Route 606 Bridge Replacement over I-95 with 606 Improvements
Spotsylvania County, VA

Contract ID Number: C00105463DB89
State Project Nos.:
Route 606 Roadway Improvements (0606-088-653, C501), UPC 105463
Route 606 Bridge Replacement (0606-088-622, C501, B643), UPC 100829

Federal Project Nos.:
Route 606 Roadway Improvements (STP-5111(272))
Route 606 Bridge Replacement (BR-5111(237))

Submitted By: ABERNATHY CONSTRUCTION CORP.
In Association With: AMMANN & WHITNEY
Offerors shall furnish a copy of this Statement of Qualifications (SOQ) Checklist, with the page references added, with the Statement of Qualifications.

<table>
<thead>
<tr>
<th>Statement of Qualifications Component</th>
<th>Form (if any)</th>
<th>RFQ Cross reference</th>
<th>Included within 15-page limit?</th>
<th>SOQ Page Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statement of Qualifications Checklist and Contents</td>
<td>Attachment 3.1.2</td>
<td>Section 3.1.2</td>
<td>no</td>
<td>Following Cover</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>Under Tab 2.10</td>
</tr>
<tr>
<td>Letter of Submittal (on Offeror’s letterhead)</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Authorized Representative’s signature</td>
<td>NA</td>
<td>Section 3.2.1</td>
<td>yes</td>
<td>2</td>
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<tr>
<td>Offeror’s point of contact information</td>
<td>NA</td>
<td>Section 3.2.2</td>
<td>yes</td>
<td>1</td>
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<tr>
<td>Principal officer information</td>
<td>NA</td>
<td>Section 3.2.3</td>
<td>yes</td>
<td>1</td>
</tr>
<tr>
<td>Offeror’s Corporate Structure</td>
<td>NA</td>
<td>Section 3.2.4</td>
<td>yes</td>
<td>1</td>
</tr>
<tr>
<td>Identity of Lead Contractor and Lead Designer</td>
<td>NA</td>
<td>Section 3.2.5</td>
<td>yes</td>
<td>1</td>
</tr>
<tr>
<td>Affiliated/subsidiary companies</td>
<td>Attachment 3.2.6</td>
<td>Section 3.2.6</td>
<td>no</td>
<td>Under Tab 3.2</td>
</tr>
<tr>
<td>Debarment forms</td>
<td>Attachment 3.2.7(a) Attachment 3.2.7(b)</td>
<td>Section 3.2.7</td>
<td>no</td>
<td>Under Tab 3.2</td>
</tr>
<tr>
<td>Offeror’s VDOT prequalification evidence</td>
<td>NA</td>
<td>Section 3.2.8</td>
<td>no</td>
<td>Under Tab 3.2</td>
</tr>
<tr>
<td>Evidence of obtaining bonding</td>
<td>NA</td>
<td>Section 3.2.9</td>
<td>no</td>
<td>Under Tab 3.2</td>
</tr>
</tbody>
</table>
## ATTACHMENT 3.1.2

**Project: 0606-088-653, C501 & 0606-088-622, C501, B634**

### STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

<table>
<thead>
<tr>
<th>Statement of Qualifications Component</th>
<th>Form (if any)</th>
<th>RFQ Cross reference</th>
<th>Included within 15-page limit?</th>
<th>SOQ Page Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCC and DPOR registration documentation (Appendix)</td>
<td>Attachment 3.2.10</td>
<td>Section 3.2.10</td>
<td>no</td>
<td>Appendix</td>
</tr>
<tr>
<td>Full size copies of SCC Registration</td>
<td>NA</td>
<td>Section 3.2.10.1</td>
<td>no</td>
<td>Appendix</td>
</tr>
<tr>
<td>Full size copies of DPOR Registration (Offices)</td>
<td>NA</td>
<td>Section 3.2.10.2</td>
<td>no</td>
<td>Appendix</td>
</tr>
<tr>
<td>Full size copies of DPOR Registration (Key Personnel)</td>
<td>NA</td>
<td>Section 3.2.10.3</td>
<td>no</td>
<td>Appendix</td>
</tr>
<tr>
<td>Full size copies of DPOR Registration (Non-APELSCIDLA)</td>
<td>NA</td>
<td>Section 3.2.10.4</td>
<td>no</td>
<td>Appendix</td>
</tr>
</tbody>
</table>
| **DBE statement within Letter of Submittal** confirming  
Offeror is committed to achieving the required DBE goal | NA | Section 3.2.11 | yes | 2 |
| **Offeror’s Team Structure** | | | | |
| Identity of and qualifications of Key Personnel | NA | Section 3.3.1 | yes | 3-7 |
| Key Personnel Resume – DB Project Manager | Attachment 3.3.1 | Section 3.3.1.1 | no | Under Tab 3.3 |
| Key Personnel Resume – Quality Assurance Manager | Attachment 3.3.1 | Section 3.3.1.2 | no | Under Tab 3.3 |
| Key Personnel Resume – Design Manager | Attachment 3.3.1 | Section 3.3.1.3 | no | Under Tab 3.3 |
| Key Personnel Resume – Construction Manager | Attachment 3.3.1 | Section 3.3.1.4 | no | Under Tab 3.3 |
| Organizational chart | NA | Section 3.3.2 | yes | 4 |
### ATTACHMENT 3.1.2

**Project: 0606-088-653, C501 & 0606-088-622, C501, B634**

**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

<table>
<thead>
<tr>
<th>Statement of Qualifications Component</th>
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<th>Included within 15-page limit?</th>
<th>SOQ Page Reference</th>
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</thead>
<tbody>
<tr>
<td>Organizational chart narrative</td>
<td>NA</td>
<td>Section 3.3.2</td>
<td>yes</td>
<td>5-7</td>
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</table>

**Experience of Offeror’s Team**

<table>
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<tr>
<th>Lead Contractor Work History Form</th>
<th>Attachment 3.4.1(a)</th>
<th>Section 3.4</th>
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<th>Under Tab 3.4</th>
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<table>
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<tr>
<th>Lead Designer Work History Form</th>
<th>Attachment 3.4.1(b)</th>
<th>Section 3.4</th>
<th>no</th>
<th>Under Tab 3.4</th>
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**Project Risk**

<table>
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<tr>
<th>Identify and discuss three critical risks for the Project</th>
<th>NA</th>
<th>Section 3.5.1</th>
<th>yes</th>
<th>11-15</th>
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</table>
Route 606 Bridge Replacement over I-95 with 606 Improvements
ATTACHMENT 2.10

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

RFQ NO. C00105463DB89
PROJECT NO.: 0606-088-653, C501 & 0606-088-622, C501, B634

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:

   (Date)

   (Date)

3. Cover letter of
   (Date)

Bobby J. Alcornathy
SIGNATURE
1-21-2016
DATE

Bobby J. Alcornathy
PRINTED NAME
TITLE
Route 606 Bridge Replacement over I-95 with 606 Improvements

Submitted By: ABERNATHY CONSTRUCTION CORP
In Association With: AMMANN & WHITNEY
February 4, 2016

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

Re:  Design-Build Route 606 Bridge Replacement over I-95 with 606 Improvements
    Contract ID Number: C00105463DB89

Dear Mr. Kindy:

Abernathy Construction Corporation (as the offeror), along with our very talented team, is enthusiastic about the opportunity to support VDOT in making the Route 606 over I-95 bridge replacement a successful reality. We recognize the prominence, significance and prestige that surround this endeavor and are fully cognizant that this project will be highly visible to many internal and external stakeholders. Recognizing this, we stand confidently and competently ready to partner with you to exceed your expectations and requirements.

I will serve as the Point of Contact (RFP 3.2.2) and Principal Officer (RFP 3.2.3) for Abernathy Construction Corporation. I will execute the contract. My contact info is:

Bobby Abernathy
President
Abernathy Construction Corporation
10891 Winfrey Road
Glen Allen, VA 23059
804.266.1465 (t)
804.266.4449 (f)
babernathy@abernathyconstruction.com

Abernathy Construction Corporation is a private stock corporation in VA that will have 100% financial responsibility for the Project and joint and several liability for the performance of the work (RFP 3.2.4). There are no liability limitations. Our bonding approach will be to provide performance and payment bonds for the total contract value and time period.

Abernathy Construction Corporation is the lead contractor and, as noted above, the offeror. The firm will serve as prime/general contractor and will be the legal entity executing the contract under signature of Bobby Abernathy (RFP 3.2.5).

Ammann & Whitney Consulting Engineers, PC will be the lead designer for the Project. The firm will be responsible for overall design of the Project (RFP 3.2.5).
Abernathy Construction Corporation does not have subsidiaries or affiliates. *RFP Attachment 3.2.6* is included in this response section immediately following this Letter of Submittal. The firm is not submitting any other Statement of Qualifications for the Project.

The Debarment Forms for Primary and Lower Tier Covered Transactions, *RFP Attachments 3.2.7(a) and 3.2.7(b)* respectively, for Abernathy Construction Corporation and all team subconsultants are included in this response section following Attachment 3.2.6.

Abernathy Construction Corporation is a prequalified bidder in good standing with VDOT. The firm’s prequalification number is A0003 and a copy of its VDOT prequalification certificate is included in this response section following the team’s Debarment forms (*RFP 3.2.8*).

Also attached in this response section (following the prequalification certificate) is a letter from our surety that provides evidence that Abernathy Construction Corporation is capable of obtaining a performance and payment bond for the current estimated contract value and that these bonds will cover the Project and any warranty periods (*RFP 3.2.9*).

All business entities and individual professional personnel included on the Abernathy Construction Corporation team comply with Virginia state laws governing organization structure and/or professional registration. *RFP Attachment 3.2.10* delineates the SCC and DPOR registration information for each business entity, as well as DPOR license information for Key Personnel, as applicable.

Finally, on behalf of Abernathy Construction Corporation, I personally commit to VDOT that our team will achieve a DBE participation goal of 15% of the entire value of the contract through design and construction activities (*RFP 3.2.11*).

We know that our performance is a reflection of VDOT and we deeply respect the venerable reputation and standing of the Department. As president and owner of Abernathy Construction Corporation you have my personal and professional commitment that from day one, through project close-out, you will have the full force and benefit of the best that our organization has to offer. If you have any questions, or require additional information, please do not hesitate to contact me at babernathy@abernathyconstruction.com or 804.266.1465.

Very truly yours,

Bobby J. Abernathy

President
Abernathy Construction Corporation
Appendix

3.2.6 Affiliated/Subsidiary Companies
3.2.7(a) Debarment Form
3.2.7(b) Debarment Forms
3.2.8 Offeror’s VDOT Prequalification Evidence
3.2.9 Evidence of Obtaining Bonding
3.2.10 SCC and DPOR Information
  3.2.10.1 SCC Registrations
  3.2.10.2 DPOR Registrations (Offices)
  3.2.10.3 DPOR Registrations (Key Personnel)
  3.2.10.4 DPOR Registrations (Non-APELSCIDLA)
ATTACHMENT 3.2.6
State Project No. 0606-088-653, C501 & 0606-088-622, C501, B634

Affiliated and Subsidiary Companies of the Offeror

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

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

<table>
<thead>
<tr>
<th>Relationship with Offeror (Affiliate or Subsidiary)</th>
<th>Full Legal Name</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

1 of 1
ATTACHMENT NO. 3.2.7(a)

CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS

Project No.: 0606-088-653, C501 & 0606-088-622, C501, B634

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, and declared ineligible or voluntarily excluded from covered transactions by any Federal department or agency.

