January 10, 2013

IN ASSOCIATION WITH:
Turn-Key Tunneling, Inc.
EBA Engineering, Inc. (DBE)
EMSI Engineering, Inc.
Rinker Design Associates, P.C. (SWaM)
Appraisal Review Specialists, LLC
Metro Title, LLC
Engineering & Materials Technologies, Inc. (DBE)
H&B Surveying and Mapping, LLC (DBE)
Sharp & Company, Inc. (DBE)

Request For Qualifications
A Design-Build Project

Route 7
Westbound
Truck Climbing Lane

From: Route 9
To: West Market Street

State Project No.: 6007-053-133, R201, C501
Federal Project No.: STP-5401 (518)
Contract ID Number: C00058599DB54

Loudoun County, Virginia

IN ASSOCIATION WITH:
Turn-Key Tunneling, Inc.
EBA Engineering, Inc. (DBE)
EMSI Engineering, Inc.
Rinker Design Associates, P.C. (SWaM)
Appraisal Review Specialists, LLC
Metro Title, LLC
Engineering & Materials Technologies, Inc. (DBE)
H&B Surveying and Mapping, LLC (DBE)
Sharp & Company, Inc. (DBE)
Mr. Kevin Reichert, P.E.
Alternate Project Delivery Office
Virginia Department of Transportation
1401 East Broad Street
Richmond, VA 23219

Re: Request for Qualifications – A Design-Build Project
   Route 7 – Westbound Truck Climbing Lane
   RFQ No.: C00058599DB54

Dear Mr. Reichert:

In accordance with the requirements of the Request for Qualifications, we are pleased to submit our Statement of Qualifications (SOQ) for VDOT’s consideration.

General Excavation, Inc. (GEI) has delivered over $250 million of various transportation projects to VDOT across the Commonwealth since the company’s incorporation in February 1983, including the Pacific Boulevard Widening project, a recent Design-Build project completed for VDOT in Loudoun County. Several of our projects have received recognition by VDOT for construction excellence. GEI has been widely recognized for its dedication to providing quality projects, delivered on time and within budget.

Our design partner, Whitman, Requardt and Associates, LLP (WR&A) has been chosen because their solid reputation with VDOT reflects GEI’s values when performing and completing work for the Department. WR&A has provided engineering, planning and construction management services to VDOT for over 60 years, including recent experience providing extensive design services to VDOT’s Northern Virginia District.

GEI has included Turn-Key Tunneling, Inc. on the Design-Build Team based on their tunneling, boring/jacking and sliplining experience and a history of working with GEI on previous successful projects. Turn-Key’s involvement reflects our commitment in mitigating two of the projects critical risks. These risks include the maintenance of traffic at the Route 9 Interchange on the eastbound entrance ramp to Route 7 and the improvements of the existing corrugated metal pipes that are in poor condition throughout the corridor.

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

Section 3.2.2 – Point of Contact for the Offeror
Mr. Scott C. Hunter – Vice President // 9757 Rider Road // Warrenton, VA 20187
Tel: (540) 439-2202 // Fax: (540) 439-3795 // E-mail: shunter@gei-va.com

Section 3.2.3 – Principal Officer of the Offeror
Mr. Scott C. Hunter – Vice President // 9757 Rider Road // Warrenton, VA 20187 // Tel: (540) 439-2202

Section 3.2.4 – Offeror’s Corporate Structure/Financial Responsibility
General Excavation, Inc. is a Virginia Corporation. General Excavation, Inc. shall take full financial responsibility for the project. There are no liability limitations.
Section 3.2.5 – Full Legal Name of Lead Contractor and Lead Designer

Lead Contractor: General Excavation, Inc.
Lead Designer: Whitman, Requardt and Associates, LLP

Section 3.2.6 – Affiliated/Subsidiary Companies of the Offeror

General Excavation, Inc. does not have any affiliated and/or subsidiary companies.

Section 3.2.7 – Certificate Regarding Debarment Forms

The Certificate Regarding Debarment Form Primary Covered Transactions and Certificates Regarding Debarment Form Lower Tier Covered Transactions are provided in the Appendices and Attachments section of this submittal.

Section 3.2.8 – Offeror’s VDOT Prequalification Number and Current Status

General Excavation, Inc.’s prequalification number is G181. GEI’s prequalification status is active and a full-size copy of the certificate is located in the Appendices and Attachments section of this submittal.

Section 3.2.9 – Surety or Insurance Company Letter

The required Surety or Insurance Company letter stating that General Excavation, Inc. is capable of obtaining a performance and payment bond based on the current contract value is provided in the Appendices and Attachments section of this submittal.

Section 3.2.10 – Virginia State Corporation Commission (SCC) and Virginia Department of Professional and Occupational Regulations (DPOR)

The Attachment 3.2.10, full-size copies and other evidence of the Team’s SCC Certificates and DPOR Registrations are located in the Appendices and Attachments section of this submittal.

Section 3.2.11 – DBE Participation Goal

General Excavation, Inc. commits to VDOT that the GEI Team will achieve a DBE participation goal of 15%.

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

The combination of the construction experience of GEI and design experience of WR&A provides a strong relationship that VDOT can count on for successfully delivering the Route 7 project. We look forward to the opportunity to be the Design-Builder for the VDOT Route 7 – Westbound Truck Climbing Lane project. Should you have any questions, need clarification or require additional information, please call (540) 439-2202.

Sincerely,
GENERAL EXCAVATION, INC.

Scott C. Hunter,
Vice President
3.3 Offeror’s Team Structure

The Firms and Key Personnel represented on the GEI Team have been chosen to lead this endeavor based on their proven track record of working cooperatively and constructively in a team environment. GEI and WR&A have an impressive history of constructing and designing VDOT projects in Northern Virginia.

3.3.1 Key Personnel

Detailed resumes of all Key Personnel listed below are located in the Appendices as Attachment 3.3.1.

<table>
<thead>
<tr>
<th>Scott Hunter</th>
<th>Design-Build Project Manager</th>
<th>GEI</th>
<th>26 Years of Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scott Hunter has over 26 years of experience and will serve as the Design-Build Project Manager (DBPM) for the project. He served as the DBPM on GEI’s Pacific Boulevard Widening Design-Build project, located in Loudoun County and administered by VDOT’s Northern Virginia District. He has provided similar services on large VDOT projects including the $46 million I-95/Route 627 Interchange project in Stafford County, the $38 million I-66 HOV Widening project between Route 234 and the Route 234 Bypass in Prince William County. Mr. Hunter’s Design-Build background includes experience working on Phase 1 of the $1.6 billion Dulles Corridor Metrorail project in Fairfax County, as well as the Dulles Greenway project in Loudoun County. <strong>He will oversee and be responsible for the timely delivery of this project and to ensure each team member is performing at acceptable levels.</strong></td>
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<table>
<thead>
<tr>
<th>Robert Shackelford, P.E.</th>
<th>Quality Assurance Manager</th>
<th>WR&amp;A</th>
<th>21 Years of Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robert Shackelford, P.E. will serve as the Quality Assurance Manager (QAM) for the project and operate separately and independently from construction operations. He has 21 years of experience in the construction industry and was a former DCE and ACE in the VDOT Fredericksburg District performing similar Quality Assurance and responsible charge roles. He is also a <strong>registered, licensed, Professional Engineer in Virginia</strong>. Mr. Shackelford will be responsible for the Quality Assurance (QA) inspection and testing of all materials used and work performed, to include monitoring of the contractor’s Quality Control (QC) program. He will ensure that all work and materials, testing, and sampling are performed in accordance with the contract requirements and the <strong>“Approved for Construction”</strong> plans and specifications.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>John Maddox, P.E.</th>
<th>Design Manager</th>
<th>WR&amp;A</th>
<th>27 Years of Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Maddox, P.E. is a <strong>registered, licensed, Professional Engineer in Virginia</strong> with 27 years of experience designing major highway facilities and will serve as the Design Manager (DM) for this project. He has been performing as a Design Manager for over 20 years including several similar widening projects in the Commonwealth. Mr. Maddox will be responsible for coordinating the individual design disciplines and ensuring the overall project design is in conformance with the Contract Documents. In addition, he will establish and oversee the design QA/QC program for all appropriate disciplines involved in the design of the project including the review of design plans, working plans, shop drawings, specifications and constructability for the project.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Page Gallihugh</th>
<th>Construction Manager</th>
<th>GEI</th>
<th>23 Years of Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Page Gallihugh will serve as the Construction Manager (CM) for this project. He has 23 years of experience on VDOT projects and for the past 11 years has worked as a Construction Manager for GEI. He holds several certifications including a DCR Responsible Land Disturber, VDOT Erosion and Sediment Control Contractor and is a certified Traffic Control Supervisor Instructor. He provided oversight of all field operations on GEI’s Pacific Boulevard Widening Design-Build project and the Route 208 project in Spotsylvania County. He will implement and oversee the maintenance of traffic during construction to ensure the safety of both the motorists and pedestrians.</td>
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</tbody>
</table>
3.3.2 Team Organizational Chart

The Organizational Chart located on the previous page provides a visual overview of the functional relationships and lines of communication for our Team. A distinct separation of Quality Assurance and Quality Control for construction activities is shown. Key Personnel are denoted with a “key” symbol.

Organizational Narrative

The Design-Build Project Manager (DBPM), Scott Hunter will be the single point of contact for VDOT. Mr. Hunter will serve as a communication link between the Design-Build Team and VDOT. Any issues or clarifications of the contract documents will be handled by him. The DBPM will coordinate progress and final drawings for review by VDOT. He will lead in generating alternative technical concepts during the bid and design phases of the project. Additionally, the DBPM will submit to VDOT a baseline project schedule for review. A detailed CPM schedule will be maintained and submitted to VDOT. The DBPM will also ensure that any and all required permits are acquired with copies submitted to VDOT. The DBPM will facilitate final inspections and an audit of the project with VDOT and the QAM to ensure the project was designed and constructed in conformance with the requirements of the contract. VDOT will review with the DBPM the appropriate documents relating to the final close-out of the project.

The DBPM will bear full responsibility for the successful completion of this project and is accountable for the overall communication and coordination of all team members. He will create a work environment that promotes a collaborative, results-oriented atmosphere and lead team members, including VDOT and other parties. This environment will optimize understanding project objectives, mutually protect the parties from contractual non-conformities, and empower our representatives to operate in a manner where they can make decisions appropriate to their level of responsibility.

Design-Build Management Team

In cooperation with the Design-Build Project Management Team, the DBPM will devise a plan for managing the entire project to a successful completion. In addition to the actual design and construction of the project, major elements of the plan will include QA, QC, Safety, Environmental Compliance and Public Relations.

- The Quality Assurance Manager (QAM) for this Project, Rob Shackelford, P.E., will develop the Quality Assurance and Quality Control Plan (QA/QC Plan) for review and approval by VDOT as well as implementation by the DBPM. The plan will ensure all aspects of design and construction meet the VDOT requirements of the Design-Build Manual. The QAM will establish testing and reporting standards to be implemented on the project. The QAM will monitor the contractor’s Quality Control.
practices and will review reports to ensure compliance with the requirements set forth in the QA/QC Plan. Mr. Shackelford will report directly to the DBPM.

- The **Design Manager** for this Project, *John Maddox, P.E.*, will coordinate the individual design disciplines and ensure the overall project design is in conformance with VDOT design standards as specified in the Contract Documents. Mr. Maddox will utilize input received from the DBPM and the Construction Manager (CM) to develop the design in conformance with the QA, QC, Safety and Environmental plans. Mr. Maddox will report directly to the DBPM, and will communicate with the CM to resolve any constructability issues that may arise. He will attend progress meetings and provide guidance in resolving changes to the design with the CM.

- The **Construction Manager (CM), Page Galliugh**, will report directly to the DBPM. As the CM, he will be on the project site for the duration of construction activities and will oversee the work of the construction team. Mr. Galliugh will also oversee the Quality Control activities to ensure that all of the materials used meet the “Approved for Construction” plans and specifications. Mr. Galliugh will also oversee the MOT operations for the project ensuring that all lane closures and detours are in full compliance with the Manual of Uniform Traffic Control Devices and the latest version of the Virginia Work Area Protection Manual. He will be involved during the design process to review and make recommendations on the TMP/MOT plan to ensure the anticipated construction phasing and methods are followed. In addition to management of field operations, the CM will support the Design Team in their efforts by working with the DM to review constructability issues during development of plan design.

- The **Project Safety Director, Harry Newlin**, will work with the DBPM to mitigate identified safety issues and risks. He will analyze the scope of the project and communicate possible safety issues and concerns related to design to the DM through the DBPM. The Safety Director will make regular visits to the project site to check for compliance, identify new issues and will report directly to the DBPM. He will also communicate openly with the CM to coordinate appropriate training of construction crews, through “tool box safety talks” and more formal training as necessary.

- The **Environmental Compliance Manager, Glenn Wilson**, will conduct an environmental assessment and will report his findings directly to the DBPM. Mr. Wilson will then review the project design and QA/QC Plan for consistency with his recommendations. During construction, he will make regular visits to the site checking for compliance and identifying any new issues and risks.

- The **Public Relations Manager, Amanda Baxter**, will develop a Public Relations Plan for the project and will partner with the Northern Virginia Regional Park Authority (NVRPA) on the design of the W&OD Trail modification and implement the TMP Public Communication Plan. The Public Communication Plan will be developed to inform the public of potential lane closures, timing of cross-over closures, and permanent impacts to existing traffic patterns. She will work directly for the DBPM and will coordinate with VDOT and media outlets to inform the general public on all relevant aspects of this project.

**Quality Assurance Team**

The Quality Assurance Team, led by *Rob Shackelford, P.E.*, will establish the QA/QC Plan that complies with the Minimum Requirements for Quality Assurance and Quality Control on Design-Build and P3 Projects Manual dated January 2012. He will distribute and enforce the Plan with support from the DBPM. Mr. Shackelford will communicate with VDOT to clarify any issues with regard to VDOT standards and specifications. The DBPM will review the
QA/QC Plan for conformance to the Contract Documents and submit the plan to VDOT for approval. The QAM will also ensure that the contractor follows the "Approved for Construction" plans and specifications. At project completion, the DBPM and the QAM will work together to ensure all final record documents and releases required by VDOT are in place to facilitate the close-out of the project.

- **Testing and Inspections** – WR&A shall provide the personnel to perform material sampling, testing and reporting in accordance with the frequencies required by the QA/QC Plan. The QA Inspectors will carry out their duties and report their findings directly to the QAM.

- **Independent QA Testing Lab** – Engineering and Materials Technologies, Inc. shall provide the independent lab testing for the QA function of the project and will report directly to the QAM.

