STATEMENT OF QUALIFICATIONS

I-64/ROUTE 15 (ZION CROSSROADS) INTERCHANGE IMPROVEMENT PROJECT

From: 0.3 Mi. W. Int. Rte. 15 (I-64 EB & WB)
To: 0.35 Mi. E. Rte. 15 (I-64 EB & WB)
Louisa County, Virginia

State Project No.: 0064-054-703, P101, R201, C501
Federal Project No.: IM-064-2(155)
Contract ID Number: C00086453DB48

February 3, 2012

This proposal has been prepared by:

Key Construction Company, Inc.
SECTION 3.2
LETTER OF SUBMITTAL

Key Construction Company, Inc.
February 3, 2012

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

RE: Statement of Qualifications
I-64/Route 15 (Zion Crossroads) Interchange Improvement
Louisa County, Virginia
State Project No.: 0064-054-703, P101, R201, C501
Federal Project No.: IM-064-2(155)
Contract ID Number: C00086453DB48

Dear Mr. Millikan:

Key Construction Company, Inc. (Key) is pleased to submit ten (10) paper copies and one CD-ROM of our Statement of Qualifications (SOQ) to the Virginia Department of Transportation (VDOT) to provide Design-Build (D-B) services for the I-64/Route 15 (Zion Crossroads) Interchange Improvement D-B Project in Louisa County, Virginia. We have carefully reviewed the Request for Qualifications (RFQ), RFQ Information Package, and RFQ Questions and Answers; attended the Project Information Meeting; and visited the project site multiple times.

PROJECT TEAM
Key is a wholly-owned subsidiary of Utility Services Associates, Inc. (USA). USA is a 100% employee-owned and operated Virginia corporation that serves as the holding company of the USA family of companies, including Key Construction Company, Inc. and their subsidiaries Key Constructors, Inc. and D.W. Lyle Corporation, each of whom provides construction related services.

Key, based in Clarksville, Virginia, employs qualified personnel delivering projects throughout the Mid-Atlantic Region. Key is a company with shared values focusing on customer needs, employee-owner satisfaction, and strong vendor relationships. Our wealth of expertise allows us to construct or repair complex highway infrastructures under extreme conditions and areas. With our shared values and many past successful projects, we are confident we will deliver the I-64/Route 15 (Zion Crossroads) Interchange Improvement D-B Project to the satisfaction of VDOT and Louisa County.

Key has selected Johnson, Mirmiran & Thompson (JMT) as our lead design firm to provide all engineering services for this project. Key and JMT have excellent reputations in the design and construction of similar projects, with proven prior experience in delivering quality D-B projects. Combined, our vast experience directly benefits VDOT, by incorporating the team’s familiarity with pre-design constructability assessments and requirements, effective communication procedures, and the ability to react and adapt quickly to dynamic design and construction realities. Other members of our team include EBA Engineering, Inc.; ECS Mid-Atlantic, LLC; EEE Consulting, Inc.; Froehling & Robertson, Inc.; Quinn Consulting Services, Inc.; Schnabel Engineering Consultants, Inc.; and Travesky & Associates, Ltd.

KEY PERSONNEL
Key has committed one of their most seasoned managers, Mr. Timothy Nunn, to serve as the D-B Project Manager (D-B PM). Mr. Nunn has more than 30 years experience planning, managing and assisting in the design and construction of heavy civil projects. He has specific expertise in Virginia transportation construction projects and is thoroughly familiar with VDOT processes, policies, and procedures. This knowledge, combined with his experience and uncompromising commitment to quality and professionalism, ensure that Mr. Nunn has the ability to capably fulfill D-B PM responsibilities for this project. JMT’s Design Manager, Mr. Robert Gallagher, P.E., will provide day-to-day management of the design team’s efforts. Key’s Construction Manager, Mr. Patrick Newton, will be on site for the duration of the project to manage the construction process including all Construction Quality Control activities. The Public Relations Manager, Ms. Denise Nugent of Travesky & Associates, Ltd. will be responsible for all public relations activities for the project.
These four key individuals will work closely with the independent Construction Quality Assurance Manager, Mr. Kaushik Vyas, P.E. of Quinn Consulting Services, Inc. to provide the highest levels of project Construction Quality Assurance services in all phases from design to completion.

Section 3.2.1 Official Representative and Point of Contact

Key’s official representative and designated point-of-contact for all project-related communications is Key’s Vice President, Timothy B. Nunn. Mr. Nunn can be reached as follows:

<table>
<thead>
<tr>
<th>Address</th>
<th>Phone</th>
<th>Mobile</th>
<th>Fax</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>P. O. Box 698</td>
<td>434-374-2125</td>
<td>804-314-0046</td>
<td>434-374-4360</td>
<td><a href="mailto:tim.nunn@key-construction.com">tim.nunn@key-construction.com</a></td>
</tr>
<tr>
<td>11453 Highway 15 South Clarksdale, VA 23927</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 3.2.2 Principal Officer

The principal officer of Key with whom a D-B contract would be written is Key’s principal officer and President, Mr. David W. Lyle. Mr. Lyle can be reached as follows:

<table>
<thead>
<tr>
<th>Address</th>
<th>Phone</th>
<th>Mobile</th>
<th>Fax</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.O. Box 698</td>
<td>434-374-2125</td>
<td>804-731-3707</td>
<td>434-374-4360</td>
<td><a href="mailto:david.lyle@key-construction.com">david.lyle@key-construction.com</a></td>
</tr>
<tr>
<td>11453 Highway 15 South Clarksdale, VA 23927</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 3.2.3 Structure of Offeror

Key is a 100% employee-owned and operated Virginia corporation and will take financial responsibility for the project through bonding, insurance, etc. as required by VDOT. Key will manage the companies as a single, integrated design-build entity. Key will provide VDOT with performance and payment bonds for the project’s construction costs in its entirety. At this time, there are no limits, qualifications, or caps for Key’s liability and indemnification for VDOT.

Section 3.2.4 Affiliated or Subsidiary Companies

Key is a wholly-owned subsidiary of Utility Services Associates, Inc.

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Address</th>
<th>Phone</th>
<th>Fax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utility Services Associates, Inc.</td>
<td>11500 Ironbridge Road, Chester, VA 23831</td>
<td>804-768-1054</td>
<td>804-768-6057</td>
</tr>
</tbody>
</table>

Subsidiary Companies:

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Address</th>
<th>Phone</th>
<th>Fax</th>
</tr>
</thead>
<tbody>
<tr>
<td>D.W. Lyle Corporation</td>
<td>11453 Highway 15 South, Clarksdale, VA 23927</td>
<td>434-374-5095</td>
<td>434-374-4360</td>
</tr>
<tr>
<td>Key Constructors, Inc.</td>
<td>11453 Highway 15 South, Clarksdale, VA 23927</td>
<td>434-374-2125</td>
<td>434-374-4360</td>
</tr>
</tbody>
</table>

Affiliated Companies:

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Address</th>
<th>Phone</th>
<th>Fax</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.W. Wright Construction Company, Inc.</td>
<td>11500 Ironbridge Road, Chester, VA 23831</td>
<td>804-768-1054</td>
<td>804-748-4099</td>
</tr>
<tr>
<td>Booth &amp; Associates, Inc.</td>
<td>1011 Schaub Drive, Raleigh, NC 27606</td>
<td>919-851-8770</td>
<td>919-859-5918</td>
</tr>
<tr>
<td>Seaboard Boring, LTD</td>
<td>8301 Shell Road, Richmond, VA 23237</td>
<td>804-743-7716</td>
<td>804-743-7717</td>
</tr>
<tr>
<td>USA Solutions, Inc.</td>
<td>11500 Ironbridge Road, Chester, VA 23831</td>
<td>804-768-1054</td>
<td>804-748-4099</td>
</tr>
</tbody>
</table>

Section 3.2.5 Certification of Debarment

Signed “Certifications Regarding Debarment” forms for the D-B Team are included in the Appendix of this submission.

Section 3.2.6 Evidence of Prequalification

Key Construction Company, Inc. is licensed by the Commonwealth of Virginia State Corporation Commission (license number 2701 021531A) and a prequalified corporation with VDOT (vendor number K006). Evidence of Key’s prequalification with VDOT is included in the Appendix of this submission.

Section 3.2.7 Surety or Insurance Company Performance and Payment Bond

Included in this SOQ on page 5 is a letter of reference from Thomas Rutherford, Inc., our surety agent, stating that Key is capable of obtaining a performance and payment bond based on the current estimated contract value of $7,500,000 as stated in Section 2.1 of the RFQ.

Section 3.2.8 Professional Services Information
The tables on the following pages indicate registration information for each team member. Our team complies with the requirements set forth in RFQ Section 3.2.8 and subsections 1 through 4, where applicable.

1—The SCC registration information including the name, registration number, type of corporation and status of the business entity:

<table>
<thead>
<tr>
<th>Registered Name</th>
<th>Registration #</th>
<th>Type of Corporation</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Construction Company, Incorporated</td>
<td>0082414-4</td>
<td>Corporation</td>
<td>Active</td>
</tr>
<tr>
<td>Johnson, Mirmiran &amp; Thompson, Inc.</td>
<td>F149901-3</td>
<td>Corporation</td>
<td>Active</td>
</tr>
<tr>
<td>EBA Engineering, Inc.</td>
<td>F123900-5</td>
<td>Corporation</td>
<td>Active</td>
</tr>
<tr>
<td>ECS Mid-Atlantic, LLC</td>
<td>S120821-6</td>
<td>Limited Liability Company</td>
<td>Active</td>
</tr>
<tr>
<td>EEE Consulting, Inc.</td>
<td>0504941-6</td>
<td>Corporation</td>
<td>Active</td>
</tr>
<tr>
<td>Froehling &amp; Robertson, Incorporated</td>
<td>0027211-2</td>
<td>Corporation</td>
<td>Active</td>
</tr>
<tr>
<td>Quinn Consulting Services, Incorporated</td>
<td>0492551-7</td>
<td>Corporation</td>
<td>Active</td>
</tr>
<tr>
<td>Schnabel Engineering Consultants, Inc.</td>
<td>0712674-1</td>
<td>S Corporation</td>
<td>Active</td>
</tr>
<tr>
<td>Travesky &amp; Associates, Ltd.</td>
<td>0292417-3</td>
<td>Limited Corporation</td>
<td>Active</td>
</tr>
</tbody>
</table>

2—For this Project, the DPOR registration information for each office practicing or offering to practice any professional services in Virginia:

<table>
<thead>
<tr>
<th>Registered Name</th>
<th>Address</th>
<th>Registration Type</th>
<th>Registration # Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johnson, Mirmiran &amp; Thompson Inc</td>
<td>9201 Arboretum Pkwy Suite 310</td>
<td>ENG/LS</td>
<td>#0411 000029 2/29/12</td>
</tr>
<tr>
<td></td>
<td>Richmond, VA 23236</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Herndon</td>
<td>13921 Park Center Rd Herndon, VA 20171</td>
<td>ENG</td>
<td>#0411 000441 2/29/12</td>
</tr>
<tr>
<td>Sparks</td>
<td>72 Loveton Circle Sparks, MD 21152</td>
<td>LA/ARC/ENG/LS</td>
<td>#0407 001314 12/31/13</td>
</tr>
<tr>
<td>Virginia Beach</td>
<td>272 Bendix Rd Suite 260</td>
<td>ENG</td>
<td>#0411 000440 2/29/12</td>
</tr>
<tr>
<td></td>
<td>Virginia Beach, VA 23452</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EBA Engineering, Inc.</td>
<td>714 Westwood Office Park</td>
<td>ENG</td>
<td>#0411 000871 2/29/12</td>
</tr>
<tr>
<td>Fredericksburg</td>
<td>Fredericksburg, VA 22401</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECS Mid-Atlantic, LLC</td>
<td>14026 Thunderbolt Place Ste 100</td>
<td>ENG</td>
<td>#0407 004628 12/31/13</td>
</tr>
<tr>
<td>Chantilly</td>
<td>Chantilly, VA 20151</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charlottesville</td>
<td>1601 Airport Road Charlottesville, VA 22911</td>
<td>ENG</td>
<td>#0411 000662 02/29/12</td>
</tr>
<tr>
<td>EEE Consulting, Inc.</td>
<td>8525 Bell Creek Road</td>
<td>ENG</td>
<td>#0407 003798 12/31/2013</td>
</tr>
<tr>
<td>Mechanicsville</td>
<td>Mechanicsville, VA 23116</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Froehling &amp; Robertson Inc</td>
<td>3015 Dumbarton Road Richmond, VA 23228</td>
<td>ENG</td>
<td>#0407 000098 12/31/11</td>
</tr>
<tr>
<td>Richmond</td>
<td>Crozet 6181 Rockfish Gap Turnpike Crozet, VA 22932</td>
<td>ENG</td>
<td>#0411 000052 2/29/12</td>
</tr>
<tr>
<td>Quinn Consulting Services, Inc.</td>
<td>4607 Marble Rock Court</td>
<td>ENG</td>
<td>#0407 003733 12/31/13</td>
</tr>
<tr>
<td>Chantilly</td>
<td>Chantilly, VA 20151</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schnabel Engineering Consultants, Inc.</td>
<td>2020 Avon Ct Suite 15</td>
<td>ENG</td>
<td>#0411 000698 2/29/12</td>
</tr>
<tr>
<td>Charlottesville</td>
<td>Charlottesville, VA 22902</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3—For this Project, the DPOR license detailing for each of your Key Personnel practicing or offering to practice professional services in Virginia:

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>VA License Type</th>
<th>Registration# &amp; Exp Date</th>
<th>Office Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robert Taylor Gallagher, P.E.</td>
<td>10004 Studley Farms Drive</td>
<td>Professional</td>
<td>#0402 023016 1/31/14</td>
<td>Johnson Mirmiran and</td>
</tr>
<tr>
<td></td>
<td>Mechanicsville, VA 23116</td>
<td>Engineer</td>
<td></td>
<td>Thompson Richmond, VA</td>
</tr>
<tr>
<td>Kaushikkumar Bhupendraprasad Vyas, P.E.</td>
<td>10170 Spring Dr</td>
<td>Professional</td>
<td>#0402 039004 6/30/12</td>
<td>Quinn Consulting Services.</td>
</tr>
<tr>
<td></td>
<td>Gordonsville, VA 22942-7581</td>
<td>Engineer</td>
<td></td>
<td>Chantilly, VA</td>
</tr>
</tbody>
</table>

4—For this Project, the DPOR license detailing for those regulated services other than professional services (i.e. real estate appraisal):

<table>
<thead>
<tr>
<th>Business Name</th>
<th>Address</th>
<th>Registration Type</th>
<th>Registration Number</th>
<th>Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 3.2.9 Commitment to DBE Participation Goal

Key formally commits to achieving VDOT’s 17% Disadvantaged Business Enterprise (DBE) participation goal for the entire value of the contract on the I-64/Route 15 (Zion Crossroads) Interchange Improvement D-B Project.

Key will ensure competition by structuring subcontracts to allow the largest number of DBE firms to compete. Key will continue to seek out qualified SWaM firms to provide supportive services as needed for the construction of the I-64/Route 15 (Zion Crossroads) Interchange Improvement Project.

Why Select the Key/JMT Team

The Key/JMT Team is uniquely qualified and ideally suited for this project by virtue of the following factors:

- 100 years of combined team experience designing, constructing, and inspecting VDOT projects.
- 100 years experience designing, constructing, and inspecting similar projects.
- Team knowledge and extensive experience with roadway construction projects involving extreme sensitivity to the environment, citizens of the community and the traveling public.
- Team knowledge and experience with Interstate projects with significant traffic control.
- Team knowledge and experience performing multi-staged roadway construction projects.
- Team cohesiveness and personnel longevity
  - Key’s President and Principal-In-Charge and JMT’s Lead Structural Engineer have a 22 year working relationship
  - Key’s President and Principal-In-Charge and JMT’s Design Manager and Lead Structural Engineer have a 10 year working relationship
  - Design Build Project Manager, Lead Roadway Engineer, Lead Structural Engineer, and Construction Manager have a 5 year relationship

Key and JMT have long and successful histories of serving VDOT on countless projects such as this. Together with all of our coordinating companies, we will design and construct the I-64/Route 15 (Zion Crossroads) Interchange Improvement D-B Project in a manner to ensure the greatest opportunity for success. We will create a transparent working relationship with VDOT and 3rd party stakeholders to promote trust, confidence, and collaboration.

Respectfully Submitted,

Key Construction Company, Inc.

[Signature]

David W. Lyle
President
January 12, 2012

Mr. Ian Millikan, P.E.
Alternate Project Delivery Office
Virginia Department of Transportation
1221 East Broad Street
Main Building, 4th Floor
Richmond, VA 23219

RE: Key Construction Company, Inc.
RFQ: Design/Build Project - I-64/Route 15 (Zion Crossroads) Interchange Improvement
Contract ID Number: C00086453DB48
Estimate: $7,500,000

Dear Mr. Millikan:

The above referenced firm is a valued client of Zurich North American Surety (Fidelity and Deposit Company of Maryland, which is listed on the United States Department of Treasury, Federal Register, Circular 570 and is licensed to transact business in the Commonwealth of Virginia). Zurich is one of the leading bonding companies in the country and has an "A" Best Rating and Financial Size Category: XV. We have committed to provide Key Construction Co., Inc. with $125,000,000 in aggregate capacity in payment and performance bonds with a single project limit of $60,000,000.

We are prepared to provide bid and 100% performance and 100% payment bonds in the amount of the anticipated cost of construction, and said bonds will cover the project and any warranty periods (Virginia standard 12 month warranty period) on behalf of the Contractor, in the event that such firm be the successful bidder and enter into a contract for this project, subject to the normal underwriting conditions at the time of award. This includes, but is not limited to work on hand, contract terms, bond forms, profitability and bid spread.

We have found their management to be seasoned, mature and proactive. Their abilities to manage the preconstruction and construction process and finance their operation are as good as any in the business. We recommend this contractor highly. If I can be of further assistance please feel free to contact me directly.

Sincerely,

FIDELITY AND DEPOSIT COMPANY OF MARYLAND

Jessica J. Winfree
Attorney-in-Fact

RICHMOND OFFICE
1001 Hasell Point | Suite 800 | Richmond, VA 23219 | 804.780.0611 | Fax: 804.788.8944 | www.rutherford.com

Local Touch. World Class.
SECTION 3.3
OFFEROR’S TEAM STRUCTURE
3.3 Offeror’s Team Structure

3.3 OFFEROR’S TEAM STRUCTURE

Key Construction Company, Inc. (Key), operating as a single Design-Build (D-B) entity, will ultimately be responsible for the delivery of this project to VDOT. Key’s responsibilities will include coordinating all interested parties – contractors, designers, VDOT, and the public – as well as providing overall construction management. In addition, Key will serve as the lead contractor, self-performing much of the construction while managing qualified subcontractors as necessary. Other team members and their assigned roles include:

- **Johnson, Mirmiran & Thompson, Inc.** – Lead Designer
- **EEE Consulting, Inc.** – Environmental
- **Schnabel Engineering Consultants, Inc.** – Geotechnical Engineering
- **Travesky & Associates, Ltd.** – Public Relations
- **EBA Engineering, Inc.** – Construction Quality Control Services
- **Froehling & Robertson, Inc.** – Construction Quality Control Materials Sampling and Testing Services
- **Quinn Consulting Services, Inc.** – Construction Quality Assurance Services
- **ECS Mid-Atlantic, LLC** – Construction Quality Assurance Materials Sampling and Testing Services

3.3.1 Identity of and Information About the Key Personnel

The Key and Johnson, Mirmiran, and Thompson, Inc. (JMT) personnel assigned to the I-64/Route 15 (Zion Crossroads) Interchange Improvement D-B Project are highly qualified design and construction professionals with extensive experience on similar projects. The Key/JMT Team structure employs best management practices, emphasizes intra-team communications, and empowers team members to solve issues at the most appropriate organizational level. This Statement of Qualifications (SOQ) includes resumes providing descriptions of the qualifications and experience of the Key/JMT Team Key Personnel. Our Key Personnel and support staff have a long history working with VDOT on transportation projects and have experience working on recent D-B projects in Virginia. The Key/JMT Team will keep these Key Personnel, as well as all identified support team members, on this project for the duration of this contract. For the I-64/Route 15 (Zion Crossroads) Interchange Improvement D-B Project, the Key/JMT Team commits the following five Key Personnel:

3.3.1.1 Design-Build Project Manager (D-B PM)

Key has committed one of their most seasoned managers, **Mr. Timothy B. Nunn**, to serve as the D-B PM. Mr. Nunn has more than 30 years of experience in planning, managing and assisting in the design and construction of heavy civil projects. His specific expertise is in Virginia transportation construction projects and, as a result, he is thoroughly familiar with VDOT processes, policies and procedures. Mr. Nunn has worked on numerous traditional Bid-Build transportation projects in the State involving roadways and interchanges including:

- Route 41, City of Danville, VA, reconstructed 2-lane commuter route to 5-lane undivided highway
- Route 265, Franklin Turnpike Extension, Pittsylvania County, VA 300,000 cubic yards of excavation
- Route 604, Genito Road, Chesterfield County, VA, reconstructed 2-lane rural highway to 4-lane thoroughfare
- Route 58 Mecklenburg County, VA , 3.6 miles of new and reconstructed 4 lane divided highway
- Route 360 and Route 58, Halifax County, VA, constructed (2) 2-lane bridges and grading roadway
- Route 61 over New River Design-Build, Narrows, VA, Bridge replacement and roadway improvement project
- Watkins Center Parkway (Route 60), Chesterfield County, VA, 1 bridge, roadway, grading, storm drainage

His recent and on-going Virginia construction experience, combined with his knowledge and uncompromising commitment to quality and professionalism, ensure that Mr. Nunn has the ability to capably fulfill the D-B PM responsibilities for this project.