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

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

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

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

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

[Signature] [Date] [Title]
[Abbe_taxonomy Construction Corporation]

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0606-088-653, C501 & 0606-088-622, C501, B634

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

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

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

[Signature] 1/27/16  [Senior Vice President]
Signature    Date    Title

[Name of Firm]

Ammann & Whitney Consulting Engineers, PC
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0606-088-653, C501 & 0606-088-622, C501, B634

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

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

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

[Signature] 1/21/2016  [President]  [Title]

[Name of Firm]
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0606-088-653, C501 & 0606-088-622, C501, B634

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

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

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

[Signature] January 27, 2016 [Principal]
Signature Date Title

A. Morton Thomas and Associates, Inc.

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project No.: 0606-088-653, C501 & 0606-088-622, C501, B634

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

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

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

[Signature] 1/21/16  Vice President/Branch Manager

Date Title

ECS Mid-Atlantic, LLC

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0606-088-653, C501 & 0606-088-622, C501, B634

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

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

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

[Signature] January 21, 2016 [Date] [President]

[Title]

KDR Real Estate Services, Inc.

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0606-088-653, C501 & 0606-088-622, C501, B634

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

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

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

Signature: ___________________________ Date: 01/21/16

MANAGING PRINCIPAL/CORPORATE SECRETARY
Title

TIMMONS GROUP
Name of Firm
CERTIFICATE OF QUALIFICATION

ABERNATHY CONSTRUCTION CORPORATION

Vendor Number: A003

In accordance with the Regulations of the Virginia Department of Transportation, your firm is hereby notified that the following Rating has been assigned to your firm:

PREQUALIFIED

Your firm specializes in the noted Classification(s):

MAJOR STRUCTURES; DRAINAGE STRUCTURES; RAILROAD CONSTRUCTION / REPAIR; EXCAVATING

Issue Date: January 31, 2016
This Rating and Classification will Expire: January 31, 2017

Suzanne FR Lucas, State Prequalification Officer
Don E. Silies, Director of Contracts

It is not permissible to alter this document, use after posted expiration date, or use by persons or firms other than those named on this certificate.
February 4, 2016

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

RE: Abernathy Construction Corporation - Bonding Capability

Project:
A Design-Build Project
Route 606 Bridge Replacement over I-95 with 606 Improvements
Spotsylvania County, Virginia
State Project Nos.: Route 606 Roadway Improvements (0606-088-653, C501), UPC 105463
Route 606 Bridge Replacement (0606-088-622, C501, B634), UPC 100829
Federal Project Nos.: Route 606 Roadway Improvements (STP-5111(272))
Route 606 Bridge Replacement (BR-5111(237))
Contract ID Number: C00105463DB89

To Whom It May Concern:

Abernathy Construction Corporation has been a valued client of BB&T Insurance Services and Travelers Casualty and Surety Company of America for more than twenty years.

Abernathy Construction Corporation is capable of obtaining a 100% Performance Bond and 100% Labor and Materials Payment Bond in the amount of the anticipated cost of construction, and said bonds will cover the project and any warranty periods as provided for in the contract documents on behalf of the Contractor, in the event that such firm be the successful bidder and enter into a contract for this project.

Our willingness to commit to any such bond request would, of course, be contingent upon our being satisfied with all prevailing underwriting conditions at the time of the request including, but not limited to, acceptable job specifications, acceptable contract terms, acceptable bond forms, and confirmation of full project financing.

Travelers Casualty and Surety Company of America maintains an A.M. Best Financial Strength Rating of A+ and Financial Size Category XV, and is licensed to transact surety business in the Commonwealth of Virginia. Travelers Casualty & Surety Company of America is listed on the U.S. Department of Treasury’s list of acceptable sureties.

Should you have any questions, please feel free to contact me.

Very truly yours,

Carolyn S. Mullenaux
Attorney-In-Fact for Travelers Casualty and Surety Company of America
POWER OF ATTORNEY

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
St. Paul Fire and Marine Insurance Company
St. Paul Guardian Insurance Company

St. Paul Mercury Insurance Company
Travelers Casualty and Surety Company
Travelers Casualty and Surety Company of America
United States Fidelity and Guaranty Company

Attorney-In Fact No. 224871

Certificate No. 006492021

KNOW ALL MEN BY THESE PRESENTS: That Farmington Casualty Company, St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company are corporations duly organized under the laws of the State of Connecticut, that Fidelity and Guaranty Insurance Company is a corporation duly organized under the laws of the State of Iowa, and that Fidelity and Guaranty Insurance Underwriters, Inc., is a corporation duly organized under the laws of the State of Wisconsin (herein collectively called the "Companies"), and that the Companies do hereby make, constitute, and appoint

Walter P. Smith, III, Christopher Brandon Pulliam, Neil Brian Biller, Carolyn S Mullenaux, Veronica Hodkin Fox, Joyce D Barrett, and Richard W Coon

of the City of Richmond, State of Virginia, their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed and their corporate seals to be hereto affixed, this 18th day of August, 2015.

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
St. Paul Fire and Marine Insurance Company
St. Paul Guardian Insurance Company

St. Paul Mercury Insurance Company
Travelers Casualty and Surety Company
Travelers Casualty and Surety Company of America
United States Fidelity and Guaranty Company

By: [Signature]
Robert L. Raney, Senior Vice President

State of Connecticut
City of Hartford ss.

On this the 18th day of August, 2015, before me personally appeared Robert L. Raney, who acknowledged himself to be the Senior Vice President of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

In Witness Whereof, I hereunto set my hand and official seal.
My Commission expires the 30th day of June, 2016.

[Signature]
Marie C. Tetreault, Notary Public

58440-8-12 Printed in U.S.A.
This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary, and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kevin E. Hughes, the undersigned, Assistant Secretary, of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereto set my hand and affixed the seals of said Companies this 4th day of February, 2016.

Kevin E. Hughes, Assistant Secretary

To verify the authenticity of this Power of Attorney, call 1-800-421-3880 or contact us at www.travelersbond.com. Please refer to the Attorney-In-Fact number, the above-named individuals and the details of the bond to which the power is attached.
**ATTACHMENT 3.2.10**  
**State Project No. 0606-088-653, C501 & 0606-088-622, C501, B634**  
**SCC and DPOR Information**

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

<table>
<thead>
<tr>
<th>Business Name</th>
<th>SCC Number</th>
<th>SCC Type of Corporation</th>
<th>SCC Status</th>
<th>DPOR Registered Address</th>
<th>DPOR Registration Type</th>
<th>DPOR Registration Number</th>
<th>DPOR Expiration Date</th>
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<tr>
<td>Abernathy Construction Corporation</td>
<td>01315340</td>
<td>Corporation</td>
<td>Active</td>
<td>Winfrey Road, PO Box 1041, Glen Allen, VA 23060</td>
<td>Class A Contractor H/H</td>
<td>2701011256</td>
<td>12/31/16</td>
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<tr>
<td>Ammann &amp; Whitney Consulting Engineers, PC</td>
<td>F1291469</td>
<td>Foreign Corporation</td>
<td>Active</td>
<td>203 E Cary Street, Suite 201, Richmond VA 23219</td>
<td>ENG</td>
<td>0140000194</td>
<td>2/29/2016</td>
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<td>Accompong Engineering Group LLC</td>
<td>S283521-5</td>
<td>LLC</td>
<td>Active</td>
<td>9510 Iron Bridge Road, Suite 200 Chesterfield, VA 23832</td>
<td>ENG</td>
<td>0407005442</td>
<td>12/31/17</td>
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<tr>
<td>A. Morton Thomas and Associates, Inc.</td>
<td>F049431-2</td>
<td>S-Corp</td>
<td>Active</td>
<td>One Jadip Lane Suite 111 Fredericksburg, Virginia 22405</td>
<td>ENG</td>
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<td>02/29/2016</td>
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<td>ECS Mid-Atlantic, LLC</td>
<td>S-120821-6</td>
<td>LLC</td>
<td>Active</td>
<td>915 Maple Grove Drive, Suite 100, Fredericksburg, VA 22407</td>
<td>ENG</td>
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<tr>
<td>KDR Real Estate Services, Inc.</td>
<td>05712104</td>
<td>Corporation</td>
<td>Active</td>
<td>2500 Grenoble Road Richmond, VA 23294</td>
<td>Real Estate Firm</td>
<td>0226007129</td>
<td>12/31/2016</td>
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<td>Timmons Group</td>
<td>0264043-1</td>
<td>Corporation</td>
<td>Active</td>
<td>1001 Boulders Parkway, Suite 300 Richmond, VA 23225</td>
<td>LS, ENG, LA</td>
<td>0405000456</td>
<td>12/31/2017</td>
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<tr>
<td>Business Name</td>
<td>Individual's Name</td>
<td>Office Location Where Professional Services will be Provided (City/State)</td>
<td>Individual's DPOR Address</td>
<td>DPOR Type</td>
<td>DPOR Registration Number</td>
<td>DPOR Expiration Date</td>
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<tr>
<td>Ammann &amp; Whitney Consulting Engineers, PC</td>
<td>Christopher Connor Adams</td>
<td>Richmond, VA</td>
<td>5812 Old Richmond Avenue Richmond, VA 23226</td>
<td>ENG</td>
<td>0402033017</td>
<td>01/31/2017</td>
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</tr>
</tbody>
</table>
Commonwealth of Virginia

State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That ABERNATHY CONSTRUCTION CORPORATION is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is April 15, 1971;

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:
January 13, 2016

Joel H. Peck, Clerk of the Commission

CISECOM
Document Control Number: 1601135415
COMMONWEALTH OF VIRGINIA
STATE CORPORATION COMMISSION

AT RICHMOND,
April 15, 1971

The accompanying articles having been delivered to the State Corporation Commission on behalf of

Abernathy Construction Corporation

and the Commission having found that the articles comply with the requirements of law and that all required fees have been paid, it is

ORDERED that this CERTIFICATE OF INCORPORATION

be issued, and that this order, together with the articles, be admitted to record in the office of the Commission;

and that the corporation have 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 [Signature]
Chairman
ABERNATHY CONSTRUCTION CORPORATION

**General**

- SCC ID: 01315340
- Entity Type: Corporation
- Jurisdiction of Formation: VA
- Date of Formation/Registration: 4/15/1971
- Status: Active
- Shares Authorized: 500

**Principal Office**

- 10891 WINFREY RD
- GLEN ALLEN VA 23060

**Registered Agent/Registered Office**

- DEBORAH ABERNATHY
- WINFREY RD.
- P.O. BOX 1641
- GLEN ALLEN VA 23060
- HENRICO COUNTY 143
- Status: Active
- Effective Date: 3/4/1987

Screen ID: e1000

Need additional information? Contact sccinfo@scs.virginia.gov Website questions? Contact: webmaster@scs.virginia.gov

We provide external links throughout our site.
Commonwealth of Virginia

STATE CORPORATION COMMISSION

Richmond, April 23, 1997

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

AMMANN & WHITNEY CONSULTING ENGINEERS, P.C.

a corporation organized under the laws of NEW YORK 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

Clk of the Commission
AMMANN & WHITNEY CONSULTING ENGINEERS, P.C.

