structures, roadways, and mass transit stations. His extensive project management experience, formal training and hands-on participation in inspection, design and construction engineering assignments afford him in-depth knowledge of project requirements. Additionally, his experience with design-build projects has developed his full understanding of the implementation of bridge plans and projects through construction. He is currently a member of the VTCA Engineering Consultant Leadership Committee is regularly attends and participates in the VTCA Design-Build Committee meetings. |
Project Manager and Lead Structural Engineer for dozens of bridge projects. Oversaw staff of 20 structural engineers. Served as Engineer of Record on bridge replacement projects. Served as Principal in Charge for design-build projects in Virginia, North Carolina and Washington DC. |
| Director of Virginia Operations – Ammann & Whitney (June 1993 – May 2005) |
Project Manager and Lead Structural Engineer for projects throughout Massachusetts, Pennsylvania and Virginia. Served as Engineer of Record on bridge replacement and rehabilitation projects. Focused on rehabilitation of bridges damaged from over height loads and emergency response. |
| e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: |
Virginia Commonwealth University, Richmond, VA – MBA/2003/Business Administration |
University of New Hampshire, Durham, NH – BSCE/1993/Civil Engineering |
| f. Active Registration: Year First Registered/ Discipline/VA Registration #: |
1999/Professional Engineer/VA (#0402033863) |
2010/DBIA Professional (#125387) |
2010/NBIS Certified Bridge Inspection Team Leader |
| 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.) |
| Middle Ground Blvd. Extension, Newport News, VA (Design-Build) |
1. Structures Project Manager. As part of a Staff Services contract for Innovative Project Delivery department Mr. Johnson developed preliminary plans depicting the location and a concept (TS&L plans and report) for the bridge over the CSX Railroad in order to identify right of way requirements. Mr. Johnson also played an integral role in estimating construction costs. The Extension of Middle Ground Boulevard is from approximately 0.120 miles east of Route 143 (Jefferson Avenue) to approximately 0.077 miles west of Route 60 (Warwick Boulevard) in Newport News, Virginia. The proposed improvements cover a distance of approximately 1.20 miles and include a new bridge over the CSX Railroad. Mr. Johnson coordinated with the roadway engineers, railroad, and utility designers to arrive at the most cost-effective design. |
| 2. T.Y. Lin International |

**US 158 Over Yadkin River, Mocksville, NC (Design-Build)**
1. Project Design Manager and Structural Engineer for a roadway widening that included a nine-span bridge structure with a length of 1150 feet. The superstructure span arrangement consists of three, 3-span units made continuous for live load utilizing 72” Modified Bulb Tee girders. The substructure consists of three column bents founded on drilled shaft foundations. Mr. Johnson led a multi-member, multi-disciplined project team (including utilities, roadway, right-of-way, environmental, structures, and hydraulics) from proposal development through construction. Complicating the project was extensive right-of-way negotiations, complex maintenance of traffic, complex hydraulic analysis, and an aggressive schedule.
2. T.Y. Lin International


**New York Avenue, Washington, DC (Design-Build)**
1. Project Design Manager and Lead Structural Engineer for this bridge replacement project in downtown Washington DC. Maintenance of Traffic during construction was the main driving force of the project. MOT drove the most applicable structural alternatives. Mr. Johnson worked closely with the client and contractor to arrive at the most feasible bridge replacement options. The project involved significant roadway work and Mr. Johnson was responsible for all aspects of the project, from initial costing to final design.
2. T.Y. Lin International


**The Bridges at Lancer Park for Longwood University (Design-Build)**
1. Project Design Manager and Structural Engineer for the design of two new bridge structures and associated approaches and ramps. The first structure, a 140 foot long through truss, completed the proposed West Third Street entrance into Lancer Park by spanning the Rails and Trails corridor. The second structure is a pedestrian bridge and crosses West Third Street. Responsibilities included coordination with the Virginia Bureau of Capital Outlay Management (BCOM), Department of Conservation and Recreation (DCR), VDOT and the Town of Farmville. This project also included a presentation before the Art and Architecture Review Board (AARB).
2. T.Y. Lin International


**Anacostia Riverwalk Trail, Washington, DC (Design-Build)**
1. Project Design Manager for the environmental assessment and design of approximately 16 miles of the Anacostia Riverwalk Trail following the east and west banks of the Anacostia River, mostly through Anacostia National Park property. The trail alignment is adjacent to some of the most environmentally sensitive portions of the National Park. The trail will also include numerous connections to adjacent neighborhoods and transit stations. The final project was divided into three Design-Build contracts. Final design for one of these contracts and for a portion of another contract has been completed under the direction of Mr. Johnson. For this work, he was the Project Design Manager and was responsible for all aspects of the project, from pricing to final delivery. These contracts involved the construction of approximately 5.75 miles of trail as well as two bridges over the CSXT railroad.
2. T.Y. Lin International
3. April 2009 – Aug. 2010
**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

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

| a. Name & Title: | Page L. Gallihugh, Jr. – General Superintendent |
| b. Project Assignment: | Construction Manager |
| c. Name of Firm with which you are now associated: | General Excavation, Inc. |

| d. Years experience: | With this Firm: 10 Years | With Other Firms: 13 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.):

**General Superintendent, General Excavation, Inc. (2001 – Present)**

As a Construction Manager for GEI, Mr. Gallihugh is responsible for field construction operations on design-build and fast-track, large scale transportation infrastructure projects. The following projects represent his field of practice as General Superintendent:

- Route 7 Traffic Flow Improvements Project in Loudoun County, VA ($3.7 million for Loudoun County) – General Superintendent responsible for field construction operations. April 2012 – Present.
- Pacific Boulevard Widening Design-Build Project in Loudoun County, VA ($1.9 million for VDOT) – General Superintendent responsible for field construction operations. May 2010 – August 2012.
- Sycolin Road Widening, Phase II in Leesburg, VA ($2.7 million for Town of Leesburg) – General Superintendent responsible for field construction operations. June 2010 – September 2011.
- Route 15 Improvements in Loudoun County, VA ($4.7 million for VDOT) - General Superintendent responsible for field construction operations. November 2006 – November 2007.
- Route 15 Improvements in Loudoun County, VA ($4.4 million for VDOT) – General Superintendent responsible for field construction operations. May 2002 – May 2003.

**Construction Quality Improvement Inspector, Virginia Department of Transportation (1998 – 2001)**

- Inspection of VDOT projects for safety issues, quality construction, and adherence to specification and plans.

| e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: |
| f. Active Registration: Year First Registered/Discipline/VA Registration #: |

**Certifications:**

- VDCR – Responsible Land Disturber #32627 – Expires 10/15/2015
- VDOT – Erosion and Sediment Control Contractor Certification #1754C – Expires 2/20/2014
- VDOT – Instructor Work Zone Traffic Control #00044953
- VDMME – General Mineral Miner #0010996
- Hazmat – Expires 12/22/2013

**Training:**

- OSHA – Subpart P, 30-Hour Attended 2/29/2008;
- ATTSA – Certified Traffic Control Supervisor – Expires 12/04/2016
- VDOT – Guardrail; Concrete Field; Nuclear Safety; Pavement Marking
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.)

**Pacific Boulevard Widening – VDOT Design-Build Project, Loudoun County, VA**
1. General Superintendent – Management and oversight of the field operations for the VDOT Pacific Boulevard design-build project. The contract price $1.9 million consisted of designing and constructing 0.56 miles of secondary roadway. Significant borrow material was necessary to complete the project. Duties included negotiations with property owners of borrow sites essential to secure the required material; coordination with utility companies and the service authority for removal, replacement and relocation of existing utilities; monitor quality control inspections and testing to make sure the required frequency is being met and the results are acceptable.
2. General Excavation, Inc.
3. May 2010 – August 2012

**Route 610 Garrisonville Road, Stafford County, VA**
1. General Superintendent of this $5.1 million VDOT bid-build project that consisted of 0.87 miles of grading, drainage, asphalt pavement, water, sanitary sewer, signage and traffic signals. The project included complex traffic control issues with three (3) major intersections and a daily traffic count of 50,000 VPD. The project required daily communication with the school system, VDOT and service authorities. Responsible for the safety of GEI employees and the traveling public. Coordinated with the local government agencies, commercial entities and media outlets to provide notice of upcoming lane shifts and detours. Served as the point of contact with the Stafford County Utilities Department for the upgrade to their facilities during the widening of Garrisonville Road.
2. General Excavation, Inc.

**Route 208 Courthouse Road, Spotsylvania Courthouse - Phase 1- Spotsylvania County, VA – VDOT**
1. General Superintendent – Management of a $13.4 million VDOT bid-build project consisting of 4.82 km of grading, drainage, excavation, asphalt pavement, curb & gutter, guardrail, landscaping, traffic signalization, electrical items, pavement markings, misc. concrete, pipe and structure installation and erosion & sediment control. Mr. Gallihugh was responsible for scheduling all crews and equipment. He negotiated with property owners to secure borrow and disposal sites. Participated in planning and progress meetings that included VDOT management staff, Spotsylvania County elected officials, and field supervisors. His knowledge of VDOT specifications and standards and his ability to communicate complex ideas and details to the stakeholders helped to develop positive community relations.
2. Firm: General Excavation, Inc.

**Route 234 Dumfries Road at Lake Jackson Drive – VDOT – Prince William County, VA**
1. General Superintendent – Managed a $16.2 million VDOT bid-build project consisting of 2.071 Miles of grading, construction of 3 bridges, drainage, asphalt drainage, storm water management, signs and signals. Managed and coordinated subcontractors involved with the installation of bridges, asphalt pavement, curb & gutter, guardrail and fence. He was responsible for managing GEI pipe crews and grading crews assigned to the project. Scheduling and coordinating material deliveries and their staging was an interregnal part of his daily activities. Traffic controls including detours, lane shifts and maintenance of traffic through the work zone was included in his duties.
2. Firm: General Excavation, Inc.
3. April 2001 – October 2002

**I-66 University Boulevard – VDOT – Prince William County, VA**
1. General Superintendent – Managed $11.1 million VDOT bid-build project consisting of 0.922-mile project constructing of a bridge across I-66 and the Norfolk Southern Railroad. Managed the maintenance of traffic plan, which included I-66 traffic and Norfolk Southern rail traffic. Involved close coordination with the Norfolk Southern Railroad flagmen to ensure that construction activities within the railroad right-of-way did not interfere with the train schedules. During the erection of the steel bridge spans a complete closure of I-66 was necessary and was permitted in 15-minute intervals, which involved coordination with the State Police to provide the necessary lane closures. The project was completed ahead of schedule.
2. General Excavation, Inc.
ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: Kyle Springs, PWS, PWD – Senior Project Manager/Wetlands Specialist

b. Project Assignment: Lead Environmental Manager

c. Name of Firm with which you are now associated: Bowman Consulting Group, Ltd.