3.3.1.2 Quality Assurance Manager (QAM)

Quinn Consulting Services, Inc. (QCS) has committed one of their most seasoned construction professionals, **Mr. Kaushik Vyas, P.E.**, to serve as the QAM. With over 25 years of engineering and construction experience, Mr. Vyas is currently assigned to the I-495 HOT Lanes Design-Build Project where he is serving in a Resident Engineer role with responsible for ensuring adherence to a project specific QA/QC Plan as well as VDOT’s Minimum Requirements for Quality Assurance and Quality Control for Design-Build and Public-Private Transportation Act Projects. Mr. Vyas has performed Quality Assurance and Quality Control services in various capacities on the following Virginia projects:

- I-495 HOT Lanes Design-Build Project, Fairfax County
- Route 15 Widening Design-Build Project, Prince William County
- Linton Hall Road Widening Project, Prince William County
3.3 Offeror’s Team Structure

Key Construction Company, Inc.

- Spriggs Road Improvements Project, Prince William County
- Route 895 PPTA Project, Chesterfield and Henrico County

3.3.1.3 Design Manager (DM)

JMT has committed Mr. Robert T. Gallagher, P.E., one of their most experienced managers, to serve as the DM. Mr. Gallagher has 25 years of extensive experience in Virginia transportation projects. He serves as JMT’s Virginia Transportation Manager and is responsible for the major transportation disciplines of roadway and bridge design, construction inspection, and right-of-way acquisition within the Commonwealth. He is thoroughly familiar with the VDOT project development and delivery process for transportation projects including public involvement policy; environmental document preparation; roadway, hydraulics, structures (bridge and retaining wall) and traffic engineering; and utility design and relocation coordination. His vast experience in the management of all pertinent design disciplines ensures his ability to responsibly manage project design and to establish and oversee an independent design QA/QC program for this project. Mr. Gallagher has been instrumental in the successful design and administration of many VDOT and municipal, VDOT funded, highway projects including numerous D-B projects. He has served as the Project Manager or Principal-In-Charge on numerous VDOT “on-call” contracts and D-B projects throughout the Commonwealth including:

- Route 61 over New River, Route 460, and Old Virginia Avenue D-B Project, Town of Narrows
- Fairfax County Parkway (Phase I, II and IV) D-B Project, Fairfax County
- James Madison Highway (Route 15) Improvements D-B Project, Prince William County
- Route 288 PPTA D-B Project, VDOT Richmond District
- Route 1 (Monroe Avenue) over Potomac Yards D-B Project, City of Alexandria
- Pentagon Secure Access Road Improvements at Route 27/244 D-B Project, Arlington County
- VDOT Design Limited Services Statewide and Two Regional Contracts
- VDOT Traffic Engineering Statewide Limited Services
- VDOT NOVA Regional Quality Plan Review

Mr. Gallagher is a current member of VTCA’s Engineering Consultant Leadership Committee and previously served on VTCA’s Joint Highway Cooperative Committee.

3.3.1.4 Construction Manager (CM)

Mr. Patrick H. Newton will serve as the CM responsible for managing the Key and subcontractor forces. He will oversee a multi-disciplined staff of construction professionals and subcontractors. Mr. Newton brings six years continuous experience with the construction management team consisting of superintendent, utility superintendent, and utility coordinator to direct and control specific tasks for each construction crew and subcontractor. Mr. Newton will also oversee all construction QC activities to ensure the materials used and the work performed meet contract requirements, plans, and specifications. With almost 50 years of construction experience, Mr. Newton has worked on numerous traditional Bid-Build transportation projects in the State involving roadways and interchanges including:

- Route 41, City of Danville, VA - reconstructed 2-lane commuter route to 5-lane undivided highway
- Route 265, Franklin Turnpike Extension, Pittsylvania County, VA - 300,000 cubic yards of excavation
- Route 15 Improvements, Fluvanna County, VA – roadway improvement and bridge replacement
- Route 60, Appomattox County, VA – roadway improvement and bridge replacement

Mr. Newton will hold all applicable certifications required in the performance of his duties prior to commencement of construction, including but not be limited to a Virginia Department of Conservation and Recreation (DCR) Responsible Land Disturber (RLD) Certification and a VDOT Erosion and Sediment Contractor Certification (ESCCC).

3.3.1.5 Public Relations Manager (PRM)

Travesky & Associates, Ltd. (T&A) has committed Ms. Denise H. Nugent to serve as the PRM for this project and will report directly to the D-B PM. With more than 20 years of public relations experience, Denise Nugent develops and implements strategic communication programs and participates in public and stakeholder activities supporting transportation planning and design-build projects. Working closely with consultant engineering firms and state transportation agencies, Ms. Nugent prepares strategic communication plans, crafting the methodology necessary to successfully implement public participation programs. She plans and evaluates project activities and directs the professional team. She organizes, advertises, and provides follow-up from public meetings, and represents the project team at community events. She facilitates workshop discussions and manages the preparation of informational materials, websites, study documents, and project resource centers. Ms. Nugent possesses a thorough knowledge of, and sound experience in, public involvement principles, practices, and standards. Recent project experience includes the following Virginia transportation project:
3.3 Offeror’s Team Structure

- Columbia Pike Transit Initiative, WMATA, Arlington and Fairfax County
- Idea66 Spot Improvement Design Study, VDOT-FHWA, Arlington and Fairfax County, City of Falls Church
- Transaction 2030 – Update NOVA’s 2020 Transportation Plan, Northern Virginia Transportation Authority
- Dulles Corridor Rapid Transit PE/NEPA Project, VDRPT, Northern Virginia

3.3.2 Team Organizational Chart

The organizational chart provided at the end of this section shows the “chain of command” while identifying major functions to be performed by the Key/JMT Team. The organizational chart also shows the reporting relationships of Key Personnel responsible for the management of design, construction, and quality control/quality assurance activities.

The Key/JMT Team has clearly defined roles and relationships. The team organization is optimized to present clear, logical, reporting relationships to manage the design and construction of the I-64/Route 15 (Zion Crossroads) Interchange Improvement D-B Project, while maintaining distinct responsibilities and project controls. The project staff are organized to facilitate timely and effective communication among all personnel, regardless of position. Practical lines of communication run between design, construction, and the independent QA/QC support staff, with the D-B PM ensuring all levels function as a team. This organization is a successful model used by Key and JMT on past and present projects.

Design-Build Project Manager

The Key/JMT Team organizational chart starts with VDOT at the pinnacle of the hierarchy. The Key/JMT Team recognizes that all final decisions rest with VDOT. The team’s primary interface with VDOT will be through the D-B PM, Mr. Tim Nunn.

In accordance with sound management practice and VDOT guidance, the D-B PM serves in the most crucial role, one that defines success for all aspects of the project. The D-B PM is the principal conduit for communication with VDOT, and also directly controls the design, construction, and quality assurance functions. One feature of the Key/JMT Team proposal is the independence of the key support staff of specialty professionals whose role is to assure that the highest levels of quality and safety are maintained in both the design and construction phases of the project.

The organizational chart further depicts that the main production staff interfaces with the D-B PM will be the DM, the CM, and the QAM allowing effective communication among the Key Personnel. The DM, the CM, and the QAM will support the D-B PM as points of contact with VDOT in their respective areas of expertise. The D-B PM will rely on the DM, the CM, and the QAM to effectively coordinate their individual Team elements and will use these Key Personnel to communicate to all Team members during design and construction.

Mr. Nunn will also coordinate directly with those shown in the roles of Principal-In-Charge, Safety Director, Environmental Compliance Monitor, and Public Relations. These personnel serve important support roles for the project team and provide specific areas of expertise to benefit the entire project.

Principal-In-Charge:
David W. Lyle, President, Key Construction Company, will provide executive oversight for Key. He will ensure that all necessary resources are made available to successfully complete the project. Mr. Lyle reports directly to the board of directors for Utility Services Associates, Inc. and has the ability to assemble additional labor, equipment, and expertise from this extensive enterprise.

Safety Director:
Joseph F. Kucera, Key Construction Company, will be the Safety Director for this project. He will be responsible for planning, executing, evaluating, and monitoring all aspects of the Safety Program in close coordination with the D-B PM, the CM, and field staff.

Environmental Compliance Monitor:
EEE Consulting, Inc. will provide independent environmental compliance monitoring and oversight during construction and will ensure that all requirements of the environmental document and environmental permits are met.

The I-64/Route 15 (Zion Crossroads) Interchange Improvement D-B Project will increase the capacity of the I-64 off-ramps at the Route 15 interchange and will accommodate the forecasted increase of traffic due to the area’s commercial growth. The proposed diverging diamond interchange configuration is new to the United States and is unique in operation by briefly shifting vehicles to the opposite side of the road through the interchange.
result, 3rd party stakeholders such as the local business owners, schools, emergency responders, public and private utility companies, and especially the traveling public will be very interested in the project. The CM, superintendents, and QA Team will provide the daily, front line interaction with 3rd party stakeholders. In addition, the Team acknowledges the importance of stakeholder coordination and public relations and has included a firm to assist with this effort.

Public Relations:
Ms. Denise H. Nugent of Travesky & Associates, Ltd. will lead the Team’s stakeholder coordination and public relations activities for the project. Ms. Travesky possesses over 30 years of government and community relations experience in the public and private sectors. She specializes in developing public and agency outreach programs and meeting facilitation. Ms. Travesky served for eight years as a member of the Fairfax County Board of Supervisors. During this time, she chaired the Northern Virginia Transportation Commission, the Virginia Association of Public Transit Officials, and the Transportation Planning Board of the Metropolitan Washington Council of Governments. She also served as a Director of the Washington Metropolitan Area Transit Authority. Ms. Travesky’s knowledge and understanding of the stakeholder’s demands and their interest in traffic patterns will help provide a seamless project delivery.

The DB-PM, in conjunction with Travesky & Associates, will work with VDOT to develop and implement a public participation program including conducting both public information meetings and individual one-on-one meetings, developing and updating a project web site, preparing monthly project mailers, and securing media coverage through newspapers, radio, and television.

Design Manager
The Key/JMT organizational chart clearly defines that all design disciplines for the project will report to the DM, Mr. Robert Gallagher, P.E. The approach to staffing these disciplines hinges on the concept of matching the requirements of this project to the experience and depth of knowledge of staff best suited to fulfill these specific requirements. While the majority of the disciplines will be covered by JMT professionals, the team does include several specialty subconsultants who will augment the Team and report directly to the DM. The DM will report directly to the D-B PM.

During the design phase of the project, Mr. Gallagher will interface directly with each of the discipline leaders, whether that individual is a JMT staff member or a subconsultant contracted with JMT.

In addition, JMT, a VDOT prequalified right-of-way contracting consultant, will manage and provide all right-of-way acquisition services for the project. During the appraisal and appraisal review process, JMT will engage the services of a VDOT prequalified fee appraiser and VDOT prequalified review appraiser.

Mr. Gallagher will also establish and oversee the QA/QC program for design. The responsibilities of the QA/QC team will be separated between the Design QA Manager and the Design QC Managers.

The Design QA Manager will operate independent of the design team and will evaluate and compare the design to the established design criteria and ensure that the design QC process is complete. In general, the Design QA Manager will evaluate whether the designer appropriately assessed design issues and problems, applied the correct analysis techniques, and assigned qualified personnel to the task. The Design QA Manager will address whether the solution is practical and cost effective and whether the design is appropriate. JMT has identified Mr. Dick Asbury, P.E. to serve as the Design QA Manager. He will interface and report directly to the DM. Mr. Asbury has provided design quality assurance services on numerous projects during his 40 year engineering career.

The Design QC Team will be staffed with individual Design QC Managers that are not involved in the design process and will report directly to the DM. Reviewers that are independent from day-to-day design activities ensure that the QC Team is truly providing a fresh set of eyes to plan development. The independent QC reviews will determine whether the design and plans conform to the established design criteria and design processes. In general, the QC Team will review math and engineering computations; check technical accuracy; verify conformance with contract requirements; review form, content, and spelling; and verify coordination with other design disciplines and the project sequence of construction.

The following subconsultants will provide specialty services and will report directly to the DM.

**EEE Consulting, Inc. (EEE)**
EEE will be responsible for obtaining all necessary state and federal water quality permits for the project.
Schnabel Engineering Consultants, Inc. (Schnabel)
Schnabel will provide geotechnical services for the project including geotechnical investigations, borings and analysis, materials analysis, and geotechnical recommendations for design and construction. In addition, Schnabel will validate the suitability of the minimum pavement sections anticipated for the project.

Construction Manager
The Key/JMT Team organizational chart identifies Mr. Patrick H. Newton as the CM for the project who will oversee all major construction activities. The superintendent, utility superintendent, and utility coordinator will all report directly to the CM. His responsibilities will include CPM schedule development and updating, resource planning and allocation (materials, labor, and equipment), budgetary and cost control, subcontractor scheduling, maintenance of traffic, E&SC, and shop drawing review. The CM will report directly to the D-B PM.

A number of utilities are present at the site including water, telephone, cable television, electric, and traffic control facilities. Since the project will potentially involve utility relocations, the Team has included two construction phase roles specific for utilities. The utility superintendent will be responsible for the construction activities related to the physical relocation of all utilities. The utility coordinator will be responsible for the post-design phase, pre-construction phase activities necessary to ensure public and private utilities are on-board and ready to move when scheduled. The utility coordinator will aggressively and persistently monitor the utility’s progress, will assist with coordination between Team and utility, and will serve as the physical conduit for information between the Team and utility.

In addition, the CM will be responsible for Construction Quality Control activities including construction quality control testing and off-site materials sampling and testing. The Key/JMT Team has selected EBA Engineering, Inc. (EBA) to provide the Construction Quality Control services for the project. EBA commits Mr. George P. Romack, P.E. to serve as the Construction QC Manager for the project’s construction quality control program. With over 40 years of engineering and construction experience, Mr. Romack will oversee all QC staff including inspectors and testing technicians and will oversee the activities of the off-site materials sampling and testing laboratory. The Construction QC Manager will report directly to the CM.

EBA Engineering, Inc. (EBA)
EBA will provide QC inspectors and testing technicians for the project.

Froehling & Robertson, Inc. (F&R)
F&R will provide QC services for the off-site materials sampling and testing.

Quality Assurance Manager
The Key/JMT Team organizational chart identifies Quinn Consulting Services, Inc. (QCS) as the independent firm to provide the Construction Quality Assurance services for this project. QCS commits Mr. Kaushik Vyas, P.E. to serve as the QAM in a leadership capacity for the project’s construction quality assurance program. He will oversee a QA staff including a lead senior inspector, project inspectors, and a records administrator, as well as oversee the activities of the independent off-site materials sampling and testing laboratory. The QAM will report directly to the D-B PM.

Quinn Consulting Services, Inc. (QCS)
QCS will provide all Construction Quality Assurance services for this project including inspection and administration activities.

ECS Mid-Atlantic, LLC (ECS)
ECS will provide QA services for the off-site materials sampling and testing.
Organizational Chart for  
I-64/Route 15 (Zion Crossroads)  
Interchange Improvement  
Design-Build Project  
Louisa County, Virginia

Legend:
- Key Construction Company, Inc.  
- Johnson, Mirmiran & Thompson, Inc.  
- Quinn Consulting Services, Inc.  
- Small, Women, and Minority Businesses  
- Disadvantaged Business Enterprise  
- Key Personnel
SECTION 3.4
EXPERIENCE OF OFFEROR’S TEAM
### 3.4 EXPERIENCE OF OFFEROR’S TEAM

**Key Construction Company, Inc. (Key)** is a heavy-highway construction contractor specializing in public and private infrastructure projects including bridges, overpasses, channels, roadways, and highways. During the past five decades, Key has served as a prime contractor for multiple clients including departments of transportation, counties, federal, state and local governmental authorities, municipalities, investor-owned utilities, and other private market owners in the states of Virginia, Maryland, North Carolina, and South Carolina. These projects have been successfully completed by a variety of project delivery methods including design-build, prime contracting, subcontracting, and construction management. In 2006, Key acquired D.W. Lyle Corporation in a strategic move to add strength and market share to its organization. D.W. Lyle Corporation operated for over 50 years as a heavy-highway contractor focused primarily on new bridge, bridge replacement, and bridge widening projects throughout Virginia, North Carolina, and South Carolina.

Key’s philosophy is to safely deliver the highest level of quality within the industry both on time and within budget and to assure that the standards of construction meet Virginia Department of Transportation (VDOT) requirements. Key’s employee-owners are dedicated to meeting commitments and to giving back to the communities in which it’s employees live and work. Key is further committed to meeting the needs of VDOT on every front, from the initial stages of project development through construction completion. **Key has maintained an average C-36 rating over 90 points, as well as a 95 CQIP performance score.**

The projects listed below showcase Key and D. W. Lyle Corporation experience with projects that are similar in size and scope to the I-64/Route 15 (Zion Crossroads) Interchange Improvement D-B Project. Project similarities include interstate interchange; bridge overpass; bridge and road construction; utility construction, relocation and coordination; phased construction; maintenance of traffic; environmental compliance; and stakeholder coordination.

- VDOT, 2005, Stony Run Parkway over I-64, Henrico County
- VDOT, 2007, Route 29 Business over Route 29 Bypass, Town of Chatham
- VDOT, 2008, Watkins Center Parkway over Route 288 Design-Build, Chesterfield County
- VDOT, 2009 to Current, I-495 and Dulles Toll Road Interchange, Fairfax County
- VDOT, 2011, Route 265 Franklin Turnpike Extension, Pittsylvania County

**Johnson, Mirmiran & Thompson, Inc. (JMT)** is a full service ENR top 500 design firm (#96 in 2011) and is #30 among ENR’s Top 50 Transportation Design Firms. JMT has offices in Richmond, Herndon and Virginia Beach, Virginia as well as in Maryland, West Virginia, Pennsylvania, Washington DC, Delaware, New Jersey, New York and Florida. JMT has continuously provided road and bridge design and surveying services to VDOT from our Virginia offices for over 25 years. With more than 40 years of experience in the design of highway projects, JMT has total staff in excess of 700 professionals including a staff of over 80 in the Commonwealth of Virginia.

JMT has designed major projects for VDOT, Maryland State Highway Administration (MD SHA), Maryland Transportation Authority (MdTA), Pennsylvania Department of Transportation (PennDOT) and the Metropolitan Washington Airports Authority (MWAA). JMT’s transportation design capabilities have been recognized numerous times in the recent past by virtue of the many awards our projects have received. The Woodrow Wilson Bridge Project won “The 2008 America’s Transportation Award Grand Prize” February 24, 2009. JMT was a Section Designer for I-95/I-495/I-295 Interchange for this award winning project. The American Society of Civil Engineers (ASCE) honored the Woodrow Wilson Bridge Project as its Outstanding Civil Engineering Achievement for 2008. In 2003, JMT was awarded the Award of Excellence, Partnering-Major Project by the Maryland Quality Initiative, Maryland State Highway Administration for the Elkton Main Street (MD 7D) Detail/Build project in Cecil County, MD. In 2010 American Council of Engineering Companies of VA (ACEC of VA) awarded the Leesburg Park and Ride in Loudoun County, VA and the Fairfax County Parkway D-B Project in Fairfax County, VA Merit Awards. Details of these and other award winning projects can be found on JMT’s website at [www.jmt.com/awards](http://www.jmt.com/awards).