General

SCC ID: F1291469
Entity Type: Foreign Corporation
Jurisdiction of Formation: NY
Date of Formation/Registration: 12/16/1998
Status: Active
Shares Authorized: 1000

Principal Office

95 MORTON ST
NY NY 10014

Registered Agent/Registered Office

BAL CHERWOO
203 E CARY STREET
SUITE 201
RICHMOND VA 23219
RICHMOND CITY 215
Status: Active
Effective Date: 1/20/2015

Select an action

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

Screen ID: e1000

Need additional information? Contact sccinfo@scv.legislative.state.virginia.us
Website questions? Contact: webmaster@scv.legislative.state.virginia.us
We provide external links throughout our site. ©
STATE CORPORATION COMMISSION

Richmond, February 17, 2009

This is to certify that the certificate of organization of

Accompong Engineering Group, LLC

was this day issued and admitted to record in this office and that the said limited liability company is authorized to transact its business subject to all Virginia laws applicable to the company and its business. Effective date: February 17, 2009

State Corporation Commission
Attest:

[Signature]
Clerk of the Commission
Accompong Engineering Group, LLC

General

SCC ID: 52835215  
Entity Type: Limited Liability Company  
Jurisdiction of Formation: VA  
Date of Formation/Registration: 2/17/2009  
Status: Active

Principal Office

8425 LYLWOOD CT  
CHESTERFIELD VA 23838

Registered Agent/Registered Office

CONRAD A SCOTT  
9510 IRONBRIDGE ROAD  
SUITE 200  
CHESTERFIELD VA 23832  
CHESTERFIELD COUNTY  
120  
Status: Active  
Effective Date: 12/27/2011
CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That A. MORTON THOMAS & ASSOCIATES, INC., a corporation incorporated under the law of Maryland, is authorized to transact business in the Commonwealth of Virginia;

That it obtained a certificate of authority to transact business in Virginia from the Commission on November 26, 1997; and

That the corporation is 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:
September 26, 2013

Joel H. Peck, Clerk of the Commission
A. MORTON THOMAS & ASSOCIATES, INC.

**General**

SCC ID: F0494312  
Entity Type: Foreign Corporation  
Jurisdiction of Formation: MD  
Date of Formation/Registration: 11/26/1997  
Status: Active  
Shares Authorized: 52000

**Principal Office**

800 KING FARM BOULEVARD 4TH FL  
ROCKVILLE MD20850

**Registered Agent/Registered Office**

NATIONAL CORPORATE RESEARCH, LTD.  
250 BROWNS HILL COURT  
MICHELTON VA 23114  
CHESTERFIELD COUNTY  
Status: Active  
Effective Date: 9/30/2015

Screen ID: e1000

Need additional information? Contact support@scce.com. Website questions? Contact: webmaster@scce.com.

We provide external links throughout our site.
CERTIFICATE OF FACT

I Certify the Following from the Records of the Commission:

That ECS - Mid-Atlantic, LLC is duly organized as a limited liability company under the law of the Commonwealth of Virginia;

That the date of its organization is April 16, 2004; and

That the limited liability company is in existence 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:
January 4, 2016

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

ECS - Mid-Atlantic, LLC

**General**

- **SCC ID:** S1206216
- **Entity Type:** Limited Liability Company
- **Jurisdiction of Formation:** VA
- **Date of Formation/Registration:** 4/16/2004
- **Status:** Active

**Principal Office**

- **Address:** 14026 THUNDERBOLT PL STE 100
  CHANTILLY VA 20151

**Registered Agent/Registered Office**

- **Name:** JAMES A ECKERT
- **Address:** 14026 THUNDERBOLT PL STE 100
  CHANTILLY VA 20151
- **County:** FAIRFAX
- **Status:** Active
- **Effective Date:** 4/16/2004

Screen ID: e1000

Need additional information? Contact support@vocor.org. Website questions? Contact: webmaster@vocor.org

[PDF Reader] [Excel Viewer] [PowerPoint (1.0) Viewer] [Word Viewer]

Build #: 1.0.0.24450
Commonwealth of Virginia

STATE CORPORATION COMMISSION

Richmond, January 30, 2002

This is to Certify that the certificate of incorporation of

KDR Real Estate Services, Inc.

was this day issued and admitted to record in this office and that the said corporation is authorized to transact its business subject to all Virginia laws applicable to the corporation and its business. Effective date: January 30, 2002

State Corporation Commission
Attest: 

[Signature]
Clerk of the Commission

CIS0436
KDR Real Estate Services, Inc.

General

SCC ID: 05712104
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 1/30/2002
Status: Active
Shares Authorized: 100

Principal Office

2500 GREENBOLE RD
RICHMOND VA 23294

Registered Agent/Registered Office

ALLEN G DORIN JR
2500 GREENBOLE RD
RICHMOND VA 23294
HENRICO COUNTY 143
Status: Active
Effective Date: 7/9/2003

Select an action

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

New Search Home
CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That Timmons Group, Inc. is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is November 30, 1984;

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:
January 25, 2016

Joel H. Peck, Clerk of the Commission
Timmons Group, Inc.

General

SSC ID: 02640431
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 11/30/1984
Status: Active
Shares Authorized: 50000

Principal Office

1001 BOULDERS PKWAY
STE 300
RICHMOND VA 23225

Registered Agent/Registered Office

BRIAN F DORTELL
1001 BOULDERS PKWY STE 300
RICHMOND VA 23225
CHESTERFIELD COUNTY 120
Status: Active
Effective Date: 1/22/2007
Ammann & Whitney's DPOR Registration for the NY office address is currently in the renewal process. Paperwork has been submitted to DPOR and the new certificate is pending. DPOR Registrations for the VA and DC office addresses are current.
COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation
9060 Mayland Drive, Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

PROFessions: ENG

ACCOMPONG ENGINEERING GROUP, LLC
9510 IRON BRIDGE RD
SUITE 200
CHESTERFIELD, VA 23832

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY BRANCH OFFICE REGISTRATION

PROFESSIONS: ENG

A MORTON THOMAS AND ASSOCIATES INC
ONE JADIP LANE
SUITE 111
FREDERICKSBURG, VA 22405
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY BRANCH OFFICE REGISTRATION

PROFESSIONS: ENG

ECS-MID-ATLANTIC LLC
915 MAPLE GROVE DR
STE 100
FREDERICKSBURG, VA 22407-6935

Nick A. Christner
Interim Director

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation
9960 Mayland Drive, Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

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

PROFESSIONS: LS, ENG, LA

TIMMONS GROUP INC
1001 BOULDERS PKWY STE 300
RICHMOND, VA 23225

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
01-31-2017

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

NUMBER
0402033017

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

CHRISTOPHER CONNER ADAMS
5812 OLD RICHMOND AVE
RICHMOND, VA 23226

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

COMMONWEALTH OF VIRGINIA
BOARD FOR APELSCIDLA
PROFESSIONAL ENGINEER LICENSE
NUMBER: 0402033017 EXPIRES: 01-31-2017

CHRISTOPHER CONNER ADAMS
5812 OLD RICHMOND AVE
RICHMOND, VA 23226

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

ISAAC M WHITED JR
602 ARBROATH RD
SOUTH BOSTON, VA 24592-5104
Route 606 Bridge Replacement over I-95 with 606 Improvements

Submitted By: ABERNATHY CONSTRUCTION CORP

In Association With: AMMANN & WHITNEY
3.3 OFFEROR’S TEAM STRUCTURE

We recognize that the success of any project is largely dependent upon the staff assigned to it. We have carefully assessed the preliminary project requirements and have assembled a team of proven, veteran design and construction professionals who have completed directly comparable work and who possess the necessary VA licenses and certifications.

Our team includes local firms all known by and experienced with VDOT bridge design and construction:
- Abernathy Construction Corporation
- Ammann & Whitney Consulting Engineers, PC
- Accompong Engineering Group, LLC
- ECS-Mid-Atlantic, LLC
- KDR Real Estate Services, Inc.
- Timmons Group, Inc.

Our team embraces challenge. Projects such as the Route 606 Bridge Replacement over I-95, with all their natural complexities and intricacies, are the types of projects on which our team staff thrive…and excel. The Route 606 Project will require a team of highly skilled professionals who possess demonstrated expertise in: bridge, roadway, traffic, drainage, geotechnical and utility design and construction; right-of-way acquisition; environmental mitigation and permitting; rigorous safety enforcement; vigilant QA/QC; and stakeholder outreach and communication.

The Abernathy Construction Corporation team offers expertise and resources ideally suited to meeting VDOT’s vision and best interests across the broad spectrum of your project concerns.

3.3.1: Identity of and Qualifications of Key Personnel

We have assigned the following individuals to the Key Personnel roles for the Route 606 Project. The proposed Key Personnel will be accountable for the duties and responsibilities of the role and will not delegate these duties and responsibilities to any other personnel throughout the duration of the project. RFP Attachment 3.3.1 Key Personnel Resumes are included at the conclusion of this response section.

Key Person                  Role                                Firm                           
Bobby Abernathy              Design-Build Project Manager     Abernathy Construction           
Chuck Whited, PE             Quality Assurance Manager (QAM)    A. Morton Thomas                
Christopher Adams, PE        Design Manager                       Ammann & Whitney                
Richard Siford, RLD, ES CCC  Construction Manager                 Abernathy Construction          

In addition to the Key Personnel, we offer VDOT the value-added resources and capabilities of a highly talented, VDOT-tested design and construction team. Per the RFP, we have not provided resumes for these additional staff.

The organizational chart on the following page illustrates the functional structure of our team, as well as defines Key Personnel and other committed core staff leading critical disciplines. The “chain of command” of our team is delineated by solid lines for direct reporting relationships and dotted lines for communication/coordination relationships.

We look forward to supporting the Department on this significant endeavor and delivering an exceptionally high quality project safely, timely and with cost certainty.
3.3 OFFEROR’S TEAM STRUCTURE
### 3.3 OFFEROR’S TEAM STRUCTURE

#### 3.3.2: Organizational Chart Narrative

The following narrative describes the responsibilities, functional relationships and communications among the design and construction professionals comprising our team. This structure will be in force for the duration of all Project activities.

**Design-Build Project Manager—Bobby Abernathy, Abernathy Construction Corporation:** Bobby will have overall accountability for all aspects of project performance and delivery including design, construction, safety, quality, schedule, budget and stakeholder and VDOT engagement, as well as procurement and furnishing of all materials, equipment, labor and services required for the Project. All staff and functions of our proposed team will report directly to Bobby.

In addition to his full and complete authority for all aspects of the team’s project delivery, Bobby will be the main point of contact with VDOT. He will be responsible for contract negotiation and execution and responding to Department inquiries throughout the duration of the project. In his role Bobby will strive to resolve challenges and avoid disputes and will work in good faith with the Department and in accordance with Section 10.2.2 of RFP Part 4 – General Conditions of Contract.

**Quality Assurance Manager (QAM)—Chuck Whited, PE, A. Morton Thomas & Associates:** Chuck reports directly to Bobby Abernathy (Design-Build Project Manager), with open lines of communication to VDOT, and no other reporting requirement to any other member of the team. As QAM, Chuck is 100% independent from all other design, construction or quality control functions.

He is responsible for the independent QA inspection and testing of all materials used and work performed on the Project. As part of this, Chuck will direct the QA inspector and independent QA testing technicians. The QAM will ensure that all work and materials, testing, and sampling are performed in conformance with the contract requirements and the "approved for construction" plans and specifications. Chuck will also monitor Abernathy Construction Corporation’s quality control (QC) program.

In his independent role Chuck has open lines to communicate directly with VDOT, as well as Bobby Abernathy (Design-Build Project Manager). If Chuck finds that work is not in conformance with the contract documents, he has the authority to stop work until he can ensure that corrective action is taken. In such circumstances work will not be accepted or certified for payment until Chuck authorizes it.

**Design Manager—Christopher Adams, PE, Ammann & Whitney:** Chris reports directly to Bobby Abernathy (Design-Build Project Manager) with open lines of communication to the Construction Manager and Public Involvement Coordinator. Chris has responsibility for managing all aspects of design, including interface and coordination between disciplines and review of design working plans, shop drawings, specifications, and constructability. Chris
3.3 OFFEROR’S TEAM STRUCTURE

will also ensure that the work product of all design disciplines is effectively integrated with construction, right-of-way, utility, and safety elements.