**Design Team**

The Design Team, led by John Maddox, P.E. will manage all elements of the design for the project. He will be leading a proven Team of WR&A engineers, who have worked together for many years and on similar VDOT projects. He will report directly to the DBPM and lead all design disciplines. He will be supported by the following WR&A staff:

- **Structural Design** – Jeremy Schlussel, P.E. with 15 years of experience will lead the structural design efforts for the Route 7 project. He will ensure all structural designs are completed in accordance with VDOT’s Road and Bridge Standards and design manuals. Mr. Schlussel is currently providing similar design services on two Design-Build projects in Virginia.

- **Roadway Design** – Bruce Barnett, P.E. has over 22 years of experience and will lead the roadway design based on his history of designing projects for the VDOT NOVA District. He has completed over 80 assignments under the NOVA District On-Call Design Contract over the last four years.

- **Hydraulic Design** – Ipek Aktuglu, P.E. has over 11 years of experience and will lead the storm drainage and stormwater management design efforts for the project. She is currently providing similar services to the VDOT NOVA District under WR&A’s On-Call Design Contract.

- **Geotechnical Engineer** – Jeff Basford, P.E. will provide the final geotechnical reports for the roadway improvements and the tunnel foundations. For 12 years he has provided geotechnical engineering services for VDOT, including major widening projects. He is currently working on two Design-Build projects in Virginia.

- **Traffic Engineering and TMP** – Dana Trone, P.E., PTOE with over 16 years of experience will lead the traffic engineering efforts for the project. A critical element will be the development of the TMP including the analysis of each phase of construction with close coordination with the roadway staff. She has worked on several complex TMPs in the NOVA District and recently led the traffic engineering efforts for the Fairfax County Parkway Interchange at Fair Lakes Parkway.

- **Design QA/QC Manager** – Mark Vasco, P.E. will follow the QA/QC Plan for the design of the project, which will be coordinated with all design disciplines and with the project design and construction QA/QC Plan. He has 29 years of experience in designing projects for VDOT and has a complete understanding of VDOT’s design requirements and the VDOT Road and Bridge Specifications. He is also working in a similar capacity on the George Mason Design-Build project for the Route 123 improvements.
The Design Team coordination efforts are greatly enhanced due to WR&A’s ability to complete all design disciplines with our in-house staff. To assist in meeting the DBE requirements for the project, the surveying efforts will be completed by H&B Surveying and Mapping, LLC, which has worked with WR&A on numerous projects in Virginia.

**Construction Team**

The Construction Team, led by Page Gallihugh, will lead 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 that may be identified. The CM will communicate project specific baseline quality, environmental, and safety standards to the Team.

- **Quality Control Manager (QCM)** – James Cleveland, P.E. of EBA will work closely with the CM to communicate and execute the Construction Quality Control program of the QA/QC Plan. Together they will be responsible for ensuring all work performed meets the requirements of the “Approved for Construction” plans and specifications and to arrange for all QC testing on the project. EBA QC Inspectors will provide the necessary testing and sampling of materials and will make on-site recommendations to senior field personnel to efficiently ensure compliance according to the QC materials sampling and testing frequencies set forth in the QC portion of the QA/QC Plan. The QC Lab Testing will be provided by EMSI Engineering, Inc.

- **Scheduling/Project Controls**, performed by Brian Harris in conjunction with the CM, will solicit input from the Right-of-Way Manager, Design Team and Construction Team to develop an appropriate baseline schedule and process to be followed for progressing and updating the schedule during construction.

- **Construction Project Manager** – Will Ashwell will work closely with the CM and DBPM by providing administrative project management, including contract administration, purchasing, facilitating project scheduling, coordination of suppliers and subcontractors, and assisting in management of field construction activities.

- **Construction Superintendent** – Grant White will report directly to the CM and will be responsible for the various construction foremen on the project. He will work closely with the Construction Project Manager to ensure the construction personnel have the necessary equipment and materials to perform their work as scheduled.

- **Utility Coordinator** – Daniel Seli, P.E. will coordinate the relocation of all private utility companies required by the project design and supervise the design of all public utilities. During the construction of the utility relocation, he will report directly to the CM to ensure all utilities are cleared for construction of the project.

- **Road Tunneling/Boring** – Turn-Key Tunneling, Inc. will report directly to the CM and lead the Road Tunneling/Boring efforts for the GEI Design-Build Team. They will coordinate the design efforts with the DM and the WR&A Structural Design group, as well as participate in all constructability reviews.
Right-of-Way Acquisition Team
The Right-of-Way Acquisition Team, led by James Moore, CGREA with Rinker Design Associates, P.C., a VDOT prequalified right-of-way contracting consultant. Mr. Moore will work closely with the DBPM to ensure the required right-of-way and/or off-site easements are acquired in a timely manner to ensure the project moves forward in accordance with the schedule without delay. The Right-of-Way Manager shall communicate closely with the DM, CM and the Public Relations Manager to ensure the proper communication is relayed to the property owners.

- **Appraisals** shall be performed by Chris Calamos, CRREA.
- **Appraisal Reviews** shall be performed by Appraisal Review Specialists, LLC, a company that is independent from the appraisal company.
- **Title Reports/Settlements** will be performed by Metro Title, LLC, a company that is independent from the appraisal company.
- **Acquisition Plats** shall be prepared by our surveyor, H&B Surveying and Mapping, LLC.

Summary
Our Team provides the following:
- A well-organized Senior Management staff with proven Design-Build experience.
- Extensive experience designing and constructing VDOT projects.
- Local Design-Build Team members.
- Complete in-house Design Team to minimize inter-discipline conflicts.
- Expertise in all Design-Build disciplines necessary for successful project completion.
- A proven history of delivering projects on time and within budget.
- Unparalleled QA and QC programs.
- A Health, Safety and Welfare Program with a record that stresses our commitment to Safety.
- Trained and certified professionals in the areas of E&S, MOT and Scheduling.
Section 3.4 Experience of Offeror’s Team

The General Excavation, Inc. (GEI) Team has the experience and personnel to successfully complete the Route 7 – Westbound Truck Climbing Lane Design-Build Project. Our team members have been carefully selected from companies with significant experience and long term success completing projects in the transportation industry; specifically for VDOT. In addition, the companies chosen have successful track records of completing transportation construction and design work within Loudoun County; therefore, we have local knowledge of the area and officials representing the stakeholders.

**General Excavation, Inc.** (GEI) is a full service general contractor founded in February 1983. GEI is known for specializing in transportation construction and has successfully completed and delivered similar size projects for the VDOT NOVA District for over 29 years including the Advanced Detour and Access Road Construction for Phase IV – I-66/Route 29 Linton Hall Road Interchange (Estimated Cost $10.4 million), Route 234/Lake Jackson Improvements (Estimated Cost $14 million) and the Pacific Boulevard Widening Design-Build project in Loudoun County. GEI’s portfolio of projects in Loudoun County and the Town of Leesburg is numerous and reflects our strong local knowledge and reputation of completing quality projects on time and within budget. A sample of the locally completed projects includes the South King Street Improvements, Battlefield Parkway Rough Grading, Sycolin Road Widening Phases I and II, Leesburg Park and Ride, and the Route 15 Widening project.

**Whitman, Requardt and Associates, LLP** (WR&A) is a regional engineering and architectural firm, which has been providing professional engineering services for over 98 years, which includes over 60 years providing design services to VDOT. WR&A has been providing engineering services on similar size projects for the NOVA District including the Fairfax County Parkway Interchange at Fair Lakes Parkway (Estimated Cost $44 million) and the Route 123 Interchange at Route 1 (Estimated Cost $70 million). WR&A is also currently providing engineering and construction quality assurance services on two Design-Build projects in Virginia. The George Mason University Campus Drive project, WR&A is providing roadway design for the Route 123 detour and improvements, the bridge and retaining walls, geotechnical engineering and construction quality assurance. For the PPTA Route 636 project in Augusta County, WR&A is providing bridge and retaining walls, geotechnical engineering and construction quality assurance. WR&A has extensive experience working for the VDOT NOVA District in Loudoun County and the Town of Leesburg. WR&A has a reputation of providing strong project management and quality engineering on projects of similar size and scope.

**Turn-Key Tunneling, Inc.** (TTI) will perform the construction of the pedestrian underpass and potential replacement/upgrade of the existing drainage culverts crossing Route 7. GEI selected TTI as a teaming partner for the Route 7 project based on a successful history of working together on similar type of projects. TTI is a trench-less excavating contractor specializing in Tunneling, Auger Boring, Pipe Jacking and Sliplining. Founded in 2005, TTI is proud to be one of the most experienced workforces in the trenchless industry. Their field operations personnel possess 185 years of combined trenchless construction experience. TTI has extensive experience providing design and construction under a Design-Build delivery method.

**EBA’s experience as it relates to this project can be reflected in its 70 task orders over the last 10 years on VDOT District-wide contracts providing QC inspection, documentation and materials testing. EBA has extensive experience providing QC inspection on multiple sections of Maryland’s Inter-County Connector Design-Build Project. Along with the management staff, EBA’s experienced and VDOT-Certified Inspectors have been specifically requested to assist VDOT on**
several specialized, short-duration assignments due to their qualifications. EBA has also provided interim project records audit services of VDOT projects to ensure timely and accurate monthly and final estimates. Their reputation for quality and excellence make EBA one of the best firms to provide QC management and inspection for this project.

Rinker Design Associates, P.C. (RDA) will be providing full service Right-of-Way and Easement Acquisition services for the Route 7 project. RDA, a VDOT prequalified right-of-way contracting consultant, is providing similar services directly to VDOT and on several Design-Build projects in the region. RDA’s agents and appraisers have nearly 300 years of combined experience in this field, with many of the staff previously having worked at VDOT in the same capacity. RDA’s agents are experienced in providing services in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (49CFR Part 24), The Uniform Standards of Professional Appraisal Practice (USPAP); the Code of Virginia Titles 15, 25, 33 and 56; as well as VDOT’s Right-of-Way and Utilities Manual of Instructions, Volumes I and II.

**Relevant Working Relationships**
The GEI Team was assembled based on past working relationships amongst the firms and individuals with GEI, WR&A, TTI, EBA and RDA. GEI has constructed several projects designed by WR&A including most recently the Route 234 Park and Ride that is currently under construction.

GEI and TTI developed a strong positive relationship on the Advanced Detour and Access Road Construction for Phase IV – I-66/Route 29 Linton Hall Road Interchange project. TTI was a sub-contractor to GEI providing jack/bore services for the relocation of existing water and sewer lines. The design for the relocation of existing water and sewer lines was prepared by WR&A.

In addition to the firm relationships, several members of the GEI Team have established prior working relationships in similar capacities as noted below:

- Route 208 Courthouse Road – Spotsylvania Courthouse Phase I project – *Scott Hunter and Page Gallihugh* led the GEI Team while *Rob Shackelford* served as the Area Construction Engineer (ACE) in the VDOT Fredericksburg District.
- I-95/627 Interchange project in Stafford County – *Scott Hunter* while with Moore Brothers Company, Inc. and *Rob Shackelford* served as the ACE in the VDOT Fredericksburg District.

The established firm and individual relationships will prove beneficial to the Design-Build method of delivery for the Route 7 project.
Section 3.5 – Project Risks
The GEI Team carefully reviewed the various documents included in the RFQ Informational Package and completed a field investigation to identify the critical risks on the project. Our review paid particular attention to the comments raised during the various Public Hearing meetings, VDOT’s Scoping Report and the conceptual plans. The GEI Team identified several potential risks during our assessment, such as Right-of-Way/Easement Acquisition, Utility Impacts and Relocations, and Environmental Impacts. However, the GEI Team has identified the Maintenance of Traffic, Coordination with the Northern Virginia Park Authority to relocate the existing trail, and Storm Drain Design as critical risks that could impact the success of the project. These critical risks are further described below:

Risk 1: Maintenance of Traffic (Safety of the Motorists During Detours and Changes in Traffic Patterns)
A. Define the Risk and Why it is Critical
   The current design of the project includes major changes in access to Route 7 by closing median crossovers or restricting movements at the existing median crossovers. This change in access can be confusing to motorists, which increases the potential for wrong way movements onto Route 7 during and after construction. Similarly, the potential detour of the Route 7 eastbound on-ramp at the Route 9 Interchange presents significant challenges and could result in a complex detour of traffic at the already confusing intersections at the Route 9 Interchange ramps and East Colonial Highway/Dry Mill Road, which is to be converted to a roundabout by the project. These changes in traffic patterns are a significant safety concern for the project.
   
   To clearly define the risk we have identified three areas of concern with the current project design:
   1. Residents living on the Southside of Route 7 attempting to access the Route 7 westbound, in some cases, will need to travel towards the Town of Leesburg and likewise for those residents living on the Northside of Route 7 traveling to the Town of Leesburg will need to travel towards the Route 9 Interchange in order to access Route 7 eastbound.
   2. Upon completion of the Project, traffic patterns and driving habits for residents along the corridor will change drastically and will require, for some, a change in travel and commuting schedules. For instance, residents on the Southside of Route 7 in the communities off of White Gate Road and Roxbury Hall Road will no longer have direct access to travel west on Route 7. The crossover typically used at these intersections will be permanently closed by the median improvements. The new access to westbound Route 7 will require residents in both communities to travel eastbound on Route 7 to the interchange with West Market Street to gain access to westbound Route 7.
   3. Maintaining access to the on-ramp from Route 9 to eastbound Route 7 is a very high traffic volume movement at the interchange. If the on-ramp were temporarily closed, motorists would be required to take long detours along narrow roads or by heading westbound along Route 7 to the Route 704 (Hamilton Station Road)/Route 7 Interchange, approximately a 6-mile round trip.

B. Impacts the Risk Will Have on the Project
   Safety – The major impact of the risk is safety to the traveling public, which is the primary concern of the Design-Build Team and VDOT. A motorist traveling the wrong way on Route 7 would likely result in a severe crash. The residents who live along the corridor will have a high degree of interest in the safety during construction and after completion of the project.
   Increased Costs and Schedule Delays – The initial schedule will be developed based on the Transportation Management Plan (TMP) for the project. Major revisions to the TMP during construction will impact the schedule and cost of the project.
Public Relations – The residents living along the corridor have concerns with the project and will be active in ensuring the construction and final project meets both the needs of the community and the motorists traveling on Route 7. A poorly planned public involvement process will result in negative press for the GEI Team and VDOT, which could impact the schedule of the project.

C. Mitigation Strategies

The risk identified above can be effectively managed by first developing a detailed TMP for the project. The GEI Team will develop an MOT plan that has a major focus on preventing wrong way movements during each phase of construction and in the final design of the project. The GEI Team will emphasize the public involvement process in the TMP and include a defined schedule for public outreach. Additionally, the GEI Team will ensure the implementation in the field of the MOT plans with a focus on clearly defining traffic movements and sight distance for each phase of construction at every intersection.