**JMT’s Relevant Experience Includes:**

- FHWA-EFLHD: Fairfax County Parkway (D-B), Fairfax County
- FHWA-EFLHD: 9th Street Bridge Replacement (D-B), Washington, DC
- FHWA-EFLHD: Taylor Street Bridge Replacement (D-B), Washington, DC
- VDOT: Route 61 (MacArthur Avenue) over New River, Route 460, and Old Virginia Avenue (D-B), Town of Narrows
- VDOT: 3rd Street (Route 15/460) over Buffalo Creek (D-B), Town of Farmville
- VDOT: Route 7 Fairfax County
- VDOT: Route 105, City of Newport News and York County
- Prince William County: USMC Heritage Center Roadway Improvements
- Prince William County: Route 1 Improvements (Joplin Road to Brady’s Hill Road)
- Prince William County: James Madison Highway (Route 15) Improvements (D-B)
- MWAA: North Area Roads Improvements, Washington Dulles International Airport, Loudon and Fairfax County

**3rd Street (Route 15/460) over Buffalo Creek D-B**
3.4 Experience of Offeror’s Team

**Relationship of Key and JMT**

Key and JMT and the individual staff members of Key and JMT have a solid, long term, work history of teaming and partnering on transportation projects. The successful completion of these projects demonstrates that the Team possesses the skills and knowledge to provide VDOT with an exceptional team for the design and construction of the I-64/Route 15 (Zion Crossroads) Interchange Improvement D-B Project. In addition, Key and JMT’s focus on process, planning, and scheduling make them an excellent team for this project. Both organizations are very experienced with the design-build process and have a proven cooperative work history.

The Key/JMT Team has success with VDOT as the D-B Team selected to provide the design and construction of the Route 61 Bridge Replacement over the New River, Route 460, and Old Virginia Avenue D-B Project in the Town of Narrows, Giles County located in VDOT’s Salem District. The I-64/Route 15 (Zion Crossroads) Interchange Improvement D-B Team will use many of the same design, construction, and quality assurance staff including Design Manager, Lead Roadway Engineer, and Lead Traffic Engineer as on the Route 61 D-B Team. The uninterrupted continuation of this experienced D-B Team will prove to be a valuable asset to the success of this project.

Key’s President and Principal-In-Charge, David Lyle, and JMT’s Lead Structural Engineer, Trip Phaup, PE have a **22 year relationship** working together on roadway and bridge and structure related projects including design-build projects, design-bid-build projects, value engineering (VE) redesigns, and construction engineering assignments for cofferdams, sheeting and shoring, crane lifting beams, and other miscellaneous structures. David and Trip first met at Virginia Tech while taking classes in Civil Engineering and Building Construction. They first worked together as Contractor’s project superintendent and Engineer’s construction inspector on the Pungo Ferry Road Bridge in the City of Virginia Beach which was completed in 1991 and have worked hand-in-hand since then on the following projects in Virginia:

- I-81 Climbing Lanes Design-Build, Technical and Price Proposal Engineering, Rockbridge County
- Route 15 Bridge over Rivanna River, VE Foundation Redesign, Fluvanna County
- Southpoint Parkway Bridge over Massaponax Creek, Total Bridge Design, Spotsylvania County
- I-95 (NBL and SBL) over CSX Railroad, Superstructure Jacking Plans, Caroline County
- Jefferson Street Retaining Wall and Culvert Repairs, Total Retaining Wall Design, City of Petersburg
- Route 606 (Blenheim Road) Bridge over Deep Creek, VE Total Bridge Redesign, Powhatan County
- Route 54 over South Anna River, Temporary Bridge Foundation Design, Hanover County
- Route 58 (WBL) over Nottoway River, Deep Cofferdam Design, Southampton County
- Pungo Ferry Road Bridge, Construction and Construction Inspection, City of Virginia Beach

Key’s President and Principal-In-Charge, David Lyle; JMT’s Design Manager, Bob Gallagher; and JMT’s Lead Structural Engineer, Trip Phaup, PE have a **10 year relationship** working together on bridge and roadway projects in Virginia including:

- Route 288 PPTA D-B, Goochland County including bridges on
  - Route 650 (River Road) over Route 288
  - Route 288 (NBL and SBL) over West Creek Parkway
  - Route 6 (Patterson Avenue) over Route 288
- Route 642 (Salem Church Road) over Reedy Creek, Chesterfield County
3.4 Experience of Offeror’s Team

As companies, Key and JMT have worked successfully on a number of recent projects in Virginia including:

- Route 61 over New River, Route 460, and Old Virginia Avenue (D-B), Town of Narrows (under design)
- James Madison Highway (Route 15) Improvements PPTA D-B, Prince William County
- Watkins Center Parkway Design-Build, Chesterfield County

The project examples described above demonstrate that Key and JMT and the individual staff members of Key and JMT have a solid, long term, work history involving transportation projects in Virginia and will be able to successfully deliver the I-64/Route 15 (Zion Crossroads) Interchange Improvement D-B Project.

Subconsultants and Major Subcontractors

Key and JMT have developed and organized a team in order to provide VDOT with sufficient, knowledgeable, and qualified staff to successfully complete this project. Based on the project size, we selected a number of qualified subconsultant firms to provide the expertise, experience, qualifications, and staff resources to accomplish the anticipated work. The Key/JMT Team members were selected for the following reasons:

- their reputation for providing excellent service,
- their excellent working relationship with each other,
- their successful past and continued working relationship with VDOT and Virginia localities, and
- their ability and experience to provide all the services required by VDOT and this project.

Brief descriptions of the qualifications of each subconsultant are provided below.

**EBA Engineering, Inc. (EBA)** Since 1981, EBA has provided professional engineering and management services to a wide variety of satisfied clients in both public and private sectors. EBA’s professional services include civil/site, geotechnical, environmental, structural, transportation, and water systems engineering; construction management and inspection; surveying and mapping; and materials testing. EBA’s Construction Management and Inspection Department provides services related to construction inspection of transportation systems of all types, including highways, bridges, tunnels, airports, seaports, light rail, and heavy rail. EBA’s experienced and certified construction inspectors provide complete management and inspection work from the pre-construction condition surveys to the final audit, acceptance and start-up of the project. Our inspection personnel review plans and specifications and assist project owners in constructability and bidability reviews at the pre-construction phase. During construction, our staff engages in a full range of quality control and materials testing activities, including preparation of sketchbooks, maintenance of all construction inspection records, as-built recordkeeping, as well as project close out services. As part of this oversight, the team also utilizes automated construction management software, such as Primavera, which increases productivity and reduces our clients’ expenses.

**ECS Mid-Atlantic, LLC (ECS)** With an 18-year record of growth, accomplishment and success, ECS is a top ranked provider of environmental, geotechnical and cultural resources engineering as well as construction observation and testing services. ECS provides these services to both the private and public sectors from 13 offices located in Virginia, Maryland, Pennsylvania, and the District of Columbia. ECS sets the standard for service. Client needs are the number one priority, and ECS strives to provide innovative, value-added solutions to satisfy site constraints and challenges, project requirements, and federal, state, and municipal regulatory requirements. That's why ECS ranks as the #1 or #2 engineering firm in more than half of the markets that they serve. That's why ECS consults on more than 8,000 projects on a yearly basis. And that's why ECS is the partner of choice for many of the region's top A/E and consulting firms. Local to Virginia, ECS has 600 employees, 160 engineering and scientific professionals, and 12 material testing laboratories accredited by WACEL, AASHTO, AMRL, CCRL, and USACE.

**EEE Consulting, Inc. (EEE)**, a Virginia DMBE certified small, women-owned, and minority (SWaM) business, specializes in environmental and environmental engineering, local government planning and environmental education. EEE has helped local government, and state and federal transportation agencies
with natural resource, wetlands, hazardous materials, air quality, noise studies, environmental compliance, and NEPA documents, including Environmental Impact Statements (EIS), Environmental Assessments (EA) Categorical Exclusions (CE), and State Environmental Review Process Requirements (SERP). EEE’s transportation experience includes Locally Administered Projects with 10 local governments and contracts with VDOA, VDOT, VDPRPT, WMATA, NCDOT, STB, FTA, including two people who worked in VDOT’s Environmental Division. EEE is extremely familiar with the environmental work necessary for acquisition of the water quality permits for the project and has provided similar services to JMT on numerous, recent projects including the Fairfax County Parkway Design-Build Project in Fairfax County, VA.

**Froehling & Robertson, Inc. (F&R)**, established in 1881, is a multi-disciplinary engineering firm that provides a full range of services including construction management, construction materials testing, and environmental and geotechnical engineering. Not only does F&R have some of the most advanced testing facilities and equipment in the industry, but their engineers and technicians are among the most highly trained. F&R’s specialists are examined and certified by technical groups including WACEL, NICET, ACI, AWS, and ASNT, and constantly take new training to ensure that they are up-to-date on the latest procedures and techniques.

**Quinn Consulting Services, Inc. (QCS)** is a 100% woman owned DBE/WBE certified Construction Engineering and Inspection firm that provides construction management, engineering, and inspection support to other engineering firms, commerical industry, and Federal, State, and Local Government clients. QCS specializes in management, inspection, and engineering support for transportation, marine, and facility projects. In recent years, QCS has focused on providing quality control and/or quality assurance services on design-build projects for contractors, design engineers, and owners. QCS has supported our clients from all perspectives on large and small design-build projects. We have worked as owner QA representatives, contractor QC inspectors, and consultant engineer quality assurance managers where we have served as an integral part of project QA/QC teams delivering a quality product by working in partnership with owners, design engineers, and contractors. Quinn Consulting Services is currently performing construction engineering and inspection services for VDOT’s Meadow Creek Parkway Extension - McIntire Road Project in Charlottesville, VA which Key is constructing.

**Schnabel Engineering Consultants, Inc. (Schnabel)**, founded in 1956, is an employee-owned company offering highly specialized services in geotechnical engineering, geostural design, dam engineering, tunnel and underground engineering, environmental, geophysics and geosciences, construction monitoring, and resident engineering from locations throughout the United States. Schnabel’s wide variety of projects includes buildings, dams, airports, highways and bridges, subways, tunnels, port facilities, and government facilities. Schnabel provides a full range of geotechnical and dam engineering services including subsurface exploration, soil laboratory testing, engineering analysis, design recommendations, and construction phase services. Schnabel’s multi-disciplinary staff of more than 300 includes geotechnical, geostural, dam, mining, tunnel, and civil engineers; hydrogeologists; hydrologists; geophysicists and geologists; wetlands specialists; vibration analysts; construction inspectors; and grouting specialists. More than 100 of their employees are registered professional engineers, geologists, or scientists. **Schnabel has provided geotechnical engineering services on over 75 bridge and roadway projects throughout Virginia located in a wide variety of geologic settings.** Also, Schnabel has a long history of providing geotechnical services to JMT spanning the last 10 years.

**Travesky & Associates, Ltd. (T&A)** specializes in government and community relations for a broad range of clients. The T&A team possesses excellent human relations skills and the ability to communicate effectively in sensitive political environments. Team members are proficient in analyzing a project area to identify the demographics, key stakeholders, best communication venues, and important issues and concerns. The firm uses innovative and proven public involvement techniques to tailor programs to project areas. Over the last 25 years, T&A has worked on some of the nation’s most high-profile regional planning and transportation projects. In fact, T&A has been around long enough to see these often decades-long projects come to fruition. From the construction of I-95 HOV extensions, to I-495 HOT Lanes, Dulles Corridor Rail, to the Intercounty Connector, and the I-66 widening, we’ve worked in the fast lane and for the long haul. T&A has worked on public, media and government relations projects of all shapes and sizes. All projects, big or small, are crucially important for the stakeholders. T&A approaches each project with professionalism, enthusiasm, and a dedication to strategic communications excellence.

**Construction Subcontractors and Material Suppliers** As an established member of the Heavy Highway and Construction Industry for 50 years, Key has developed long standing relationships with reputable subcontractors and material suppliers and will utilize these relationships to identify and secure the most qualified firms to support our project goals. Key is currently working with a number of subcontractors and materials suppliers, prequalified with VDOT, performing similar scope of services and quantities of work that this project demands. When selecting subcontractors and material suppliers, Key evaluates them during the procurement process as follows:

- Review VDOT experience track record and qualifications.
- Define the scope of work with associated quantities and project expectations.
3.4 Experience of Offeror’s Team

- Prepare bid quote packages including expected performance time table and estimated quantities.
- Solicit quotes from subcontractors and vendors including all DBE and SWaM firms.
- Check performance data, EMR Ratings, OSHA, and Safety Records.
- Analyze and select subcontractors based on price, performance, products, methods, and firm capacity.

The interaction of all these participants is managed by both design and construction staffs from start to finish, and performance is audited by the D-B PM. Subconsultants, subcontractors, and material suppliers are included in various phases of design and constructability reviews to ensure specific key components and factors are addressed. Selected participants are required to meet the terms of the project contract requirements and specifications.

3.4.1 Work History

Key and JMT have each provided three work history forms describing relevant projects of similar scope and complexity as the I-64/Route 15 (Zion Crossroads) Interchange Improvement D-B Project. The project descriptions can be found in Attachment No. 3.4.1(a) Lead Contractor Work History Form and Attachment 3.4.1(b) Lead Designer Work History Form of this SOQ.

The projects Key has chosen for their work history experience were selected because they are similar in nature to the I-64/Route 15 (Zion Crossroads) Interchange Improvement D-B project and best demonstrate our qualifications. The projects were constructed for VDOT, involved roadway and bridge construction in environmentally sensitive sites, carried high volumes of traffic in a mix of urban and rural settings, and contained a heavy concentration of public and private utilities. These projects had various stakeholders, such as private property owners, city and town officials, business owners and government administrators which required extensive communication to present project goals and schedules. These projects were all completed ahead of schedule and within budget.

The projects JMT has chosen for their work history experiences were selected because each involved similar aspects of work that will be required for the I-64/Route 15 (Zion Crossroads) Interchange Improvement D-B project. All projects are Design-Build projects designed and constructed to FHWA or VDOT Standards and Specifications involving roadway improvements and new, replacement, or widened bridges. The Fairfax County Parkway project was a major Design-Build project with FHWA-EFLHD with extensive review and oversight from VDOT, NOVA Mega Projects GEC, U.S. Army Garrison Fort Belvoir, and the I-95 HOT Lanes P3 team. The project includes design of 7 bridge structures, including 3 structures over the environmentally sensitive Accotink Creek and the widening of an existing bridge.

The 3rd Street (Route 15/460) Bridge over Buffalo Creek project was one of the first VDOT Design-Build projects involving a bridge replacement over waterway in the Town of Farmville that required critical MOT plans to accommodate traffic through the work zone during construction including maintaining access for emergency response and fire department vehicles.

The 9th Street Bridge Replacement D-B project in Washington D.C. required construction of a four span bridge over CSXT and AMTRAK rail facilities for New York Avenue and included 1,700 feet of realignment and construction of New York Avenue including three new signalized intersections. The project and project Owner concerns mandated a community outreach program to address and minimize impacts and construction time, and address concerns with aesthetic design of the project. Along with the community and users of the project, major stakeholders included the DDOT, CSXT, AMTRAK, U.S. Post Office and Utility Companies.
3.5 Project Risk

3.5.1 Identify and Discuss Three Critical Risks for this Project

The Key/JMT Team has evaluated the existing project information contained in the RFQ documents including RFQ plans, and reports and has visited the project site on numerous occasions. Based on this research, the Key/JMT Team has identified a number of potential project risks including –

✓ Performing utility relocation and coordination in a timely manner
✓ Developing a maintenance of traffic plan that is constructable and provides access to I-64/Route 15
✓ Developing a good public relations, participation, and involvement plan
✓ Overcoming the challenge in obtaining the full DBE requirement of 17% for the entire project
✓ Assessing and defining the potential variable geotechnical characteristics present at the project site
✓ Ensuring that the finished project design solves the traffic issues at the interchange
✓ Ensuring that the finished project implements context sensitive solution within available project budget

The Key/JMT Team has weighed each potential risk described above and has identified three critical risks that the Team considers most relevant and critical to the success of the project. A narrative for each risk is provided below that describes why the risk is critical, indicates the impact the risk may have on the project, discusses the mitigation strategies that the Team may implement to address the risk, and describes the role that the Team expects VDOT or other agencies may have in addressing the risk.

Critical Risk 1 – Developing a good public relations, participation, and involvement plan will be a critical risk for the project.

The I-64/Route 15 (Zion Crossroads) Interchange Improvement D-B Project will improve traffic operations and increase safety at the interchange and along Route 15. The improvements will be accomplished by realigning the existing interchange into a Diverging Diamond Interchange (DDI) and improving the intersection of Route 15 and Spring Creek Parkway. The diverging diamond interchange is new to the United States. Though the design originally appeared in the 1970’s in Versailles, France, America’s first DDI was built in 2009 in Springfield, Missouri. Since that time, two others have been completed in Missouri, as well as one each in Utah and Tennessee. As a result, 3rd party stakeholders such as Louisa County, business owners, emergency responders, residential communities, public and private utility companies, and the traveling public will be very interested in the project.

Why the risk is critical and the impact the risk will have on the Project. The risk is critical because input from the final users of the project need to be considered and implemented when possible into the final project design. While a number of individuals at the June 22, 2011 Design Public Hearing supported the project as presented, 4 out of 13 comments received by the Department did not support the project. Comments from individuals who did not support the project include:

- The proposed project is wasteful and goofy. We don’t need a 7.9 million dollar counterintuitive interchange. Rather, the only thing needed in the Zion Crossroads US15/I64/US250 area is a traffic light at the McDonalds on 15.
- It appears that the problems (at the interchange) are brought about by VDOT failure to plan for someday adding a full cloverleaf to this (interchange). Just because VDOT does not own the land is not a reason for planning for future growth. Planners need to overlay the outline of a full cloverleaf……Put a little snow on the ground, and the power out, and watch how the drivers will navigate this mess.
- Zions Crossroads will not reach that sort of congestion for 30 or more years, and the I-64/Rt. 250 needs to be addressed now. Spending $8M on a problem that does not currently exist, in my mind, is a horrible waste of tax payers’ money. Please put that resource to work on a real problem.
- I think it’s confusing. I think it goes against the grain of normal traffic. I think that it’s going to be confusion for people who are from out of the area.

However, one of the supporters of the project provided this comment:

- Looks like an excellent solution for long term use of the existing bridges. An intensive public involvement effort will be important.

Developing a good public relations, participation, and involvement plan will be critical to the success of the project in order to clearly explain the benefits of the proposed project to the public and to educate the traveling public in how a DDI operates. In addition, the public needs to be aware of the construction activities, the hours of work, the roadways affected, and alternate routes during construction.

Mitigation strategies the Team may implement to address the risk. The mitigation strategies that the Team may implement focus on providing information to and communicating with the public. The Team acknowledges the importance of understanding and engaging 3rd party stakeholders by assigning public participation activities to Ms.
Denise Nugent of Travesky & Associates. Ms. Nugent will lead all public relations efforts including informing and engaging the public using a combination of formal and informal meetings, radio announcements, newspaper notices, email, and project website updates. With more than 20 years of public relations experience, Ms. Nugent develops and implements strategic communication programs and participates in public and stakeholder activities supporting transportation planning and design-build projects. Her knowledge and understanding of the stakeholder’s demands and their interest in traffic patterns will greatly help the team.

The DB-PM, in conjunction with Ms. Nugent will work with VDOT to develop and implement a public participation program including conducting both public information meetings and individual one-on-one meetings, developing and updating a project website, preparing monthly project mailers, and securing media coverage through newspapers, radio, and television. In addition, the CM, superintendents, and QA Team will provide the daily, front line interaction with 3rd party stakeholders.

One key component of the public relations plan will be developing and implementing a Public Awareness Education Campaign for Zion Crossroads Diverging Diamond Interchange.

Since the proposed Diverging Diamond Interchange (DDI) at Zion Crossroads will be the first DDI in Virginia, it is imperative to educate the public on what a DDI is, how a DDI works, and why a DDI is the best option for this intersection – emphasizing how DDIs eliminate dangerous left turns and increase safety. Travesky & Associates will develop a public awareness education campaign, which will outline the necessary public outreach techniques to reach the affected public.