d. Years experience: With this Firm 1.5 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.):

Senior Project Manager/Wetlands Specialist – Bowman Consulting Group, Ltd (Nov. 2011 – present)

Mr. Springs is a Senior Project Manager in Bowman Consulting’s Environmental Group. His expertise includes wetland and stream delineations, perennial stream determinations, 404/401 environmental permitting and monitoring, threatened and endangered species coordination, cultural resources coordination, NEPA documentation, VDOT State Environmental Review Process (SERP), Local Environmental Review Process (LERP), drainage improvement projects, residential and commercial development, wetland and stream mitigation, nutrient offset coordination, and preservation projects pertaining to wetlands, streams, surface waters, culverts and bridge replacements, retention basins, and Chesapeake Bay / Atlantic Ocean Preservation Act requirements for Resource Protection and Management Areas. Mr. Springs has completed multiple small and large scale environmental permitting projects and has worked closely with the regulatory community to ensure that these projects meet the client’s goals and needs while meeting all environmental guidelines and regulations.

Senior Environmental Project Manager – Timmons Group, Inc. (October 2005-November 2011)

Responsible for managing the Natural Resources Group personnel and projects. Expertise included managing and providing support for environmental permitting, threatened and endangered species coordination, cultural resources coordination, NEPA documentation, VDOT State Environmental Review Process, drainage improvement, residential and commercial development, mitigation, and preservation projects pertaining to wetlands, streams, surface waters, culverts and bridge replacements, retention basins, and Chesapeake Bay / Atlantic Ocean Preservation Act requirements for Resource Protection and Management Areas. Additional responsibilities included assistance in proposal preparation, interviews and contract administration. He also tracked job performance, job mark-ups for invoicing and updated deliverables. Furthermore, he was involved in long-term planning and business development.

While at Timmons Group, Mr. Springs served on a number of design-build projects including the Mecklenburg County jail where he managed the environmental aspects of a design build penitentiary for the County; the Brunswick County Jail where he also managed the penitentiary for the County; and the George Mason University Faculty Housing Facility where he completed gained Nationwide permit authorization for stream impacts associated with the project.

Project Scientist I – Environmental Services, Inc. (August 2004-September 2005)

Responsible for managing various tasks such as environmental site assessments (Phase I), wetland and stream delineations, endangered species surveys, GPS data collection, NEPA report preparation for cell towers, and USACOE permitting as well as agency correspondence and report preparation with minor graphic design. Specialties include erosion prevention through planning, design, and implementation of erosion control techniques.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
   Clemson University, Clemson, SC – BS/2002/Biological Sciences

f. Active Registration: Year First Registered/ Discipline/VA Registration #:
   2012/Professional Wetland Scientist (#2219)
   2012/Professional Wetland Delineator (#2402000131)
   2011/Erosion and Sediment Control Responsible Land Disturber (#36702)

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.)

**Lakeview Avenue, City of Colonial Heights, VA**
1.  Lead Environmental Manager. Performed documentation and received a NEPA Categorical Exclusion for the Lakeview Avenue, a ½ mile highway modernization project that involved adding a middle lane to a single lane road. Studies and documentation included; wetland delineation and confirmation, cultural resources coordination and approval, hazardous materials study, threatened and endangered species coordination, and coordination with the Petersburg National Battlefield. The project was located within the battlefield boundary. Coordination with the Petersburg National Battlefield included a written report with photographs and a concept layout to show a rendering of the finished product. Sixty percent design plans were also provided for review and comments. The project was evaluated for effect on Section 4(f) lands, and a determination of no effect was achieved.
2.  Bowman Consulting Group, Ltd.
3.  2011 - 2013

**Cowan Crossing, City of Fredericksburg, VA**
1.  Lead Environmental Manager. Performed wetland delineation, coordinated wetland confirmation, perennial flow determination and approval, and 404/401 permitting for a commercial development. Coordination with the Virginia Department of Historic Resources DHR for the issuance of a memorandum of agreement for the treatment of prehistoric and historic period artifacts and evidence of two (2) structures historical resource located in the center of the property that could not be avoided. Coordinated with the Virginia Department of Game and Inland Fisheries (DGIF) to avoid a time of year restriction for mussels, and work around a time of year restriction for anadromous fish.
2.  Bowman Consulting Group, Ltd.
3.  2013

**Temple-Conduit Right Turn Lane, City of Colonial Heights, VA**
1.  Performed documentation and received a NEPA Programmatic Categorical Exclusion for the addition of a right turn lane. Studies and documentation included; wetland delineation and confirmation, cultural resources coordination and approval, hazardous materials study, and threatened and endangered species coordination. The project was also evaluated for effect on Section 4(f) lands, and a determination of no effect was achieved.
2.  Bowman Consulting Group, Ltd.
3.  2012 - 2013

**Temple-Dimmock Left Turn Lane, City of Colonial Heights, VA**
1.  Lead Environmental Manager. Performed documentation and received a NEPA Programmatic Categorical Exclusion for the addition of a left turn lane. Studies and documentation included; wetland assessment, cultural resources coordination and approval, hazardous materials study, and threatened and endangered species coordination. The project was also evaluated for effect on Section 4(f) lands, and a determination of no effect was achieved.
2.  Bowman Consulting Group, Ltd.
3.  2012 - 2013