Below we have highlighted several examples of implementing an effective TMP for the project:

1. Access to the residential properties along the Route 7 corridor will be disrupted during construction and possibly eliminated in order to construct the median improvements. The public will need to be made aware of this change early in the project and well before construction begins. Our mitigation strategy will be to complete the TMP early in the design phase to allow our Public Relations Manager to lay the groundwork of communicating the forthcoming changes. Our Public Relations Manager shall begin an education campaign as defined in the TMP to make sure the stakeholders are aware of detour routes and permanent changes in traffic patterns along the corridor. The education campaign will include the mailing of flyers to introduce the change and establish a date for a public information meeting. The public information meeting will be held to allow stakeholders the opportunity to review the MOT plan and potential alternate routes. In addition to the Public Relations effort, the GEI construction team, through our Construction Manager, Page Gallihugh, will ensure the proper controls are in place to assist motorist through the construction area and will evaluate the MOT plan against traffic conditions to determine if any adjustments are needed. The GEI Team proposes a second phase of public relations that would involve following up with an additional resident/stakeholder meeting that would provide additional exhibits and timing for the completion of the project and when the permanent crossover closure would occur. Prior to the second meeting, advanced notice will be provided in the form of pamphlets to inform residents/stakeholders about the meeting and its purpose. In addition to the public information campaign, temporary and permanent signage will be provided along the new routes.

2. The GEI Team has reviewed several options regarding access to the Route 9 on-ramp to eastbound Route 7. The options include closing the on-ramp in favor of detours, providing a temporary connection to the on-ramp off of Dry Mill Road to allow open cutting, and tunneling the pedestrian underpass while maintaining traffic on the existing ramp. Upon review of the first option, closing the on-ramp in favor of detours, it appears the detours would be long and be a significant inconvenience to the motorists. The second option, although viable, would add time to the project schedule and create an additional change in the traffic pattern at the Route 9 Interchange. The third option of tunneling the pedestrian underpass would be the least disruptive to the motorists and may help advance the project schedule. The GEI Team includes Turn-Key Tunneling, Inc. to fully explore this option during the development of the TMP for the project. TTI has completed numerous pedestrian underpasses by...
tunneling under existing roadways and provides the GEI Team the expertise to perform tunneling and offer cost effective measures to enhance the appearance of the pedestrian underpass.

D. VDOT’s Role in Mitigating Risk
The VDOT role in helping to mitigate the risk would be to attend the public information meetings, reinforce the need to close the various crossovers, and review the GEI Team’s TMP during construction.

Risk 2: Coordination of WO&D Trail Relocation with Users and NVRPA
A. Define the Risk and Why it is Critical
The WO&D Trail consists of 45 miles of paved trail for walking, running, bicycling and skating and 32 miles of adjacent gravel trail for horseback riding. Built on the roadbed of the former Washington & Old Dominion Railroad, the multi-use W&OD Trail runs through the urban heartland and countryside of Northern Virginia. The design of the relocation of the W&OD Trail will separate trail users from the Route 9 intersection with the eastbound Route 7 exit ramp and the Dry Mill Road intersection, which is a significant enhancement to the trail system. The NVRPA will have a high degree of interest in the design details of these enhancements and will be a partner in the design approval. Major areas of concern of the NVRPA will be:
- The at-grade crossing of the westbound entrance ramp onto Route 7 at the northern roundabout of the interchange
- The safety and aesthetics of the trail location under the existing Route 9 bridge abutment
- The aesthetics of the trail tunnel under the eastbound entrance ramp onto Route 7
- Trail alignment grades and aesthetics
- Safety to users during construction

The NVRPA concerns listed above pose a significant risk to the cost and schedule of the project.

B. Impact the Risk Will Have on the Project
The relocation of the trail should be completed prior to the construction of the southern roundabout at the Route 9 Interchange to reduce potential conflicts with trail users during construction. This places the trail design and construction on the critical path of the schedule for the project. Therefore, the design and approval for the trail design is a major risk for the schedule and cost. Additionally, the trail design will require input from the trail users, which must be completed early in the public outreach efforts of the GEI Team. The safety of the trail users during construction is an important risk that will need to be carefully considered during design and construction.

C. Mitigation Strategies
Design Coordination – The GEI Team will establish a series of Partnering Workshops with NVRPA to clearly define the project goals, concerns and critical design features. This will include the tunnel under the eastbound on-ramp onto Route 7 and the modification to the Route 9 bridge abutment. TTI will provide the ability to fully investigate all of the options suggested by NVRPA, which will ensure the final design of the trail will meet the goals of the NVRPA and the trail users.
Safety – The GEI Team will ensure the safety of the trail users are considered during each phase of construction in the development of the TMP for the project. A key element will be establishing a sound plan for the construction of the tunnel under the eastbound Route 7 entrance ramp due to the close proximity of the existing trail.

D. VDOT’s Role in Mitigating Risk
The design of the relocated W&OD Trail will need to conform to commitments included in the environmental document. This will need to be verified and supported by VDOT. The TMP for the project will be submitted with the design plans for review and comment.
**Risk 3: Storm Drain Design (Condition of Existing Corrugated Metal Pipe (CMP) on the Project)**

**A. Define the Risk and Why it is Critical**

Based on the GEI Team review of the as-built plans, survey files and field visit, it was determined that the existing CMP is in poor condition throughout the project and will need to be addressed in the design. Due to the high volume of traffic on Route 7 and the depth of the existing pipes, they will need to be lined, if the existing pipe conditions allows or replaced by boring/jacking of a new pipe. Both of these installation methods will have major impacts on the schedule and cost of the project.

**B. Impact the Risk Will Have on the Project**

The condition of the existing CMP will impact the design of the project from the very beginning of the design process. On previous projects, the GEI Team’s designer WR&A has developed a well-defined process to determine the adequacy, condition, and type of rehabilitation/replacement of the existing CMP. This approach requires additional design time and cost, which impacts the schedule; however, these efforts result in the most economical project construction. Additionally, the boring and jacking method may require additional easement to construct the necessary jacking and receiving pits.

**C. Mitigation Strategies**

The GEI Team will mitigate the risk of the existing condition of the CMP by implementing the following plan:

1. A preliminary drainage analysis of the existing storm drainage pipes will be completed to determine, which existing pipes are inadequate based on capacity. These pipes will generally need to be replaced during construction.
2. A condition survey of the remaining existing CMP will be completed utilizing video survey equipment.
3. **GEI, WR&A** and **TTI** will evaluate the condition survey and determine which existing CMP can be lined or if the existing pipes must be replaced.
4. All pipes determined to be replaced by means of boring and jacking or tunneling methods will require a geotechnical evaluation to ensure the means and methods of construction and potential construction costs.
5. The GEI Team will then investigate all constructability concerns to assure the boring and jacking or tunneling method has the appropriate easements for construction and the ability to construct the necessary channel changes to tie the proposed pipes to the existing channels.

The GEI Team will complete this analysis early in the design of the project to ensure the current environmental permits cover all impacts to the existing streams and that all necessary right-of-way and permanent/temporary easements are acquired for the project.

GEI introduced TTI to the Team because of their experience in tunneling, boring/jacking and sliplining improvements; due to the deterioration of the existing pipes. Having the pipe boring and jacking and lining contractor, **TTI** on the GEI Team from the project qualification stage of procurement will significantly reduce the project risk by having the expertise to determine the most appropriate method of improving the existing storm drainage system.

**D. VDOT’s Role in Mitigating Risk**

VDOT’s primary role will be reviewing the condition assessment of the existing pipes and drainage computations to ensure the proposed design is in compliance with VDOT’s design requirements.
## Project: 6007-053-133, R201, C501

### 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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1 of 3
## ATTACHMENT 3.1.2

**Project: 6007-053-133, R201, C501**  
**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  
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Cross reference: Section 3.2.11  
Included within 15-page limit?: yes  
Page Reference: 2

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## ATTACHMENT 3.1.2

### Project: 6007-053-133, R201, C501

**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

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ATTACHMENT 2.10

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

RFQ NO. C00058599DB54
PROJECT NO.: 6007-053-133, R201, C501

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 10/31/12 (Date)
2. Cover letter of Addendum #1 – 12/14/12 (Date)
3. Cover letter of (Date)

[Signature] [Date]
ATTACHMENT 3.2.6
State Project No. 6007-053-133, R201, C501

Affiliated and Subsidiary Companies of the Offeror

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

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

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<th>Relationship with Offeror (Affiliate or Subsidiary)</th>
<th>Full Legal Name</th>
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ATTACHMENT NO. 3.2.7(a)

CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS

Project No.: 6007-053-133, R201, C501

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] 1/9/2013  [Vice President]

[Date]  [Signature]  [Title]

General Excavation, Inc.

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 6007-053-133, R201, C501

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] 11/7/13 [Name] [Title]

Whitman, Requardt and Associates, LLP

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 6007-053-133, R201, C501

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

[Signature]  [Date]  [Title]

Turn Key Tunneling, Inc.

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 6007-053-133, R201, C501

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Signature  Date  Title

EBA Engineering, Inc.

Name of Firm
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 6007-053-133, R201, C501

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ineligible, or voluntarily excluded from participation in this transaction by any Federal
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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 ___________________________

GMSI Engineering Inc.
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 6007-053-133, R201, C501

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

[Signature]  December 10, 2012  Director of Transportation/VP of Operations
Signature  Date  Title

RINKER DESIGN ASSOCIATES, P.C.
Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 6007-053-133, R201, C501

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

[Signature] 1/3/2013 [Managing Partner]
Signature Date Title

Appraisal Review Specialists, LLC

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 6007-053-133, R201, C501

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Signature: [Signature]  Date: [Date]  Title: [Title]

Metro Title, LLC

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 6007-053-133, R201, C501

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

Signature /Date 12-14-12

Principal Engineer

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.: 6007-053-133, R201, C501

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] 12/20/12

Vice President

H&B Surveying and Mapping, LLC

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 6007-053-133, R201, C501

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] 12/4/12 [President]  
Signature Date Title

[Sharp & Company Inc.] Name of Firm
CERTIFICATE OF QUALIFICATION

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

Don E. Sillies, State Contract Officer
January 4, 2013

Mr. Kevin Reichert, P.E.
Alternate Project Delivery Office
Virginia Department of Transportation
1401 East Broad Street
Richmond, VA  23219

Re:   General Excavation, Inc.
      VDOT Design/Build Project – Loudoun County, VA
      Route 7 – Westbound Truck Climbing Lane
      State Project No.: 6007-053-133,R201,C501
      Contract ID Number: C00058599DB54

Dear Mr. Reichert:

General Excavation, Inc. has been a valued client of the Zurich for over 30 years. During that
time, Zurich has supported General Excavation, Inc. for projects in excess of $40 million.

As surety for General Excavation, Inc., Zurich American Insurance Company and/or its
subsidiary, Fidelity and Deposit Company of Maryland with A.M. Best Financial Strength Rating
of A (Excellent) and with a financial size category of XV ($2 billion +) is capable of obtaining
a 100% Performance Bond and 100% Labor and Materials Payment Bond in the amount of the
anticipated cost of construction, and said bonds will cover the Project and any warranty periods
on behalf of the Contractor, in the event that such firm be the successful bidder and enter into a
contract for the referenced project 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

cc:   General Excavation, Inc.
      F&D/Zurich
ATTACHMENT 3.2.10
State Project No. 6007-053-133, R201, C501

SCC and DPOR Information

Offerors shall complete the table and include the required state registration and licensure information. By completing this table, Offerors certify that their team complies with the requirements set forth in Section 3.2.10 and that all businesses and individuals listed are active and in good standing.

<table>
<thead>
<tr>
<th>Business Name</th>
<th>SCC Number</th>
<th>SCC Type of Corporation</th>
<th>SCC Status</th>
<th>DPOR Registered Address</th>
<th>DPOR Registration Type</th>
<th>DPOR Registration Number</th>
<th>DPOR Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Excavation, Inc.</td>
<td>0240067-9</td>
<td>Corporation</td>
<td>Active</td>
<td>9757 Rider Road, Warrenton, Virginia 20187</td>
<td>Class A Contractor</td>
<td>2701 026132A</td>
<td>04/30/2013</td>
</tr>
<tr>
<td>Whitman, Requardt and Associates, LLP</td>
<td>K000382-4</td>
<td>Limited Liability Partnership</td>
<td>Active</td>
<td>801 South Caroline Street, Baltimore, Maryland 21231</td>
<td>ARC, ENG, LS, LA</td>
<td>0407001676</td>
<td>12/31/2013</td>
</tr>
<tr>
<td>Whitman, Requardt and Associates, LLP</td>
<td>See Above</td>
<td>See Above</td>
<td></td>
<td>9030 Stony Point Parkway, Ste. 220 Richmond, Virginia 23235</td>
<td>ENG</td>
<td>0411000133</td>
<td>02/28/2014</td>
</tr>
<tr>
<td>Whitman, Requardt and Associates, LLP</td>
<td>See Above</td>
<td>See Above</td>
<td></td>
<td>1320 Central Park Blvd., Ste. 224 Fredericksburg, Virginia 22401</td>
<td>ENG</td>
<td>0411000861</td>
<td>02/28/2014</td>
</tr>
<tr>
<td>Whitman, Requardt and Associates, LLP</td>
<td>See Above</td>
<td>See Above</td>
<td></td>
<td>3701 Pender Drive, Ste. 450 Fairfax, Virginia 22030</td>
<td>ENG</td>
<td>0411000134</td>
<td>02/28/2014</td>
</tr>
<tr>
<td>Turn-Key Tunneling, Inc.</td>
<td>F166037-4</td>
<td>Corporation</td>
<td>Active</td>
<td>1247 Stimmel Road Columbus, Ohio 43223</td>
<td>Class A Contractor</td>
<td>2705102232</td>
<td>02/28/2013</td>
</tr>
<tr>
<td>EBA Engineering, Inc.</td>
<td>F123900-5</td>
<td>Corporation</td>
<td>Active</td>
<td>714 Westwood Office Park Fredericksburg, Virginia 22401</td>
<td>ENG</td>
<td>0411000871</td>
<td>02/28/2014</td>
</tr>
<tr>
<td>EMSI Engineering, Inc.</td>
<td>0313271-9</td>
<td>Corporation</td>
<td>Active</td>
<td>9720 Capital Court, Ste. 400 Manassas, Virginia 20110</td>
<td>Class A Contractor</td>
<td>2705059214</td>
<td>10/31/2014</td>
</tr>
<tr>
<td>Rinker Design Associates, P.C.</td>
<td>0227062-7</td>
<td>Corporation</td>
<td>Active</td>
<td>927 Maple Grove Drive, Ste. 105 Fredericksburg, Virginia 22407</td>
<td>Appraisal Business - Corporation</td>
<td>4008001739</td>
<td>04/30/2014</td>
</tr>
<tr>
<td>Appraisal Review Specialists, LLC</td>
<td>T049068-2</td>
<td>Limited Liability Corporation</td>
<td>Active</td>
<td>3058 Mount Vernon Road, Ste. 12 Hurricane, West Virginia 25523</td>
<td>Appraisal Business - L</td>
<td>4008001735</td>
<td>04/30/2014</td>
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1 of 3
**ATTACHMENT 3.2.10**