Implementing a project website will be an essential element of the campaign. The project website will highlight the key elements of the project and act as an information hub, containing project maps, definitions, background information, fact sheets, and newsletters/brochures. The website should also contain a video library containing video animation/simulations for the DDI at Zion Crossroads. It should also show examples of other successful DDIs throughout the region, to help demonstrate how a DDI works, and what the interchange will look like when the DDI is implemented. The website can be used to share information throughout the duration of the project, such as construction updates and lane closures. It will be a key outlet for stakeholders to obtain important project information.

Using social media outlets, such as Facebook, Twitter, or YouTube, help reach a broader audience instantaneously. Outlets such as Facebook and Twitter can provide immediate construction information, such as lane closures. Posting a simulation of the proposed interchange alignment to a video channel like YouTube can provide the public with interactive information to help show how the DDI will work and what it will look like when implemented. Links from the main project website to social media outlets and vice versa will increase awareness.

Identifying key stakeholder groups is crucial in a successful public awareness education campaign. Having a solid relationship with media representatives will help educate the public about the construction project. Providing regular communications and briefings to the media will keep media representatives informed and help avoid potential misrepresentations of the project and construction. Support from area elected officials is also very important. Frequent meetings and open discussions with elected officials will ensure a positive relationship with the affected public. The communities and businesses that directly surround the interchange would benefit from open communication and regular briefings from the project team during construction, as well. Well-marked lanes and excellent signage will be imperative to aid drivers through the area during construction.

The project team will need to provide clear and concise information to the affected public in a timely manner. Technical data will need to be communicated in a simple and easily understood terms and use an abundance of graphics and maps. It is important to emulate best practices from other successful DDI projects and use proven and innovative techniques to inform the affected communities.

Role that the Team expects VDOT or other agencies may have in addressing these project risks. The Team expects that VDOT will provide timely reviews of submittals for public outreach communications as outlined in the Contract Documents. The Team expects that VDOT will provide assistance when possible in dealing with the 3rd party stakeholders.

**Critical Risk 2 – Ensuring safety through the work zone during construction while minimizing impacts to the traveling public and local businesses will be a critical risk for the project.** A multi-phase, maintenance of traffic plan will need to be developed that safely conveys traffic through the work zone while minimizing impacts and providing access to adjacent commercial and retail businesses.

**Why the risk is critical and the impact the risk will have on the Project.** This risk is critical because providing a safe work zone and minimizing impacts to the traveling public are core values and goals on projects designed and constructed by VDOT. In particular, maintenance of traffic during the crucial “switch over” period when the travel...
directions on the bridges will switch and the interchange will function as a DDI will be the most critical and riskiest stages of construction. A possible sequence of construction for the project may be as follows:

- Construct all new pavement sections on ramps.
- Construct ramps right of centerline including “spurs”.
- Adjust traffic onto new ramp construction as necessary utilizing appropriate traffic control devices such as temporary striping, channelizing devices, and signage.
- Construct ramps left of centerline.
- Install temporary and permanent signs. Cover signs until needed.
- Construct new pavement sections in median areas.
- Simultaneous to ramp and median work, install new signals. Adjust existing signals as necessary to accommodate new signal construction.
- **Switch traffic into diverging diamond configuration. This is the most critical, riskiest stage of construction.**
- Using temporary lane closures, install drainage, incidental concrete, asphalt build up through the intermediate (IM) layer - first on one side of the edge of pavement and then on the other side in the “diamond” areas.
- Mill and overlay asphalt pavement.
- Surface asphalt the entire project.
- Install permanent pavement markings.

**Mitigation strategies the Team may implement to address the risk.** Mitigation strategies that the Team may implement include developing feasible, constructable maintenance of traffic (MOT) plans; assigning experienced, knowledgeable staff; and holding coordination and planning meetings with all stakeholders prior to traffic switch. The MOT plans need to be developed to allow work in concurrent areas where possible and need to be founded on solid traffic analysis for each phase with the plans geared to match the need for each phase. The entire project team and 3rd party stakeholders will need to work together during development of the MOT plans. The Engineer needs to prepare safe, feasible, and constructable MOT plans. The Contractor needs to work with the Engineer to develop the MOT plans, needs to sequence work in a logical order, and needs to perform work in accordance with the plans in a safe manner. The Public needs the ability to provide input into construction hours of operations and needs to be aware of the construction activities, the hours of work, the roadways affected, and alternate routes.

JMT's lead roadway designer, Rodney Hayzlett, PE, has extensive experience in preparing MOT plans. He has prepared transportation management and MOT plans for all three types of projects (Type A, B, and C) defined in VDOT L&D IIM-LD-241.5 and TED-351.3 and holds an Advanced Work Zone Traffic Control Training Certificate issued through ATSSA. JMT's lead traffic engineer, Randy Boice, PE also has extensive VDOT experience and is currently providing traffic related engineering services to the Department on a VDOT Statewide Traffic Engineering Term Contract and on a VDOT Statewide Location and Design Term Contract. In addition, the Team has established an independent Safety Director assigned to the project. The Safety Director is not a member of Key’s day to day construction forces but an independent entity providing unbiased safety reviews on the project. The Fairfax County Parkway project, the 3rd Street (Route 15/460) Bridge over Buffalo Creek, and the Route 360 Bridge over the Dan River provided the Team with excellent opportunities to develop and hone MOT plan skills including evaluating all possible MOT scenarios, conducting citizens meetings, issuing public notices, and updating the project website to keep all project stakeholders informed of project activities.

Under the crucial “switch over” period when the travel directions on the bridges will switch and the interchange will function as a DDI, the Team will use all available tools to accomplish this as smoothly and safely as possible. Prior to the “switch over”, the Team will prepare public awareness announcements and erect message boards. During the “switch over”, the Team will have police present at the site, will install temporary striping and channelizing devices, will activate the new signal, and will uncover new signs. These activities will require a large, well prepared, and coordinated work force to successfully complete.

**Role that the Team expects VDOT or other agencies may have in addressing these project risks.** The Team expects that VDOT will provide timely reviews of MOT plans as outlined in the Contract Documents. The Team also expects that VDOT will provide assistance when possible in dealing with outside agencies and 3rd party stakeholders. An example where the Department and the Key/JMT Team worked extremely well together was during the water quality permit acquisition process on the Route 61 Design-Build Project. The Key/JMT Team engaged the USACOE early during project design to resolve the unexpected discovery of regulated ephemeral channels. VDOT Salem District Environmental staff provided valuable assistance in working through this challenge and continued to provide assistance during the permitting process with extremely quick reviews of the permit application and guidance and recommendations during outside agency review periods.

**Critical Risk 3 – Assessing and defining the potential variable geotechnical characteristics present at the project site will be a critical risk for the project.** As with any project where the Design-Build Team is required to provide a lump sum price for all project elements prior to finalizing design, unexpected geotechnical challenges are always evaluated and quantified with respect to potential risk. The Key/JMT Team has reviewed the Geotechnical
Data Report (GDR) produced by Culpeper District Materials for the project. The GDR indicates that shallow rock or highly weathered rock was not encountered in the subsurface exploration; however, a hard transitional zone (very similar to highly weathered rock) was encountered in three borings at relatively shallow grades, below the residual soils and above rock. Rock in this area is characterized as metagraywacke, quartzose schist and mélange bedrock. The upper zone of the natural residual soils were of generally stiff to very hard consistency and the lower zone of the natural residual soils were of generally stiff/medium dense to hard/dense consistency/density. Existing fill above the residuum ranged from soft to hard consistency. Selected soil specimens obtained in bulk or from SPT testing were tested in the laboratory. Testing included particle size analysis and Atterberg limits testing as well as moisture density relations and CBR tests for the bulk samples.

**Why the risk is critical and the impact the risk will have on the Project.** The risk is critical because the Design-Builder is expected to submit a lump sum price to perform all work on the project using only the information provided in the RFP Documents and prior to finalizing all design elements. The Key/JMT Team has identified the following geotechnical-related risks for the project:

- **Approach Embankment Settlement.** The approach embankment fills are in areas where borings indicate softer existing fill materials up to about 8.5 feet that will settle due to the additional surcharge if these materials are left in place. However, underlying natural foundation soils are relatively stiff in this area. Accordingly, settlement of the foundation soils may not be too great and should occur relatively quickly. Undercutting of soft and wet near-surface soils should be anticipated prior to approach fill placement to reduce settlement.

- **Embankment Fill Materials.** Criteria for unsuitable soils are provided in the GDR. On-site soils included several areas of highly plastic clays and silts with liquid limits greater than 40. These materials are considered unsuitable and cannot be used as embankment fill. Accordingly, there is some risk that a portion of the on-site materials in cut areas will not be considered suitable for use as embankment fill. Moisture conditioning of fill materials will also likely be needed.

- **Rock Excavation.** According to the GDR, cuts and fills of up to about 15 feet will be needed for the project. The borings did not encounter shallow rock; however, dense transitional materials above bedrock were encountered in some of the borings. Therefore, some rock excavation should be anticipated for the project, especially in areas of deeper cuts.

- **Design Slope Angles.** Proposed fill slopes are 2H:1V and depending on the available fill materials, it is possible that slightly flatter slopes or benched slopes will be needed to produce stable slopes. As mentioned above, there may also be a need to undercut soft, near-surface soils prior to fill placement.

**Mitigation strategies the Team may implement to address the risk.** The mitigation strategies that the Team may implement include the following:

- Assign experienced staff with the responsibility of managing the risk. Schnabel Engineering Consultants will be responsible for all geotechnical investigations, evaluations, and recommendations for the project. With local offices in both Richmond and Charlottesville, Schnabel has extensive experience with the geotechnical characteristics of the Piedmont region of Virginia. Schnabel has provided geotechnical engineering services on over 75 bridge and roadway projects throughout Virginia located in a wide variety of geologic settings. Also, Schnabel has a long history of providing geotechnical services to JMT spanning the last 10 years.

- Evaluate and access the quality of information contained in the GDR prepared for the project.

- Perform a geotechnical engineering investigation that meets or exceeds Chapter 3 of the VDOT Manual of Instructions for Materials Division. Specific items that will be considered for this project include:
  - A thorough evaluation of the subsurface conditions is important to properly characterize the subsurface conditions and should include performing necessary calculations to better quantify the potential risks.
  - The GDR indicates areas of soils with high plasticity requiring drying to meet compaction criteria. Therefore, additional laboratory testing is recommended to better define the CBR values, estimate the extent of unsuitable high plasticity soils that requiring undercut and replacement, and evaluate the extent of soils that can be modified or stabilized versus undercut and replacement with select materials.
  - Triaxial shear strength testing on proposed embankment materials should be considered for slope stability analyses and factor of safety determination.
  - Identification of significant compressible zones will allow for design considerations for embankment construction, which can reduce settlement potential at deep embankments.

- Initiate early discussion with Department’s geotechnical and materials engineers to address all concerns and develop consensus on geotechnical recommendations.

- Rely on the fairness of the scope validation and identification of scope issues process defined in the Contract Documents to resolve issues that could not be reasonably discovered during development of the price proposal.

**Role that the Team expects VDOT or other agencies may have in addressing these project risks.** The Team expects that VDOT will provide timely reviews of submittals for geotechnical reports, studies, and recommendations as outlined in the Contract Documents. The Team also expects that VDOT will provide assistance when possible in dealing with outside agencies and 3rd party stakeholders.
ATTACHMENT 3.1.2

Statement of Qualifications Checklist & Contents

Key Construction Company, Inc.
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 20-page limit?</th>
<th>SOQ Page Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statement of Qualifications Checklist and Contents</strong></td>
<td>Attachment 3.1.2</td>
<td>Section 3.1.2</td>
<td>no</td>
<td>Tab Attachment 3.1.2</td>
</tr>
<tr>
<td>Acknowledgement of RFQ, Revision and/or Addenda</td>
<td>Attachment 2.10 (Form C-78-RFQ)</td>
<td>Section 2.10</td>
<td>no</td>
<td>Tab Attachment 2.10</td>
</tr>
<tr>
<td><strong>Letter of Submittal (on Offeror’s letterhead)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Offeror’s point of contact information</td>
<td>NA</td>
<td>Section 3.2.1</td>
<td>yes</td>
<td>2</td>
</tr>
<tr>
<td>Authorized Representative’s signature</td>
<td>NA</td>
<td>Section 3.2.1</td>
<td>yes</td>
<td>4</td>
</tr>
<tr>
<td>Principal officer information</td>
<td>NA</td>
<td>Section 3.2.2</td>
<td>yes</td>
<td>2</td>
</tr>
<tr>
<td>Offeror’s Corporate Structure</td>
<td>NA</td>
<td>Section 3.2.3</td>
<td>yes</td>
<td>2</td>
</tr>
<tr>
<td>Affiliated/subsidiary companies</td>
<td>NA</td>
<td>Section 3.2.4</td>
<td>yes</td>
<td>2</td>
</tr>
<tr>
<td>Debarment forms</td>
<td>Attachment 3.2.5(a) Attachment 3.2.5(b)</td>
<td>Section 3.2.5</td>
<td>no</td>
<td>Tab Attachment 3.2.5(a) &amp; Tab Attachment 3.2.5(b)</td>
</tr>
<tr>
<td>Offeror’s VDOT prequalification evidence</td>
<td>NA</td>
<td>Section 3.2.6</td>
<td>no</td>
<td>Tab Prequalification Certificate</td>
</tr>
<tr>
<td>Statement of Qualifications Component</td>
<td>Form (if any)</td>
<td>RFQ Cross reference</td>
<td>Included within 20-page limit?</td>
<td>SOQ Page Reference</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>---------------</td>
<td>---------------------</td>
<td>-------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Evidence of obtaining bonding</td>
<td>NA</td>
<td>Section 3.2.7</td>
<td>yes</td>
<td>5</td>
</tr>
<tr>
<td><strong>Professional Services Evidence</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full size copies of SCC and DPOR registration documentation (appendix)</td>
<td>NA</td>
<td>Section 3.2.8</td>
<td>no</td>
<td>Tab SCC/DPOR Documentation</td>
</tr>
<tr>
<td>SCC Registration</td>
<td>NA</td>
<td>Section 3.2.8.1</td>
<td>yes</td>
<td>3</td>
</tr>
<tr>
<td>DPOR Registration (Offices)</td>
<td>NA</td>
<td>Section 3.2.8.2</td>
<td>yes</td>
<td>3</td>
</tr>
<tr>
<td>DPOR Registration (Key Personnel)</td>
<td>NA</td>
<td>Section 3.2.8.3</td>
<td>yes</td>
<td>4</td>
</tr>
<tr>
<td>DPOR Registration (Non-APELSCIDLA)</td>
<td>NA</td>
<td>Section 3.2.8.4</td>
<td>yes</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>DBE statement within Letter of Submittal</strong> confirming Offeror is committed to achieving the required DBE goal</td>
<td>NA</td>
<td>Section 3.2.9</td>
<td>yes</td>
<td>4</td>
</tr>
<tr>
<td><strong>Offeror’s Team Structure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identity of and qualifications of Key Personnel</td>
<td>NA</td>
<td>Section 3.3.1</td>
<td>yes</td>
<td>6-8</td>
</tr>
<tr>
<td>Key Personnel Resume – DB Project Manager</td>
<td>Attachment 3.3.1</td>
<td>Section 3.3.1.1</td>
<td>no</td>
<td>Tab Attachment 3.3.1</td>
</tr>
<tr>
<td>Key Personnel Resume – Quality Assurance Manager</td>
<td>Attachment 3.3.1</td>
<td>Section 3.3.1.2</td>
<td>no</td>
<td>Tab Attachment 3.3.1</td>
</tr>
<tr>
<td>Key Personnel Resume – Design Manager</td>
<td>Attachment 3.3.1</td>
<td>Section 3.3.1.3</td>
<td>no</td>
<td>Tab</td>
</tr>
<tr>
<td>Statement of Qualifications Component</td>
<td>Form (if any)</td>
<td>RFQ Cross reference</td>
<td>Included within 20-page limit?</td>
<td>SOQ Page Reference</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>---------------</td>
<td>---------------------</td>
<td>-------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Key Personnel Resume – Construction Manager</td>
<td>Attachment 3.3.1</td>
<td>Section 3.3.1.4</td>
<td>no</td>
<td>Tab Attachment 3.3.1</td>
</tr>
<tr>
<td>Key Personnel Resume – Public Relations Manager</td>
<td>Attachment 3.3.1</td>
<td>Section 3.3.1.5</td>
<td>no</td>
<td>Tab Attachment 3.3.1</td>
</tr>
<tr>
<td>Organizational chart</td>
<td>NA</td>
<td>Section 3.3.2</td>
<td>yes</td>
<td>11</td>
</tr>
<tr>
<td>Organizational chart narrative</td>
<td>NA</td>
<td>Section 3.3.2</td>
<td>yes</td>
<td>8-10</td>
</tr>
<tr>
<td><strong>Experience of Offeror’s Team</strong></td>
<td></td>
<td></td>
<td></td>
<td>12-16</td>
</tr>
<tr>
<td>Lead Contractor Work History Form</td>
<td>Attachment 3.4.1(a)</td>
<td>Section 3.4</td>
<td>no</td>
<td>Tab Attachment 3.4.1(a)</td>
</tr>
<tr>
<td>Lead Designer Work History Form</td>
<td>Attachment 3.4.1(b)</td>
<td>Section 3.4</td>
<td>no</td>
<td>Tab Attachment 3.4.1(b)</td>
</tr>
<tr>
<td><strong>Project Risk</strong></td>
<td></td>
<td></td>
<td></td>
<td>17-20</td>
</tr>
<tr>
<td>Identify and discuss three critical risks for the Project</td>
<td>NA</td>
<td>Section 3.5.1</td>
<td>yes</td>
<td>17-20</td>
</tr>
</tbody>
</table>
ATTACHMENT 2.10
Form C-78-RFQ
ATTACHMENT 2.10

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

RFQ NO.  C00086453DB48
PROJECT NO.:  0064-054-703, P101, 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  12/06/11
   (Date)

2. Cover letter of
   (Date)

3. Cover letter of
   (Date)

[Signature]  [Date: Feb 1, 2012]
ATTACHMENT 3.25(a)
Primary Debarment Form

Key Construction Company, Inc.
ATTACHMENT NO. 3.2.5(a)

CERTIFICATION REGARDING DEBARMENT PRIMARY COVERED TRANSACTIONS

Project No.: 0064-054-703, P101, 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 proposal.

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

Signature  Date  Title

Key Construction Co., Inc.
Name of Firm
ATTACHMENT 3.25(b)
Lower Tier Debarment Form
ATTACHMENT NO. 3.2.5(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-054-703, P101, 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 proposal.

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

[Signature] February 3, 2012 Senior Vice President
[Signature] Date Title

Johnson Mirmiran and Thompson
Name of Firm
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-054-703, P101, 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 proposal.

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

Signature  Date  Chairman  Title

EBA Engineering, Inc.
Name of Firm
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-054-703, P101, 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 proposal.

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

Signature Date Title

Name of Firm
ATTACHMENT NO. 3.2.5(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-054-703, P101, 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 proposal.

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

Signature: ___________________________ Date: 2/1/12
President: ___________________________ Title: ___________________________

EEE Consulting, Inc.
Name of Firm
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-054-703, P101, 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 proposal.

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

Signature Date Title

Name of Firm
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-054-703, P101, R201 & C501

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

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

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

[Signature]

January 23, 2012

President

[Signature]

Quinn Consulting Services, Inc.

Name of Firm
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-054-703, P101, 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 proposal.

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

[Signature] January 19, 2012 [Principal]

[Signature] Date [Principal]

Schnabel Engineering Consultants, Inc.

Name of Firm
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-054-703, P101, 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 proposal.

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

[Signature] [Date] [Title]

Travesky & Associates, Ltd

Name of Firm
ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title:
   Timothy B. Nunn
   Vice President

b. Project Assignment:
   DESIGN-BUILD PROJECT MANAGER

c. Name of Firm with which you are now associated:
   Key Construction Company, Inc.

d. Years experience: With this Firm 33 Years With Other Firms 0 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.)
   Name of Firm: Key Construction Company, Inc.  Start Date: June 1978  End Date: Present
   Position: Vice-President

   Responsibilities:
   Mr. Nunn has been employed by Key Construction Company, Inc. or one of its affiliates for 30+ years, serving as vice president for the past sixteen. Through this experience, he has developed a wide range of skills, which include estimating, planning, resource allocation, and project management, that allow him to efficiently and effectively manage construction projects from start to completion. Much of Mr. Nunn’s focus for the past 15 years has been on VDOT projects. As such, he has acquired an intimate knowledge of VDOT’s specifications and standards, its safety and environmental regulations, as well as its policies and procedures. He has successfully applied this knowledge on numerous projects—on new roadways as well as on road reconstructions and widenings, in rural and urban environments, and on projects large and small.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
   Virginia Polytechnic Institute and State University, Blacksburg, VA/ Bachelor of Science Civil Engineering / 1978 / Construction Management

f. Active Registration: Year First Registered/ Discipline/VA Registration #:
   Erosion & Sediment Control / Certification # 1089C

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.)