Chris has ultimate accountability for ensuring that the team’s design is in conformance with contract documents, as well as implementing and managing over-arching design QC. It is Chris’ duty to utilize team resources appropriately so that those performing QC do not have conflict vis-à-vis design production, as stated in VDOT Minimum Requirements for Quality Assurance and Quality Control on Design-Build and P3 Projects.

Richard holds both Responsible Land Disturber (RLD) and VDOT Erosion and Sediment Control Contractor (ESCCC) Certifications. He has 45 years of experience encompassing numerous VDOT bridge and road construction projects, including Route 36 Design-Build Improvements in the City of Hopewell and Prince George County.

As noted above, our Organization Chart illustrates a comprehensive team. Additional staff that will be essential to the successful delivery of this design-build project include, but are not limited to, the following:

Construction Manager—Richard Siford, RLD, ESCCC, Abernathy Construction Corporation: Richard reports directly to Bobby Abernathy (Design-Build Project Manager) with open lines of communication to the Design Manager and Public Involvement Coordinator. Richard is responsible for managing the construction process including all QC activities. He will ensure that the materials used, and work performed, meet the contract requirements and conform to the plans and specifications. Throughout all construction activity Richard will be in the field at the Project site. He will have primary responsibility for maintaining the project schedule.

In his role, Richard will also work closely with Chris Adams (Design Manager) to ensure constructability review of the design. Richard and Chris will coordinate the designer’s review of construction activities through the witness and hold points. Richard will also collaborate with the utility designers regarding any relocations, as well as the Right-of-Way staff to address acquisitions.

His current assignment is for Virginia Railway Express, project IFB No. 013-012. The anticipated completion date is March 7, 2016.

Safety Manager—Kevin Abernathy, Abernathy Construction Corporation: Kevin reports directly to Bobby Abernathy (Design-Build Project Manager) with open lines of communication to VDOT. Kevin will work with the team to ensure a safe work environment for the traveling public as well as workers on and visitors to the site. He will enforce compliance with all applicable VDOT and OSHA regulations and guidelines, as well as Abernathy’s corporate safety policy. He will also develop, implement and monitor a project-specific health and safety plan.

Kevin has 15 years of experience and manages safety for all Abernathy projects, including Route 36 Design-Build Improvements in the City of Hopewell and Prince George County.
3.3 OFFEROR’S TEAM STRUCTURE

Public Involvement Coordinator—Joseph Riley, PE, Ammann & Whitney: Joe reports directly to Bobby Abernathy (Design-Build Project Manager) with open lines of communication to VDOT and the Design and Construction Managers (Chris Adams and Richard Siford, respectively). Joe will assist the team, and VDOT (as needed) with stakeholder outreach, encompassing a broad spectrum of constituencies and needs.

Structures Lead—Ahcene Larbi, PhD, PE, Ammann & Whitney: Ahcene reports directly to Chris Adams (Design Manager) with open lines of communication with all design disciplines. Ahcene is ultimately responsible for design of all structures and integration, as needed, of other design disciplines.

Roadway/MOT Lead—Conrad Scott, PE, PMP, Accompong Engineering Group: Conrad reports directly to Chris Adams (Design Manager) with open lines of communication with all design disciplines. Conrad will lead all roadway and MOT design work and will ensure coordination with other design disciplines, as needed. He will also contribute to development and monitoring of TMP and TTC plans to ensure safe and efficient construction operations.

Design Quality Control Manager—Samuel Knaster, PE, Ammann & Whitney: Sam reports directly to Chris Adams (Design Manager). He will support Chris by performing Independent Quality Control activities. He will not be involved in design production, which will facilitate “fresh eyes reviews” and diversified thinking during the delivery of this important project.

Construction Quality Control Manager—Antonio Bassett, PE, Accompong Engineering Group: Antonio reports directly to Richard Siford (Construction Manager). Antonio has a multitude of bridge replacement design and construction experience. A former VDOT Construction Engineer from the Hampton Roads District, Antonio is very experienced with VDOT requirements and has hands-on experience delivering challenging and sensitive interstate bridge projects.

Joe has 28 years of experience, and a comprehensive portfolio of stakeholder outreach work, including public meetings and contributing to print and electronic collateral development. He was also Ammann & Whitney’s design QC Manager for the award-winning Huguenot Bridge replacement and two new bridges over Route 59 Middle Fork Holston River.

Ahcene has 21 years of diverse, technical experience, including his recent work as senior structural engineer for VDOT’s Huguenot Bridge Replacement and the City of Richmond’s Mayo Bridge project.

As a former VDOT design manger from the Central Office, Conrad has a multitude of roadway and MOT/TMP design expertise within VA including Route 36 Design-Build Improvements in the City of Hopewell and Prince George County, I-395 HOV Ramp Design-Build at Seminary Road in the City of Alexandria, and I-95 Bridges Replacement over the Meherrin River in the City of Emporia.

Sam’s QC experience includes I-64 Bridges Replacement over Acca Rail Yard, Huguenot Bridge Replacement, and the Mayo Bridge Feasibility and Replacement Study in Richmond.

His project experience includes I-64 Noise Walls in Norfolk and various I-64 rehabilitation projects, Pinners Point Interchange Design and Construction in Portsmouth, and Bird Neck Road Widening and Reconstruction in Virginia Beach.
**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel anticipated for the Project.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Name &amp; Title:</td>
</tr>
<tr>
<td>Bobby J. Abernathy</td>
</tr>
<tr>
<td>b. Project Assignment:</td>
</tr>
<tr>
<td>Design-Build Manager</td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated:</td>
</tr>
<tr>
<td>Abernathy Construction Corporation</td>
</tr>
<tr>
<td>d. Employment History:</td>
</tr>
<tr>
<td>With this Firm 43 Years with Other Firms 11 Years</td>
</tr>
<tr>
<td>Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):</td>
</tr>
<tr>
<td>Owner/President, Abernathy Construction Corporation</td>
</tr>
<tr>
<td>Responsible for day to day company operations, client satisfaction, construction quality, maintaining business/permit licenses. Additionally, responsible for preparing proposals, developing subcontractor relationships and contracts, resolving claims or disputes, determining project feasibility, assigning work and finalizing document controls-all in support of roadway, bridges and utility construction projects.</td>
</tr>
<tr>
<td>e. Education: Name &amp; Location of Institution(s)/Degree(s)/Year/Specialization:</td>
</tr>
<tr>
<td>University of Richmond (Richmond, VA) /BA / 1966-1968 / Physics</td>
</tr>
<tr>
<td>Randolph Macon College (Ashland, VA) / BA / 1968-1971 / Physics</td>
</tr>
<tr>
<td>Various accredited coursework in computer education, safety and CPM Scheduling</td>
</tr>
<tr>
<td>f. Active Registration: Year First Registered/ Discipline/VA Registration #:</td>
</tr>
<tr>
<td>Certification-American Concrete Institute / #01121075 expires 2018</td>
</tr>
<tr>
<td>NCCCO Certified Operator / # 1508117076 expires 2020</td>
</tr>
<tr>
<td>g. Document the extent and depth of your experience and qualifications relevant to the Project.</td>
</tr>
<tr>
<td>1. Note your role, responsibility, and specific job duties for each project, not those of the firm.</td>
</tr>
<tr>
<td>2. Note whether experience is with current firm or with other firm.</td>
</tr>
<tr>
<td>3. Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</td>
</tr>
<tr>
<td>(List at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.)</td>
</tr>
<tr>
<td>I-95 (0095-106-104, C501, B617, VDOT-City of Colonial Heights, VA</td>
</tr>
<tr>
<td>Principal-In-Charge responsible for traffic control on busy interstate and major roadway including lane closures. Ensured appropriate personnel certifications in Immediate Work Zone Traffic Control training and the adeq equipment and qualified personnel were assigned to job. Ascertained that adjacent property owners and businesses experienced minimum disruption. Confirmed the appropriate and effective flow of phasing for project. Instituted subcontracts with contractors to accomplish job. Assured coordination of work with guardrail, asphalt, traffic lane striping, and utility subcontractors as well as local Law enforcement, local utility department, fire department, and other entities to successfully complete project.</td>
</tr>
<tr>
<td>Abernathy Construction Corporation March 2007-July 2008</td>
</tr>
<tr>
<td>Route 340 (0340-136-102,C501,B601), VDOT-City of Waynesboro, VA</td>
</tr>
<tr>
<td>Principle-In-Charge responsible for negotiation of successful value engineering proposal for redesigned bridge structure and traffic control on the major city roadways, including lane closures. Ensured appropriate personnel certifications in Immediate work Zone traffic control training and that adequate equipment and qualified personnel were assigned to the project. Ascertained that adjacent property owners and businesses experienced minimum disruption. Confirmed the appropriate and effective flow of phasing for project. Instituted subcontracts with contractors to accomplish job. Assured coordination of work with asphalt, traffic lane striping, and utility subcontractors as well as local law enforcement, local utility department, fire department and Buckingham Branch Railroad to ensure successful completion of project.</td>
</tr>
</tbody>
</table>
Abernathy Construction Corporation  
August 2008-September 2010

RT 36 (0036-074-709,P101,R201,C501), VDOT Design-Build Improvements City of Hopewell and Prince George County, VA
Principal-In-Charge for all phases in this Design-Build project. Brought to the project lessons learned from prior experience relevant to this VDOT project including quality control/VDOT review process, right of way process and schedule, his understanding of VDOT procedures and policy for approvals and early release from construction, safety in the design and construction phase, supervising the construction and performing major elements of the construction. Selected design and specialty sub consultants to integrate and optimize the intended value of the project. Enabled Abernathy to deliver the highest quality coupled with an optimal schedule and cost.

Abernathy Construction Corporation  
July 2010-December 2012

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

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment.
ATTACHMENT 3.3.1
KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title:
   Isaac M. “Chuck” Whited, PE
   Quality Assurance Manager

b. Project Assignment:
   Quality Assurance Manager

c. Name of Firm with which you are now associated:
   A. Morton Thomas and Associates, Inc. (AMT)

d. Years experience: With this Firm 7 Year  With Other Firms 21 Years
   Please list chronologically (most recent experience first) your employment history, position and general experience
   or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of
   your experience for those years you have worked.):  Project specific experience shall be included in Section (g) below):

   Quality Assurance Manager
   A. Morton Thomas and Associates, Inc. ………………………………………………………………. 2009 - Present
   As a Design-Build Quality Assurance Manager, Construction Quality Manager and Construction Engineer he
   specializes in construction management and oversight. He has participates in the day-to-day operations of VDOT
   construction projects including certifying accurate and complete inspection reports, ensuring compliance with plan
   specifications, review of daily diaries, preparation of technical, monthly progress reports and website progress
   updates. Additionally, he provides oversight of on-site testing of inspection services, established on-site testing
   laboratories and provides project schedule and cost analysis. He verifies VDOT-approved materials are incorporated
   into the Contract as well as preparing the Material Book for the Design-Build Contract.