**Meadowville Technology Park, Chesterfield County, VA**
1.  Environmental Manager – Wetland and stream delineation and confirmation, with RPA limit coordination. Permit preparation for Meadowville Technology Parkway, a one mile road extension including one single culvert wetland crossing and one triple culvert stream crossing designed for extended detention to reduce flooding downstream during the two-year and greater storm event. Bald Eagle location and coordination with Fish and Wildlife Services for management radius around nest. Historical resources coordination for the DeSear Farmstead Site.
2.  Timmons Group, Inc.
3.  2007-2011
### KEY PERSONNEL RESUME FORM

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

<table>
<thead>
<tr>
<th>a. Name &amp; Title:</th>
<th>Ronald Van Cleve, Jr. – Senior Project Manager, Right of Way Acquisitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Project Assignment:</td>
<td>Lead Right of Way Manager</td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated:</td>
<td>Bowman Consulting Group, Ltd.</td>
</tr>
<tr>
<td>d. Years experience:</td>
<td>With this Firm 1.5 Years With Other Firms 36 Years</td>
</tr>
</tbody>
</table>

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.):

**Senior Project Manager, Right of Way Acquisitions – Bowman Consulting Group, Ltd (2011 - present)**

Mr. Van Cleve has over 36 years of experience in the utility industry, county government and engineering consulting. His specific expertise is with land rights issues and managing right-of-way agents, appraisers, title companies and survey crews. He has been a Project Manager involved with program development for over 12 years in ITS and is skilled in both analytical/technical problem solving and communication, resulting in the ability to conceptualize, design, and convey concepts to management and technical staff. He is accustomed to balancing business requirements and technical feasibility in finding solutions. Mr. Van Cleve also has experience with all aspects of project management for residential building. He has completed ITS Project Management Methodology training class and Certificate from the US Department of Transportation for ‘Pipeline Safety’ seminar.

**Senior Right-of-Way Project Manager – Greenhorne & O’Mara, Inc. (2008-2011)**

Provided Project Management for right of way projects, including responsibility for project financials and workload projections. All responsibilities required for turnkey right of way acquisitions, to include title reports, appraisals, appraisal reviews, negotiations, relocation advisory services, settlement/closings, recordation, property management, parcel file management and project status reporting documents.

**Senior Right-of-Way Project Manager – Prince William County Department of Transportation (2005-2008)**

Negotiated and recorded land rights and purchases of real property required for capital improvement projects. Functioned as liaison between property owners and county staff. Verified and calculated square footage of land rights and in property descriptions. Researched county records pertinent to land acquisition issues. Reviewed titles and appraisals. Interpreted real estate valuation principles, engineering plans, and construction drawings. Reviewed construction and utility plans and plats. Compiled data required for public hearings and condemnation proceedings. Prepared Board of Supervisor agenda items and made presentations to Board. Maintained project files and data needed for project management and court testimony. Prepared land acquisition cost estimates. Prepared RFPs and negotiated contracts for land acquisition for County road projects by consultants/contractors. Managed and coordinated land acquisition, title reports, appraisals, settlements, and relocation assistance services for County road projects. Selected as Prince William County Employee of the year in 2007 and had Washington Post article written on efforts to relocate senior citizen impacted by County project.


Thirty year career with Washington Gas. Involved with survey; right-of-way acquisition as a land agent and manager; information technology; pipeline integrity; and GIS support.

<table>
<thead>
<tr>
<th>e. Education: Name &amp; Location of Institution(s)/Degree(s)/Year/Specialization:</th>
</tr>
</thead>
<tbody>
<tr>
<td>f. Active Registration: Year First Registered/ Discipline/VA Registration #:</td>
</tr>
</tbody>
</table>

International Right-of-Way Association (IRWA) - Environmental Contamination Property certificates; Certificate from the US Department of Transportation for ‘Pipeline Safety’ seminar; Certificates from the Maryland Society of Surveyors: Maryland’s GIS, Working with National Geodetic Surveys, and Introduction to GPS Certificates from the IRWA for completion of the Principles of Real Estate Acquisition; Certificate from the National Institute of Real Estate.
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.)

**VDOT - Route 229 Project Widening Project, Town of Culpeper, VA**
1. Lead Right of Way Manager. Provided right of way acquisition services for this project. The primary purpose of this project is to improve Route 229 (N. Main Street) in the town of Culpeper from two lanes to five lanes. VDOT, in conjunction with the Town of Culpeper, proposes to improve Route 229 to a five-lane undivided highway. The project will feature sidewalk on the west side of Route 15/29 Business, plus a 10-foot shared-use path on the east side of Route 229 and the north side of Route 15/29 Business. This project originated in 1997 and at that time included the intersection improvement that later became the proposed project to construct a roundabout at Routes 15/29 and 229. The projects were split in 2008 at the request of the Town of Culpeper due to regained support of the locally administered Western Inner Loop project. A slight design change has been implemented on the southern end of the project to accommodate future construction of the Western Inner Loop Project. The length of this project is approximately 4,245’ from south of Fairview Road northward to Richmond Road and involves right of way and easements acquisition from 51 properties along the route. Project Right of Way Acquisition and Utility Relocation estimated costs are $2.3M.
   2. Bowman Consulting Group, Ltd.
   3. 2012 – 2013