**State Project No. 6007-053-133, R201, C501**

### SCC and DPOR Information

<table>
<thead>
<tr>
<th>Name</th>
<th>DUNS</th>
<th>Type</th>
<th>Status</th>
<th>Address</th>
<th>Certification</th>
<th>Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro Title, LLC</td>
<td>S035370-8</td>
<td>Limited Liability Corporation</td>
<td>Active</td>
<td>*Not Applicable – Metro Title, LLC is providing Non-Professional services and does not require Office DPOR Certification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering and Materials Technologies, Inc.</td>
<td>0478633-1</td>
<td>Corporation</td>
<td>Active</td>
<td>7857 Coppermine Drive Manassas, Virginia 20109</td>
<td>ENG</td>
<td>0407005994 12/31/2013</td>
</tr>
<tr>
<td>H&amp;B Surveying and Mapping, LLC</td>
<td>S290560-4</td>
<td>Limited Liability Corporation</td>
<td>Active</td>
<td>612 Hull Street, Ste. 101B Richmond, Virginia 23224</td>
<td>LS</td>
<td>0407005432 12/31/2013</td>
</tr>
<tr>
<td>Sharp &amp; Company, Inc.</td>
<td>F176141-2</td>
<td>Corporation</td>
<td>Active</td>
<td>*Not Applicable – Sharp is providing Non-Professional services and does not require a Office DPOR Certification</td>
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</table>
## 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>Whitman, Requardt and Associates, LLP</td>
<td>Robert Shackelford</td>
<td>Fredericksburg, Virginia</td>
<td>11705 New Bond Street</td>
<td>Professional Engineer</td>
<td>0402040575</td>
<td>01/31/2013</td>
</tr>
<tr>
<td>Whitman, Requardt and Associates, LLP</td>
<td>John Maddox</td>
<td>Richmond, Virginia</td>
<td>2825 Willbrook Drive</td>
<td>Professional Engineer</td>
<td>0402026613</td>
<td>01/13/2014</td>
</tr>
<tr>
<td>Rinker Design Associates, P.C.</td>
<td>James Moore</td>
<td>Manassas, Virginia</td>
<td>3514 Delashmutt Drive</td>
<td>Certified General Real Estate Appraiser</td>
<td>4001000502</td>
<td>02/28/2014</td>
</tr>
<tr>
<td>Rinker Design Associates, P.C.</td>
<td>Christopher Calamos</td>
<td>Fredericksburg, Virginia</td>
<td>821 Bright Street</td>
<td>Certified Residential Real Estate Appraiser</td>
<td>4001012863</td>
<td>11/30/2013</td>
</tr>
</tbody>
</table>

**NOTE 1:** We have also included copies of Page Gallihugh’s (Construction Manager) required Virginia Department of Conservation and Recreation (DCR) Responsible Land Disturber (RLD) Certification and his VDOT Erosion and Sediment Control Contractor Certification (ESCCC). The copies are located behind General Excavation, Inc.’s Contractor’s License.

**NOTE 2:** As noted in the RFQ, Rinker Design Associates, P.C. are a VDOT prequalified right-of-way contracting consultant. Christopher Calamos, RDA’s Fee Appraiser, is a VDOT prequalified Fee Appraiser. Appraisal Review Specialists, LLC is a VDOT prequalified Review Appraiser.
General Excavation, Inc.
SCC and DPOR Information
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
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
CISM0180  CORPORATE DATA INQUIRY  01/02/13  15:57:46

CORP ID: 0240067 - 9  STATUS: 00 ACTIVE  STATUS DATE: 04/27/00
CORP NAME: GENERAL EXCAVATION, INC.

DATE OF CERTIFICATE: 03/28/1983  PERIOD OF DURATION:  INDUSTRY CODE: 00
STATE OF INCORPORATION: VA VIRGINIA  STOCK INDICATOR: S STOCK
MERGER IND:  CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y  MONITOR INDICATOR:
CHARTER FEE:  MON NO:  MON STATUS:  MONITOR DTE:
   R/A NAME: RUSSELL A JENKINS

   STREET: 9757 RIDER RD  AR RTN MAIL:

   CITY: WARRENTON  STATE : VA  ZIP: 20187
   R/A STATUS: 1 DIRECTOR  EFF. DATE: 01/29/09  LOC : 130
   ACCEPTED AR#: 212 03 3995  DATE: 02/02/12  FAUQUIER COUNTY
   CURRENT AR#: 212 03 3995  DATE: 02/02/12  STATUS: A  ASSESSMENT INDICATOR: 0

YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
12  190.00

(Screen Id:/Corp_Data_Inquiry)
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
04-30-2013

NUMBER
2701 026132A

BOARD FOR CONTRACTORS
CLASS A CONTRACTORS LICENSE

GENERAL EXCAVATION INC
9757 RIDER ROAD
WARRENTON VA 20187

*CLASSIFICATIONS* H/H SDS

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

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

PCKET CARD

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

NUMBER: 2701 026132A EXPIRES: 04-30-2013
GENERAL EXCAVATION INC
9757 RIDER ROAD
WARRENTON, VA 20187

Permission to reproduce this information is granted by the DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION, 9960 Mayland Dr., Suite 400, Richmond, VA 23233, Telephone: (804) 367-6500.

Gordon N. Dixon, Director
COMMONWEALTH OF VIRGINIA
Soil and Water Conservation Board
203 Governor Street, Suite 206
Richmond, Virginia 23219
Telephone (804) 786-2064

EROSION AND SEDIMENT CONTROL
RESPONSIBLE LAND DISTURBER

Expires 09/03/2012
Page L. Gallihugh
Certificate 32627

Joseph H. Maroon
Secretary of the Board

Commonwealth of Virginia
Department of Transportation
1401 E. Broad Street
Richmond, VA 23219

Erosion & Sediment Control
Contractor Certification Program
Certificate of Completion for
Page L. Gallihugh

Expires 2/20/2014
Cert. # 1754

Please contact VTCA at 804-330-3312 with changes of employment or change of address.
COMMONWEALTH OF VIRGINIA
Soil and Water Conservation Board
203 Governor Street, Suite 206, Richmond,
Virginia 23219
Telephone (804) 786-2064

EROSION AND SEDIMENT CONTROL
RESPONSIBLE LAND DISTURBER

Expires 10/15/2015

Page L Gallighugh

Certificate Number 38494

Jack E. Frye
Director
Division of Soil & Water Conservation
The American Traffic Safety Services Association

This is to certify that

Page Gallihugh

has demonstrated a thorough knowledge of the standards, guidelines and practices of traffic control in highway construction and maintenance work areas and has completed all the requirements of the American Traffic Safety Certification Program to the satisfaction of the Certification Board; is this date awarded the designation of:

Traffic Control Supervisor

and is fully entitled to all the rights and privileges associated with this designation. This certificate will remain in effect until the expiration date noted herein unless otherwise revoked by action of the Certification Board.

Issue Date: 12/13/2012
Expiration Date: 12/04/2016
Certification #: 44953

DONALD M. CLARK
President, CEO

SHERI M. WRIGHT
Training & Products Dept. Director

SAFER ROADS SAVE LIVES
Whitman, Requardt and Associates, LLP
SCC and DPOR Information
Commonwealth of Virginia

STATE CORPORATION COMMISSION

Richmond, August 10, 2000

This is to Certify that the statement of registration of

Whitman, Requardt & Associates, LLP

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

State Corporation Commission
Attest:

[Signature]
Clerk of the Commission
CERTIFICATE OF FACT

I Certify the Following from the Records of the Commission:

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

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

Nothing more is hereby certified.

Signed and Sealed at Richmond on this Date:
June 19, 2012

Joel H. Peck, Clerk of the Commission
Dear Customer:

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

The annual continuation report was filed on May 30, 2012.

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

Sincerely,

Joel H. Peck
Clerk of the Commission
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY REGISTRATION

PROFESSIONS: ARC, ENG, LS, LA

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

ALTERATION OF THIS DOCUMENT, USE AFTER EXPIRATION, OR USE BY PERSONS OR FIRM OTHER THAN THOSE NAMED MAY RESULT IN CRIMINAL PROSECUTION UNDER THE CODE OF VIRGINIA.
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY BRANCH OFFICE REGISTRATION

PROFESSIONS: ENG

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

1010 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (604) 357-8500

0411000133

(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

NUMBER
0411000861

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

PROFESSIONS: ENG

WHITMAN, REQUARDT AND ASSOCIATES LLP
CENTRAL PARK TOWN CENTER
1320 CENTRAL PARK BLVD
SUITE 224
FREDERICKSBURG, VA 22401

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

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233

BOARD FOR APESCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000861  EXPIRES: 02-20-2014
PROFESSIONS: ENG
WHITMAN, REQUARDT AND ASSOCIATES LLP
CENTRAL PARK TOWN CENTER
1320 CENTRAL PARK BLVD
SUITE 224
FREDERICKSBURG, VA 22401

ALTERATION OF THIS DOCUMENT, USE AFTER EXPIRATION, OR USE BY PERSONS OTHER THAN THOSE NAMED MAY RESULT IN CRIMINAL PROSECUTION UNDER THE CODE OF VIRGINIA.
COMMONWEALTH OF VIRGINIA
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY BRANCH OFFICE REGISTRATION

PROFESSIONS: ENG

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

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

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

ROBERT FRANK SHACKELFORD
11705 NEW BOND STREET
FREDERICKSBURG, VA 22408

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
JOHN PATRICK MADDOX
2825 WILLBROOK DRIVE
RICHMOND, VA 23233
Turn-Key Tunneling, Inc.
SCC and DPOR Information
CISM0180 CORPORATE DATA INQUIRY

**CORP ID:** F166037 - 4  **STATUS:** 00 ACTIVE  **STATUS DATE:** 03/09/06

**CORP NAME:** Turn-Key Tunneling, Inc.

**DATE OF CERTIFICATE:** 03/09/2006  **PERIOD OF DURATION:**  **INDUSTRY CODE:** 00

**STATE OF INCORPORATION:** OH OHIO  **STOCK INDICATOR:** S STOCK

**MERGER IND:**  **CONVERSION/DOMESTICATION IND:**

**GOOD STANDING IND:** Y  **MONITOR INDICATOR:**

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

**R/A NAME:** NATIONAL REGISTERED AGENTS, INC.

**STREET:** 4001 NORTH NINTH STREET  **AR RTN MAIL:**

**SUITE 227**

**CITY:** ARLINGTON  **STATE :** VA  **ZIP:** 22203

**R/A STATUS:** 5  **B.E. AUTH IN VI**  **EFF. DATE:** 01/27/11  **LOC :** 106

**ACCEPTED AR#:** 212 03 8124  **DATE:** 02/13/12  **ARLINGTON COUNT**

**CURRENT AR#:** 212 03 8124  **DATE:** 02/13/12  **STATUS:** A  **ASSESSMENT INDICATOR:** 0

**YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES**

| 12 | 100.00 |

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(Screen Id:/Corp_Data_Inquiry)
Details of license number 2705102232

Name: TURN-KEY TUNNELING INC
License Number: 2705102232
License Description: Contractor (Class A)
Business Type: Corporation
Address: 1247 STIMMEL ROAD
          COLUMBUS, OH 43223
Specialties/Classifications:
  Classification Definitions
  Specialty Definitions
  • HIGHWAY / HEAVY
Initial Certification Date: February 28, 2007
Expiration Date: February 28, 2013

Complaints

No Open Complaints

"Open Complaints" reflect only those complaints against regulants 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 regulants closed since 1990. Cases closed without disciplinary action are purged after three years in accordance with DPOR's record retention policy.

To inquire about closed complaints, see the department's Public Records Access or contact the department's Information Management Section at (804) 367-8583 or publicrecords@dpor.virginia.gov.

Recovery Fund Claims include claims against a licensee where a judgment has been obtained for improper or dishonest conduct in a court of law. The Contractors Transaction Recovery Fund and the Real Estate Transaction Recovery Fund provide monetary relief to consumers who incur losses through the improper and dishonest conduct of a licensed contractor or licensed real estate professional. The funds are supported entirely by assessments paid by
EBA Engineering, Inc.
SCC and DPOR Information
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

Clerk of the Commission
CORPORATE DATA INQUIRY

CORP ID: F123900 - 5 STATUS: 00 ACTIVE STATUS DATE: 12/03/07
CORP NAME: EBA ENGINEERING, INC.

DATE OF CERTIFICATE: 10/22/1997 PERIOD OF DURATION: INDUSTRY CODE: 70
STATE OF INCORPORATION: MD MARYLAND STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: 2000.00 MON NO: MON STATUS: MONITOR DTE:

STREET: 4701 COX RD STE 301
CITY: GLEN ALLEN STATE: VA ZIP: 23060 6802
R/A NAME: CT CORPORATION SYSTEM

ACCEPTED AR#: 212 53 6976 DATE: 09/26/12 HENRICO COUNTY
CURRENT AR#: 212 53 6976 DATE: 09/26/12 STATUS: A ASSESSMENT INDICATOR: 0

YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
12 1,700.00 1,000,000
EMSI Engineering, Inc.
SCC and DPOR Information
CISM0180 CORPORATE DATA INQUIRY

CORP ID: 0313271 - 9 STATUS: 00 ACTIVE STATUS DATE: 02/04/11
CORP NAME: EMSI ENGINEERING INC.