Franklin Turnpike Extension, Pittsylvania County, Virginia VDOT Project #/(NFO)6265-071-V05, B643, C501
Name of Firm: Key Construction Company, Inc.
Start: 08/2009
Finish Date: 11/2011
Project Role: Project Director
Responsibilities: Provided overall project management including bidding and estimating, schedule development and implementation, oversight of field managers, and primary liaison with VDOT. Clearing and grubbing, 300,000+ cubic yards of excavation, water and sewer, storm drainage, aggregate base material, asphalt, concrete curb and gutter, guardrail, fencing, overhead signs, and two bridges each 600+ If in length were activities performed during construction of this final phase of the Franklin Turnpike Extension connecting Route 41 in the City of Danville to the Route 29 Danville Bypass. Coordination and cooperation with the many stakeholders involved, including VDOT, the City of Danville, N&S Railroad, local business owners, and the travelling public, contributed significantly to the successful early completion of this $18.9 million project.

Owner Contact: (Name/Title/Phone): Virginia Department of Transportation
   Mr. Zack Weddle, P.E, Area Construction Engineer (434)476-6471.
US 360 & US 58 Bypass in Halifax County, Virginia VDOT Project #6360-041-E15,C501,B608,B609,B610
Name of Firm: Key Construction Company, Inc.
Start: 08/2003
Finish Date: 12/2006
Project Role: Project Manager
Responsibilities: Supervised the demolition of an existing bridge and the construction of two two-lane bridges 2,134 feet long containing 5,005 cubic yards of concrete, 1.7 million pounds of reinforcing steel and 7.2 million pounds of plate girders in a highly environmentally sensitive area across the Dan River and its flood plains. This project also featured construction of a MSE wall and a tie back reinforced retaining wall. Additionally, grading, paving, curb and gutter, water and sewer installation, and drainage structures were completed on the heavily traveled highway. Of note, implemented value engineering on the MSE wall construction on this $24.6 million project that was completed seven months ahead of schedule and under budget.

Owner Contact: (Name/Title/Phone): Virginia Department of Transportation  
Mr. J.D. Barkley, II, Resident Engineer (434)791-5218

Route 41, City of Danville, Virginia VDOT Project #NFO 0041-108-101, C501
Name of Firm: Key Construction Company, Inc.
Start: 4/2006
Finish Date: 12/2008
Project Role: Division Manager
Responsibilities: A highly traveled, congested two lane commuter route was reconstructed into a five lane undivided street with curb and gutter and sidewalks. This project, valued at $6.5 million, consisted of grading, water and sewer utilities, storm drainage, incidental concrete, aggregate base, asphalt, striping, and signalization. Strong MOT and construction planning were essential elements in maintaining safe travel throughout the workzone, private owner and business access, and scheduling requirements. Through Mr. Nunn’s initiative, and with the cooperative partnership of the Department, a modified pavement structure was implemented that enhanced constructability and significantly contributed to an early (three months) completion. Mr. Nunn was involved in the management of the project from the bidding phase through completion.

Owner Contact: (Name/Title/Phone): Virginia Department of Transportation  
Mr. Zack Weddle, P.E., Area Construction Engineer (434) 476-6471

Route 604 Genito Road, Chesterfield County, Virginia VDOT Project #0604-020-158, C504, B674
Name of Firm: Key Construction Company, Inc.
Start: 09/2001
Finish Date: 07/2003
Project Role: Project Manager
Responsibilities: This $8.1 million project involved reconstructing an outdated overcapacity 2-lane rural highway into a 4-lane urban thoroughfare with major intersections in a heavily populated area of Chesterfield County. Work consisted of grading, drainage, curb and gutter, utilities, underdrain, aggregate base, asphalt, guardrail, striping, signalization, landscaping, and a new bridge. This project required considerable planning and cooperation between all parties, the contractor and the Department as well as the County and utility owners-electric power, communications, gas, and petroleum. Despite funding, utility conflict, and other numerous delays, this project was completed ahead of schedule. In fact, our company received a $100,000 early completion incentive bonus and was awarded recognition for pavement rideability on this $8.1 million project.

Owner Contact: (Name/Title/Phone): Virginia Department of Transportation  
Mr. Chris Winstead, P.E., District Construction Engineer (804)674-2800

Route 58 in Mecklenburg County, Virginia VDOT Project #6058-058-E28,C501,B649
Name of Firm: Key Construction Company, Inc.
Start: 01/2002
Finish Date: 05/2005
Project Role: Project Manager
Responsibilities: Provided oversight for this 3.6 mile project which entailed clearing and grubbing, regular and borrow
excavation, installation of utilities, seeding and erosion control, soil cement treated subgrade, aggregate base, paving, guardrail, and striping. This project also included replacement of an existing bridge and the construction of two new bridges. Additionally, managed the proposal pricing and final pricing of all grading and structure work, material/subcontractor pricing, scheduling, and efficiency. Initiated and ultimately provided the Department with two VEPs. First, value engineered mainline storm drain installation and MOT plan to provide cost savings and improve workzone safety. Second, two three span bridges were redesigned as single span bridges which again provided a cost savings to the Department as well as mitigated environmental concerns by eliminating instream cofferdams. By maintaining a rigid production schedule and incorporating the aforementioned VEPs, this $10.4 million project was delivered to the Department on time and under budget.

Owner Contact: (Name/Title/Phone): Virginia Department of Transportation
Mr. Charlie Guerant, Engineering Manager I (434)774-2300
**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>Name &amp; Title</td>
</tr>
<tr>
<td>Kaushik Vyas, P.E., Quality Assurance Manager</td>
</tr>
<tr>
<td>b. Project Assignment:</td>
</tr>
<tr>
<td><strong>QUALITY ASSURANCE MANAGER</strong></td>
</tr>
<tr>
<td>c. Name of Firm with which associated:</td>
</tr>
<tr>
<td>Quinn Consulting Services, Incorporated</td>
</tr>
<tr>
<td>d. Years experience: With this firm: 1 With Other Firms: 24</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>
</tbody>
</table>

Quinn Consulting Services, Inc., Quality Assurance Manager – March 2010 to Present, As Quality Assurance Manager (QAM), works exclusively on VDOT design-build projects in lead QA roles and is responsible for the QA inspection and testing of all materials used and work performed on projects including monitoring QC activities; maintaining the Materials Notebook; documenting all use of all materials, sources of materials, and method of verification used to demonstrate compliance with VDOT Standards.

TRC, formally Site-Blauvelt, Transportation Engineer – April 2001 to March 2010, As Transportation Engineer, performed overall Quality Assurance services during construction, in line with VDOT PPTA Project QA/QC Guidelines.

Gujarat Electricity Board, Civil Engineer – June 1985 to July 2000, As Civil Engineer, worked in Power Plants (Generation Wing), and was responsible for construction and maintenance of plant and technical matters for a Thermal power plant project.

e. Education: Location of Institution/Degree(s)/Year/Specialization:
   **Gujarat University, Ahmedabad, India / BS / 1983 / Civil Engineering**

f. Active Registration: Year First Registered/ Discipline/VA Registration #:
   **Professional Engineer VA 2004 / Civil Engineer / 0402 039004**

g. Document the extent and depth of 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 ending dates of each assignment.
   (List at least (3), but no more than (5) relevant projects for which you have performed a similar function).

**I-495 HOT Lanes Design-Build Project**

Quinn Consulting Services, Inc., Quality Control Manager November 2010 to Present. Quality Control Manager on this nearly 2 billion dollar public-private Capital Beltway Project that includes widening of approximately 14 miles of High Speed, High Traffic flow Interstate, widening/replacement of over 50 bridges, construction of new HOV toll lanes, upgrades to 12 key interchanges and new soundwalls and carpool ramps. Responsibilities included oversight of quality control operations; daily staff assignments in the field; analyzing and interpreting project plans and specifications; participating in weekly progress meetings; working closely with contractors to identify and resolve problems; monitoring and reviewing daily diaries prepared by inspection staff; preparing deficiency and non-compliance reports; ensuring materials testing was performed in accordance with project specific QA/QC Plan and VDOT’s Minimum Requirements for Quality Assurance and Quality Control for Design-Build and Public-Private Transportation Act Projects; working directly with General Contractor, Engineering and VDOT oversight personnel to discuss and/or recommend resolutions for field construction problems.

**Relevant Attributes:** Design-Build Project, Quality Assurance/Quality Control Construction Inspection for Roadways and Bridges, Heavy Public Involvement

**Owner Contact:** VDOT – Northern Virginia District, 14685 Avion Parkway, Chantilly, VA 20151-1104, Ms. Susan Shaw, P.E., (703) 259-1995
Design-Build, Route 15 Widening, Prince William County, Virginia
TRC (formerly Site-Blauvelt) Quality Control Manager November 2007 to November 2010. Project included five different phases for widening Route 15 from Route 66 Interchange to Sudley Road which involves Old Carolina Road, Heathcote Boulevard and Waterfall Road Widening. Project also included three bridges. Served as the Quality Control Manager providing coordination with QA/QC Teams for execution of the work according to plans and VDOT Road and Bridge Specifications. Responsibilities included QA inspection and testing of all materials, checking test reports, daily reports, safety reports, environmental reports, coordination with companies for utility relocations, and also with public relations in regards to the project.
Relevant Attributes: Design-Build Project, Quality Control Construction Inspection for Roadway, Heavy Public Involvement
Owner Contact: VDOT – Northern Virginia District, 14685 Avion Parkway, Chantilly, VA 20151-1104, Mahmud Hussain, (703) 383-8368

Design-Build, Route 895 (PPTA) Project, Richmond, Virginia
TRC (formerly Site-Blauvelt) Quality Control Manager April 2001 to July 2002. Project involved monitoring the James River crossing of I-95 using a segmental bridge. This bridge was built using a very advanced technique called the balanced cantilever method and was cast in place with traveling formwork. Responsible for studying the complex reinforcement plans, river crossing segmental drawings, oversight of all Quality Control inspection and materials testing, the pier table structure detailed drawings in order to methodically check and inspect the reinforcement of the critical river crossings. Also inspected the post tensioning of strands for the river crossing segments and reviewed the schedule of nodes and stressing data.
Relevant Attributes: Design-Build Project, Quality Control Construction Inspection for Bridge, Complex Reinforcement Plans, Heavy Public Involvement
Owner Contact: VDOT – Richmond District, 2430 Pine Forest Drive, Colonial Heights, VA, 23834, Sandro Plunto (804) 357-5588

Linton Hall Road Widening, Prince William County, Virginia
TRC (formerly Site-Blauvelt) Quality Assurance Manager November 2007 to November 2010. Project included bridge over Broad Run Creek and Roadway Widening up to Route 28. Served as the Quality Assurance Manager providing coordination with QA/QC Teams for execution of the work according to plans and VDOT Road and Bridge Specifications. Responsibilities included QA inspection and testing of all materials, checking test reports, daily reports, safety reports, maintaining materials notebooks and environmental reports. Also worked closely with utility companies during facility relocations and addressed public inquiries as related to the project.
Relevant Attributes: Design-Build Project, Quality Assurance Construction Inspection for Roadways and Bridges
Owner Contact: Prince William County, 1 County Complex Court (MC460), Prince William, Virginia 22192-9201
Mr. Khattab Shammout, (703) 792-6826

Spriggs Road Improvements Project, Prince William County, Virginia
TRC (formerly Site-Blauvelt) Quality Assurance Manager May 2006 to October 2007. Project which included widening of Spriggs Road to make it a four-lane divided highway between Minnieville Road and Hoadly Road. Project also included the construction of access roads, MSE walls, and utility relocation. Served on Quality Assurance staff interpreting geotechnical reports as related to actual field conditions and recommending solutions when unsuitable soils were encountered. Monitored ongoing roadway drainage work and soil stabilization work and prepared daily reports, pay item summaries, and project schedule reports.
Relevant Attributes: Design-Build Project, Quality Assurance Construction Inspection for Roadway and Access Roads
Owner Contact: Prince William County, 1 County Complex Court (MC460), Prince William, Virginia 22192-9201
Mr. Khattab Shammout, (703) 792-6826
### Brief Resume of Key Personnel anticipated for the Project

#### a. Name & Title:

**Robert T. Gallagher, P.E.**  
Senior Vice President

#### b. Project Assignment:

**DESIGN MANAGER**

#### c. Name of Firm with which you are now associated:

**Johnson, Mirmiran & Thompson, Inc.**

#### d. Years experience: With this Firm 4 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.):

**Name of Firm:** Johnson Mirmiran & Thompson  
**Start Date:** 02/07  
**End Date:** Present  
**Position:** Senior Vice President, Richmond Office Manager, VA Region Transportation Discipline Leader  
**Responsibilities:** Responsible for operations of JMT's Richmond Office and serves as JMT's Transportation discipline leader for Virginia. Oversees all roadway and bridge design, construction inspection, and right-of-way acquisition within the Commonwealth. Mr. Gallagher also serves as JMT's Project Manager on the VDOT Statewide Limited Services Design contract and the NOVA Limited Services Quality Plan Review contract.

**Name of Firm:** Earth Tech  
**Start Date:** 07/05  
**End Date:** 02/07  
**Position:** Vice President, Senior Section Manager  
**Responsibilities:** Senior Section Manager for Transportation services for the Richmond office. Responsible for the major transportation disciplines of roadway and bridge design, construction inspection and right-of-way acquisition. Served as the Project Manager and Principal-in-Charge for design and administration of many VDOT and municipal VDOT-funded highway projects. Served as the Capital District Transportation Business Line Leader responsible for coordinating transportation efforts between individual offices including Baltimore, Alexandria, Richmond, and Norfolk.

**Name of Firm:** Earth Tech  
**Start Date:** 07/03  
**End Date:** 07/05  
**Position:** Vice President, Operations Manager  
**Responsibilities:** Operations Manager for the Richmond office responsible for all Transportation services. Served as the Project Manager and Principal-in-Charge for select VDOT assignments. Assumed additional responsibility for the Environmental service line during structural operation changes of the company. Additional responsibilities involved oversight of multidisciplinary environmental professionals including professional engineers, professional geologists, certified hazardous materials managers, scientists, accountants, procurement professionals, field crews and support personnel. Responsibilities included: profitability and budgets, acquisition and execution of projects, setting strategic goals and budgets for profit and office support centers.

**Name of Firm:** Earth Tech  
**Start Date:** 07/98  
**End Date:** 07/03
Position: Vice President and Senior Program Director for Richmond Global Facilities and Infrastructure Division

Responsibilities: Responsible for Richmond home and field offices for the major Transportation disciplines of roadway and bridge design, environmental documents and permitting, construction inspection and Right-of-Way acquisition services in the Commonwealth of Virginia. Served as Project Manager for multiple VDOT Limited Services Design contracts and Project Manager on select project specific consultant contracts. Also served as the Capital District Transportation Business Line Leader responsible for coordinating transportation efforts between the individual offices throughout Virginia.

Name of Firm: Earth Tech (formerly Rust Environment and Infrastructure)
Start Date: 04/90 End Date: 07/98
Position: Transportation Project Manager and Engineer
Responsibilities: Served in various engineering and project manager roles for VDOT and municipal funded Virginia Transportation projects. Experience centered on highway design, structure design and analysis, roadway hydraulics and storm water management.

Tri-State University, Angola, Indiana/BS/1987/Civil Engineering
State University of New York Agricultural & Technical College, Alfred, NY/AAS/1984/Construction Technology

1992 / Professional Engineer / 23016

Project: Fairfax County Parkway (Route 7100) Design-Build, Fairfax County, VA
Name of Firm: Johnson, Mirmirian & Thompson
Start Date: 10/08 Finish Date: September 2009(Phase I/II Design) November 2009 (Phase IV Design) November 2010 (Construction)
Project Role: Design Manager
Responsibilities: Responsible for engineering of the Design-Build construction on one of the last segments of the Fairfax County Parkway between Rolling Road (Route 638) on the north and Fullerton Road on the south. This project includes construction of approximately 1.5 miles of a four-lane divided, limited access highway designed to facilitate future widening to 6 lanes. The project includes relocation of portions of Rolling Road; a multipurpose trail along a portion of the road; interchanges at Rolling Road/EHG Access Road, Boudino Drive Interchange; I-95 SB DAR access ramp; and 6 new multi-lane bridges (including two 400 long bridges over Accotink Creek), 1 interstate ramp widening and UXO and Hazmat accommodations. Responsibilities include roadway and structure design and coordination with all other support disciplines including survey, utility designations and locations, water resources, environmental analysis and permitting, geotechnical engineering, traffic engineering, signing and lighting and project website. Project required an extensive coordination process to satisfy varying diverse needs as defined by the MOA (VDOT, Dept. of the Army, DOT FHWA) and Fairfax County. Project involved mitigation of and processing where necessary design waivers and exceptions to accommodate previously committed right of way and other constraints. Design execution included accommodating significant owner options into the project development while maintaining schedule. Conditional approval for clearing, grading and E&S construction for the western half of the project was received 2 months ahead of original schedule.

Relevant Attributes: Design-Build Project, Bridge and Road Design and Construction Services, Sensitive Utilities, Heavy Public Involvement
<table>
<thead>
<tr>
<th>Project: Route 288 PPTA Design-Build, Goochland County, VA</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Firm: Earth Tech</td>
<td></td>
</tr>
<tr>
<td>Start Date: 2000</td>
<td>Finish Date: 2002</td>
</tr>
<tr>
<td>Project Role: Design Manager/Principal-In-Charge</td>
<td></td>
</tr>
<tr>
<td>Responsibilities: Responsible for roadway, bridge design and water resources work performed as a sub consultant to the PPTA design-build. Services included completion of the roadway construction plans and select bridge plans for this segment of the Route 288 (4 lane divided Principal Arterial Freeway) western bypass around Richmond from the James River to Interstate 64. Segment included four interchanges and extensive environmental permitting. Project design efforts included value engineering meetings with contractors focusing on cost savings through modifications to roadway and bridge plans. Required extensive coordination efforts to accommodate planned development of the 8,000 employee Capital One campus facility within the West Creek Business Park adjacent to the project at the interchange of Route 288 and Ridgefield Road. Provided field support for contractor Request for Information on roadway and bridge design, along with review of structural shop drawings submittals. Relevant Attributes: VDOT Design-Build Project, Bridge Design and Construction Services, Bridges Constructed by D.W. Lyle Corporation</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project: James Madison Highway (Route 15) Improvements PPTA Design-Build, Prince William County, VA</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Firm: Johnson, Mirmiran &amp; Thompson</td>
<td></td>
</tr>
<tr>
<td>Start Date: 01/07</td>
<td>Finish Date: 2009</td>
</tr>
<tr>
<td>Project Role: Principal-In-Charge</td>
<td></td>
</tr>
<tr>
<td>Responsibilities: Responsible for overseeing the design of two river crossing structures, review of structural shop drawings submittals, acquisition of right of way acquisition, and designation of utilities for a PPTA Design-Build project to improve and widen Route 15. Relevant Attributes: Design-Build Project, Bridge and Road Design and Construction Services, Right-of-Way Acquisition, Utilities, Bridges Constructed by D.W. Lyle Corporation</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project: Monroe Avenue (Route I) Bridge Replacement Design-Build, City of Alexandria, VA</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Firm: Earth Tech</td>
<td></td>
</tr>
<tr>
<td>Start Date: 2006</td>
<td>Finish Date: 02/07</td>
</tr>
<tr>
<td>Project Role: Principal-In-Charge</td>
<td></td>
</tr>
<tr>
<td>Responsibilities: Responsible for engineering and quality assurance activities for a contractor led, $50 million, Design-Build project in the Potomac Yard Development corridor, a major commercial corridor located in a former railroad switchyard in Alexandria. The project involved replacement of the existing Route 1 bridge over the CSX railroad corridor. The proposed 4-span, 800-foot steel structure provides three travel lanes in each direction and sidewalks. The project included improvements to accommodate public transit along Route 1, construction of a bike trail east of the railroad corridor and improvements to adjoining roads. Relevant Attributes: Design-Build Project, Bridge Replacement Project, Heavy Public Involvement</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project: Pentagon Secure Access Improvements (Route 27/244) Design-Build, Arlington County, VA</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Firm: Earth Tech</td>
<td></td>
</tr>
<tr>
<td>Start Date: 2002</td>
<td>Finish Date: 2004</td>
</tr>
<tr>
<td>Project Role: Principal-In-Charge</td>
<td></td>
</tr>
<tr>
<td>Responsibilities: Responsible for engineering activities on a contractor led Design-Build team that provided a secure and dedicated access lane to the Pentagon’s 250,000-square foot Remote Delivery Facility. The $10M project, involved modification of the Route 27/ 244 Interchange and provided additional security checkpoint areas, truck queuing capacity and facilitated secure access. The project received the 2004 Design-Build Award of Excellence from the Associated Builders and Contractors’ Metropolitan Washington and Virginia Chapters. Relevant Attributes: Design-Build Project, Sensitive Utilities</td>
<td></td>
</tr>
</tbody>
</table>