**VDOT - 10th Street Project, Roanoke, VA**
1. Lead Right of Way Manager. As a subconsultant, Bowman Consulting Group was contracted as a right-of-way sub consultant to perform project management of the right-of-way and easement acquisition efforts and negotiations on more complex acquisitions. Managed two of the Prime Consultant’s right-of-way agents, coordination with appraiser and VDOT’s review appraiser, and perform negotiations on more complex acquisitions. Prepared status reports and met with VDOT’s Project Manager on two week intervals. The project involved the right-of-way and easement acquisitions from 110 parcels. The estimated right-of-way acquisition budget was approximately $0.75M.
   2. Bowman Consulting Group, Ltd.
   3. 2012 – 2013

**VDOT – PPTA I-495 HOT Lanes PPTA Project, Fairfax County, VA**
1. Lead Right of Way Manager. Provided project management to Design-Builder and was responsible for right-of-way easement acquisition, title reports, appraisals, settlements, parcels requiring use of eminent domain, relocations, property management, and environmental assessments as sub-consultant for design-build contractor of I-495 HOT Lanes PPTA Project. This effort affected approximately 145 parcels along 14 miles of the Capital Beltway from Hemming Avenue to west of the Dulles Toll Road. Managed five right-of-way agents and six appraisers; handled the relationship with the title company for all title reports and settlement efforts; and completed the ROW, easement acquisitions and relocation efforts without impacting the construction schedule. Total budget for right-of-way acquisition was approximately $42M.
   2. Greenhorne & O’Mara, Inc.
   3. 2012 – 2013

**Minnieville Road Expansion Projects (East and West), Prince William County, VA**
1. Project Manager responsible for title reports, appraisals, negotiations, settlements and right-of-way acquisition required as part of the Minnieville Road Widening Projects. Total budget for ROW acquisition was approximately $7M.
   2. Prince William County Department of Transportation
   3. 2012 - 2013

**Spriggs Road Expansion Projects (South and North), Prince William County, VA**
1. Project Manager responsible for title reports, appraisals, negotiations, settlements, and right-of-way acquisition required as part of the Spriggs Road Widening Project in affecting 127 parcels. Total budget for right-of-way acquisition was approximately $7M.
   2. Prince William County Department of Transportation
Attachment 3.4.1(a)

Lead Contractor Work History Forms
Pacific Boulevard Widening (Design/Build)  
Loudoun County, VA

Kimley Horn & Associates, Inc.

Virginia Department of Transportation  
703.259.2947  
Timothy Hartzell, PE  
timothy.hartzell@VDOT.Virginia.gov

July 2011  
August 2012  
$1,850  
$1,964  
$927

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.

Scope of Work
- Design/Build Delivery
- ROW Acquisition from multiple property owners, including commercial condominium
- Existing traffic patterns changed during construction
- Geotechnical investigation of existing conditions critical to design approval

Proposed Personnel for this Project
- Scott Hunter – Design/Build Manager
- Page Gallough – Construction Manager
- Brian Harris – Administrative Project Manager

Lessons Learned
- Daily maintenance of MOT devices
- Agressively pursue ROW acquisition
- Perform geotechnical investigations early in the process
- Keep all key personnel engaged in the project for the entire duration
- Secure off-site disposal and borrow areas as soon as possible

The last noteworthy challenge related to the condition of the existing soils and material encountered. Since the existing material was determined to be unsuitable, several options were presented when considering how best to treat the material, including the use of geotextile fabrics and soil stabilization treatments. To minimize impacts to the schedule, the material was undercut, removed from the project, and replaced with suitable material from several off-site borrow sources. The Pacific Boulevard Widening project also required a designed detour and Traffic Management Plan (TMP). The existing Pacific Boulevard roadway was closed for a limited period of time in order to facilitate construction of the widening. This closure necessitated that a detour be implemented in order to maintain access to businesses on the north end of the project. Since a portion of the work required the complete reconstruction of Relocation Drive, the TMP included provisions to demolish and reconstruct Relocation Drive under traffic using daily lane closures and flaggers. The project was completed without any reportable incidents or accidents.

Evidence of Performance
GEI reached substantial completion on time and within budget even after encountering unforeseen substantial undercut due to soils with high moisture content associated with the time of year construction had to begin. No recordable Lost Time Accidents reported.
**LEAD CONTRACTOR - WORK HISTORY FORM**

**ATTACHMENT 3.4.1(a)**

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Name of the prime design consulting firm responsible for the overall project design.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 208 – Courthouse Bypass, Spotsylvania County, VA</td>
<td>VDOT – Fredericksburg Design Unit</td>
</tr>
<tr>
<td>c. Contact information of the Client or Owner and their Project Manager who can verify Firm’s responsibilities.</td>
<td>Virginia Department of Transportation 540.899.4133 C. Dennis Williams 540.899.4300 <a href="mailto:charles.williams@vdot.virginia.gov">charles.williams@vdot.virginia.gov</a></td>
</tr>
<tr>
<td>d. Contract Completion Date (Original)</td>
<td>e. Contract Completion Date (Actual or Estimated)</td>
</tr>
<tr>
<td>f. Contract Value (in thousands)</td>
<td>g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement. (in thousands)</td>
</tr>
<tr>
<td>Original Contract Value</td>
<td>Final or Estimated Contract Value</td>
</tr>
<tr>
<td>$13,463</td>
<td>$14,400</td>
</tr>
<tr>
<td>$14,400</td>
<td>$14,400</td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>