   Construction Manager for Bridge
   Greenhorne and O’Mara, Inc. ………………………………………………………………………….. 2006 – 2008
   Responsible for all phases of bridge construction administration/management including all QC materials testing,
documentation, and pay estimates for multiple bridges at I-64/Battlefield Boulevard Improvements

   Senior Project Engineer
   Greenhorne and O’Mara, Inc. ………………………………………………………………………….. 2000 – 2006
   Responsible for all roadway and bridge contract administration including technical reports, documentation,
materials testing, training, pay estimates, and scheduling of work

   Plans Reviewer / Specifications
   Florida Department of Transportation ………………………………………………………………… 1994 – 2000
   Responsible Professional Engineer for the preparation, signing and sealing of Specification packages for all types of
   Contracts including design-bid-build, design-build, and alternative contracting. Also, he was the point-of-contact for
   all questions by contractors bidding on upcoming Contracts including roadway/bridge technical issues and
   contractual matters.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
   University of South Florida, Tampa Florida / 1986 / Civil Engineering

f. Active Registration: Year First Registered/ Discipline/VA Registration #:
   2000 .......... Virginia ................................................. Professional Engineer  #35104
   1990 .......... Florida................................................. Professional Engineer  #43442

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.)
<table>
<thead>
<tr>
<th>Project Name</th>
<th>Route 29 Solutions</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albemarle County, VA</td>
<td></td>
<td>2015</td>
<td>2016</td>
</tr>
<tr>
<td>Project Role</td>
<td>Independent Assurance of Quality Control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client/Owner</td>
<td>Virginia Department of Transportation</td>
<td>With Current Firm?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Construction Manager for Independent Assurance** for this $70 million design-build project at Rio Road Grade Separated Interchange which involves permanent retaining wall structures with driven, tie-back, and cantilever piling, depressed highway reconstruction, installation of underground stormwater management structures, major utility relocations, installation of fire suppression systems for the tunnel, precast bridge deck panels with post tensioning of threaded rods, installation of composite concrete retaining wall fascia, traffic signals, etc. Project duties include verification of inspection, testing, documentation of the contractor’s work by the QC and QA staff; performing independent observation, verification of testing results, and overall compliance with the procedures detailed in the approved QA/QC Plan; verifying accuracy and completeness of material book entries, reviewing daily work reports for accuracy and the 7 R’s of construction documentation for quality control.

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Route 460 Connector, Phase I</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breaks, VA</td>
<td></td>
<td>2009</td>
<td>2015</td>
</tr>
<tr>
<td>Project Role</td>
<td>Quality Assurance Manager</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client/Owner</td>
<td>Virginia Department of Transportation</td>
<td>With Current Firm?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Quality Assurance Manager** for this $90 million design-build highway/bridge project that includes one mile of new 460 Connector Roadway and 0.56 miles of widening and realignment of Route 80. The project also include three bridges: twin 1,733 foot long cast-in-place hollow box concrete structures crossing Grassy Creek and Route 610 at a maximum height of 267 feet, and a 300 foot long bulb-T girder bridge crossing Hunts Creek. Mr. Whited provided oversight and management of construction activities, materials testing, and analysis and interpretation of project plans and specifications to ensure constructability.

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Route 1 Improvements, Woodbridge, VA</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Role</td>
<td>Bridge Construction Engineer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client/Owner</td>
<td>Virginia Department of Transportation</td>
<td>With Current Firm?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Bridge Construction Engineer**. This $18 million project included road widening and bridge replacement on Route 1, over Neabsco Creek in Prince William County. The project involved raising the roadway approximately seven feet and widening the roadway and new bridges to three lanes for each bridge. The project involved raising the roadway approximately seven feet and widening the roadway and new bridges to three lanes for each bridge. Responsible for quality control including certifying accurate and complete inspection reports, ensuring compliance with plans and specifications for bridge replacement, and testing of concrete and casting concrete cylinders for pay factor determination.

<table>
<thead>
<tr>
<th>Project Name</th>
<th>I-64 Battlefield Boulevard Interchange</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chesapeake, VA</td>
<td></td>
<td>2007</td>
<td>2009</td>
</tr>
<tr>
<td>Project Role</td>
<td>Bridge Construction Manager</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client/Owner</td>
<td>Virginia Department of Transportation</td>
<td>With Current Firm?</td>
<td>No</td>
</tr>
</tbody>
</table>

**Bridge Construction Manager** for a $98.6 million project interchanged project. Mr. Whited provided quality control and supervision of inspection staff on six bridges including braided ramp flyover, fracture critical bridges, railroad overpass bridges, and two new Battlefield Boulevard bridges; a major interstate interchange and collector/distributor road reconstruction.

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Kerr Reservoir Bridge (Clarksville Bypass Project), Mecklenburg, VA</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Role</td>
<td>Senior Project Manager</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client/Owner</td>
<td>Virginia Department of Transportation</td>
<td>With Current Firm?</td>
<td>No</td>
</tr>
</tbody>
</table>

**Senior Project Manager** providing construction quality control, technical support and inspection on the drilled shaft foundation for the Kerr Reservoir Bridge on the Lake Country Parkway and on ten other bridges within this $75 million construction project.

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

**Route 29 Solutions**, Construction Manager for Independent Assurance, Scheduled completion date: Fall 2016

This current assignment will be in close-out phase by the time construction will begin for the Route 606 Bridge Replacement.
### 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> Christopher Adams, PE, Manager of VA Operations</td>
</tr>
<tr>
<td><strong>b. Project Assignment:</strong> Design Manager</td>
</tr>
<tr>
<td><strong>c. Name of Firm with which you are now associated:</strong> Ammann &amp; Whitney Consulting Engineers, PC</td>
</tr>
<tr>
<td><strong>d. Employment History:</strong> With this Firm 8 Years With Other Firms 14 Years</td>
</tr>
<tr>
<td>Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):</td>
</tr>
<tr>
<td>Ammann &amp; Whitney (2008-Current) – Bridge and Structural Engineering</td>
</tr>
<tr>
<td>VDOT (1994-1997) – Bridge and Structural Engineering</td>
</tr>
<tr>
<td><strong>e. Education:</strong> Name &amp; Location of Institution(s)/Degree(s)/Year/Specialization:</td>
</tr>
<tr>
<td>BS/ University of Virginia/1994/Civil Engineering</td>
</tr>
<tr>
<td>MEng/Princeton University/2004/Civil Engineering</td>
</tr>
<tr>
<td><strong>f. Active Registration:</strong> Year First Registered/ Discipline/VA Registration #: 1999/Professional Engineer/VA #(033017)</td>
</tr>
<tr>
<td><strong>g. Document the extent and depth of your experience and qualifications relevant to the Project.</strong></td>
</tr>
<tr>
<td>1. <em>Note your role, responsibility, and specific job duties for each project, not those of the firm.</em></td>
</tr>
<tr>
<td>2. <em>Note whether experience is with current firm or with other firm.</em></td>
</tr>
<tr>
<td>3. <em>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</em></td>
</tr>
<tr>
<td>(List at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.)</td>
</tr>
<tr>
<td><strong>DDOT Citywide Bridge Consultant, DDOT, Washington, DC:</strong> Project Manager responsible for coordinating rehabilitation, analysis, and construction efforts on District bridges for the Asset Management Division. Responsibilities included leading design staff and coordinating with subconsultants on emergency responses, load ratings, live load testing, material testing, bridge rehabilitation, and bridge jacking jobs. Bridge rehabilitation tasks included structural steel repair, prestress beam repair, bearing replacement, and joint replacement. Ammann &amp; Whitney (2013- Current)</td>
</tr>
<tr>
<td><strong>Huguenot Memorial Bridge, VDOT, Richmond, VA:</strong> Project Manager and Lead Structural Engineer responsible for final design services for two new structures as part of an innovative road improvement project utilizing Low Impact Design (LID) techniques. The crossing over the creek was originally slated to be replaced with twin bridges, which were...</td>
</tr>
</tbody>
</table>
to be skewed, simple span steel girders on a curved alignment. Ammann & Whitney was able to provide a lower cost alternative by developing plans for a prefabricated concrete arch culvert. By utilizing a culvert the County will enjoy considerable cost savings, both in initial cost and maintenance costs. The pedestrian underpass is just west of the new creek crossing and will be a key structure along the pedestrian trail known as the Laurel Hill Greenway. The existing alignment of Lorton Road currently spans the Greenway using a barrel tunnel built in 1911 for the old prison railroad. Because the existing barrel tunnel will remain in place, aesthetics on the new prefabricated structure will be important to the county and surrounding community to make sure there is visual continuity between the structures. *Ammann & Whitney (2008-Current)*

**Route 58 over Middle Fork, Holston River, VDOT, Washington County, VA:** Project Manager responsible for Construction Support Services including responding to RFI's and reviewing Submittals. Structural Engineer for the design of two new bridges (approximately 335 ft long) over Middle Fork Holston River. The bridges are composed of continuous curved steel girders and were erected in stages. *Ammann & Whitney (2008-2011)*

---

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

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment.
**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel anticipated for the Project.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Name &amp; Title:</td>
</tr>
<tr>
<td>Richard J. Siford, RLD, ESCCC, Senior Project Manager</td>
</tr>
</tbody>
</table>

| b. Project Assignment:                                  |
| Construction Manager                                   |

| c. Name of Firm with which you are now associated:      |
| Abernathy Construction Corporation                     |

| d. Employment History: With this Firm 43 Years with Other Firms 2 Years |
| Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below): |

**Senior Project Manager, Abernathy Construction Corporation**  
October 1994-December 2015  
Responsible for staffing projects, documenting the job progress, ensuring quality construction, mentoring, schedule development, schedule adherence, resource allocation, OSHA compliance, environmental permitting compliance and coordination with subs, VDOT and local jurisdictions to ensure project success. These responsibilities are implemented with every assignment to include bridge projects, roadway projects and utility projects.

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

| f. Active Registration: Year First Registered/ Discipline/VA Registration #: |
| Certification-VA DCR Responsible Land disturber/ #32547                     |
| Certification-VA division of mineral Mineral mining general Mineral Miner/ #3 0016354 |
| Certification-VDOT Erosion and Sediment control contractor/ #3589C          |

| g. Document the extent and depth of your experience and qualifications relevant to the Project. |
| 1. Note your role, responsibility, and specific job duties for each project, not those of the firm. |
| 2. Note whether experience is with current firm or with other firm. |
| 3. Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation. |

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

<table>
<thead>
<tr>
<th>Project Details</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 637 (0637-028—161,M501,B611), VDOT-Essex County, VA</td>
<td>April 2006-June 2007</td>
</tr>
<tr>
<td>Virginia Railway Express Bridge and Approach Track-VRE</td>
<td></td>
</tr>
</tbody>
</table>

Senior Project manager responsible for subcontract administration, DBE management, quality control, safety and environmental compliance, scheduling, material controls, daily supervision and field lay out. Ensured that scheduled work was coordinated and performed on time in accordance with the project schedule. Interpreted plan sheets, worked with subcontractors and met schedule milestones, monitored job budget and job cost, complied with safety measures and ascertained that the contract specifications were met. Ensured successful completion of project on time and within budget.
work was coordinated and performed on time in accordance with the project schedule. Interpreted plan sheets, worked with subcontractors and meet schedule milestones and coordinated construction activities with CSX Transportation, Possum Point, VA Dominion Power Plant, VA marine Resource and VRE. Monitored job budget and job costs, complied with safety measures and ascertained that the contract specification was met. Ensured successful completion of project on time and within budget.


Route 58/258 Connector, VDOT- Isle of Wight County, VA
Senior Project Manager responsible for subcontract administration, DBE management, quality control, safety and environmental compliance, scheduling, material controls, daily supervision and field lay out. Monitored job budget and job costs. Managed all facets of the project to ensure all scheduled work activities were being met and any issues were immediately addressed and resolved with VDOT personnel on the job. Ensured that schedule milestones were met, safety measures were adhered to and quality was maintained.