DATE OF CERTIFICATE: 12/03/1987 PERIOD OF DURATION: INDUSTRY CODE: 73
STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: 25.00 MON NO: MON STATUS: MONITOR DTE:
R/A NAME: RANYA SEoud

STREET: 9720 CAPITAL CT #400 AR RTN MAIL:
CITY: MANASSAS STATE: VA ZIP: 20110
R/A STATUS: 2 OFFICER EFF. DATE: 12/28/09 LOC : 308
ACCEPTED AR#: 212 18 1867 DATE: 12/03/12 MANASSAS CITY (CURRENT AR#: 212 18 1867 DATE: 12/03/12 STATUS: A ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
12 100.00

(Screen Id:/Corp_Data_Inquiry)
Details of license number 0407002869

Name: EMSI ENGINEERING INC.
License Number: 0407002869
License Description: Business Entity Registration
Business Type: CORP
Address: 9720 CAPITAL CT SUITE 400 MANASSAS, VA 20110
Initial Certification Date: May 18, 1988
Expiration Date: December 31, 2013

Complaints

No Open Complaints

"Open Complaints" reflect only those complaints against regulants 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 regulants closed since 1990. Cases closed without disciplinary action are purged after three years in accordance with DPOR's record retention policy.

To inquire about closed complaints, see the department's Public Records Access or contact the department's Information Management Section at (804) 367-8583 or publicrecords@dpor.virginia.gov.

Associated Professional Licensing Information

Professional Engineer License

Name: HASSAN, TALAL A
License Number: 0402025527
License Description: Professional Engineer License
Address: CLIFTON VA, 20124
Initial Certification Date: November 1, 1994
Expiration Date: February 28, 2014

Professional Engineer License

Name: ELMESIRY, ESSAM ELDIN
License Number: 0402037721
License Description: Professional Engineer License
Address: MANASSAS VA, 20109
Initial Certification Date: December 29, 2005
Expiration Date: December 31, 2013

Architect License

Name: CONDRUT, GABRIELA ANA
License Number: 0401011683
License Description: Architect License
Address: CENTREVILLE VA, 20121
Initial Certification Date: January 6, 2000
Expiration Date: January 31, 2014
Details of license number 2705059214

Name: EMSI ENGINEERING INC
License Number: 2705059214
License Description: Contractor (Class A)
Business Type: Corporation
Address: 9720 CAPITAL CT SUITE 400 MANASSAS, VA 20110
Specialties/Classifications:
- BUILDING
- COMMERCIAL IMPROVMENT
- HIGHWAY / HEAVY
- PLUMBING
Initial Certification Date: October 27, 2000
Expiration Date: October 31, 2014

Complaints

No Open Complaints

"Open Complaints" reflect only those complaints against regulants 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 regulants closed since 1990. Cases closed without disciplinary action are purged after three years in accordance with DPOR's record retention policy.

To inquire about closed complaints, see the department's Public Records Access or contact the department’s Information Management Section at (804) 367-8583 or publicrecords@dpor.virginia.gov.

Recovery Fund Claims include claims against a licensee where a judgment has been obtained for improper or dishonest conduct in a court of law. The Contractors Transaction Recovery Fund and the Real Estate Transaction Recovery Fund provide monetary relief to consumers who incur losses through the improper and dishonest conduct of a licensed contractor or
Rinker Design Associates, P.C.
SCC and DPOR Information
CISM0180  CORPORATE DATA INQUIRY  01/02/13  15:59:57

| CORP ID: | 0227062 - 7 | STATUS: 00 ACTIVE |
| CORP NAME: | Rinker Design Associates, P.C. |
| DATE OF CERTIFICATE: | 02/24/1982 |
| PERIOD OF DURATION: | |
| INDUSTRY CODE: | 70 |
| STATE OF INCORPORATION: | VA VIRGINIA |
| STOCK INDICATOR: | S STOCK |
| MERGER IND: | VA VIRGINIA |
| CONVERSION/DOMESTICATION IND: | |
| GOOD STANDING IND: | Y |
| MONITOR INDICATOR: | |
| CHARTER FEE: | |
| MON NO: | |
| MON STATUS: | |
| MONITOR DTE: | |
| R/A NAME: | JOHN S WISIACKAS |
| STREET: | ODIN FELDMAN & PITTLERMAN PC |
| AR RTN MAIL: | |
| 1775 WIEHLE AVENUE STE 400 |
| CITY: | RESTON |
| STATE: | VA |
| ZIP: | 20190 |
| R/A STATUS: | 4 ATTORNEY |
| EFF. DATE: | 08/27/12 |
| LOC: | 129 |
| ACCEPTED AR#: | 212 53 8373 |
| DATE: | 10/04/12 |
| FAIRFAX COUNTY |
| CURRENT AR#: | 212 53 8373 |
| DATE: | 10/04/12 |
| STATUS: A |
| ASSESSMENT INDICATOR: | 0 |
| YEAR FEES | PENALTY | INTEREST | TAXES | BALANCE | TOTAL SHARES |
| 13 | 190.00 | |
| 190.00 | 20,000 |

(Screen Id:/Corp_Data_Inquiry)
Details of license number 4008001739

Name: RINKER DESIGN ASSOCIATES P C
License Number: 4008001739
License Description: Appraisal Business Registration
Business Type: Corporation
Address: 927 MAPLE GROVE DR STE 105
FREDERICKSBURG, VA 22407
Initial Certification Date: April 30, 2012
Expiration Date: April 30, 2014

Complaints

No Open Complaints

"Open Complaints" reflect only those complaints against regulators 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 regulators closed since 1990. Cases closed without disciplinary action are purged after three years in accordance with DPOR's record retention policy.

To inquire about closed complaints, see the department's Public Records Access or contact the department's Information Management Section at (804) 367-8583 or publicrecords@dpor.virginia.gov.
Details of license number 4008001684

Name: RINKER DESIGN ASSOCIATES PC
License Number: 4008001684
License Description: Appraisal Business Registration
Business Type: Corporation
Address: 9385 DISCOVERY BOULEVARD SUITE 200 MANASSAS, VA 20109
Initial Certification Date: February 10, 2011
Expiration Date: February 28, 2013

Complaints

No Open Complaints

"Open Complaints" reflect only those complaints against regalants 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 regalants closed since 1990. Cases closed without disciplinary action are purged after three years in accordance with DPOR's record retention policy.

To inquire about closed complaints, see the department's Public Records Access or contact the department's Information Management Section at (804) 367-8583 or publicrecords@dpor.virginia.gov.
Details of license number 4001000502

Name: MOORE, JAMES M
License Number: 4001000502
License Status: Active
License Description: Real Estate Appraiser
Type: Certified General
Address: HAYMARKET VA, 20169
Initial Certification Date: February 19, 1992
Expiration Date: February 28, 2014
Continuing Education: Click here to view continuing education.

Complaints

No Open Complaints

"Open Complaints" reflect only those complaints against regulants 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 regulants closed since 1990. Cases closed without disciplinary action are purged after three years in accordance with DPOR's record retention policy.

To inquire about closed complaints, see the department's Public Records Access or contact the department's Information Management Section at (804) 367-8583 or publicrecords@dpor.virginia.gov.
## Details of license number 4001012863

<table>
<thead>
<tr>
<th>Name:</th>
<th>CALAMOS, CHRISTOPHER STAVROS</th>
</tr>
</thead>
<tbody>
<tr>
<td>License Number:</td>
<td>4001012863</td>
</tr>
<tr>
<td>License Status:</td>
<td>Active</td>
</tr>
<tr>
<td>License Description:</td>
<td>Real Estate Appraiser</td>
</tr>
<tr>
<td>Type</td>
<td>Certified Residential</td>
</tr>
<tr>
<td>Address:</td>
<td>FREDERICKSBURG VA, 22401</td>
</tr>
<tr>
<td>Initial Certification Date:</td>
<td>November 30, 2007</td>
</tr>
<tr>
<td>Expiration Date:</td>
<td>November 30, 2013</td>
</tr>
<tr>
<td>Continuing Education:</td>
<td><a href="print">Click here to view continuing education.</a></td>
</tr>
</tbody>
</table>

### Complaints

**No Open Complaints**

"Open Complaints" reflect only those complaints against regulants 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 regulants closed since 1990. Cases closed without disciplinary action are purged after three years in accordance with DPOR's record retention policy.

To inquire about closed complaints, see the department's Public Records Access or contact the department's Information Management Section at (804) 367-8583 or publicrecords@dpor.virginia.gov.
Appraisal Review Specialists, LLC
SCC and DPOR Information
LLC ID: T049068 - 2  STATUS: 00  ACTIVE  STATUS DATE: 02/03/12

LLC NAME: Appraisal Review Specialists, LLC

DATE OF FILING: 02/03/2012  PERIOD OF DURATION: 99/99/9999  INDUSTRY CODE: 00

STATE OF FILING: WV  WEST VIRGINIA  MERGER INDICATOR:

CONVERSION/DOMESTICATION INDICATOR:

PRINCIPAL OFFICE ADDRESS

STREET: 3058 MOUNT VERNON RD

CITY: HURRICANE  STATE: WV  ZIP: 25526-0000

REGISTERED AGENT INFORMATION

R/A NAME: INCORP SERVICES INC

STREET: 7288 HANOVER GREEN DR

RTN MAIL:

CITY: MECHANICSVILLE  STATE: VA  ZIP: 23111-0000

R/A STATUS: 5  ENTITY AUTHORIZ EFF DATE: 02/03/12  LOC: 142  HANOVER COUNTY

YEAR FEES PENALTY INTEREST BALANCE
13 50.00 50.00 50.00

(Screen Id:/LLC_Data_Inquiry)
Details of license number 4008001735

Name: APPRAISAL REVIEW SPECIALISTS LLC
License Number: 4008001735
License Description: Appraisal Business Registration
Business Type: L
Address: 3058 MOUNT VERNON ROAD SUITE 12 HURRICANE, WV 25523
Initial Certification Date: April 5, 2012
Expiration Date: April 30, 2014

Complaints

No Open Complaints

"Open Complaints" reflect only those complaints against regulators 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 regulators closed since 1990. Cases closed without disciplinary action are purged after three years in accordance with DPOR's record retention policy.

To inquire about closed complaints, see the department’s Public Records Access or contact the department’s Information Management Section at (804) 367-8583 or publicrecords@dpor.virginia.gov.
Metro Title, LLC
SCC and DPOR Information
LLC ID: 8035370 - 8  STATUS: 00 ACTIVE  STATUS DATE: 02/11/99

LLC NAME: METRO TITLE, LLC

DATE OF FILING: 02/11/1999   PERIOD OF DURATION: 02/11/2019   INDUSTRY CODE: 35

STATE OF FILING: VA VIRGINIA   MERGER INDICATOR: 

CONVERSION/DOMESTICATION INDICATOR: 

PRINCIPAL OFFICE ADDRESS
STREET: 8221 OLD COURTHOUSE RD STE 300
CITY: VIENNA   STATE: VA ZIP: 22182-0000

REGISTERED AGENT INFORMATION
R/A NAME: GREGORY D HAIGHT

STREET: 8280 GREENSBORO DRIVE
SUITE 601
CITY: MCLEAN   STATE: VA ZIP: 22102-0000
R/A STATUS: 4 MEMBER OF VSB   EFF DATE: 11/05/10   LOC: 129   FAIRFAX COUNTY

YEAR FEES PENALTY INTEREST BALANCE
13  50.00

---

(Screen Id://LLC_Data_Inquiry)
Engineering and Materials Technologies, Inc.
SCC and DPOR Information
Commonwealth of Virginia

STATE CORPORATION COMMISSION

Richmond, January 29, 1997

This is to Certify that the certificate of incorporation of

ENGINEERING & MATERIALS TECHNOLOGIES, INC.

was this day 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:

January 29, 1997

State Corporation Commission

William J. Bridge

Clerk of the Commission
CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That ENGINEERING & MATERIALS TECHNOLOGIES, INC. is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is January 29, 1997;

That the period of its duration is perpetual; and

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

Nothing more is hereby certified.

Signed and Sealed at Richmond on this Date:
April 16, 2012

Joel H. Peck, Clerk of the Commission
CORPORATE DATA INQUIRY

CORP ID: 0478633 - 1  STATUS: 00 ACTIVE  STATUS DATE: 01/29/97
CORP NAME: ENGINEERING & MATERIALS TECHNOLOGIES, INC.

DATE OF CERTIFICATE: 01/29/1997  PERIOD OF DURATION:  INDUSTRY CODE: 70
STATE OF INCORPORATION: VA VIRGINIA  STOCK INDICATOR: S STOCK
MERGER IND:  CONVERSION/DOMESTICATION IND: 
GOOD STANDING IND: Y  MONITOR INDICATOR: 
CHARTER FEE: 50.00  MON NO: 
MON STATUS:  MONITOR DTE: 
R/A NAME: SHAHZAD S MOOSA

STREET: 7857 COPPERMINE DR  AR RTN MAIL: 
CITY: MANASSAS  STATE: VA  ZIP: 20109
R/A STATUS: 2 OFFICER  EFF. DATE: 07/20/06  LOC : 176
ACCEPTED AR#: 213 01 1156  DATE: 11/28/12  PRINCE WILLIAM
CURRENT AR#: 213 01 1156  DATE: 11/28/12  STATUS: A  ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
13 100.00

(Screen Id:/Corp_Data_Inquiry)
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY REGISTRATION

PROFESSIONS: ENG

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

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

Gordon N. Dixon, Director

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

COMMONWEALTH OF VIRGINIA

BOARD FOR APELSCIDLA
BUSINESS ENTITY REGISTRATION
NUMBER: 0407005994  EXPIRES: 12-31-2013
PROFESSIONS: ENG
ENGINEERING & MATERIALS TECHNOLOGIES, INC
7857 COPPERMINE DR
MANASSAS, VA 20109

ALTERATION OF THIS DOCUMENT, USE AFTER EXPIRATION, OR USE BY PERSONS OR FIRMS OTHER THAN THOSE NAMED MAY RESULT IN CRIMINAL PROSECUTION UNDER THE CODE OF VIRGINIA.
H&B Surveying and Mapping, LLC
SCC and DPOR Information
Commonwealth of Virginia

STATE CORPORATION COMMISSION

Richmond, April 27, 2009

This is to certify that the certificate of organization of

H & B Surveying and Mapping, LLC

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

State Corporation Commission
Attest:

[Signature]
Clerk of the Commission
LLCM3220 LLC DATA INQUIRY

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

LLC NAME: H & B Surveying and Mapping, LLC

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

STATE OF FILING: VA VIRGINIA MERGER INDICATOR:

CONVERSION/DOMESTICATION INDICATOR:

PRINCIPAL OFFICE ADDRESS

STREET: 612 HULL STREET STE 101B

CITY: RICHMOND STATE: VA ZIP: 23224-0000

REGISTERED AGENT INFORMATION

R/A NAME: TIMOTHY H GUARE

STREET: TIMOTHY H GUARE PLC
6802 PARAGON PL STE 100

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

YEAR FEES PENALTY INTEREST BALANCE
12 50.00

(Screen Id:/LLC_Data_Inquiry)
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS

BUSINESS ENTITY REGISTRATION

PROFESSIONS: LS

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

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
Sharp & Company, Inc.
SCC Information
CISM0180 CORPORATE DATA INQUIRY

CORP ID: F176141 - 2 STATUS: 00 ACTIVE STATUS DATE: 01/04/13

CORP NAME: SHARP & COMPANY INCORPORATED

DATE OF CERTIFICATE: 07/23/2008 PERIOD OF DURATION: INDUSTRY CODE: 00

STATE OF INCORPORATION: MD MARYLAND STOCK INDICATOR: S STOCK

MERGER IND: CONVERSION/DOMESTICATION IND:

GOOD STANDING IND: N NO A-REPORT MONITOR INDICATOR:

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

R/A NAME: KAREN A DONER

STREET: ROTH DONER JACKSON PLC AR RTN MAIL:
8200 GREENSBORO DR STE 820

CITY: MCLEAN STATE: VA ZIP: 22102

R/A STATUS: 4 ATTORNEY EFF. DATE: 10/02/12 LOC: 129

ACCEPTED AR#: 211 21 3716 DATE: 04/19/12 FAIRFAX COUNTY

CURRENT AR#: 211 21 3716 DATE: 04/19/12 STATUS: A ASSESSMENT INDICATOR: 0

YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
13 130.00

(Screen Id:/Corp_Data_Inquiry)
**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><strong>a. Name &amp; Title:</strong></td>
</tr>
<tr>
<td>Scott C. Hunter – Vice President</td>
</tr>
<tr>
<td><strong>b. Project Assignment:</strong></td>
</tr>
<tr>
<td>Design-Build Project Manager</td>
</tr>
<tr>
<td><strong>c. Name of Firm with which you are now associated:</strong></td>
</tr>
<tr>
<td>General Excavation, Inc.</td>
</tr>
<tr>
<td><strong>d. Years experience:</strong></td>
</tr>
<tr>
<td>With this Firm 5 Years With Other Firms 21 Years</td>
</tr>
<tr>
<td>Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):</td>
</tr>
<tr>
<td>General Excavation, Inc.</td>
</tr>
<tr>
<td>Vice President</td>
</tr>
<tr>
<td>May 2007 – Present</td>
</tr>
<tr>
<td>As Vice President of General Excavation, Inc. Mr. Hunter has been responsible for the following:</td>
</tr>
<tr>
<td>• South King Street Widening, Phase I in Leesburg, Virginia ($4.5 million for Town of Leesburg) – Responsible-in-Charge for contract administration and project management. February 2012 – Present.</td>
</tr>
<tr>
<td>• Route 234 Park &amp; Ride Project in Prince William County, Virginia ($5.3 million for VDOT) – Responsible-in-Charge for contract administration and project management. March 2012 – Present.</td>
</tr>
<tr>
<td>• Route 7 Traffic Flow Improvements Project in Loudoun County, Virginia ($3.7 million for Loudoun County) – Responsible-in-Charge for contract administration and project management. April 2012 – Present.</td>
</tr>
<tr>
<td>• Aldie Route 50 Traffic Calming Project in Loudoun County, Virginia ($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.</td>
</tr>
<tr>
<td>• Pacific Boulevard Widening Design-Build Project in Loudoun County, Virginia ($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.</td>
</tr>
<tr>
<td>• Leesburg Park and Ride in Loudoun County, Virginia ($4.3 million for Loudoun County) - Responsible-in-Charge for contract administration and project management. November 2008 – June 2010.</td>
</tr>
<tr>
<td>• Route 340 Bridge Replacement Project over Jeremy’s Run in Page County, Virginia ($7.7 million for VDOT) - Responsible-in-Charge for contract administration and project management. January 2008 – August 2009.</td>
</tr>
<tr>
<td>• Dulles Corridor Metrorail Design-Build Project in Fairfax County, Virginia ($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.</td>
</tr>
<tr>
<td>• Route 340 Bridge Replacement Project / Overall Run in Page/Warren Counties, Virginia ($5.1 million for VDOT) - Responsible-in-Charge for contract administration and project management. December 2006 - August 2008.</td>
</tr>
<tr>
<td>• Route 208 Bypass Project Phase 1, Spotsylvania County, Virginia ($13.4 million for VDOT) - Responsible-in-Charge for contract administration and project management. January 2007 – December 2008.</td>
</tr>
<tr>
<td>• Route 15 Improvements in Loudoun County, Virginia ($4.7 million for VDOT) - Responsible-in-Charge for contract administration and project management. November 2006 – November 2007.</td>
</tr>
<tr>
<td><strong>Lane Construction</strong></td>
</tr>
<tr>
<td>Project Manager</td>
</tr>
<tr>
<td>December 2006 – May 2007</td>
</tr>
<tr>
<td>• 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.</td>
</tr>
<tr>
<td><strong>Moore Brothers Company, Inc.</strong></td>
</tr>
<tr>
<td>Vice President of Construction</td>
</tr>
<tr>
<td>January 2003 – November 2006</td>
</tr>
<tr>
<td>• I-95/ Route 627 Interchange Project in Stafford County, Virginia ($46.0 million for VDOT) – Responsible-in-Charge for project construction. May 2002 – March 2006.</td>
</tr>
<tr>
<td><strong>Moore Brothers Company, Inc.</strong></td>
</tr>
<tr>
<td>General Superintendent</td>
</tr>
<tr>
<td>January 1997 – December 2002</td>
</tr>
</tbody>
</table>
Virginia Military Institute – Lexington, Virginia / B.S. / 1986 / Civil Engineering

N/A

Pacific Boulevard Widening – VDOT Design-Build Project – Loudoun County, Virginia
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, Virginia
1. Vice President - Principal-in-Charge of contract administration and project management. Assisted 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. Assisted 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, Virginia
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, Virginia
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. Assisted the field staff with 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

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title:
   Robert Shackelford, P.E. – Associate – Construction Management Services

b. Project Assignment:
   Quality Assurance Manager

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

d. Years experience: With this Firm 1 Years With Other Firms 20 Years
   Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):
   Whitman, Requardt and Associates, LLP Various Positions/Project Manager July 2011 – Present
   Mr. Shackelford is an Associate for Construction Management Services within the firm and has performed Project Management duties on various contracts for VDOT, George Mason University and local agencies. Projects include:
   • George Mason University Campus Drive Design-Build Project – Quality Assurance Manager – Aug. 2012-Present
   • VDOT DW Contracts in the Richmond, Fredericksburg and NOVA Districts – Consultant Coordinator – 2011-Present
   • City of Richmond – RMA Bridge Rehabilitation Project – Construction Project Manager – 2011-Present
   Mr. Shackelford was the Fredericksburg District Construction Engineer and Area Construction Engineer (ACE) and was responsible for management of over $200 million in transportation construction projects. He was also the Department’s Project Manager and Senior Department Representative on three Design-Build projects. Projects include:
   • Region 4 Design-Build Bridge Projects – Multiple Districts – District DB Project Manager – 2009-2011
   • Region 2 Design-Build Culvert Projects – Multiple Districts – District DB Project Manager – 2009-2011
   • Route 3 Improvement Project – LAP/DB – Spotsylvania County – ACE – 2009-2011
   • Route 208 Bypass Project Phases 1 and 2 – Spotsylvania County – ACE – 2008-2011
   • Cowan Boulevard Project over I-95 – City of Fredericksburg – ACE – 2004-2006
   • Interstate 95/627 Interchange Project – Stafford County – ACE – 2004 – 2007
   Mr. Shackelford was a Resident Engineer responsible for the construction of civil works projects for numerous clients on transportation construction (highways & bridge), drainage facilities, utility installations and planned development community infrastructure construction projects within the San Francisco Bay Area. Projects included the following:
   • Mountain House (Phase 1 & 2) Roads, Structures, Infrastructure, San Joaquin County, CA – RE – 2002-2004
   • Highway 4 Bypass (Phase 2) – Antioch and Brentwood, CA – RE - 2000-2002
   California Department of Transportation Resident Engineer/Assist. RE July 1991 – October 1998
   Mr. Shackelford was a Resident Engineer and Structure Representative for several Caltrans divisions and worked on numerous bridge and highway construction projects in the San Francisco Bay Area. Projects included the following:
   • Interstate 80/Hilltop Road Interchange reconstruction and widening – Field Engineer – Richmond, CA – 1990-1992

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
   The Ohio State University – Columbus, Ohio/B.S./1991/Civil Engineering

f. Active Registration: Year First Registered/Discipline/VA Registration #:
   Professional Engineer/Virginia/2005/#040575

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.)
   George Mason University Campus Drive Design-Build Project – Fairfax, VA
   I. Mr. Shackelford is the Quality Assurance Design Manager responsible for ensuring project quality on the $14 million Design-Build contract, which includes the construction of a Campus Drive through the GMU campus with a new bridge carrying Route 123 over Campus Drive. Along with the Route 123 improvements, the project installs a new...
2. **Firm: Whitman, Requardt & Associates, LLP**

3. **August 2012 – Estimated December 2013**

**Region 4 Design-Build Bridge Contract – Richmond and Fredericksburg Districts – VDOT**

1. Mr. Shackelford served as the Project Manager/Senior Dept. Representative on the $6.6 million multi-District ARRA contract, which replaced ten (10) bridges in the VDOT Richmond & Fredericksburg Districts. Mr. Shackelford was responsible for coordination and approval of all work packages for construction, problem-solving/negotiations with the Design-Build, coordination of IA/IV inspections/testing and payment application approvals. He was also responsible for the processing of change requests, ensuring that public information notifications were sent out and ensuring that bridge work was performed in compliance with contract requirements.

2. **Firm: Virginia Department of Transportation**

3. **2009 – 2011**

**Region 2 Design-Build Culvert Contract – Richmond, Fredericksburg and Northern Virginia Districts – VDOT**

1. Mr. Shackelford served as the Project Manager/Senior Dept. Representative on the $9.2 million multi-District contract, which reconstructed or rehabilitated nine (9) deficient drainage systems in the VDOT Richmond, Fredericksburg and Northern Virginia Districts. Mr. Shackelford was responsible for all coordination and approval of all work packages for construction, problem solving/negotiations with the Design-Builder, coordination of IA/IV inspections/testing and payment application approvals. He was also responsible for the processing of change requests, ensuring public information notifications, environmental permitting requirements and commitments were met and he ensured that culvert work was performed according to the contract requirements. Project rehabilitations included linings, patching and full reconstructions of deteriorated pipes within the project scope.

2. **Firm: Virginia Department of Transportation**

3. **2009 – 2011**

**Route 208 Courthouse Road, Spotsylvania Courthouse - Phase 1- Spotsylvania County, VA – VDOT**

1. Mr. Shackelford was the Area Construction Engineer assigned to this $13.5 million project which constructed the first phase of a primary road realignment in the busy Spotsylvania Courthouse area. The project was staged to avoid traffic disruptions in the Courthouse area. Project required close communications and advanced construction scheduling with miscellaneous utilities, County government, National Park Service, business and residents. Construction elements included a new divided 4-lane roadway, traffic signals, guard rail installation, drainage facilities, storm water 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. Mr. Shackelford was responsible for the supervision of staff on the project and was responsible for review and approval of the project schedule, managing changes to the work, and checking work quality of Construction Managers and Inspectors. He reviewed and approved project documentation/recordkeeping, scheduled material testing, approved monthly pay packages and communicated with project designers and other VDOT support sections. He was responsible for contract change negotiations and claim negotiations on the contract. He also was responsible for all financial closeout items with the FHWA on the contract.

1. **Firm: Virginia Department of Transportation**

2. **2007 – 2008**

**I-95/627 Interchange Project – Stafford County, VA – VDOT**

1. Mr. Shackelford was the Area Construction Engineer assigned to this $46 million project, which constructed a new interchange on Interstate 95 north of Fredericksburg, a connector road to Route 1 and associated roadway features. Project built approximately 5 miles of undivided and divided roadway, 4 new structures, 4 signalized intersections, 1.3 million cubic yards of excavation, soundwall, storm drain systems, lighting and soundwall on this multi-year contract. Mr. Shackelford was responsible for managing the FHWA funded project and supervising all Construction Management and Inspection staff. Duties included verification that all Department and FHWA requirements and processes were employed and satisfied on the project. He reviewed and approved project documentation and ensured that materials used met standards. He approved monthly payments to the contractor, frequently communicated with project designers and coordinated with VDOT support sections to resolve unforeseen conditions encountered on the project. He negotiated and authorized changes on the project with the contractor and was responsible to resolve conflicts and notices of intent to file claims with the contractor. He also was responsible for closeout all financial settlements with the contractor and eventually FHWA on the contract. He conducted partnering and project meetings with the contractor and dealt extensively with utilities, the public, local governments, media outlets and project stakeholders.