**PROJECT SCOPE AND DESCRIPTION**

GEI was the Prime Contractor for this 4.82 km section of Route 208 in Spotsylvania County. This project consisted primarily of the construction of a new four-lane divided roadway and included embankment excavation, clearing, miscellaneous concrete items, pipe and structure installation, utility relocations, asphalt pavement, curb & gutter, guardrail, SWM, landscaping, traffic signalization, and pavement markings. Construction elements included a new divided four-lane roadway, traffic signals, guardrail installation, drainage facilities, stormwater detention facilities and other features. Work items included earthwork, fine grading, underground construction, asphalt concrete, environmental mitigation and traffic control on both the primary and secondary road systems.

The project was constructed in two phases each with numerous stages. Phase I consisted of the construction of the new EBL and WBL of Route 208 between existing 208 and Route 613. The Route 613 improvements were also completed in Phase I of the construction sequence. Phase II consisted of the completion of the remainder of mainline Route 208 and final surface paving and pavement markings. The project was carefully scheduled and staged specifically to avoid traffic disruptions during peak volume periods and in the area of the courthouse. In order to accomplish these critical objectives, GEI’s Team communicated closely with numerous third parties including the National Park Service, County government, the Spotsylvania School Board, utility owners, businesses and residents keeping them well informed of progress on the project and any upcoming construction activities, traffic shifts, road closures, and/or new traffic patterns that would impact the traveling public.

**PROJECT COMPLEXITY**

There were two significant aspects of the project that required special attention throughout the course of design and construction. The first was ensuring that all of the commitments made to the National Park Service were adhered to throughout the life of the project. This included verifying survey data noting the limits of construction relative to the location of the National Battlefield. Special attention was given to material haul routes within the limits of the project to be sure construction activities did not encroach on the historic battlefield. Commitments were made to the Park Service that the viewshed to the battlefield would be preserved and special accommodations were provided to add scenic pull off areas with signs noting specific details of the Civil War battles that occurred in Spotsylvania County.

The second distinguishing feature of this project was the construction of an off-site wetland mitigation site. The wetland mitigation site was noted as a necessary element of work required to comply with the environmental documents. The site was designed and constructed to fulfill environmental requirements not only for this project, but also for later phases of Route 208 construction. Since the new four-lane divided highway was primarily constructed on an alignment that intersected and cut off several secondary roadways, a detailed TMP was required to facilitate the safe construction of the project and ensure that all motorists, school buses, and first responders were provided with sufficient information noting in advance the exact dates and times of significant changes to the traffic patterns. GEI’s Team met with many of the local residents to inform them of upcoming changes and public meetings were held to inform schools, the courthouse, and emergency services. Maintaining an open line of communication with third parties and stakeholders is a critical key to ensuring the timely delivery of a project. Engaging these key partners early in the design process and keeping them informed of progress ensures that their opinions are considered and that they will assist with keeping others informed of changes to traffic patterns as milestones dates are met. GEI’s ability to manage and schedule the operations of this project enabled us to deliver this vital project to VDOT and the people of Spotsylvania County on time and within budget. The safety of the construction staff and public was maintained throughout the entire project with no recordable lost time accidents or incidents reported.

**Evidence of Performance**

GEI successfully completed the project on time and within budget working within cultural and environmentally sensitive areas. No recordable Lost Time Accidents reported.
a. Project Name & Location
University Boulevard Extension / I-66 Overpass
Prince William County, VA

b. Name of the prime design consulting firm responsible for the overall project design.
Dewberry & Davis, LLC

Virginia Department of Transportation
703.815.3239 NOVA District
William Green (retired)
571.329.5418 (cell)
wgreen@volkert.com

Project Name & Location
University Boulevard Extension / I-66 Overpass
Prince William County, VA

b. Name of the prime design consulting firm responsible for the overall project design.
Dewberry & Davis, LLC

Virginia Department of Transportation
703.815.3239 NOVA District
William Green (retired)
571.329.5418 (cell)
wgreen@volkert.com

d. Contract Completion Date (Original)
Sept. 2006

e. Contract Completion Date (Actual or Estimated)
Sept. 2006

f. Contract Value (in thousands)
$11,157

Original Contract Value
$12,134
(8.8% increase to the final contract value was due to approved change orders - one of significant value that added a retaining wall, and asphalt and fuel adjustments)

Final or Estimated Contract Value
$5,968

g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement (in thousands)
$5,968

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.

Scope of Work
- Construction work within a limited access road
- Bridge construction over an interstate
- Retaining wall construction
- Pedestrian trail adjacent to limited access road
- Detailed traffic management plan required

Similar Project Management Team
- Scott Hunter – Responsible in Charge
- Page Gallihugh – Construction Manager

Lessons Learned
- Develop a MOT/TMP plan that reduces the impact to the traveling public and surrounding businesses while enabling safe construction practices. GEI successfully revised the approved MOT plan for the project to achieve this objective.
- Engage local utility companies early to ensure timely delivery of utility relocation and new power and communications to traffic signals.