Abernathy Construction Corporation November 2001-June 2003

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

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment.
Route 606 Bridge Replacement over I-95 with 606 Improvements

Submitted By: ABERNATHY CONSTRUCTION CORP
In Association With: AMMANN & WHITNEY
3.4 EXPERIENCE OF OFFEROR’S TEAM

Our team is led by Abernathy Construction Corporation (Lead Contractor) and Ammann & Whitney (Lead Designer). The firms have worked together on projects throughout the Commonwealth of Virginia. Ammann & Whitney has provided Abernathy with engineering and inspection services. In turn, Abernathy has assisted Ammann & Whitney with equipment, labor and materials, as well as constructability reviews and contractor estimating. Highlights of our successful collaborations include:

**Design, Engineering Services, Inspection**
- Route 621, Westmoreland, VDOT: Design and inspection of bridge formwork overhang and Bulb T-support at the abutments.
- Route 604, Chesterfield, VDOT: Design and inspection of bridge formwork overhang.
- Route 630, Stafford, VDOT: Design and inspection of bridge formwork overhang and (for CSX review) of Bulb-T beam placement and existing bridge demolition.
- Route 633, King and Queen, VDOT: Design and inspection of slab deck bridge false work.

**Equipment, Labor, and Material Services/ Constructability Reviews and Contractor Estimating**
- Route 360, 14th Street Bridge (Mayo Bridge), City of Richmond: Traffic control, excavation to top of arches, backfill and pavement.
- Pennsylvania Avenue over Rock Creek Parkway, Washington DC: Constructability review.

Supporting Abernathy and Ammann & Whitney is a team of highly qualified design and construction firms with directly comparable work experience. Our team is comprised of all local firms known by and proven to VDOT. A brief summary of each team firm follows.

**Abernathy Construction Corporation (AB):** Abernathy Construction was found in 1949 by Lloyd Abernathy who built bridges up and down the east coast for nearly 20 years before settling in Virginia. In 1971, the family business was reorganized and incorporated as Abernathy Construction Corporation. Today, the firm continues its family’s construction tradition of exceptionally high standards, growing along with the communities in which they do business.

Abernathy has the ability to execute sizable and complex bridge and highway projects. Their large fleet of modern equipment can manipulate a wide range of materials, while personnel have the ability to keep the most challenging projects running smoothly on time and on budget. The majority of the work is self-performed—earthmoving, demolition, material hauling, pile driving, rebar installation, and concrete forming and placement—while maintaining standards of employee safety and environmental responsibility.

Experience building interstate and secondary highway systems affords them unique insights and knowledge of heavy construction in Virginia. The company’s core staff, who take extreme pride in the firm’s ability and knowledge, each have 20+ years of experience with Abernathy Construction. This combination of superior staff and equipment resources allows the company to operate with great flexibility and efficiency in the market place.

**Ammann & Whitney Consulting Engineers, PC (AW):** From its inception, Ammann & Whitney has been identified as a leader in bridge engineering. Over the past 70 years, the firm has provided design services for thousands of bridges of all sizes and types. Ammann & Whitney’s long history of providing innovative design solutions to the broad spectrum of bridge engineering challenges has made the firm a recognized leader across the gamut of bridge types. Staff take equal pride in record-setting long span bridges and the design of smaller and less well-known structures, which comprise the majority of the firm’s portfolio today.

**In the last five years Abernathy has delivered 21 projects for VDOT in excess of $51M.**

**Ammann & Whitney has been an active leader in Virginia’s bridge engineering community for over 18 years, designing structures ranging from larger, complex river crossings to culverts for VDOT and local transportation authorities.**
3.4 EXPERIENCE OF OFFEROR’S TEAM

In Virginia, Ammann & Whitney has performed structural feasibility studies for major projects such as the Mayo Bridge in Richmond. They were also lead designer for the award-winning 3,000ft Huguenot Memorial Bridge and the Route 58 Bridges over the Middle Fork of the Holston River, both for VDOT. Additionally, Ammann & Whitney’s Virginia staff successfully completed designs for the rehabilitation or repair of over 100 of Virginia’s bridges through projects associated with asset management companies. They have also provided construction engineering services for some of the most challenging structural engineering projects in the region, including the superstructure replacement of I-64 over the ACCA rail yard and the pin and hanger replacement on the Frederick Douglass Bridge in Washington, DC.

Accompong Engineering Group, LLC (AEG): AEG is a Virginia-based DBE/MBE that provides transportation planning, civil and environmental engineering and program/project management services. The company was founded in 2009 by Conrad Scott, a former VDOT Roadway Design Section Manager with approximately 20 years of engineering experience. The firm is staffed with other former DOT and municipal engineers that provide value-added services and enhance Virginia communities by providing multi-modal and context sensitive design solutions. AEG staff understand VDOT delivery tools, as well as VDOT policies and standards.

Recently AEG provided design and construction support services for five VDOT projects, three design-build, with $197M construction value.

AMT has managed and provided Quality Assurance Management services for some of the most significant and challenging transportation projects in the region. These include roadway, bridge, and various maintenance contracts encompassing extensive environmental issues; complex maintenance of traffic; construction in mountainous terrain; coordination with property owners, local government and law enforcement agencies, suppliers, utility companies and other stakeholders; review of the contractor’s schedule and plan of operations; field engineering; quantity verifications and cost estimates and maintenance of comprehensive project records, among other tasks.

ECS-Mid-Atlantic, LLC (ECS): ECS has the resources necessary to provide state-of-the-practice geotechnical engineering for clients in multiple markets and locations. The firm has considerable experience with VDOT and the knowledge of local jurisdictional requirements. ECS has completed investigations and analyses for numerous bridges, roadways, and retaining walls across the Commonwealth.

Route 606 Bridge Replacement Over I-95 With 606 Improvements

AEG has served as transportation engineers on various complex urban and interstate projects, including: I-95 bridges replacement over the Meherrin River in the limits of Emporia; Mayo Bridge Replacement Feasibility Study in Richmond; Western Inner Connector, which included three roundabouts, in Culpeper; Route 43 bridge replacement in Bedford County; and I-64 bridges replacement at Route 156 in Henrico.

AEG’s services on several important VDOT design-build projects include: I-395 HOV ramp to Seminary Road and I-395 auxiliary lane widening in Alexandria; I-581 at Valley View Interchange in Roanoke; Route 36 widening in the City of Hopewell; MWAA Dulles Metro-Rail Extension Phase 2; and I-264 Rehabilitation in Virginia Beach, which carries approximately 186,000 vehicles per day.

A. Morton Thomas & Associates, Inc. (AMT): AMT is an ENR Top 200 Firm with over 60 years of transportation-oriented construction engineering and inspection experience, including 28 years in the Commonwealth of Virginia. The firm is an industry leader in the field of Quality Assurance Management (QAM), providing inspection, design and design review and contract development services to VDOT and a wide variety of other state DOT and municipal clients.

Recently AMT managed the $250M design-build project at I-264 Rehabilitation in Virginia Beach.

In the past five years AMT has provided construction engineering for $700M of VDOT projects and design for $250M.

From 2008 to 2011 ECS held the VDOT Statewide On-Call Geotechnical Services Contract and currently holds the VDOT East and North Geotechnical Services Contracts.
3.4 EXPERIENCE OF OFFEROR’S TEAM

The Fredericksburg office has a staff of 28 employees. They maintain soil, aggregate, and concrete laboratory facilities that are AASHTO accredited. ECS is familiar with the local soil conditions ranging from the marine clays of the Coastal Plain to the moisture sensitive micaceous silts and clays of the Piedmont and the underlying weathered rock. They also understand the potential for acid sulfate soils and are familiar with mitigation practices, as needed. Their knowledge of the geologic conditions, regulatory requirements, local construction practices, and practical approach to solving design and construction problems has earned ECS a reputation as an industry leader.

**KDR Real Estate Services, Inc. (KDR):** KDR is a full service right-of-way and easement acquisition company. KDR is also a licensed title agency that can underwrite insurance policies through WFG National Title Insurance Company.

**KDR’s ROW work for VDOT over the past five years has encompassed over 1,000 parcels, 301 for design-build.**

Since 1998, KDR has been involved in 17 VDOT projects in 12 different counties and the cities of Colonia Heights and Petersburg. Projects have included road widenings, new road construction, interchanges and bridge improvements. Specific design-build projects across the state have included: the Fort Lee entrance, Route 35 Nottoway River Bridge, Virginia Capital Trails New Market and Varina phases, Fall Hill Avenue and Greenview Drive.

**Timmons Group, Inc. (TM):** Founded 1953 in downtown Richmond, TM has built a reputation of excellence for projects ranging from small-town infrastructure to federal design-build projects, and from large mixed-use communities to urban in-fill projects. TM provides civil, environmental and geotechnical engineering; GIS/geospatial technology, landscape architecture and surveying services to a diverse client base. Their market-focused organization is structured to help fulfill their mission “to achieve unparalleled understanding of our clients, their businesses and their visions, resulting in unrivaled customer service and shared success.”

**Timmons has completed 196 projects/tasks for VDOT.**

3.4.1 Work History Forms

Work History Forms (RFP Attachments 3.4.1(a) and (b)) as required for Abernathy Construction Corporation (Lead Contractor) and Ammann & Whitney (Lead Designer) are included at the conclusion of this section.
Lead Contractor Work History Form
3.4.1(a)

Abernathy Construction Corporation
**ATTACHMENT 3.4.1(a)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

(LIMIT 1 PAGE PER PROJECT)

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Name of the prime design consulting firm responsible for the overall project design.</th>
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<th>g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name: RT 95 Project # (FO)0095-106-104,C501,B617</td>
<td>Location: City of Colonial Heights, VA</td>
<td>Name: Virginia Department of Transportation</td>
<td>Phone: 804 674-2452 Project Manager: Mr. Scott Fisher Phone: 804 213-9740 Email:</td>
<td>07/2008</td>
<td>07/2008</td>
<td>$3,812</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Name of Client/ Owner: VDOT</td>
<td></td>
<td></td>
<td></td>
<td>$3,759</td>
</tr>
</tbody>
</table>

| h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly. *For a project with multiple phases or multiple contracts, only one phase or one contract will be considered. If additional phases or contracts are shown under the same Work History Form, only the first phase or contract listed will be evaluated. |

**PROJECT DELIVERY METHOD:** Bid

**SPECIFICATIONS:** Interchange Improvements Northbound on Ramp From Temple Avenue (Route 144)

**Project Description:** The project included the construction of a new 2,900’ ramp and a 120’ bridge from Temple Avenue west to I-95 north. Heavy traffic, constrained workspace, environmentally sensitive work site over a live stream, adjacent military base, and high public visibility contributed to the challenges of the project.

The project was completed early and under budget. The project had no accidents, and the CQIP scores were 93.02% and 96.3%, qualifying for VDOT’s Four-Star Recognition.

This project was awarded VTCA/VDOT’s Best State Transportation Construction Project in 2008, for a visually appealing structure and roadway that improved the level of service to motorists and increased public safety.