2. **Firm: Virginia Department of Transportation**

3. **2004 – 2007**
**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:</td>
</tr>
<tr>
<td>John Maddox, P.E. – Senior Vice President</td>
</tr>
<tr>
<td>b. Project Assignment:</td>
</tr>
<tr>
<td>Design Manager</td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated:</td>
</tr>
<tr>
<td>Whitman, Requardt and Associates, LLP</td>
</tr>
<tr>
<td>d. Years experience: With this Firm <em>17</em> Years With Other Firms <em>10</em> Years</td>
</tr>
<tr>
<td>Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):</td>
</tr>
<tr>
<td>Whitman, Requardt and Associates, LLP</td>
</tr>
<tr>
<td>Mr. Maddox has served as Project Manager on VDOT projects continuously from August 1997 to the present including:</td>
</tr>
<tr>
<td>- Route I-81 Bridge over the New River and Improvements to Exit 105 – Project Manager – 2011-Present ($90 million)</td>
</tr>
<tr>
<td>- Route 123 and Route 1 Interchange – Project Manager – 2007-Present ($70 million)</td>
</tr>
<tr>
<td>- VDOT NOVA District Location and Design On-Call Contract – Contract Manager – 2008-Present</td>
</tr>
<tr>
<td>- Fairfax County Parkway Widening and Interchange at Fair Lakes Parkway – Project Manager – 2001-Present ($44 million)</td>
</tr>
<tr>
<td>- VDOT Statewide Location and Design On-Call Contract – Contract Manager – 2008-2011</td>
</tr>
<tr>
<td>- Route I-81 Widening and Bridge Replacement over Buffalo Creek and Truck Climbing Lane – Project Manager – 1999-2007 ($27 million)</td>
</tr>
<tr>
<td>- Route I-81 Widening and Bridge Replacement over Maury River – Project Manager – 1999-2006 ($18 million)</td>
</tr>
<tr>
<td>- Route 29 Bypass Sweet Briar Interchange – Project Manager – 1996-2005 ($35 million)</td>
</tr>
<tr>
<td>e. Education: Name &amp; Location of Institution(s)/Degree(s)/Year/Specialization:</td>
</tr>
<tr>
<td>West Virginia Institute of Technology (is now a division of West Virginia University) – Montgomery, West Virginia/B.S./1985/Civil Engineering</td>
</tr>
<tr>
<td>f. Active Registration: Year First Registered/Discipline/VA Registration #:</td>
</tr>
<tr>
<td>Professional Engineer/Virginia/1996/#026613</td>
</tr>
<tr>
<td>g. Document the extent and depth of your experience and qualifications relevant to the Project.</td>
</tr>
<tr>
<td>1. Note your specific responsibilities and authorities for each assignment, not those of the firm.</td>
</tr>
<tr>
<td>2. Note whether experience is with current firm or with other firm.</td>
</tr>
<tr>
<td>3. Provide beginning and end dates for each assignment.</td>
</tr>
<tr>
<td>(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)</td>
</tr>
</tbody>
</table>

**Fairfax County Parkway (FCP) Widening and Interchange at Fair Lakes Parkway – Fairfax County, VA – VDOT**
1. Mr. Maddox is the Project Manager responsible for the design of a $44 million project, which widens FCP from four to six lanes for 2.3 miles and provides an interchange at Fair Lakes Parkway and Monument Drive. The interchange includes two new bridges and over 43,000 sf of retaining walls. The project also required the design of over 70,000 sf of noise walls. The FCP Bridge over Route 50 was widened from four to six lanes. The project also includes an extensive MOT plan with multiple phases of construction for maintaining over 45,000 vpd during the construction of the project. The project required coordination with the Fairfax County Park Authority to obtain permanent easements for the project and the connection of the Rocky Run Stream Valley Trail in the park. Mr. Maddox provides oversight and coordination for all elements of the project including roadway, hydraulic, SWM, structural, utility relocation, traffic engineering, environmental permits, traffic forecast and analysis, and public involvement. Mr. Maddox provided a leadership role in stakeholder outreach to the existing Homeowners’ Associations, Fair Lakes League and the Fairfax County Park Authority to minimize right-of-way impacts, aesthetics and pedestrian access to the Rocky Run Stream Valley Park.

2. **Firm: Whitman, Requardt and Associates, LLP**

**I-81 Widening and Bridge Replacements over Buffalo Creek and Maury River – Rockbridge County, VA – VDOT**
1. Mr. Maddox was the Project Manager responsible for the design of both projects under a single design contract. The project construction totaled $45 million and included widening 2 miles of I-81 from four to six lanes and the
construction of a truck climbing lane on northbound I-81 at Buffalo Creek. The project included the replacement of the I-81 Bridge over Buffalo Creek with an approximate length of 600 feet and the bridge over Maury River with an approximate length of 800 feet. The design included a complex maintenance of traffic plan to maintain two lanes of traffic in each direction during all phases of construction. The project replaced all existing CMP along the project requiring boring and jacking of new pipes. Mr. Maddox provided oversight and coordination for all elements of the design, including roadway, hydraulic, SWM, structural, geotechnical, environmental permits and public involvement. Duties included coordination of the design with FHWA and VDOT staff. The projects received the 2008 ACEC Grand Award and the Buffalo Creek was awarded the “VDOT Virginia Statewide Construction Quality Award” and NPHQ Award “Breaking the Mold”.

2. **Firm: Whitman, Requardt and Associates, LLP**
3. **August 1999 – December 2007**

**Route 123 Interchange at Route 1 – Prince William County, VA – VDOT**

1. Mr. Maddox is the Project Manager responsible for the design of a $70 million project, which includes a tight urban interchange at Route 123 and Route 1 and the widening from four to six lanes 1.7 miles of Route 1 and Route 123. The project requires two new bridges; Route 123 over Route 1 and Route 123/Belmont Bay Drive over CSXT Railroad. Route 123 and the connecting ramps are elevated on MSE retaining walls to reduce the right-of-way impacts of the project. The replacement of the existing bridge over Marumsco Creek required a detailed analysis of the FEMA floodplain. The project includes building 2,200 feet of the Potomac Heritage Trail along Route 123. The project also includes the tunneling of three storm drainage pipes under the railroad. A complex MOT plan is also required to maintain traffic operations during multiple phases of construction including a complete traffic analysis of each phase of construction. Mr. Maddox provides oversight and coordination for all elements of the design including surveys, roadway, hydraulics, SWM, structural, geotechnical, traffic engineering, ITS, TMP, traffic forecasting and analysis, permitting and public involvement.

2. **Firm: Whitman, Requardt and Associates, LLP**
3. **December 2007 – December 2014 Advertisement**

**I-81 Bridge Replacement over the New River and Exit 105 Modifications – Montgomery and Pulaski Counties, VA – VDOT**

1. Mr. Maddox is the Project Manager responsible for the design of the $90 million project, which includes 1.72 miles of improvements to the existing four-lane divided interstate. The improvements consist of the replacement of the existing two-lane bridges over the New River with three-lane bridges in each direction. The bridges are approximately 1,600 feet long and are 80 feet above the river. I-81 will be widened to provide deceleration and acceleration lanes along I-81. The project required the investigation of the condition of the existing CMP along the project and the analysis of lining or replacing the existing pipe. The design includes a complex Type B Category IV TMP for multiple phases of construction. The Exit 105 interchange is reconstructed requiring an IMR and the replacement of the Route 232 bridge over I-81. The project is being developed under a “Turnkey Delivery” and Mr. Maddox is providing oversight and coordination for all elements of the design including surveys, roadway, hydraulics, SWM, structural, geotechnical, and traffic engineering, ITS, TMP, environmental permits and utility design. Additionally, the project includes public outreach including stakeholder meetings, a citizen information meeting and a public hearing. Mr. Maddox also leads monthly meetings with VDOT, subconsultants and key staff to ensure all elements of the project are proceeding on schedule. The scheduling is enhanced by utilizing CPM scheduling to clearly define the critical path of the design, environmental and right-of-way tasks.

2. **Firm: Whitman, Requardt and Associates, LLP**
3. **February 2011 – December 2017 Advertisement**

**Route 29 Bypass Sweet Briar Interchange – Amherst County, VA – VDOT**

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

2. **Firm: Whitman, Requardt and Associates, LLP**
4. **1996 – 2005**
### KEY PERSONNEL RESUME FORM

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

<table>
<thead>
<tr>
<th>a. Name &amp; Title:</th>
<th>Page L. Gallihugh, Jr. – General Superintendent</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Project Assignment:</td>
<td>Construction Manager</td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated:</td>
<td>General Excavation, Inc.</td>
</tr>
<tr>
<td>d. Years experience: With this Firm</td>
<td>10 Years With Other Firms 13 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.):

| General Excavation, Inc. | General Superintendent | 2001 – Present |
---|------------------------|-------------------|
As General Superintendent for General Excavation, Inc. Mr. Gallihugh has managed the following projects:

- Route 7 Traffic Flow Improvements Project in Loudoun County, Virginia ($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, Virginia ($1.9 million for VDOT) – General Superintendent responsible for field construction operations. May 2010 – August 2012.
- Sycolin Road Widening, Phase II in Leesburg, Virginia ($2.7 million for Town of Leesburg) - General Superintendent responsible for field construction operations. June 2010 – September 2011.
- Route 610 Improvements Project in Stafford County, Virginia ($5.1 million for VDOT) - General Superintendent responsible for field construction operations. November 2006 - August 2008.
- Route 15 Improvements in Loudoun County, Virginia ($4.7 million for VDOT) - General Superintendent responsible for field construction operations. November 2006 – November 2007.
- Route 649 Project in Albemarle County, Virginia ($4.8 million for VDOT) - General Superintendent responsible for field construction operations. March 2004 – September 2005.
- Route 15 Improvements in Loudoun County, Virginia ($4.4 million for VDOT) - General Superintendent responsible for field construction operations. May 2002 – May 2003.

**Virginia Department of Transportation**  
*Construction Quality Improvement Inspector*  
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: |
| Orange County High School – Orange, Virginia/1988 |

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

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. **Firm:** General Excavation, Inc.
   3. **May 2010 – August 2012**

**Route 610 Garrisonville Road, Stafford County, Virginia**

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. **Firm:** General Excavation, Inc.
   3. **November 2006 – August 2008**

**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. Gallighugh 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.

**I-66 University Boulevard – VDOT – Prince William County, Virginia**

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.

   1. **Firm:** General Excavation, Inc.

**Route 234 Dumfries Road at Lake Jackson Drive – VDOT – Prince William County, Virginia**

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, stormwater 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**
**LEAD CONTRACTOR - WORK HISTORY FORM**

**ATTACHMENT 3.4.1(a)**

**LIMIT 1 PAGE PER PROJECT**

<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>
<th>c. Contact information of the Client or Owner and their Project Manager who can verify Firm’s responsibilities.</th>
<th>d. Contract Completion Date (Original)</th>
<th>e. Contract Completion Date (Actual or Estimated)</th>
<th>f. Contract Value (in thousands)</th>
<th>g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacific Boulevard Widening (Design-Build)</td>
<td>Kimley Horn and Associates, Inc.</td>
<td>Timothy Hartzell, P.E. Phone: (703) 259-2947 E-mail: <a href="mailto:Timothy.Hartzell@VDOT.Virginia.gov">Timothy.Hartzell@VDOT.Virginia.gov</a></td>
<td>07/2011</td>
<td>08/2012</td>
<td>$1,850</td>
<td>$1,964</td>
</tr>
</tbody>
</table>

**h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly.**

The Pacific Boulevard widening project is a recent Design-Build project completed by General Excavation, Inc. for VDOT. The project consisted of constructing 2,100 LF of two lanes of a four-lane secondary roadway in Loudoun County. GEI had comprehensive responsibility for the execution of the project and served as the contractor for building the roadway widening. Elements performed and/or managed by GEI included the following:

- **Design**
- **Construction**
- **Quality Assurance**
- **Green**
- **Utility Relocation**
- **Public Outreach**
- **Traffic Signal Design and Construction**
- **Utilities – Power and Communication to Traffic Signal**
- **Grading**
- **Storm Drainage**
- **Bituminous Asphalt Paving**
- **Water and Sanitary Sewer Relocation and Adjustments**

While straightforward, the project presented the GEI Design-Build Team with several challenges. The first of these challenges was the acquisition of the right-of-way and easements required to construct the project. Since the project impacted nine (9) different properties and eleven (11) different owners, surveys were required to accurately develop and depict the plans and plats necessary for the appraisals and offers. The title research found that the smallest parcel impacted identified four (4) different property owners of a commercial condominium, which was divided into a northern segment and southern segment with the majority of the owners being located in Colorado. Preparing and presenting an offer to a property with multiple owners, who are represented by an association required a significant amount of time and effort to resolve. The second challenge involved preparing the design and acquiring the right-of-way and utility easements required to provide permanent power to the new traffic signal. Determining the most cost effective and efficient power alignment required the involvement and approval of VDOT, the power company, and a private land development company (Prologis). The GEI Design-Build Team developed and executed an agreement with Prologis that enabled the permanent power for the traffic signal to be installed within a permitted landscape easement owned by Prologis. The negotiations required to secure the necessary easement were done at no additional cost to the Department and were completed by GEI independently of the right-of-way negotiations associated with the roadway widening. Additionally, the GEI Design-Build Team agreed to implement and incorporate improvements to the approved sanitary sewer plan without additional cost to the Department. The improvement eliminated a manhole structure, upgraded a sanitary lateral, and was negotiated by GEI directly with Prologis and approved by the Loudoun County Water Authority. 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.

**Lessons Learned**

- Implementation and Daily Maintenance of MOT Devices.
- Agressively Pursue ROW Acquisition
- Perform geotechnical investigations early in the process.
- Importance of strong project management and to keep Key Personnel engaged in the project from start to finish.
- Secure off-site disposal and borrow areas as soon as possible to eliminate potential delays to construction.

**GEI Team Advantage**

GEI is proposing the same Project Management Team for the Route 7 project ensuring a proven integrated team approach to the project, which will allow the Lessons Learned above to be applied directly to the project.

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.
GEI was the Prime Contractor for this 4.82 km section of Route 208 in Spotsylvania County, Virginia. 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.

The project was constructed in two phases each with numerous stages. Phase I consisted of the construction of the new EB and WB of Route 208 between existing 208 and Route 613. The Route 613 upgrade 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, we communicated closely with numerous third parties including the National Park Service, County government, the Spotsylvania School Board, utility owners, businesses and residents and kept them all 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.

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 views 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 met personally 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.

Construction elements included a new divided four-lane roadway, traffic signals, guardrail installation, drainage facilities, storm water 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.
**ATTACHMENT 3.4.1(a)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

| a. Project Name & Location | Name: University Boulevard  
Location: Prince William County, Virginia |
|----------------------------|---------------------------------------------|
| b. Name of the prime design consulting firm responsible for the overall project design. | Name: Dewberry & Davis, LLC  
Name of Client/Owner: VDOT |
| c. Contact information of the Client or Owner and their Project Manager who can verify Firm’s responsibilities. | Phone: (703) 815-3259 – NOVA District Office  
Project Manager: Mr. William Green (Retired) |
| d. Contract Completion Date (Actual or Estimated) | 09/2006  
09/2006 |
| e. Contract Completion Date (Original) | |
| f. Original Contract Value | $11,157 |
| g. Final or Estimated Contract Value | $12,134  
(8.8% Increase to the Final Contract Value was a result of Approved Change Orders – one of significant value that added a retaining structure, and Asphalt and Fuel Adjustments) |
| h. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands) | $5,968 |

<table>
<thead>
<tr>
<th>f. Contract Value (in thousands)</th>
<th>g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$11,157</td>
<td>$5,968</td>
</tr>
</tbody>
</table>

**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 Similar to Route 7**
- Roadway Construction
- Bridge Construction
- MSE Wall Construction
- Storm Drainage
- Maintenance of Traffic
- Construction of two new traffic signals
- Storm Drainage
- Maintenance of Traffic
- Scheduling
- Bituminous Asphalt Paving
- Construction Management of Subcontractors

**Lessons Learned/Keys to Success**
- Develop a MOT/TMP Plan that reduces the impact to the traveling public and surrounding businesses while enabling safe construction practices.
- Locate and secure disposal sites and borrow areas as soon as possible.
- Engage local utility companies early in the design process to ensure the timely delivery of power to traffic signals.

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 process. The MOT/TMP plan was implemented so that traffic could flow smoothly and uninterrupted while the bridge work continued. Carefully reviewing 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.