PROJECT SCOPE AND DESCRIPTION
General Excavation, Inc. (GEI) served as the Prime Contractor to VDOT for the University Boulevard project. University Boulevard is a 1.3-mile connector road located in Prince William County that carries over 56,000 vehicles per day from Wellington Road to Route 29, north of the Route 29/I-66 interchange. Since both Route 29 and Wellington Road are the primary routes utilized to access concerts and events held at the Nissan Pavilion (now Jiffy Lube Live), special consideration was taken to ensure construction activities were closely coordinated with the timing of these events to limit the impact the project would have on the flow of traffic to and from the Pavilion.

The project also included the construction of a box culvert and MSE retaining walls. Two new traffic signals were constructed where the alignment of University Boulevard intersected Route 29 and Wellington Road. Coordination with local utility companies was required to ensure that the appropriate power and communication services were available to both of these traffic signals when requested enabling the roadway to be opened to traffic and the project completed on time. The University Boulevard project also required the removal of over 27,000 cubic yards of unsuitable material, and importing over 230,000 cubic yards of suitable borrow material.

PROJECT COMPLEXITY
One of the significant features of this project was the construction of a 477 bridge structure over both I-66 and the railroad right-of-way, which is owned and operated by Norfolk Southern. The as-bid maintenance of traffic plan included a schedule that permitted traffic on I-66 to be stopped in 15 minutes increments during off-peak hours at night to erect and set the structural steel. After carefully reviewing traffic flows, an alternate plan was implemented that detoured traffic off of I-66 around the work zone during the erection of the steel beams. The utilization of this detour created a safer work environment, facilitated a longer work period, and significantly reduced the duration of the impact to the traveling public during the erection process. The MOT plan was also implemented so that the concrete piers on both sides of I-66, as well as in the median, were constructed without having to stop or detour traffic. Traffic barriers were placed on both sides of the highway to shift lanes away from the work crews and equipment so that traffic could flow smoothly and uninterrupted while the bridge work continued. Carefully reviewing and monitoring traffic patterns, flows, and volumes are key factors to developing a workable TMP.

The successful implementation of the TMP involves proper notification to the traveling public and other stakeholders, who may be impacted by work on the project. All of these strategies and techniques were employed successfully on the University Boulevard project, which enabled work to be prosecuted safely and with the least possible disruption to traffic and local residents and businesses.

Evidence of Performance
GEI suggested an alternative TMP plan during the bridge construction which was accepted and eliminate significant traffic congestion along I-66 during special events, and the need to stop traffic for installation of steel beams.
Attachment 3.4.1(b)

Lead Designer Work History Forms
### PROJECT SCOPE AND DESCRIPTION

**RK&K’s Raleigh office** served as the Lead Designer for the entire project with assistance from RK&K’s Richmond office. The 6.4 miles of I-40, from west of Wade Avenue to east of Jones Franklin Road is a critical commuter freeway with traffic volumes that exceed 130,000 per day and was the source of rush hours that lasted for hours. Contracted by the North Carolina Department of Transportation to reduce congestion and improve traffic flow, the RK&K Design-Build team widened the existing four-lane divided roadway to a six-lane divided facility. The project also included widening dual bridges over US 1/US 64 and dual bridges over eastbound Wade Avenue. With innovation and an aggressive design and construction schedule, the project approach circumvented complex traffic issues and was successfully completed nearly a full year ahead of schedule.

**Highway/Roadway Design:** I-40, known as the Triangle’s “Main Street,” is also a critical freeway. Traffic volumes exceeded 130,000 per day, which is far above the capacity of a freeway in this area, and led to an evening rush hour that could last for three hours eastbound.

This rolling urban freeway with a 70 mph design speed included the following roadway improvements: The design of one 12-foot wide lane in each direction of I-40 expanding the interstate from four to six lanes; a 12-foot wide paved shoulder was added in each direction, built to the same depth as the roadway, which allows for easier expansion of the highway in the future; median guardrail was installed throughout the project and guardrail was replaced on the outside shoulders; at the eastbound I-40/Wade Avenue split, the roadway was expanded to provide three lanes for I-40 from the current two lanes.

**Pavement Markings and Signing:** As a heavily traveled urban facility, special attention was focused on signing and pavement markings.

**Intelligent Traffic Systems:** Responsible for the design of ITS communications cable routing plans, CCTV cameras, and ITS.

**Bridge Design:** Structural Engineering: Structures were designed for the bridge widening at Wade Avenue and US 1 / 64, as well as two sound barrier walls.

### Evidence of Performance

*RK&K received an impressive technical score of 93% during the design-build selection process demonstrating the team had the experience and qualifications necessary to provide cost-effective and innovation solutions*

**AWARDS**

- 2011 AGC Pinnacle Award for Best Highway Project in the Carolinas
- 2010 NAPA Safety Innovation Award

“I commend the entire Design-Build Team for completing this project quickly, safely, and cost-effectively. The Design-Build Team’s efforts exceeded NCDOT’s expectations in innovation during both design and construction. Despite the numerous and complicated traffic control, schedule, subgrade, and public information challenged of this project, the S.T. Wooten/RK&K total ‘team approach’ and responsiveness to the NCDOT contributed to one of North Carolina’s finest transportation achievements.” ~NCDOT

### Utilities

- Responsible for the identification of conflicting utilities, coordination of Level “A” S.U.E. data and management of utility coordination efforts.
- Utility design included the design and permitting of water services for the construction office and asphalt plant facilities.