**Examples of items Abernathy Construction Corporation accomplished during the construction of this project are as follows:**

1. Resolved environmental issues during placement of in-stream concrete lined channel
2. Improved stabilization if fill-slope by utilizing Pennington Slope Master seed mixture instead of EC-3 as specified on plans
3. Identified and reported potential danger of major gas supply lines within the construction zone
4. Collaborated closely with Columbia gas Transmission to install a protection system for gas lines
5. Redesigned final plan grades on Temple avenue to accommodate existing road surface elevations
6. Revised grade in fill and gore area to allow for pavement drainage when preliminary plan grade review for I9-95 revealed area of roadway that did not drain
7. Facilitated with VDOT an understanding of the accuracy of complex plan deck elevations resulting in savings in time and money to VDOT
8. Coordinated access with several local businesses located adjacent to project site to ensure customers could see business entrances
9. Partnered with City of Colonial Heights, State Police, local law enforcement, fire department & utilities for lane closures, signal lighting & traffic controls
10. Developed and maintained relationships with private property owners affected by the work site.
### LEAD CONTRACTOR - WORK HISTORY FORM

**ATTACHMENT 3.4.1(a)**

**LIMIT 1 PAGE PER PROJECT**

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<tr>
<th>a. Project Name &amp; Location</th>
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</tr>
</thead>
</table>
| Route 340, Project # 0340-136-102,C501,B601 Rail Bridge Replacement | Virginia Department of Transportation | Name of Client/Owner: VDOT  
Phone: 540 332-9047  
Project Manager: Todd Stevens  
Phone: 540 332-9047  
Email: todd.stevens@vdot.virginia.gov | 11/2011 | 10/2010 | $9,862 | $9,475 |
| Location: City of Waynesboro, Virginia | | | | | | $9,475 |

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

*For a project with multiple phases or multiple contracts, only one phase or one contract will be considered. If additional phases or contracts are shown under the same Work History Form, only the first phase or contract listed will be evaluated.*

**Project Delivery Method:** Bid / Bridge Redesign Value Engineering Proposal

**Specifications:** Railroad Bridge Replacement and Roadway Improvements on Delphine Ave/RT 340

**Project Description:** The project consisted of the replacement of an existing railroad bridge and the improvements to the roadway under the bridge. Roadway improvements included providing appropriate clearance under the bridge, new drainage structures, and complete streetscape reconstruction of approximately 0.22 kilometers. Retaining walls around adjacent properties were required to accommodate the regrading of the roadway.

Due to budget limitations identified prior to project award, VDOT did not think they could award this contract. Abernathy developed a value-engineering proposal, assisted by HDR, Inc. Alexandria, VA that offered a redesigned bridge replacement. The redesigned bridge lowered the project cost by $400,000, which put the project cost within VDOT’s budget, and VDOT awarded the contract.

Abernathy received the Staunton District Best Project Excellence in Construction 2010 and the VTCA Award for Best VDOT Project over $10 Million.

**Examples of items Abernathy Construction Corporation accomplished during the construction of this project are as follows:**

1. Developed bridge redesign VEP which allowed VDOT to move forward with the much needed project within their budget
2. Shortened the construction time by seventeen months, which reduced impacts to the railroad, businesses, and traveling public
3. Simplified the structure installation which reduced the railroad service closures
4. Coordinated access with several local businesses adjacent to project site to ensure customer access was identified and maintained
5. Partnered with City of Waynesboro, local law enforcement, fire department, and utilities for street closures and other traffic controls
6. Developed and maintained relationships with private property owners affected by the work site, and worked with them to establish detours to minimize impact
7. Coordinated the work with Buckingham Branch Railroad to keep the project moving
### LEAD CONTRACTOR - WORK HISTORY FORM

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</tr>
</thead>
<tbody>
<tr>
<td>Route 36 Improvements, Project # (FO)0036-0274-709-P101,R201,C501 of Hopewell &amp; Prince George CO, VA</td>
<td>Rinker Design Associates, P.C.</td>
<td>VDOT 804 524-7008</td>
<td>Michael W. Saunders, P.E. 804 524-7008</td>
<td>11/12/2012</td>
<td>REV 01/18/2013</td>
<td>01/04/2013</td>
</tr>
</tbody>
</table>

**Project Delivery Method:** Design Build

**Specifications:** Intersection Improvements at Route 36 (Oaklawn Avenue) and route 144 (Temple Avenue)

**Project Description:** The project improved traffic flow at the Sisisky Gate entrance into the Fort Lee Military Base by relocating the existing intersection of Routes 36 and 144 away from the Fort Lee entrance. Contract included roadway design, utility relocation, right of way acquisitions asphalt pavement, pavement markings, traffic signals and signs, Maintenance of traffic plans and implementation, environmental permits, E&S controls, storm water management plans, Quality Control, and quality assurance. Challenges included heavy traffic, excessive drainage flows, and high public visibility. The project construction was completed early.

Example of items Abernathy Construction accomplished during the construction of this project are as follows:

1. Developed and implemented comprehensive MOT to safely construct the new pavement widening and alignment under traffic.
2. Reduced impacts to utilities and reduced cost of drainage by modifying pavement cross slopes.
3. Reduced overall impervious footprint by utilizing the existing route 144 westbound pavement where possible.
4. Developed safety by altering the existing roadway geometries at the eastbound route 144 connection with route 36 to provide 50 mph design speed instead of the RFP design speed of 40 mph.
5. Added a parallel storm drain system to increase the capacity through the intersection.
6. Developed a public relation plan, and implemented throughout the project. Close coordination with the US Army and Civilian representatives from Fort Lee, the City of Hopewell, and the surrounding businesses allowed sufficient time to make plans for upcoming work tasks that might impact access or traffic flow.
7. Identified existing pavement failure and submitted repair process to VDOT and FHWA, which included using a Fibermat material over two lanes for 5,000 feet each.
8. Developed a communication web for coordinating with businesses, and provided information as work tasks were planned. This minimized impacts to the business and traveling public.
Lead Designer Work History Form
3.4.1(b)

Ammann & Whitney Consulting Engineers, PC
For the Huguenot Bridge replacement project our team utilized DBE firms for geotechnical and survey services. Ammann & Whitney utilized VDOT certified DBEs and complied with all agency and project DBE requirements. The project was completed on budget and three months early.

Redesigning a pier that was two feet off alignment due to a construction survey error. Working closely with the contractor, we were able to eliminate construction delays due to utility relocation challenges at the start of the project. The project included hydraulic, hydrologic and scour analyses; cost estimates; existing bridge evaluation; replacement structures and span optimization design; repair and replacement alternatives evaluations; and public participation.

Ammann & Whitney served as the consultant project manager, coordinating and overseeing the work performed by other disciplines, including aerial and ground surveys, traffic data acquisition and analyses, roadway and stormwater management design services, redesign of an interchange along the south bank and initial cultural resource assessment of the site (part of the preliminary study).

Right-of-way acquisition was required for this bridge replacement project. As prime for the project our staff oversaw the design of commercial and residential right-of-way acquisitions. Project plans for all relocations and partial property takes were prepared as part of this design-build-build effort. Our team was responsible for identifying impacted properties, conducting surveys, and preparing right-of-way maps.

This bridge is a vital transportation link in metropolitan Richmond, so traffic lanes had to remain open during construction. During preliminary design, Ammann & Whitney developed preliminary layouts for six alternatives. A staged construction methodology was selected that minimized right-of-way impacts and kept traffic moving on the bridge. By placing Stage I of the new structure close to the existing open railing, which was cherished by the community but did not meet crash requirements, was preserved and put on a display in a nearby park.

The new bridge has 17 piers, with five in the river and none in the canal. Pier placement was key to minimizing impacts on stream flow. The new structure incorporates aesthetic elements, including a railing that allows pedestrians and motorists to view the river, along with specially shaped piers and surface staining of many visible concrete elements, reminiscent of the old bridge. A portion of the existing open railing, which was cherished by the community but did not meet crash requirements, was preserved and put on a display in a nearby park.

Due to local ground accelerations, the new bridge was designed to sustain seismic loads. Design for stream forces, wind loads and special military loading were other special structural considerations included in the project. Other work performed included hydraulic, hydrologic and scour analyses; cost estimates; existing bridge evaluation; replacement structures and span optimization design; repair and replacement alternatives evaluations; and public participation.

Ammann & Whitney provided and managed construction support services for the duration of the project. Notable accomplishments during the construction phase included working with the contractor on alternate deck pouring sequences and redesigning a pier that was two feet off alignment due to a construction survey error. Working closely with the contractor, we were able to eliminate construction delays due to utility relocation challenges at the start of the project. The project was completed on budget and three months early.

For the Huguenot Bridge replacement project our team utilized DBE firms for geotechnical and survey services. Ammann & Whitney utilized VDOT certified DBEs and complied with all agency and project DBE requirements.
## LEAD DESIGNER - WORK HISTORY FORM

**ATTACHMENT 3.4.1(b)**

### LIMIT 1 PAGE PER PROJECT

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
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<th>f. Contract Value (in thousands)</th>
<th>g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement. (in thousands)</th>
</tr>
</thead>
</table>
| **Name:** Replacement of Seven Superstructures Spanning I-676, Vine Street Expressway  
**Location:** Philadelphia, PA | Name: Buckley & Company  
Name of Client: PennDOT  
Phone: 717.787.2838  
Project Manager: Chuck Davies, PE  
Phone: 610.205.6670  
Email: cdavies@pa.gov | | 01/2015 | 06/2017 | $80,000,000 | $2,300 |

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

Ammann & Whitney, as a subconsultant, was responsible for preliminary engineering, final design and construction support services for the $65 million replacement of overhead structures that span I-676, the Vine Street Expressway, in Philadelphia. Ammann & Whitney’s primary role was the lead structural engineer for the replacement of four of the seven structures including the 22nd Street, 19th Street, and 18th Street Bridges, as well as the Family Court pedestrian bridge. We also provided support for design tasks such as highway lighting, geotechnical, drainage, sign structures and erosion and sedimentation pollution control and coordinating permitting, and environmental processes and documentation. All bridge design was completed in accordance with AASHTO and FHWA requirements.

These bridges were originally constructed as two-span prestressed concrete non-composite adjacent box beam bridges. The Department is working to remove this bridge type from its inventory. To minimize the impact on traffic during construction, the Department wanted to eliminate the piers in the median. Simple span structures were designed. To maintain or increase the vertical clearance over I-676 the girder depth was less than the span to depth ratio permissible. Calculations were provided to PennDOT to show that the deflections of the structure were less than the maximum allowable. The 22nd street bridge had its profile raised to provide a minimum of 14.5-ft clearance.

The bridge replacements incorporated context sensitive design solutions that would enhance this tourist destination. The designs included large planting areas on the structures and aesthetic treatments to meet the Fairmount Park Design Consistency manual. Aesthetic treatments included exposed aggregate sidewalks, brick inlays edging along the sidewalks, granite faced planters, and an ornamental fence.

Project challenges include incorporating the many visions of the project stakeholders for the Parkway and surrounding street network. Also important in this highly urban setting is developing effective traffic control plans and coordinating with the various utilities that are supported on these structures. A goal of the project is to have a minimum impact on the 120,000 vehicles per day that use the Vine Street Expressway. Reuse of the existing substructure was a challenge due to the increase in load. Lightweight fill was used in some cases. Over the pump house at 22nd Street, to raise the profile and keep the loads to a minimum, a lightweight concrete deck over geofoam fill was used.

This sunken section of the Vine Street Expressway passes beneath the Benjamin Franklin Parkway, which is in the city’s Museum District. The Parkway is a landmarked public space that reflects early 20th Century “City Beautification” planning goals to connect Center City and Fairmount Park with a dramatic diagonal thoroughfare. It continues to serve the city as a pedestrian and vehicular corridor linking City Hall on one end with the Philadelphia Museum of Art and Fairmount Park on the other. The Parkway provides a setting where many of the city’s major cultural and celebratory events take place each year. Our staff supported the prime consultant with environmental and historic compliance design tasks.

![Image of the Vine Street Expressway and Benjamin Franklin Parkway]
## LEAD DESIGNER - WORK HISTORY FORM

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</tr>
</thead>
<tbody>
<tr>
<td>PTC Total Reconstruction MP 213-227</td>
<td>Name: New Enterprise Stone &amp; Lime Co., Inc.</td>
<td>Name of Client: PA Tpke Commission Phone: 717.939.9551 Project Manager: Jerry Rollman Phone: x7578 Email: <a href="mailto:grollman@paturnpike.com">grollman@paturnpike.com</a></td>
<td>06/2004</td>
<td>10/2016</td>
<td>$175,000,000</td>
<td>$6,000</td>
</tr>
</tbody>
</table>

Name: Jerry Rollman
Phone: 717.939.9551
Email: grollman@paturnpike.com

**Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement.**

The phased program to totally reconstruct the Pennsylvania Turnpike was considered one of the Commission’s most important long-term initiatives. For the section stretching from the Newville Maintenance Facility to Interchange 227, Ammann & Whitney provided civil and structural design for rebuilding 14 miles of mainline roadway. The work entailed design for numerous overhead roadway reconstructions, six mainline bridge reconstructions or widenings, and redesign of the Carlisle Interchange.