**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><em>Patrick H. Newton</em></td>
</tr>
<tr>
<td><em>Project Manager/Estimator</em></td>
</tr>
<tr>
<td><strong>b. Project Assignment:</strong></td>
</tr>
<tr>
<td><em>CONSTRUCTION MANAGER</em></td>
</tr>
<tr>
<td><strong>c. Name of Firm with which you are now associated:</strong></td>
</tr>
<tr>
<td><em>Key Construction Company, Inc.</em></td>
</tr>
<tr>
<td><strong>d. Years experience:</strong></td>
</tr>
<tr>
<td>With this Firm: 6 Years</td>
</tr>
<tr>
<td>With Other Firms: 44 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><strong>Name of Firm:</strong> Key Construction Company, Inc.</td>
</tr>
<tr>
<td><strong>Position:</strong> Project Manager/Estimator</td>
</tr>
<tr>
<td><strong>Start Date:</strong> Feb. 2006</td>
</tr>
<tr>
<td><strong>End Date:</strong> Present</td>
</tr>
<tr>
<td><strong>Name of Firm:</strong> Tredright, Inc.</td>
</tr>
<tr>
<td><strong>Position:</strong> Estimator</td>
</tr>
<tr>
<td><strong>Start Date:</strong> 1992</td>
</tr>
<tr>
<td><strong>End Date:</strong> 2006</td>
</tr>
<tr>
<td><strong>Name of Firm:</strong> Talbott &amp; Marks</td>
</tr>
<tr>
<td><strong>Position:</strong> Office Manager / Estimator</td>
</tr>
<tr>
<td><strong>Start Date:</strong> 1966</td>
</tr>
<tr>
<td><strong>End Date:</strong> 1991</td>
</tr>
<tr>
<td><strong>Responsibilities:</strong></td>
</tr>
<tr>
<td>As Construction Manager for this project, Mr. Newton’s duties will include, but will not be limited to: managing the construction project from start to completion; scheduling resources (both labor and equipment) as needed; ordering and scheduling delivery of materials; directing subcontractor efforts; creating and maintaining construction schedules; coordinating efforts with all other entities on the project; accumulating and submitting data for billing purposes; and supervising other construction tasks on this difficult and complex project. One of Mr. Newton’s greatest strengths is his communication skills which will be vital in maintaining relationships with all the stakeholders - VDOT, County of Louisa, emergency services, school systems, traveling public, and local businesses. In addition, Mr. Newton will manage the construction staff to assure the project is progressing on schedule; assure adherence to plans and VDOT specifications; ensure all cranes and heavy equipment are maintained according to OSHA regulations; and that proper safety standards and procedures are in place and continue for the duration of the project.</td>
</tr>
</tbody>
</table>

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

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

**Franklin Turnpike Extension, Pittsylvania County, Virginia, Project# (NFO)6265-071-V05, B643, C501**

Name of Firm: Key Construction Co., Inc.
Start Date: 8/2009
Finish Date: 11/2011
Project Role: Project Manager
Responsibilities: Mr. Newton is responsible for the construction of the Route 265 project which includes construction of a 640 ft dual 2-lane bridge over Norfolk Southern Railway and Fall Creek and all roadway construction activities inclusive of excavation, drilling & blasting, water, sewer, gas, utilities, incidental concrete, paving, traffic control, phased urban construction, and sensitive environmental protection. Mr. Newton has maintained a firm construction schedule on this project during its construction. Key is also utilizing the formal partnering process on this project which allows all stakeholders to be fully abreast of any situation that may arise and coordinate the best plan to resolve or manage the issue. This process has helped the overall management of the project. The total contract value of this project is $18.9M.
Client/Owner Contact: Virginia Department of Transportation/John Reece /434-432-7215

**Route 41, City of Danville, Virginia**

Name of Firm: Key Construction Company, Inc.
Start: 4/2006
Finish Date: 12/2008
Project Role: Project Manager
Responsibilities: Managing the project from the estimating stage to the construction delivery stage with his experience and specialty in the procedures of ingress and egress for the project setup and layout. Mr. Newton also maintained a firm construction schedule on the project during the widening of the roadway intersection, grading, and water/sewer installation. This 6.5M project completed ahead of schedule and under budget.
Client/Owner Contact: VDOT, Mr. Zack Weddle, Area Construction Engineer (434) 791-5218

**Piedmont Triad Research Park, Winston Salem, North Carolina**

Name of Firm: D.W. Lyle Corporation, subsidiary of Key Construction Co., Inc.
Start: 1/2008
Finish Date: 7/2009
Project Role: Project Manager
Responsibilities: Mr. Newton managed the project from the estimating stage to the construction delivery stage. Responsible for the management of this $4.1M project which included the installation of crash walls on existing I-40 bridge for Norfolk Southern Railroad and the construction of new bridge for track changes and improvements for Piedmont Triad Research Park Project.
Client/Owner Contact: Yates Construction Co., Inc./ Brett Arnold/336-548-9621

**Route 15 Improvements, Fluvanna County, Virginia (NFO)0015-032-V04, C501, B601**

Name of Firm: Key Construction Co., Inc.
Start Date: 3/2006  
Finish Date: 10/2007  
Project Role: Project Manager  
Responsibilities: Managed construction of $6.8 million roadway and bridge project. Project included new construction and demolition operations in an environmentally and historically sensitive area. Coordinated with VDOT and state agencies to protect nearby historic structures. Managed value-engineering proposal which reduced construction schedule by approximately three months and reduced the project’s wetlands impact area. This project was awarded the 2008 Governor’s Award for Environmental Excellence.  
Client/Owner Contact: Virginia Department of Transportation/Walter Lane /540-967-3710

Route 60 Appomattox County, Virginia (NFO)0060-006-106, C501, B602  
Name of Firm: Key Construction Co., Inc.  
Start Date: 11/2006  
Finish Date: 10/2007  
Project Role: Project Manager  
Responsibilities: The project consisted of grading, paving, drainage structures, bridge construction, and demolition of existing bridge on Route 60 while safely and efficiently maintaining traffic flow to the traveling public and access to private landowner properties. Mr. Newton scheduled efficient use of employees, equipment and subcontractors on this project to ensure on time completion. The total value of this contract was $2.1M.  
Client/Owner Contact: Virginia Department of Transportation/Tommy Hall /434-933-8141
**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel anticipated for the Project.</th>
</tr>
</thead>
</table>
| a. Name & Title: | **Denise H. Nugent**  
Vice President |
| b. Project Assignment: | **PUBLIC RELATIONS MANAGER** |
| c. Name of Firm with which you are now associated: | **Travesky & Associates Ltd.** |
| d. Years experience: With this Firm 17 Years With Other Firms 5 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.). |
| Name of Firm: Travesky & Associates, Ltd  
Start Date: December 1994  
End Date: Present  
Position: Vice President |
| Responsibilities: | As Vice President, Ms. Nugent is responsible for contract negotiation, program planning and evaluation, and corporate financial affairs. Ms. Nugent also develops and implements strategic communication programs and participates in public and stakeholder activities supporting transportation planning and design-build projects. She provides task leadership including overall scheduling, assignment of resources, budget review and adherence, quality control, and coordination of staff activities and vendors. Ms. Nugent resolves operating problems related to the accomplishment of program objectives. Working closely with consultant engineering firms and state transportation agencies, Ms. Nugent prepares strategic communication plans, crafting the methodology necessary to successfully implement public participation programs. As Project Manager, she plans and evaluates project activities and directs the professional team. She organizes, advertises, and provides follow-up from public meetings, and represents the project team at community events. She facilitates workshop discussions and manages the preparation of informational materials, websites, study documents, and project resource centers. Ms. Nugent possesses a thorough knowledge of, and sound experience in, public involvement principles, practices, and standards. |
| e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: | **Master of Public Administration (MPA), George Mason University**  
**Bachelor of Arts – Political Science, Virginia Tech**  
**Certificate in Facilitation – USDA Graduate School**  
**Certificate in Facilitation and Group Consensus Building – George Mason University**  
**Certificate in Public Participation – International Association of Public Participation**  
**Certificate in Negotiation Skills – George Mason University** |
| f. Active Registration: Year First Registered/ Discipline/VA Registration #: | N/A |
| g. Document the extent and depth of your experience and qualifications relevant to the Project. | 1. Note your specific responsibilities and authorities for each assignment, not those of the firm.  
2. Note whether experience is with current firm or with other firm.  
3. Provide beginning and end dates for each assignment.  
(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.) |
| Project: Columbia Pike Transit Initiative  
Name of Firm: Travesky & Associates, Ltd  
Start Date: January 2004  
Finish Date: June 2012  
Project Role: Public Involvement Manager  
Responsibilities: Ms. Nugent developed and prepared educational and informational materials, including a bi-lingual project newsletter in English and Spanish for the Pike Transit Initiative. She developed media |
outreach materials, including press releases, public service announcements, and media placement schedules. She also coordinated with respect to postcard broadcasts to over 20,000 businesses and residents that announced public forums and open houses. On the current phase of the project, the Alternatives Analysis/Environmental Assessment, Ms. Nugent, as the public involvement project manager, participates in project management team, technical advisory, policy, and public meetings/hearings. She is the primary liaison to the consultant and client project managers with respect to the Policy and Community Coordination Committees. She drafted a comprehensive Communications Plan, which guides the successful implementation of program activities. She also plans and coordinates project website updates and provides extensive outreach in English and Spanish to notify stakeholders and historically underrepresented populations of public meetings and forums associated with the project.

**Project: Idea66 – I-66 Inside the Beltway**

**Name of Firm:** Travesky & Associates, Ltd.

**Start Date:** January 2004  
**Finish Date:** April 2009

**Project Role:** Public Involvement

**Responsibilities:** Ms. Nugent prepared the public involvement communications plan, schedule, and negotiated the budget for the I-66 Inside the Beltway project. She had oversight responsibility for the work activities involved with the project website, weeklong community dialogues, newsletters, community impact assessment, and public meetings. Ms. Nugent coordinated with staff and vendors regarding two newsletters reaching over 42,000 residents adjacent to I-66. She developed training materials for the facilitated workshops and community dialogues utilizing the context sensitive solution approach and participated as a facilitator. She also participated in stakeholder interviews and prepared summary documents of public involvement activities. Beginning in winter 2006, Travesky and Associates, Ltd. continued applying the context sensitive solution approach to public involvement with the Idea66 Spot Improvement Design Study. I-66 Spot Improvements is the preliminary engineering phase of the implementation of three spot improvements on Interstate 66 West inside the Capital Beltway in Northern Virginia. Ms. Nugent has continued to engage the community in the design of the spot improvements through public workshops/meetings, project newsletters, brochures, and media advertising.

**Project: TransAction 2030**

**Name of Firm:** Travesky & Associates, Ltd.

**Start Date:** September 2004  
**Finish Date:** Spring 2006

**Project Role:** Public Involvement

**Responsibilities:** Ms. Nugent developed the public involvement scope of work, work plan, schedule, and budget for TransAction 2030, an Update of Northern Virginia’s 2020 Transportation Plan. She participated in technical coordinating committee meetings and represented the project at community fairs. She had oversight responsibility for the production of the project newsletter, summary brochure, project website, telephone survey, and comment summary database. Ms. Nugent also worked closely with team members and a production company in developing an educational presentation on transportation planning and funding, which was posted to the project website.

**Project: Dulles Corridor Rapid Transit PE/NEPA Project**

**Name of Firm:** Travesky & Associates, Ltd.

**Start Date:** June 2000  
**Finish Date:** March 2005

**Project Role:** Public Involvement

**Responsibilities:** Ms. Nugent was responsible for the development and refinement of the scope, methodology, and budget for the public involvement program. She audited the progress of study with respect to planned and completed public involvement activities to ensure adherence to project timeline and operating margins. She prepared the public involvement program strategic communication plan. She also supervised and managed the day-to-day and long-term activities of staff members assigned to the project; including the review and editing of informational materials, i.e., newsletters, updates, comment forms, and handouts; research and correspondence completed by associates; meeting logistics; and e-mail and telephone communications with the public and project team. Ms. Nugent planned and managed logistics for stakeholder and public meetings and attended as a project representative. She also coordinated with the consultant, attended planning meetings, and acted as public involvement liaison. In addition, she planned, staffed, and directed the public involvement information centers operated off-site. She also coordinated activities with the public relations contact and represented the project team at community events.
ATTACHMENT 3.4.1(a)
Lead Contractor Work History Forms
**ATTACHMENT 3.5.1(a)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

<table>
<thead>
<tr>
<th>Work by Lead Contractor—three (3) projects which best illustrates current qualifications relevant to this Project.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a. Project Name &amp; Location</strong></td>
</tr>
</tbody>
</table>
| (1) Route 265 Franklin Turnpike Extension Pittsylvania County, VA Project # (NFO) 6265-071-V05-B643,C501 | - CPM  
- Construction Management  
- Bridges (2)  
- Roadway  
- Storm Drainage  
- MSE Wall  
- Wetlands Impact Avoidance  
- Subcontractor Management  
- Water & Sewer relocation & adjustments  
- Incidental Concrete | Virginia Department of Transportation  
Halifax Residency  
5211 Halifax Road  
Halifax, VA 24558  

**Project Manager:**  
Zachary P. Weddle, P.E.  
Area Construction Engineer  
Tel: 434-476-6471 (office) | **Dec. 2, 2011** | **Nov. 18, 2011** | **$ 18,295** | **$ 18,900** | **Dollar Value of Work for Which Firm Was/Is Responsible** |

**Key Construction Company, Inc.**

**Similar Scope Elements to I-64/Route 15 Interchange Improvement D-B**

| Utility Relocation | X |
| Clearing, Grubbing & Erosion Control | X |
| Roadway Construction | X |
| Phased MOT | X |
| Communicating/Coordination w/ Third Party Stakeholders | X |
| High Visibility Project | X |
| Project Management | X |
| Signing & Signalization | X |

Key Construction Co., Inc. constructed the Franklin Turnpike Extension through a formal partnering process with VDOT that led to a project with very few communication issues. The project consisted of clearing and grubbing, 300,000+ cubic yards of excavation, water and sewer, storm drainage, aggregate base material, asphalt, concrete curb and gutter, guardrail, fencing, overhead signs, and two bridges each 600+ ft in length were activities performed during construction of this final phase of the Franklin Turnpike Extension connecting Route 41 in the City of Danville to the Route 29 Danville Bypass. Coordination and cooperation with the many stakeholders involved, including VDOT, the City of Danville, N&S Railroad, local business owners, and the travelling public, contributed significantly to the successful early completion of this $18.9 million project.

**Lessons Learned for I-64/Route 15 Interchange Improvement D-B**

- Required continuous and effective communications and coordination with all stakeholders – VDOT, City and County officials, utility owners, Retailers association and the general public  
- Coordinated construction scheduling with 3rd party stakeholders  
- Reconstructing heavily travelled signalized intersections  
- Coordinated utility construction & relocation with 3rd party utility owners
**LEAD CONTRACTOR - WORK HISTORY FORM**

Work by Lead Contractor—three (3) projects which best illustrates current qualifications relevant to this Project.

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Narrative describing nature of Firm’s Responsibilities</th>
<th>c. Client/Owner/Project Manager who can verify Firm’s responsibilities. Include address and current phone number.</th>
<th>d. Contract Completion Date (Original)</th>
<th>e. Contract Completion Date (Actual or Estimated)</th>
<th>f. Estimated Value (in Thousands)</th>
<th>g. Original Contract Value</th>
<th>h. Final or Estimated Contract Value</th>
<th>i. Dollar Value of Work for Which Firm Was/Is Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) US 360 &amp; US 58</td>
<td>CPM</td>
<td>Virginia Department of Transportation</td>
<td>August 7, 2007</td>
<td>January 2007</td>
<td>$ 24,300</td>
<td>$ 24,600</td>
<td></td>
<td>(Increased contract value due to approved change orders)</td>
</tr>
<tr>
<td>Halifax County, VA</td>
<td>Construction Management</td>
<td>Halifax County</td>
<td></td>
<td></td>
<td></td>
<td>$ 24,600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project # 360-041-E15, C501, B608, B609, B610</td>
<td>Bridges (3)</td>
<td>P.O. Box 759</td>
<td></td>
<td></td>
<td></td>
<td>$ 24,600</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Roadway</td>
<td>Halifax, VA 24558</td>
<td></td>
<td></td>
<td></td>
<td>$ 24,600</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Storm Drainage</td>
<td>Project Manager: J.D. Barkley, II</td>
<td></td>
<td></td>
<td></td>
<td>$ 24,600</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MSE Wall</td>
<td>Resident Engineer: Telf. 434-791-5218 (office)</td>
<td></td>
<td></td>
<td></td>
<td>$ 24,600</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Permanent Soil Nail Wall</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$ 24,600</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Subcontractor Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$ 24,600</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wet &amp; Dry Drilled Shafts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$ 24,600</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Water &amp; Sewer relocation &amp; adjustments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$ 24,600</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Incidental Concrete</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$ 24,600</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key was the prime contractor on this long anticipated VDOT bridge and roadway project that completed Route 360 as a four-lane highway system from Richmond to Danville. The original 2000 ft + bridge spanned across the Dan River, its flood plains and the Norfolk Southern Corp. The original bridge was demolished and replaced with two 2100 ft + structures. Also, the original Vaughan Street bridge across Route 360 was demolished and replaced with a wider, longer structure. All totaled, there were 5000 ft of concrete, 1.7 million pounds of reinforcing steel and 7.2 million pounds of steel plate girders utilized. The project also included staged roadway construction converting 1.5 miles of roadway from two lane rural design to four lane urban design. Of significance, there were three major intersections contained within this project, the westmost being the major intersection of Routes 58, 360 and 501. The roadway & approach work included clearing and grubbing, grading, drainage, curb and gutter, sanitary water and sewer utilities, storm sewer, paving, and guardrail as well as construction of an MSE wall and a tie back retaining structure. There was an exceptional lesson learned on this project that now impacts our subcontractor selection process. Key experienced performance and scheduling issues from a subcontractor during the project. As a result of this experience, Key developed a more comprehensive and structured subcontractor selection process. This highly visible project, located in very sensitive environmental surroundings, required the best cooperative efforts between Key, VDOT, private utility companies, local governmental agencies, and the general public’s cooperation to deliver a successful job. Value Engineering the traffic phasing and sequence of construction shortened the project duration by 7 months.
**ATTACHMENT 3.5.1(a)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

| Work by Lead Contractor—three (3) projects which best illustrates current qualifications relevant to this Project. |
|---|---|
| a. Project Name & Location | b. Narrative describing nature of Firm's Responsibilities |
| (3) Route 60 Watkins Center Parkway Chesterfield County, Virginia | - Asphalt Paving  
- Storm Drainage  
- Traffic Control  
- CTA Base  
- Grading  
- Bridge Construction  
- CPM  
- Bridge Demolition  
- Sensitive Adj. Land Owners |
| c. Client/Owner/Project Manager who can verify Firm's responsibilities. Include address and current phone number. | Zarembo Group, LLC  
14600 Detroit Avenue  
Cleveland, OH 44107  
Project Manager:  
Alan Bellis, Senior Project Manager  
Ph: (216)221-6600 |
| d. Contract Completion Date (Original) | e. Contract Completion Date (Actual or Estimated) |
| March 2009 | March 2009 |
| f. Estimated Value (in Thousands) | Original Contract Value | Final or Estimated Contract Value | Dollar Value of Work for Which Firm Was/is Responsible |
| | 3,490 | 3,544 | 3,544 |

**Similar Elements to I-64/Route 15 Interchange Improvement D-B**

| Roadway Widening under Heavy Traffic | X |
| Roadway Construction | X |
| Phased MOT | X |
| Utility Relocation | X |
| Project Management | X |

This was a design build highway improvement project built for a private developer in association with the Watkins Center Parkway and was located on US Route 60 near Route 288 in western Chesterfield County. Although a private venture, this project was built under VDOT oversight and in accordance with VDOT standards and specifications. Specifically, Key added an interior eastbound and westbound travel lane each totaling approximately 2500' in length, as well as a 12’ wide 300’ long bridge widening on one bridge across Route 288. Roadway construction activities included grading, storm drainage, CTA base, asphalt paving, striping, erosion control and traffic control management. Working in the median of a high volume divided highway required particular emphasis on traffic management and control in order to perform our work safely and efficiently while maintaining a safe travel zone for the public. Traffic control along both heavily travelled Route 60 and Route 288 was accomplished successfully and ultimately this work was completed ahead of schedule and within budget.