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.
**LEAD DESIGNER – WORK HISTORY FORM**

**ATTACHMENT 3.4.1(b)**

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Name of the prime/general contractor responsible for overall construction of the project.</th>
<th>c. Contact information of the Client and their Project Manager who can verify Firm’s responsibilities.</th>
<th>d. Construction Contract Completion Date (Original)</th>
<th>e. Construction Contract Completion Date (Actual or Estimated)</th>
<th>f. Contract Value (in thousands)</th>
<th>g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement (in thousands).</th>
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<td>Name: FAIRFAX COUNTY PARKWAY INTERCHANGE AT FAIR LAKES PARKWAY, LLC</td>
<td>Name: Shirley Contracting Company, LLC</td>
<td>Name of Client: VDOT</td>
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<td>2013 Construction</td>
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<td>$43,961 (Est.)</td>
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<td>Location: Fairfax County, VA</td>
<td>Phone: (703) 259-1723</td>
<td>Phone: See below Project Manager: Mr. Nassre Obeed</td>
<td></td>
<td></td>
<td></td>
<td>$3,736</td>
</tr>
</tbody>
</table>

**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 subcontractor.**

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

- **Roadway Reconstruction and Widening** – 2.3 miles of Fairfax County Parkway was widened into the median increasing the number of lanes from 4 to 6 and 0.7 miles was totally reconstructed to facilitate raising FCP up and over Fair Lakes Parkway and Monument Drive. Over 3,000 feet of Fair Lakes Parkway was widened/reconstructed to provide additional turn lanes.

- **Interchange Design** – The project included the design of a Split-Diamond Interchange to provide access to both Fair Lakes Parkway and Monument Drive. The four ramps with over 7,000 feet in length. The ramps intersected Fair Lakes Parkway and Monument Drive at coordinated signalized intersections with multi-lane approaches.

- **Hydraulic Analysis** – The project contained a major drainage outfall to the Rocky Run Stream through an 800-foot long triple 8’x10’ box culvert under Ramps B and C and Fairfax County Parkway. The project also included a single 408-foot long 7’ x 8’ box culvert under Ramps B and C and Fairfax County Parkway. Additionally, Fairfax County Parkway and Fair Lakes Parkway are located on dams for regional stormwater management lakes, which are regulated by DEQ. The dam is being modified by the project and a new stormwater outfall was extended into the existing lake to provide water quality improvements for the project. This required WR&A to complete a dam break analysis and coordination for review of the dam modification with DEQ and the County of Fairfax.

- **Structural Design** – The bridge design efforts included the complete design of two single-span structures consisting of precast bulb tee beams spanning 116’ and 142’, each with a width of 128’. Abutments consisted of semi-integral concrete seats on steel piles with MSE retaining walls imprinted with an architectural finish of ashlar stone. The design included under bridge lighting for the sidewalks and pedestrian movements. The project also included widening the Fairfax County Parkway bridge over Route 50 by adding two additional travel lanes in the median. The bridge widening consisted of two span structural steel plate girders totaling 220’ in length set on a new concrete pier aesthetically similar to the existing piers. The design included over 43,000 sf of retaining walls including MSE, Pile Panel, Soil Nail and over 70,000 sf of sound barriers. The ashlar stone finish from the bridge abutments was carried through to all wall elements to create an appealing appearance to this gateway to the Fair Lakes Community. The geotechnical design efforts included an evaluation of all of the walls and the final design of bridge foundations. The retaining wall featured a two tier soil nail wall, which was one of the first soil nail walls utilized by VDOT. WR&A assisted with the development of the retaining wall specifications and provided support during construction to ensure the walls were constructed in accordance with the plans and specifications and the architectural finishes on all walls and bridge abutments was similar.

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

**TMIP Plans** – The project consisted of multiple phases of construction with a complex sequence of traffic.

- **Public Involvement** – Since the 1980s, the Fair Lakes Community has maintained the VDOT right-of-way with landscaping, decorative signage, and mowing and reserved the right-of-way for the future interchange project. WR&A led a series of meetings with the Fair Lakes League that resulted in the acceptance of the project, donation of right-of-way/easements and utilization of existing private regional stormwater management facilities for the project. This resulted in significant cost savings to the project, which allowed aesthetic features such as decorative pedestrian lighting, and an ashlar stone finish on the retaining walls and sound barriers to be added to the project. The finished project will enhance the community and provide significant improvements to traffic operations. WR&A also developed materials for both a Citizens’ Information Meeting and a Design Public Hearing.

**LESSONS LEARNED**

- Detailed traffic analysis of each phase of construction is essential to quality Transportation Management Plans.
- Innovative approach to stormwater management is required to minimize right-of-way impacts.
- Early public outreach results in true enhancements to the final project.

**WR&A Team Advantage**

WR&A is proposing the same Project Manager for the Route 7 project ensuring a proven integrated team approach to the project, which will allow the Lessons Learned above to be applied directly to the project.
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 subcontractor.

Leonard Page, Regis, and Associates LLC (WR&A) was selected as the prime designer for the I-81 bridge replacement projects for both the Buffalo Creek and Maury River bridges under a single design contract No. 99L029. WR&A completed approximately 90% of the design from our Virginia offices. The bridges had reduced shoulder width and were classified as functional obsolete. The projects were to be the first part of the I-81 reconstruction efforts and were designed to widen I-81 from 4 to 6 lanes.

Roadway Design – Both projects required the reconstruction of approximately one mile of the interstate facility. The design required total replacement of the existing pavement section, which required the roadway typical section to be shifted to the east to ensure two travel lanes where maintained during construction at all times.

Hydraulic Analysis – The projects required a detailed hydraulic analysis of both Buffalo Creek and Maury River to ensure the project had no impact to the 100-year flood elevation. Additionally, the analysis included the evaluation of temporary causeways into the stream during construction. The project design needed to carefully consider the karst geologic features along the corridor. Five stormwater management facilities were designed for the projects and all existing CM drainage pipes were replaced requiring the boring and jacking of several pipes. The projects also included the design of the extension of 3 box culverts.

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

Structural Design – The structural design of the two I-81 bridges over the Buffalo Creek gorge with a depth well over 100 feet on I-81 was a major focus of the design. The bridges were on independent alignments and grading with approximately 1,000 feet between the roadways. The NBL bridge was the more challenging design due to the requirement that it be constructed in two stages just downstream from the existing bridge, and due to the site topography. Alignment studies also revealed the need to raise the profiles of the bridges approximately 8 feet to meet current FHWA 8-foot Design Standards. The design consists of continuous hybrid steel plate girder bridges with the following span configurations: NBL Bridge: 137’–166’–166’–137’ = 606’ and the SBL Bridge: 138’–154’–154’–138’ = 584’. The NBL Bridge is on a curved alignment while the SBL Bridge is on a tangent alignment. Both bridges required tall piers of up to 110 feet in height due to the depth of the gorge.

The Maury River bridges are three lanes wide with 14-foot wide shoulders on each side. The new bridges are on parallel alignments and are of different lengths and layouts due to the topography and constraints of the site. The NBL bridge is 825 feet in length with five spans (137’–151’–164’–177’–193’) and the SBL bridge is 743 feet in length with four spans (193’–177’–177’–193’). They are on tangent alignments, but the NBL bridge has a 1°-45’ curve in the southernmost end span. The bridges have fully-continuous hybrid steel superstructures with 73-inch deep plate girders. Both the Buffalo Creek and Maury River bridges featured an innovative design element for the treatment of the deck joints at the abutments. The ends of the steel girders are encased in a concrete diaphragm that is integral with the deck and located just beyond the bearings. The deck joints are tooth expansion joints that are located on the abutment side of the concrete diaphragm. VDOT has since included the detail in the Design Guidelines as a special alternative joint detail.

WR&A Team Advantage

WR&A is proposing the same Project Manager for the Route 7 project ensuring a proven integrated team approach to the project, which will allow the Lessons Learned above to be applied directly to the project.

LESSONS LEARNED

Early Involvement of geotechnical staff can have a significant enhancement to constructability and cost of project. Maintenance of traffic plans should carefully consider the strengthening of existing paved shoulders for each phase of construction. Early detailed evaluation of existing CM pipe systems can result in a significant reduction of risk during design and construction.

WR&A is proposing the same Project Manager for the Route 7 project ensuring a proven integrated team approach to the project, which will allow the Lessons Learned above to be applied directly to the project.

Structural Design – The structural design of the two I-81 bridges over the Buffalo Creek gorge with a depth well over 100 feet on I-81 was a main focus of the design. The bridges were on independent alignments and grading with approximately 1,000 feet distance between the roadways. The NBL bridge was the more challenging design due to the requirement that it be constructed in two stages just downstream from the existing bridge, and due to the site topography. Alignment studies also revealed the need to raise the profiles of the bridges approximately 8 feet to meet current FHWA Interstate Design Standards. The design consists of continuous hybrid steel plate girder bridges with the following span configurations: NBL Bridge: 137’–166’–166’–137’ = 606’ and the SBL Bridge: 138’–154’–154’–138’ = 584’. The NBL Bridge is on a curved alignment while the SBL Bridge is on a tangent alignment. Both bridges required tall piers of up to 110 feet in height due to the depth of the gorge.

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MPM – The sequence of construction and maintenance of traffic required all existing travel lanes to remain open during construction. This required a phased construction of the bridges. The Buffalo Creek northbound bridge was constructed in two phases, while the southbound bridge was shifted into the median and constructed in a single phase. The Maury River bridges were replaced by first constructing the new northbound bridge to the east and then shifting the northbound traffic onto the new structure. The southbound traffic was then shifted onto the old existing northbound bridge while the new southbound structure was constructed.

Public Involvement – WR&A provided all presentation materials and participated in the Design Public Hearing for the project.

Project Awards:
BUFFALO CREEK: VDOT Virginia Statewide Construction Quality Award, PNHQ Award “Breaking The Mold” and ACEC Grand Award For Design Excellence
MAURY RIVER: ACEC Grand Award For Design Excellence
**ATTACHMENT 3.4.1(b)**

**LEAD DESIGNER – WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

<table>
<thead>
<tr>
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<th>g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement (in thousands).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maryland State Highway Administration (MSHA)</td>
<td>Whitman, Requardt and Associates, LLP was the prime design firm for this design-build project responsible for preparing final engineering design documents and approvals for the dualization of 2.88 miles of MD 237 from MD 235 to Pegg Road in St. Mary’s County, Maryland. The project was designed in our Baltimore, Maryland office. The project widened MD 237 from a two-lane open section roadway to a four lane divided highway incorporating pedestrian and bicycle facilities. The project features include: <strong>Roadway Reconstruction</strong> – Existing two-lane open roadway was completely reconstructed to a four-lane closed-section divided roadway with left turn lanes at select intersections. The reconstructed roadway incorporated 5’ bike lanes, a raised landscape median, and 5’ pedestrian walkways throughout the entire limits of the project. Improved horizontal and vertical geometrics were enacted to meet current design criteria including raising the roadway profile 12’ for a 2,200 LF vertical realignment at a major stream crossing for replacement of undersized pipes with a twin-cell box culvert. <strong>Interception Reconstruction</strong> – Sixteen intersecting side streets required reconstruction including two with complete realignments. With adjacent properties having direct access, over 65 driveways and entrances were reconstructed. <strong>Hydraulic Analysis and Stormwater Management (SWM)</strong> – The new closed storm drain system consisted of over 13,500 LF of drainage pipes. Eight new SWM ponds were constructed, initially constructed as sediment traps then converted over to landscaped SWM facilities as construction progressed. <strong>Noise Analysis and Noise Barrier Design</strong> – Three noise walls, totaling over 1,700 LF were installed along residential communities. Noise walls were supported on reinforced concrete drilled shafts. The noise wall consisted of reinforced concrete noise posts and panels with a simulated brick finish. <strong>Geotechnical and Pavement Analysis/Design</strong> – Foundation design was provided for the noise wall and twin-cell box culvert. A temporary fabric wall was designed to maintain traffic at the culvert replacement to accommodate the raised roadway grade while maintaining traffic on the existing pavement. Roadway geotechnical and pavement design services included designing new roadway cuts/fills and new pavement using Falling Weight Deflectometer testing of existing pavement to remain and new pavement subgrade. The first use by MSHA of bank run gravel as the pavement base course was recommended by WR&amp;A and approved by MSHA on this project. Local sources of bank run material were tested and accepted for use on the project. <strong>Drainage Culvert Replacement</strong> – Undersized culverts at a significant stream crossing were replaced with a twin-cell box culvert to eliminate flooding and closing of the existing roadway. A temporary culvert was installed for construction of the culvert and a stone stream grade control structure was designed and constructed to promote fish passage while maintaining upstream hydrology needed for the preservation of existing wetlands. The new box culvert was supported on 14 piles with one cell passing the normal flow and a second cell used as an animal passage and floodplain overflow. A circular overflow culvert was also installed to provide additional capacity for major storm events. <strong>Utility Relocation Design and Coordination</strong> – Utility relocation consisted of designing and installing over 10,000 LF of 12” ductile iron water pipe, 6,000 LF of 6” and 8” gas line, 350 feet of low pressure sanitary sewer with grinder pumps and coordination with utility companies for the relocation of aerial electric, telephone and cable television. <strong>Maintenance of Traffic</strong> – Extensive multi-phase maintenance of traffic plans were required to maintain traffic along all roadways and access to driveways/entrances. The project was divided into four distinct construction zones based on maintaining drainage within each zone. Temporary cross-overs from newly constructed pavement to the existing pavement were necessary as each portions of the project were completed. <strong>Traffic Control Devices</strong> – Traffic Engineering services included the design and installation of five new traffic signals, signal interconnect, relocation of school flasher, new signing and pavement markings, and new intersection lighting. <strong>Environmental Compliance</strong> – Construction occurred in an environmental sensitive area requiring MSHA to retain an Independent Environmental Monitor (IEM) throughout the project duration as a permit condition. Close coordination with the IEM was required to maintain the project within the strict permit conditions. <strong>Public Involvement</strong> – A public meeting was held to continue MSHA’s public involvement campaign and to inform the community of the final design elements and upcoming construction activities. <strong>Partnering During Design and Construction</strong> – WR&amp;A participated in a partnering agreement, which set goals and objectives during the early stages of work. Subsequent monthly meetings were held to ensure goals and objectives were being met by discussing the project progress, quality, resolve issues, and current/future schedule.</td>
<td></td>
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<td>$35,872</td>
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Request For Qualifications
A Design-Build Project

Route 7
Westbound
Truck Climbing
Lane

From: Route 9
To: West Market Street
State Project No.: 6007-053-133, R201, C501
Federal Project No.: STP-5401 (518)
Contract ID Number: C00058599DB54

Loudoun County, Virginia