### Lessons Learned

- When widening to the median, using alternate methods for delivering materials to the median reduces exposure to traffic and reduces construction time.
- Close coordination with subconsultants and the Contractors is vital to a successful design-build project.
- Using staged submittals of design plans (structure, traffic controls, erosion control, etc.) allowed work to begin much earlier than following the typical process.
- The process works especially well for median widening because right of way and permits are minimal.
- Additional traffic studies are valuable to show additional hauling during the day will not impact the traveling public. Also, the additional hauling during the day helped reduce the construction time.
a. Project Name & Location: ROUTE 250 BYPASS INTERCHANGE AT MCINTIRE ROAD

b. Name of the prime/ general contractor responsible for overall construction of the project: General Excavation Inc.

c. Contact information of the Client and their Project Manager who can verify Firm’s responsibilities: City of Charlottesville

434.970.3182
Angela Tucker
434.970.3182
tucker@charlottesville.org

June 2015
December 2014 (estimated)

$20,377
$20,000 (estimated)

$5,900

d. Construction Contract Completion Date (Original):

e. Construction Contract Completion Date (Actual or Estimated):

f. Contract Value (in thousands):

g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement (in thousands):

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

**project. As of the interchange concepts has been established and procurement of the project. Phase III services consist of construction management and associated with adjacent medical facility. RK&K performed traffic engineering analyses using SIDRA based on projected 2030 design year traffic volumes as well as several interim years to determine the most appropriate configuration for the roundabouts, considering the number of approach and circulating lanes, the location of separate right turn bypass lanes, and the need for lane continuity through the interchange to reduce potential driver confusion. The operational models recommended in Chapter 6 and Appendix M of NCHRP Report 572 “Roundabouts in the United States” were also used to verify the accuracy of the SIDRA results.

**Successful Delivery:** This project demonstrates a very successful planning, coordination and public outreach effort to deliver the project in the face of highly motivated opponents.

**Lessons Learned:** This project is being administered by the City of Charlottesville with oversight by VDOT and FHWA. In addition, there has been intense interest by the community including local neighborhood associations, non-profit organizations, a private school and numerous civic groups. In order to facilitate development of this context-sensitive project, RK&K adopted an aggressive public involvement approach which included a project web site (www.250interchange.org), over a dozen workshops with an 18 member steering committee, regular updates to City Council, neighborhood meetings, public workshops and coordination with local, state and federal oversight agencies. Without this pro-active approach, this project would not have advanced to the construction stage. Our extensive knowledge of VDOT’s project development process and the Local Assistance Manual helped ensure that we were prepared in advance of required submittals. We also prepared VDOT’s forms to help accelerate their review and submittal process.

**Evidence of Performance:** The success of this project is due to the inclusion of all stakeholders in the development of the project with a dedication to coordinate “early and often” with local, state and federal agencies. This approach allowed our team to identify potential roadblocks early-on where they could be addressed before they impacted the schedule.
### Relevant Scope of Work
- Roadway
- Bridge Design
- Hydraulics
- Stormwater Management
- TMP (SOC)
- Signing
- Pavement and Marking
- Quality Assurance
- Quality Control
- Project Management

### Similar Scope and Complexity
- Roadway widening from two lanes to four-lanes divided
- TMP with phased E&S
- Maintain connections to roadways, driveways and entrances
- Extensive coordination with utility relocations

### Proposed Personnel for this Project
- Owen Peery, PE
- Ryan Masters, PE
- Mike Hogan, PE

### PROJECT SCOPE AND DESCRIPTION
RK&K provided final plans to VDOT. RK&K’s Richmond Virginia staff was responsible for the following:

This two-mile section of Route 58 begins at Route 667 and ends at Route 638. The project widened the existing two-lane road to a four-lane divided facility, matching previous work to the west. Design work included major drainage and stormwater management designed to the latest standards, extensive coordination with utility relocations and two new structures over the Middle Fork of the Holston River. This rural principal arterial was designed with a 55 mph design speed and includes a graded median along with left and right turn lanes at intersecting roadways.

RK&K developed the traffic control plan to encompass the proposed road improvements along with the bridges and utility relocations. The new alignment was selected to ensure that one new bridge could be constructed while maintaining the existing road and bridge. Many of the utility relocations could not be completed until the large cut slopes were in place. The roadway, drainage, bridge and retaining wall elements were carefully evaluated to determine which elements impacted existing utilities. RK&K provided VDOT with a comprehensive TMP that included phased sequencing of the construction while accommodating utility coordination, earthwork operations, and maintenance of traffic.

While updating the shelved plans, we discussed that the recently completed section that tied to this project had been constructed six inches below its proposed elevation. A supplemental survey confirmed this change and allowed us to adjust the profile and drainage to correctly tie. Attention to detail by the Design Team removed a potentially costly change order in the field.

### Lessons Learned:
- Deep cuts required phasing proposed utility relocations to coincide with earthwork operations
- Ensure sight distance and design speed of cross-overs during maintenance of traffic
- Existing farm entrances may require permanent and temporary accommodations for oversized vehicles
- Verify adjacent construction to ensure it was built according to plans and not just rely on as-builts.

### Evidence of Performance
RK&K took this project, which had been “shelved” for a number of years, and upgraded all design elements to current standards and had the project ready for PAC in four months to meet VDOT’s desired advertisement schedule.