On this project, Key gained valuable experience in the 3rd party stakeholders’ nuances involved, the cooperative effort required, and the compromises necessary by all parties-developer/owner, county, state, engineer, and contractor- to deliver a successful design build project. Current team members involved in this project included JMT providing construction engineering to the County for project inspection and coordination.

**Lessons Learned for I-64/Route 15 Interchange Improvement D-B**

- Sensitivity to travelling public’s safety
- Coordination of all stakeholders involved
- Environmental Stewardship’s positive impact to the project and all involved parties
- Coordination and attention to utilities specific project needs and concerns
- Engagement of local government
**ATTACHMENT 3.4.1(b)**

**LEAD DESIGNER - WORK HISTORY FORM**

(LIMIT 1 PAGE PER PROJECT)

| Work by Lead Designer - three (3) projects which best illustrates current qualifications relevant to this Project. |
| --- | --- | --- | --- | --- | --- | --- |
| a. Project Name & Location | b. Narrative describing nature of Firm’s Responsibilities | c. Client/Owner/Project Manager who can verify Firm’s responsibilities. Include address and current phone number. | d. Contract Completion Date (Original) | e. Contract Completion Date (Actual or Estimated) | f. Estimated Value (in Thousands) | f. Estimated Value (in Thousands) |
| **(1)** Fairfax County Parkway (Route 7100) Design Build Fairfax County, VA | Lead Designer responsible for complete design of project including work in the following disciplines: highway, structural, water resources, traffic, multipurpose trail, lighting design, surveys, utility designations, subsurface utility engineering, geotechnical engineering, environmental analysis and permitting. | Eastern Federal Lands Highway Division 21400 Ridgeway Circle Loudoun Technical Center Sterling, VA 22170 | September 2009 (Phase II/II Design) | November 2009 (Phase IV Design) | $8,337 (Design) | $10,053 (Design) |
| | | Project Manager: Mr. Robert A. Morris, PE | | November 2009 (Phase IV Design) | | $74,000 (Design and Construction Phase II) |
| | | Phone: (703) 494-6302 | | November 2010 (Construction) | | $100,000 (Design and Construction including Owner’s option for Phase IV) | $8,690 (Design) |
| The Design-Build (D-B) Team of Johnson, Mimran & Thompson, Inc. (JMT) and Cherry Hill Construction, Inc. (CHIC) was selected as the best value team for the Fairfax County Parkway (FCP) project by the Federal Highway Administration’s Eastern Federal Lands Highway Division (EFLHD), Virginia Department of Transportation (VDOT) and U.S. Army Garrison Fort Belvoir. | The 4-lane divided limited access highway on new location completes the missing connection of FCP to I-95. The project corridor begins at Rolling Road/Franconia-Springfield Parkway and proceeds southeastward on a new alignment and ends just east of Fullerton Road and includes new interchanges at Boudinot Drive and at the new Fort Belvoir Engineering Proving Ground (EFP) Access Road (Barta Road). The work involved in the parkway extension includes design of: highway and interchange ramps, bike paths, six new bridges and one bridge widening, retaining walls, noise walls, box culverts, sign structures, grading, drainage, storm water management, erosion and sediment control, landscaping, traffic analysis, traffic simulation, traffic signals, signing and striping, dynamic message signing, lighting and pavement marking as well as maintenance of traffic and a Type C Transportation Management Plan for a complicated construction detouring scheme. The project also included special coordination requirements with Fort Belvoir environmental staff due to the presence of contaminated soil/groundwater and the possibility of unexploded ordinance on the site as well as environmental permitting with the USACE for the Accotink Creek bridge construction. In addition, the project included widening of southbound I-95 to accommodate a new exit lane. The project had an extremely aggressive 750 calendar day schedule. | During the bidding process, JMT prepared alternate technical concepts that improved the overall project design and reduced the cost. The JMT/Cherry Hill Construction team was selected based on the alternate technical concepts prepared by JMT and the overall best value that our team’s proposal offered to EFLHD. The most significant change identified was the "Fullerton Flip". The original design departed Fullerton Road crossing over Fairfax County Parkway. JMT was able to revise the profiles for both the Fairfax County Parkway and Fullerton Road to take the Parkway over Fullerton Road. The benefits that raising the grade of FCP brought to the project were: | Lessons Learned for I-64/Route 15 Interchange Improvement D-R |
| Similar Scope Elements to I-64/Route 15 Interchange Improvement D-B | Road Design and Construction X | • Reduced the amount of soil and rock excavation by also raising Boudinot Drive. | | • Coordinated the mitigation and processing of design waivers and exceptions from previously approved CTB plans, allowing the project to remain within boundaries established by the MOA between project stakeholders (VDOT, EFLHD, US Army, and Fairfax County) and keeping the commitments of the ROD. | |
| | ROW Acquisition X | • Minimalized the disturbance of contaminated material by placing embankment over the Central Motors site. | | • Designed significant profile revisions to minimize surplus material, thereby avoiding impacts to HAZMAT and UXO’s, and reducing construction traffic on the local road network. | |
| | Utility Relocation and Coordination X | • Reduced the surplus material on the project. | | • Performed extensive JMT/CHIC Team coordination for foundation design approvals to expedite construction schedule and minimize cost. | |
| | Signal Design and Construction X | • Resulted in a balanced earthwork project significantly reducing project cost. | | • Conducted extensive coordination process to satisfy the varying and diverse needs of the major stakeholders. | |
| | Phased MOT X | JMT also identified areas on the project where the remaining surplus material could be disposed which eliminated the need to dispose material site and eliminated the numerous truck trips on the local roads. | | • Rapidly accommodated multiple owner options into the plans while maintaining the design and construction schedules. | |
| | QA/QC X | | | | |
### Lead Designer - Work History Form

(LIMIT 1 PAGE PER PROJECT)

**Work by Lead Designer - three (3) projects which best illustrates current qualifications relevant to this Project.**

<table>
<thead>
<tr>
<th>Project Name &amp; Location</th>
<th>b. Narrative describing nature of Firm’s Responsibilities</th>
<th>c. Client/Owner/Project Manager who can verify Firm’s responsibilities. Include address and current phone number.</th>
<th>d. Contract Completion Date (Original)</th>
<th>e. Contract Completion Date (Actual or Estimated)</th>
<th>f. Estimated Value (in Thousands)</th>
<th>Original Contract Value</th>
<th>Final or Estimated Contract Value</th>
<th>Dollar Value of Work for Which Firm Was/is Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th Street Bridge</td>
<td>Lead Designer responsible for complete design of project including work in the following disciplines: highway, structural, water resources, traffic, multipurpose trail, lighting designs, surveys, utility designations, subsurface utility engineering, geotechnical engineering, environmental analysis and permitting.</td>
<td>Eastern Federal Lands Highway Division 21400 Ridgetop Circle Loudoun Technical Center Sterling, VA 22170</td>
<td>June 2011</td>
<td>July 2011</td>
<td>$50,961 (Design and Construction)</td>
<td>$50,961 (Design and Construction)</td>
<td>$4,802 (Design)</td>
<td></td>
</tr>
</tbody>
</table>

#### Lessons Learned for I-64/Route 15 Interchange Improvement D-B
- Extensive Maintenance of Traffic plans dealing with high traffic volume in an urbanized area.
- Extensive Railroad Coordination and proactive approach to mitigating impacts.
- Interactive coordination with all utilities and specifically with DC Water and Sewer Authority.
- Stormwater Management (SWM) challenges to meet SWM regulations within the limited Right of Way available.

The Federal Highway Administration’s Eastern Federal Lands Highway Division (EFLHD) representing the District Department of Transportation (DDOT) selected the team of Cherry Hill Construction, Inc. (CHC) and Johnson Marvin & Thompson, Inc. (JMT) for this challenging $51M design-build project. The project required the construction of a completely new four span structure over CSXT and AMTRAK rail facilities and New York Avenue on a parallel alignment with the existing 7-span structure. The project also required the full depth reconstruction and widening of 1,700 feet of New York Avenue along with the realignment and construction of three new signalized intersections. Removal of the existing structure commenced after traffic was set in its final configuration. Project phasing allowed vehicular and pedestrian traffic free movement throughout the project, during both construction and demolition, an important goal of the Owner.

The Team was issued Notice to Proceed on September 6, 2006 and completed its 100% design milestone approximately one-month ahead of schedule. Construction was able to begin in advance of the August 2009 scheduled date. The Project mandated a community outreach program which the Design-Build team embraced through the establishment of a project website, community meetings, and an extensive aesthetic content program. Like previous EFLHD projects, the Team formed a partnering agreement with DDOT, EFLHD and CSXT, but added to this list the United States Postal Service, Amtrak and the DC Water and Sewer Authority (WASA) as significant stakeholders. These stakeholders were essential to the acquisition of easements and property transfers for the construction of the project. In support of the Owners property needs, the Team performed all Title Searches, Assessments, Plat preparations, and assisted with the assembly of agreements and closing services.

The project Owner was also concerned with the aesthetic design of the structure and minimizing impacts to the community by reducing construction time. To address these critical concerns, the Team focused on achieving an elegant, streamlined bridge with numerous architectural enhancements along with an aesthetic development program lead by a local area artist specializing in urban streetscape design. The program allowed the Owner to work with the artist to develop a design, adding or deducting elements as desired while maintaining their budget. CHC’s knowledge of AMTRAK operations minimized time impacts. The Team’s experience with Amtrak procurement regulations gave early recognition to the relocation of electrical traction facilities attached to the existing bridge girders. To advance construction, CHC accelerated the project schedule by acquiring the necessary AMTRAK materials without profit. In addition, a creative demolition sequence allowed the girders span holding the electrical traction elements to remain in place during the construction of all piers and abutments, thereby allowing construction to commence in advance of the one-year duration Amtrak quoted to perform the relocations.

A project of this magnitude involved ongoing and interactive coordination with all utilities and public traffic. Along with utilities within the right of way such as DC WASA, Washington Gas, PEPCO, MCI, AMTRAK, and CSXT Railroad, the project sees an average of 60,000 vehicles on New York Avenue and 24,000 vehicles on 9th Street. Maintaining this volume of traffic mandated seven (7) major traffic phases to accommodate peak rush-hour volumes without impact.
## LEAD DESIGNER - WORK HISTORY FORM

### (LIMIT 1 PAGE PER PROJECT)

**Work by Lead Designer - three (3) projects which best illustrates current qualifications relevant to this Project.**

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Narrative describing nature of Firm's Responsibilities</th>
<th>c. Client/Owner/Project Manager who can verify Firm's responsibilities. Include address and current phone number.</th>
<th>d. Contract Completion Date (Original)</th>
<th>e. Contract Completion Date (Actual or Estimated)</th>
<th>f. Estimated Value (in Thousands)</th>
<th>f. Dollar Value of Work For Which Firm Was/Is Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>(3) 3rd Street (Route 15/460) over Buffalo Creek Design-Build Town of Farmville, VA</td>
<td>Lead Designer responsible for complete design of project including bridge, roadway, drainage, hydraulics, scour analysis, maintenance of traffic, signing and pavement marking, public involvement, construction Quality Assurance, and construction surveying and stakeout.</td>
<td><strong>Virginia Department of Transportation</strong>&lt;br&gt;Lynchburg District&lt;br&gt;4219 Campbell Avenue&lt;br&gt;Lynchburg, VA 24501</td>
<td>June 2008</td>
<td>September 2008</td>
<td>$2,900 (Design and Construction)</td>
<td>$2,900 (Design and Construction)</td>
</tr>
</tbody>
</table>

VDOT selected the Corman Construction / Johnson, Miriman & Thompson Design-Build Team for the 3rd Street (Route 15/460) over Buffalo Creek bridge replacement Design-Build project in the Town of Farmville. Maintenance of traffic (MOT) was a key requirement for the project and the challenge was to design and construct a bridge replacement, in the same location, while maintaining the daily traffic along 3rd Street (Route 15/460). Preliminary plans, provided as part of the procurement process, depicted only one lane of traffic remaining open during construction with temporary signals at each end of the work zone. JMT was able to provide a plan where one lane of traffic in each direction was provided without signals. Flagging was used only as needed for short periods of time while moving construction equipment. The MOT plan and final design provided accessibility from the fire station at the northeast corner of the bridge to 3rd Street (Route 15/460) without creating impacts of delays to fire and emergency vehicles. The JMT design reduced the number of constructions phases originally envisioned by VDOT and reduced project cost, reduced construction time and reduced the impacts to the public. The existing bridge was removed in stages and the proposed, 3-span, 270 foot long replacement bridge was constructed in stages while maintaining traffic on 3rd Street (Route 15/460). In addition to replacing the existing bridge, new approach roadways were designed to tie into the existing approach roadway, drainage system, and sidewalks and accommodate the proposed bridge typical section. Design services for the project included bridge, roadway, drainage, erosion and sediment control, hydrologic and hydraulic analysis, scour analysis, bridge load rating, shop drawing review, and consultation during construction. JMT also provided the construction inspection and Quality Assurance Management of the construction.

### Lessons Learned for I-64/Route 15 Interchange Improvement D-B

- Independent QA/QC extremely valuable to both VDOT and D-B team by promoting objectivity throughout the entire process.
- Developed alternate phased MOT plan to maintain 2 way traffic through the work zone and to accommodate emergency responders within the project limits without disrupting traveling public.
- Gained valuable VDOT Design-Build experience working on one of the first D-B projects advertised by the Innovative Project Delivery Division.
Prequalification Certificate
CERTIFICATE OF QUALIFICATION

Key Construction Company, Incorporated
Vendor Number: K006

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

PREQUALIFIED

Work Classes: Grading, Major Structures, Drainage Structures, Underground Utilities

Issue Date: June 30, 2011
This Rating and Classification will Expire: June 30, 2012

Suzanne FR Lucas Prequalification Officer

Don E. Silies, State Construction Contract Officer
<table>
<thead>
<tr>
<th>Corp ID:</th>
<th>0082414 - 4</th>
<th>Status: 00 Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corp Name:</td>
<td>KEY CONSTRUCTION COMPANY, INCORPORATED</td>
<td></td>
</tr>
<tr>
<td>Date of Certificate:</td>
<td>02/05/1959</td>
<td>Period of Duration:</td>
</tr>
<tr>
<td>State of Incorporation:</td>
<td>VA VIRGINIA</td>
<td>Stock Indicator: S STOCK</td>
</tr>
<tr>
<td>Merger Ind:</td>
<td>CONVERSION/DOMESTICATION IND:</td>
<td></td>
</tr>
<tr>
<td>Good Standing Ind:</td>
<td>Y</td>
<td>Monitor Indicator:</td>
</tr>
<tr>
<td>Charter Fee:</td>
<td></td>
<td>Mon No:</td>
</tr>
<tr>
<td>R/A Name:</td>
<td>MARK W NUNN</td>
<td>Mon Status: Monitor DTE:</td>
</tr>
<tr>
<td>Street:</td>
<td>11453 HWY 15 S</td>
<td></td>
</tr>
<tr>
<td>Po Box:</td>
<td>698</td>
<td>AR RTN Mail:</td>
</tr>
<tr>
<td>City:</td>
<td>CLARKSVILLE</td>
<td>State: VA Zip: 23927</td>
</tr>
<tr>
<td>R/A Status:</td>
<td>OFFICER</td>
<td>Eff. Date: 01/20/02 LOC: 158</td>
</tr>
<tr>
<td>Accepted AR#:</td>
<td>211 02 3101</td>
<td>Date: 01/12/11</td>
</tr>
<tr>
<td>Current AR#:</td>
<td>211 02 3101</td>
<td>Status: A Assessment Indicator: 0</td>
</tr>
<tr>
<td>Year Fees:</td>
<td>250.00</td>
<td>Interest:</td>
</tr>
<tr>
<td>Penalty:</td>
<td></td>
<td>Taxes:</td>
</tr>
<tr>
<td>Balance:</td>
<td>250.00</td>
<td>Total Shares:</td>
</tr>
<tr>
<td>Total Shares:</td>
<td>30,000</td>
<td></td>
</tr>
</tbody>
</table>

(Screen Id:/Corp_Data_Inquiry)
Commonwealth of Virginia

State Corporation Commission

I Certify the Following from the Records of the Commission:

KEY CONSTRUCTION COMPANY, INCORPORATED is a corporation existing under and by virtue of the laws of Virginia, and is in good standing.

The date of incorporation is February 05, 1959.

Nothing more is hereby certified.

Signed and Sealed at Richmond on this Date:
October 7, 2009

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

CORP ID: F149901   - 3 STATUS: 00 ACTIVE STATUS DATE: 10/17/06
CORP NAME: Johnson, Mirmiran & Thompson, Inc.

DATE OF CERTIFICATE: 10/17/2006 PERIOD OF DURATION: 70
STATE OF INCORPORATION: MD MARYLAND STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: 50.00 MON NO:
R/A NAME: ROBERT GALLAGHER

STREET: 9201 ARBORETUM PKY STE 140 AR RTN MAIL:

CITY: RICHMOND STATE: VA ZIP: 23236
R/A STATUS: 2 OFFICER EFF. DATE: 09/06/07 LOC: 120
ACCEPTED AR#: 211 51 9983 DATE: 08/31/11 CHESTERFIELD CO
CURRENT AR#: 211 51 9983 DATE: 08/31/11 STATUS: A ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
11 100.00

(Screen Id:/Corp_Data_Inquiry)
Commonwealth of Virginia

State Corporation Commission

I Certify the Following from the Records of the Commission:

Johnson, Mirmiran & Thompson, Inc., a corporation existing under the laws of MARYLAND, holds a certificate of authority to transact business in Virginia, and is in good standing.

The certificate was issued on October 17, 2006.

Nothing more is hereby certified.

Signed and Sealed at Richmond on this Date:
June 22, 2010

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

STATE CORPORATION COMMISSION

Richmond, February 8, 2002

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

Johnson, Mirmiran & Thompson, 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:

[Signature]
Clerk of the Commission
CISM0180  CORPORATE DATA INQUIRY  

CORP ID: F123900  -  5  STATUS: 00 ACTIVE  
CORP NAME: EBA ENGINEERING, INC.  

DATE OF CERTIFICATE: 10/22/1997  PERIOD OF DURATION:  
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:  
R/A NAME: CT CORPORATION SYSTEM  

STREET: 4701 COX RD STE 301  
CITY: GLEN ALLEN  STATE: VA  ZIP: 23060 6802  
R/A STATUS: 5 B.E. AUTH IN VI  
ACCEPTED AR#: 211 52 2819  
CURRENT AR#: 211 52 2819  
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES  
11 1,700.00  

(Screen Id:/Corp_Data_Inquiry)
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
LLCM3220

LLC DATA INQUIRY

LLC ID: S120821 - 6  STATUS: 00 ACTIVE

LLC NAME: ECS - Mid-Atlantic, LLC

STATUS DATE: 04/16/04

DATE OF FILING: 04/16/2004  PERIOD OF DURATION: 

STATE OF FILING: VA VIRGINIA  INDUSTRY CODE: 00

CONVERSION/DOMESTICATION INDICATOR:

PRINCIPAL OFFICE ADDRESS

STREET: 14026 THUNDERBOLT PL STE 100

CITY: CHANTILLY  STATE: VA  ZIP: 20151-0000

REGISTERED AGENT INFORMATION

R/A NAME: JAMES A ECKERT

STREET: 14026 THUNDERBOLT PL STE 100

R/A STATUS: C OF CORP M/M

EFFECTIVE DATE: 04/16/04  LOCAL: 129  FAIRFAX COUNTY

YEAR FEES PENALTY INTEREST BALANCE

11

(Screen Id: LLC_Data_Inquiry)
I Certify the Following from the Records of the Commission:

A certificate of organization was issued by the Commission to ECS - Mid-Atlantic, LLC, a limited liability company formed under the laws of VIRGINIA, effective as of April 16, 2004.

As of the date below, articles of cancellation have not been filed in this office by ECS - Mid-Atlantic, LLC, a Virginia limited liability company.

Nothing more is hereby certified.

Signed and Sealed at Richmond on this Date:
October 5, 2009

[Signature]
Joel H. Peck, Clerk of the Commission
CISM0180 CORPORATE DATA INQUIRY

CORP ID: 0504941 - 6 STATUS: 00 ACTIVE STATUS DATE: 08/04/04
CORP NAME: EEE CONSULTING, INC.

DATE OF CERTIFICATE: 06/23/1998 PERIOD OF DURATION: INDUSTRY CODE: 00
STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: 50.00 MON NO:
MON STATUS: MONITOR DTE:
R/A NAME: DONALD E KING
MCQUIREWOODS LLP
STREET: ONE JAMES CENTER/901 E CARY ST
AR RTN MAIL:

CITY: RICHMOND STATE: VA ZIP: 23219
R/A STATUS: 4 ATTORNEY EFF. DATE: 07/21/09 LOC : 216
ACCEPTED AR#: 211 51 2598 DATE: 06/16/11 RICHMOND CITY
CURRENT AR#: 211 51 2598 DATE: 06/16/11 STATUS: A ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
11 100.00

(Screen Id:/Corp_Data_Inquiry)
This is to Certify that the certificate of incorporation of EEE Consulting, 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:

June 23, 1998

State Corporation Commission

William F. Bridge
Clerk of the Commission
CISM0180

CORPORATE DATA INQUIRY

CORP ID: 0027211 - 2 STATUS: 00 ACTIVE STATUS DATE: 11/13/09
CORP NAME: FROELING & ROBERTSON, INCORPORATED

DATE OF CERTIFICATE: 10/11/1924 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: 2480.00 MON NO: MON STATUS: MONITOR DTE:
R/A NAME: WILLIAM H HOOFNAGLE III

STREET: 1900 ONE JAMES CENTER AR RTN MAIL:
901 E CARY ST
CITY: RICHMOND STATE: VA ZIP: 23219
R/A STATUS: 4 ATTORNEY EFF. DATE: 09/21/11 LOC: 216
ACCEPTED AR#: 211 16 6326 DATE: 09/23/11 RICHMOND CITY
CURRENT AR#: 211 16 6326 DATE: 09/23/11 STATUS: A ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
11 1,700.00

(Screen Id:/Corp_Data_Inquiry)
Commonwealth of Virginia
State Corporation Commission

I Certify the Following from the Records of the Commission:

FROEHLING & ROBERTSON, INCORPORATED, (Entity ID# 0027211-2), is a stock corporation existing under and by virtue of the laws of Virginia, and is in good standing.

The date of incorporation is October 11, 1924.

Nothing more is hereby certified.

Signed and Sealed at Richmond on this Date:
August 13, 2009

Joel H. Peck, Clerk of the Commission
CISM0180 CORPORATE DATA INQUIRY

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

CORP NAME: QUINN CONSULTING SERVICES INCORPORATED

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

STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK

MERGER IND: S SURVIVOR CONVERSION/DOMESTICATION IND:

GOOD STANDING IND: Y MONITOR INDICATOR:

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

R/A NAME: JOHN H QUINN JR

STREET: 2208 S KNOLL ST AR RTN MAIL:

CITY: ARLINGTON STATE: VA ZIP: 22202 2134

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

ACCEPTED AR#: 211 15 3803 DATE: 08/29/11 ARLINGTON COUNT

CURRENT AR#: 211 15 3803 DATE: 08/29/11 STATUS: A ASSESSMENT INDICATOR: 0

YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
11 100.00

(Screen Id:/Corp_Data_Inquiry)
CERTIFICATE OF GOOD STANDING

I certify the following from the records of the commission:

That QUINN CONSULTING SERVICES INCORPORATED is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is October 24, 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: August 15, 2011

Joel H. Peck, Clerk of the Commission
CISM0180

CORPORATE DATA INQUIRY

CORP ID: 0712674 - 1
STATUS: 00 ACTIVE
STATUS DATE: 08/12/09

CORP NAME: Schnabel Engineering Consultants, Inc.

DATE OF CERTIFICATE: 08/12/2009 PERIOD OF DURATION: INDUSTRY CODE: 00
STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: 50.00 MON NO:
MON STATUS: MONITOR DTE:
R/A NAME: CT CORPORATION SYSTEM

STREET: 4701 COX RD STE 301 AR RTN MAIL:

CITY: GLEN ALLEN STATE: VA ZIP: 23060 6802
R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 06/16/11 LOC: 143
ACCEPTED AR#: 211 12 3663 DATE: 06/29/11 HENRICO COUNTY
CURRENT AR#: 211 12 3663 DATE: 06/29/11 STATUS: A ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
11 130.00

(Screen Id:/Corp_Data_Inquiry)
Commonwealth of Virginia

STATE CORPORATION COMMISSION

Richmond, August 12, 2009

This is to certify that the certificate of incorporation of

Schnabel Consultants, 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: August 12, 2009

State Corporation Commission
Attest:

Joel H. Peck
Clerk of the Commission
The State Corporation Commission has found the accompanying articles submitted on behalf of Schnabel Engineering Consultants, Inc. (formerly Schnabel Consultants, Inc.)

to comply with the requirements of law, and confirms payment of all required fees. Therefore, it is ORDERED that this

CERTIFICATE OF AMENDMENT

be issued and admitted to record with the articles of amendment in the Office of the Clerk of the Commission, effective November 12, 2009.

The corporation is granted the authority conferred on it by law in accordance with the articles, subject to the conditions and restrictions imposed by law.

STATE CORPORATION COMMISSION

By

Commissioner
CISM0180  CORPORATE DATA INQUIRY

CORP ID: 0292417 - 3  STATUS: 00 ACTIVE  STATUS DATE: 05/22/92

CORP NAME: TRAVESKY & ASSOCIATES, LTD.

DATE OF CERTIFICATE: 09/11/1986  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:
R/A NAME: MARIE B. TRAVESKY  MON STATUS:  MONITOR DTE:

STREET: 3900 JERMANTOWN RD., STE. 300  AR RTN MAIL:

CITY: FAIRFAX  STATE: VA  ZIP: 22030
R/A STATUS: 2 OFFICER  EFF. DATE: 04/03/92  LOC: 303
ACCEPTED AR#: 211 13 7683  DATE: 07/27/11  FAIRFAX CITY (F
CURRENT AR#: 211 13 7683  DATE: 07/27/11  STATUS: A  ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
11 100.00

(Screen Id:/Corp_Data_Inquiry)
This is to certify that the certificate of incorporation of Travsky & Associates, Ltd. has been issued and admitted to record in this office, that the said corporation is authorized to transact its business subject to all the laws of the State applicable to the corporation and its business.

[Signature]

State Corporation Commission

[Signature]

Clerk of the Commission
The image shows a screenshot of a website displaying business license information. The page is titled "APELSCIDLA Business License". The license information includes:

- **Business Name**: Johnson Mirrars & Thompson Inc
- **Trading Name**: Johnson Mirrars & Thompson Inc
- **Address**: 9201 Arboretum Pkwy, Suite 310, Richmond, VA 23236-0000
- **Business Type**: Business Entity Branch Office
- **Registration No**: 041100029
- **Initial Certification Date**: March 24, 1992
- **Expiration Date**: February 29, 2012

For the professions offered by this office, please see below.

**Open Complaints**: None

States law prohibits the disclosure of any information about open complaints (Code of Virginia Section 54.1-106). Members of the public may review office records and obtain copies only after a complaint investigation is closed.
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
02-29-2012

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

BUSINESS ENTITY BRANCH OFFICE REGISTRATION

PROFESSIONS: LS, ENG

JOHNSON, MIRMIRAN & THOMPSON, INC.
9201 ARBORETUM PKWY
SUITE 310
RICHMOND, VA 23236

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

FOOD CARD:

COMMONWEALTH OF VIRGINIA
BOARD FOR APLESCIOLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000029 EXPIRES: 02-29-2012
PROFESSIONS: LS, ENG
JOHNSON, MIRMIRAN & THOMPSON, INC.
9201 ARBORETUM PKWY
SUITE 310
RICHMOND, VA 23236

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.
<table>
<thead>
<tr>
<th>APEDCIDA Business License</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BUSINESS NAME:</strong> JOHNSON MERRIAM &amp; THOMPSON INC</td>
</tr>
<tr>
<td><strong>ADDRESS:</strong> 13201 PARK CENTER RD HERNDON, VA 20731-0000</td>
</tr>
<tr>
<td><strong>BUSINESS TYPE:</strong> BUS ENTITY BRANCH OFFICE</td>
</tr>
<tr>
<td><strong>REGISTRATION NO:</strong> 0411000441</td>
</tr>
<tr>
<td><strong>INITIAL CERTIFICATION DATE:</strong> MARCH 06, 2006</td>
</tr>
<tr>
<td><strong>EXPIRATION DATE:</strong> FEBRUARY 29, 2012</td>
</tr>
</tbody>
</table>

For the professions offered by this office, please see below.

**Open Complaints:** None

"Open Complaints" reflect only those complaints 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.
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA
9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

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

PROFESSIONS: ENG

JOHNSON MIRMIRAN & THOMPSON INC
13921 PARK CENTER RD
HERNDON, VA 20171

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
<table>
<thead>
<tr>
<th>APELSCIDLA Business License</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BUSINESS NAME</strong></td>
</tr>
<tr>
<td><strong>TRADE NAME</strong></td>
</tr>
<tr>
<td><strong>ADDRESS</strong></td>
</tr>
<tr>
<td><strong>BIAENTITY BRANCH OFFICE</strong></td>
</tr>
<tr>
<td><strong>REGISTRATION NO</strong></td>
</tr>
<tr>
<td><strong>INITIAL CERTIFICATION DATE</strong></td>
</tr>
<tr>
<td><strong>EXPIRATION DATE</strong></td>
</tr>
</tbody>
</table>

For the professions offered by this office, please see below.

**Open Complaints**: None

"Open Complaints" reflect only those complaints 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.
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

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

BUSINESS ENTITY BRANCH OFFICE REGISTRATION

PROFESSIONS: ENG

JOHNSON MIRMIRAN & THOMPSON INC
272 BENDIX RD SUITE 260
VIRGINIA BEACH, VA 23452
### APELSCIDLA Business License

**BUSINESS NAME:** JOHNSON MARVIN & THOMPSON INC  
**TRADING NAME:**  
**ADDRESS:** 72 LOVETOHL CIRCLE 
SPARKS, NV 89431-0009  
**BUSINESS TYPE:** BUSINESS ENTITY  
**REGISTRATION NO.:** 0407001314  
**INITIAL CERTIFICATION DATE:** AUGUST 30, 1992  
**EXPIRATION DATE:** DECEMBER 31, 2013

For the professions offered by this office, please see below.

**Open Complaints: None**

"Open Complaints" reflect only those complaints 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.
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPRESS ON
12-31-2013

NUMBER
0407001314

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

PROFESSIONS: ENG, LA, ARC, LS

JOHNSON MIRMIRAN & THOMPSON INC
72 LOVETON CIRCLE
SPARKS, MD 21152

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

APELSCIDLA Business License
BUSINESS NAME: EBA ENGINEERING INC
TRADE NAME: 
ADDRESS: 714 WESTWOOD OFFICE PARK FREDERICKSBURG, VA 22401-0000
BUSINESS TYPE: BUS ENTITY BRANCH OFFICE
REGISTRATION NO: 0411005271
INITIAL CERTIFICATION DATE: OCTOBER 17, 2011
EXPIRATION DATE: FEBRUARY 29, 2012

For the professions offered by this office, please see below.

Open Complaints: None

"Open Complaints" reflect only those complaints 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.

About EDOH
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA
9990 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

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

PROFESSIONS: ENG

EBA ENGINEERING INC
714 WESTWOOD OFFICE PARK
FREDERICKSBURG, VA 22401
APELSCIDLA Business License

BUSINESS NAME: EC3 MID-ATLANTIC LLC
TRADING NAME: 
ADDRESS: 1501 AIRPORT RD CHARLOTTESVILLE, VA 22911-0000
BUSINESS TYPE: BUS ENTITY BRANCH OFFICE
REGISTRATION NO: 0411000662
INITIAL CERTIFICATION DATE: MAY 25, 2010
EXPIRATION DATE: FEBRUARY 29, 2012

For the professions offered by this office, please see below.

Open Complaints: None

"Open Complaints" reflect only those complaints 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.

Note: Your selection for the disclosure of any information about open complaints is protected by Virginia's Freedom of Information Act (FOIA) and the 'Right to Privacy Act (RTPA).
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

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

PROFESSIONS: ENG

ECS MID- ATLANTIC LLC
1601 AIRPORT RD
CHARLOTTESVILLE, VA 22911

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.
### APELSICDLA Business License

<table>
<thead>
<tr>
<th>APELSICDLA Business License</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSINESS NAME</td>
<td>ECS MID-ATLANTIC LLC</td>
</tr>
<tr>
<td>TRADING NAME</td>
<td>LEO J TITUS JR PE</td>
</tr>
<tr>
<td>ADDRESS</td>
<td>14008 THUNDERBOLT PL, STE 100, CHANTILLY, VA 20151-6309</td>
</tr>
<tr>
<td>BUSINESS TYPE</td>
<td>BUSINESS ENTITY</td>
</tr>
<tr>
<td>REGISTRATION NO</td>
<td>0407024025</td>
</tr>
<tr>
<td>INITIAL CERTIFICATION DATE</td>
<td>DECEMBER 10, 2004</td>
</tr>
<tr>
<td>EXPIRATION DATE</td>
<td>DECEMBER 31, 2013</td>
</tr>
</tbody>
</table>

For the professions offered by this office, please see below.

**Open Complaints:** None

"Open Complaints" reflect only those complaints 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 54.1-100). Members of the public may review official records and obtain copies only after a complaint investigation is closed.

**Closed Complaints:** None

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

To inquire about any disciplinary actions prior to 1990, contact the department's Public Records Section at (804) 367-6503 or Records@dpor.virginia.gov.
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

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

PROFESSIONS: ENG

ECS-MID-ATLANTIC LLC
LEO J TITUS JR PE
14026 THUNDERBOLT PL STE 100
CHANTILLY, VA 20151
APELSCIDLA Business License

BUSINESS NAME:EEI Consulting Inc
TRADING NAME:
ADDRESS:8525 Bell Creek Rd
MECHANICSVILLE, VA 23116-0000
BUSINESS TYPE:BUSINESS ENTITY
REGISTRATION NO:0407003705
INITIAL CERTIFICATION DATE:AUGUST 24, 1998
EXPIRATION DATE:DECEMBER 31, 2013

For the professions offered by this office, please see below.

Open Complaints: None

“Open Complaints” reflect only those complaints 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 54.1-198). Members of the public may review official records and obtain copies only after a complaint investigation is closed.

Closed Complaints: None

“Closed Complaints” reflect complaints closed since 1990. Cases closed without disciplinary action are purged after three years in accordance with DOPR’s record retention policy.

To inquire about any disciplinary actions prior to 1990, contact the department’s Public Records Section at (804) 367-8583 or recordsdept@dopr.virginia.gov.

For the professions offered by this office, please see below.
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

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

PROFESSIONS: ENG

EEE CONSULTING INC
8525 BELL CREEK RD
MECHANICSVILLE, VA 23116

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
APELL SCIDLA Business License

BUSINESS NAME: FROTHING & ROBERTSON INC
TRADING NAME:
ADDRESS: 3015 DUMBARTON ROAD
RICHMOND, VA 23228-0006
BUSINESS TYPE: BUSINESS ENTITY
REGISTRATION NO: 040700008
INITIAL CERTIFICATION DATE: AUGUST 05, 1982
EXPIRATION DATE: DECEMBER 31, 2013

For the professions offered by this office, please see below.

Open Complaints: None

"Open Complaints" reflect only those complaints for which a departmental investigation has determined that sufficient evidence exists to establish probable cause of violation of the law or regulations. Only those cases that have proceeded through an investigation to the adjudication stage are displayed.

Data may include the disclosure of any information about cases resulting from information furnished by third parties who are not parties to the case.
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

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

PROFESSIONS: ENG

FROEHLING & ROBERTSON, INC
3015 DUMBARTON ROAD
RICHMOND, VA 23228

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

Gordon N. Dixon, Director
For the professions offered by this office, please see below.

Open Complaints: None

"Open Complaints" reflect only those complaints 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 54.1-1601]. Members of the public may review official records and obtain copies only after a complaint investigation is closed.

Closed Complaints: None

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

To inquire about any disciplinary actions prior to 1990, contact the department's Public Records Section at (804) 367-6583 or recordstat@dpior.virginia.gov.
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

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

PROFESSIONS: ENG

FROEHLING & ROBERTSON, INC
6181 ROCKFISH GAP TURNPIKE
CROZET, VA 22932

041100052

02-29-2012
APELSCIDLA Business License

APELSCIDLA Business License
BUSINESS NAME: QUINN CONSULTING SERVICES INC
TRADING NAME:
ADDRESS: 407 MARBLE ROCK COURT
CHANTILLY, VA 20151-0000
BUSINESS TYPE: BUSINESS ENTITY
REGISTRATION NO: 0497000733
INITIAL CERTIFICATION DATE: MARCH 05, 1996
EXPIRATION DATE: DECEMBER 31, 2013

For the professions offered by this office, please see below.

Open Complaints: None

"Open Complaints" reflect only those complaints 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.
APELSCIDLA Business License

APELSCIDLA Business License

BUSINESS NAME: SCHUABEL ENGINEERING CONSULTANTS INC
TRADING NAME:
ADDRESS: 2020 AVON CT
SUIE 15
CHARLOTTESVILLE, VA 22902-0000
BUSINESS TYPE: BUS ENTITY BRANCH OFFICE
REGISTRATION NO: 0411000696
INITAL CERTIFICATION DATE: MARCH 19, 2010
EXPIRATION DATE: FEBRUARY 29, 2012

For the professions offered by this office, please see below:

Open Complaints: None

"Open Complaints" reflect only those complaints 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.
**APELSCIDLA Business License**

**BUSINESS NAME:** Schwabel Engineering Consultants Inc  
**TRADING NAME:**  
**ADDRESS:** One Cary Street  
**RICHMOND, VA 23220-0000**  
**BUSINESS TYPE:** BUS ENTITY BRANCH OFFICE  
**REGISTRATION NO:** 011000700  
**INITIAL CERTIFICATION DATE:** JANUARY 05, 2010  
**EXPIRATION DATE:** FEBRUARY 29, 2012

For the professions offered by this office, please see below.

**Open Complaints:** None

"Open Complaints" reflect only those complaints 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 2.1-715. Virginia's Open Records Act. The public may make request.)
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

9900 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 786-8500

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

PROFESSIONS: ENG

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

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.
KEY PERSONNEL DPOR DOCUMENTATION
APELSCI-DLA Individual License

NAME: GALLACHER, ROBERT TAYLOR
CITY, STATE: MECHANICSVILLE, VA
OCCUPATION: PROFESSIONAL ENGINEER 0402
LICENSE: 023016
INITIAL CERTIFICATION DATE: JANUARY 27, 1992
EXPIRATION DATE: JANUARY 31, 2014

Open Complaints: None

*Open Complaints* reflect only those complaints 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.

Closed Complaints: None
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
01-31-2014

NUMBER
0402023016

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

ROBERT TAYLOR GALLAGHER
10004 STUDLEY FARMS DRIVE
MECHANICSVILLE, VA 23116

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
**APELSCIDLA Individual License**

**NAME:** Vyas, Kushikumar Bhupendra Prasad  
**CITY, STATE:** GORDONSVILLE, VA  
**OCCUPATION:** PROFESSIONAL ENGINEER 0402  
**LICENSE:** CE0604  
**INITIAL CERTIFICATION DATE:** JUNE 14, 2004  
**EXPIRATION DATE:** JUNE 30, 2012

### Open Complaints:
None

* "Open Complaints" reflect only those complaints 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 54.1-100]. Members of the public may review official records and obtain copies only after a complaint investigation is closed.

### Closed Complaints:
None
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPRES ON
06-30-2012

9980 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-6500

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

KAUSHIKKUMAR BHUPENDRAPRASAD VYAS
10170 SPRING DR
GORDONSVILLE, VA 22942-7581

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)
Key Construction Company, Inc.

P.O. Box 698
11453 Hwy 15 South
Clarksville, VA 23927

JMT
JOHNSON, MIRMIRAN & THOMPSON

9201 Arboretum Parkway
Suite 310
Richmond, VA 23236