During preliminary design, we prepared plans and estimates for reconstruction of 11 overhead roadways and their associated bridges. We also prepared preliminary plans for six mainline drainage structures. As part of the final design, we prepared an early action contract for four overhead roadways for bid as design-build projects and six overhead bridge replacements through the traditional design-bid-build process. The design-build packages included conceptual roadway and bridge plans, complete specifications and estimates. The remaining structures and highway design tasks were finalized for conventional bidding. Reprofiling and widening Bloserville Road (which included design for a two-span bridge replacement) and McClures Gap Road (long single span bridge replacement) were added to our design responsibilities under the conventional bid submittions.

Key to reconstructing the overhead bridges was to identify detours that maintained the safety and mobility of for residents using the local roadway network. Several construction packages were used to avoid bridge closures with conflicting detour routes.

A significant part of the reconstruction was redesign of the Carlisle Interchange. Ammann & Whitney realigned the interchange to improve roadway geometry, due to a high volume of truck traffic and high accident rates at this interchange. During the preliminary design phase, we evaluated five alternatives for the proposed realignment and determined the impacts and cost of each alternative. We developed a complex maintenance and protection of traffic plan to keep the interchange open throughout construction. As part of the interchange realignment, we designed a two-span structure over the mainline roadway, as well as ramp reconstructions from the Toll Plaza to PA Route 11, and from the toll plaza to the mainline.

An extensive public relations effort was integral to the advancement of the overall design. Our team participated in numerous public meetings to inform the public officials and the general public. Residents could vote on the color and appearance of the soundwalls. A monthly status meeting was held to coordinate with the environmental agencies.

**Delivery of Alternative Technical Concepts**

This project was one of the first design contracts for the full reconstruction of the oldest sections of the PA Turnpike’s mainline. During preliminary design we worked with the PTC to determine the appropriate traffic control. The goal was to reduce the number of construction stages and the duration of construction. The implemented traffic control scheme was a two-stage construction sequence. The first phase was to widen and reconstruct the outer lanes. The second phase maintained traffic on the newly constructed outer lanes while the inner lanes and median were reconstructed. The traffic control plan set the template for the new roadway cross section. Overhead structures were designed to provide proper vertical and horizontal clearances to the widened roadway.

**Design in coordination with right of way acquisition**

Due to the large existing ROW of the PA Turnpike, all widening took place within those limits. ROW acquisition outside of the original limits was required at specific locations to accommodate storm water management facilities. Every effort was taken during the design phase to avoid property takes.
Route 606 Bridge Replacement over I-95 with 606 Improvements

Submitted By: ABERNATHY CONSTRUCTION CORP
In Association With: AMMANN & WHITNEY
3.5.1 CRITICAL RISKS

Risk I: Coastal Plain Soil Conditions

Why This Risk Is Critical: The project site sits at the western edge of the Coastal Plain physiographic province, which is characterized by repeated marine depositional and erosional events that occurred during periods of moving shorelines. The geologic formations are mixed and often have discontinuous strata. The soils types present are variable, with highly plastic soils scattered in the upper strata which is common in the lower Potomac formation. A pond is present along the Mallard Road connector alignment. Random locations contain iron sulfide minerals and are potentially acid-producing soils when exposed.

Key issues include:

- design of safe cut and fill slopes,
- workability of soils and fill materials,
- construction of suitable subgrades,
- soft soil accumulations in swales, and
- successful post-construction vegetative growth.

However, we believe the control of settlement at the bridge abutment locations is the primary risk to mitigate. Understanding the implications of these elements, exploring and ultimately developing rational design strategies will mitigate these risks.

The project team includes ECS Mid-Atlantic, LLC, the geotechnical consultant, who are located a few miles north of the project site. They have considerable design experience in this geology. This experience is essential to risk management.

Subgroup I—Slope Stability: Given the rolling nature of the topography of the site, numerous cut and fill slopes are required. Highly plastic soils, particularly those within the Potomac formation, are known to have low strength, which can have an impact on slope stability.

Mitigation Strategy: We will investigate the subsurface information and develop a sound understanding of the strength of each substratum. The focus of the investigation will be concentrated on areas having significant cut and fill slopes. We will develop an adequate laboratory test program to determine the long-term strength of the critical strata, notably the highly plastic soils, which is essential.

Subgroup II—Unsuitable Soils: As noted, most of the formations contain intermittent layers of highly plastic soils. Highly plastic soils can be difficult to work with, particularly when they are wet, potentially expansive, and poor materials for subgrades or wall backfill. They generally have lower strength and must be accounted for in cut and fill design.

Mitigation Strategy: Mass grading operations will be performed, and it will not be possible to exclude all highly plastic materials from being placed in compacted fills. Nevertheless, a well-planned and executed quality assurance and control program can be effectively used to monitor sources, blending efforts, and actual placement. Therefore, the successful construction of fill embankments will be achieved with a QA/QC program designed to account for highly plastic soils.

Subgrades for pavement require the use of low plasticity soils. There is a fairly good source of low-plasticity soils on-site located at the higher elevations. An earthwork plan will be developed as part of the design, which will define the general limits of the best borrow areas. This will ensure that adequate fill subgrade material will be available.

Undercutting subgrades in cut sections will be required, but with a well-defined QA program that defines the decision process for undercutting, the risk of pavements being constructed over highly plastic materials can be eliminated.

Subgroup III—Soft Soils in Low-Lying Areas: Low-lying areas have the potential for high water tables and soft soil accumulations. Placement of fills over such areas has slope stability and settlement risks.
3.5.1 CRITICAL RISKS

The Mallard Road connector will traverse a low-lying area with an existing pond. We anticipate the upper soils in this area to be firm enough for adequate stability. However, a very soft layer of silt and loose sand is present beneath the upper stratum and settlement due to embankment fill placement is a concern.

**Mitigation Strategy:** Exploration in swales, ponds, or potential wetland areas must be conducted. Once identified, appropriate strategies ranging from removal to in-situ ground improvement can be developed to minimize settlement and stability risks.

In the vicinity of the existing pond, the lower compressible soils are anticipated to be too deep to remove effectively. Testing is required to determine the coefficients of vertical drainage to determine the expected consolidation rate. The construction sequences of fill placement, as well as in-situ ground improvement, will be analyzed so a program to keep post-construction settlement within acceptable long-term limits can be developed.

**Subgroup IV—Acid-Sulfate Soils:** The soils at the site are recognized as potentially acidic. These soils contain iron sulfide minerals and, in an undisturbed state below the water table, acid-sulfate soils (which are generally not acidic). If the soils are drained, excavated or exposed to air, the sulfides will react with oxygen and form sulfuric acid. The acid will create a variety of adverse impacts to structures as well as inhibit the growth of vegetation. Cut slopes are more of a concern (poor vegetative growth and subsequent erosion) than fill slope because fill materials are generally blended and neutralized. The problem at this site, is that the locations or acid-sulfate soils are random.

**Mitigation Strategy:** Identification of the potential of the soils to cause adverse impacts is determined by pH and acid-base accounting tests (EPA Pub. 600/2-78-054). Locally, soil treatment is required when the calcium carbonate (lime) demand exceeds 4.0 tons per 1,000 tons of soil as determined by acid-base accounting.

The best approach is to target planned cut slopes during the field exploration for testing. The QC plan will include additional testing requirements, particularly of low-chroma soils observed during construction in cut sections. Spot tests of fill materials will also be made during construction to determine if, and the extent, of lime treatment required.

**Subgroup V—Bridge Foundations and Stability:** The substrata at the bridge location represent highly stratified conditions. There is a distinct layer of soft highly plastic clay present between elevations at +225 to +195ft. This depth layer is probably below influence of concern for stability but is a serious concern for long-term settlement and pile downdrag. The length of pile foundations is expected to be consistent as weathered rock is present at a uniform depth.

**Mitigation Strategy:** We assume that the use of driven steel HP piles is appropriate; that is, they are likely to be driven to about the same tip elevation without difficulty. Additional borings, drilled in accordance with the MOI-recommended frequency are expected to be sufficient to evaluate this assessment. Additionally, the use of pile driving analysis (wave equation) will provide an excellent prediction of pile driving requirements.

As noted in Subgroup I, stability is a risk. Adequate borings, testing and analyses of the approaches, both longitudinal and transverse, will be conducted to minimize slope stability risks.

The most critical risk is long-term settlement that can be caused by placing embankment fills at the site. The underlying clay will be slow to consolidate and can continue to settle after construction. Adequate testing is required to determine the coefficients of vertical drainage to determine the expected consolidation rate.

The construction sequences of fill placement and pile driving, as well as possible in-situ ground improvement, will be analyzed carefully. A design and construction program to keep post-construction settlement within acceptable long-term limits and to reduce downdrag on the piles will be developed.

**Role of VDOT and Other Agencies in Addressing Risk:** Subgroup IV incorporates the most critical risk, control settlement. The method of construction selected to improve and reduce long-term settlement of the approach fills will require prompt reviews and comments from VDOT, which will aide in the development of the embankment performances, project cost and schedule.
3.5.1 CRITICAL RISKS

Risk II: Environmental Conditions

Why This Risk Is Critical: The conceptual design work performed to date indicates that there are conflicts with environmental concerns posed by the new construction, which have not been fully documented. Conflicting information has been provided, as well as, other information that was not included in the Categorical Exclusion (CE) document. The risks to the project include:

Waters of the United States: The CE does not provide an accurate description or quantification of waters of the United States (i.e. wetlands, streams and other waters), and thus an accurate assessment of impacts cannot be determined. This will have both timing and cost implications.

Mitigation Strategy: Delineation, U.S. Army Corps of Engineers confirmation and location/quantification of the jurisdictional areas within the project area will be accomplished early. Plans can then be developed to include jurisdictional areas and planning for the type of permit (i.e. Nationwide Permit, General Permit, Individual Permit) required. Permit strategies can be established, in order to reduce the time associated with obtaining permits, and the costs associated with the compensations for wetland and streams impacts.

Threatened and Endangered Species and Habitat: Three species are listed: northern long eared bat (NLEB), dwarf wedge mussel (DWM), and small whorled pogonia (SWP) have been identified, but require clearance of those potential risks.

Mitigation Strategy: Early action by a qualified expert on our team will confirm if habitats for NLEB, SWP, and DWM exists within the area of potential effect (APE). Early reviews indicate that potential habitats for NLEB and SWP do. Upon confirmation early coordination with the U.S. Fish and Wildlife Service will provide for clearance and/or understanding of potential implications posed by the presence of NLEB (time of year restrictions), SWP (buffers) or DWM (avoidance of stream by clear spanning and more restrict erosion and sediment control measures).

Underground Storage Tanks: Potential environmental impacts and costs associated with underground storage tanks (USTs) at the Shell gas station (southeastern quadrant of I-95 and Route 606). Furthermore, the reports indicate that this gas station is a business that is impacted by the right-of-way, and thus purchase or condemnation should be a consideration. In either case, the risks associated with the potential recognized environmental conditions (RECs) (i.e. the potential leaking underground storage tanks (LUSTs) and petroleum contamination) need to be determined and eliminated as RECs or remediated.

In addition, a portion of the project will encroach into property owned and operated by VDOT for maintenance activity. VDOT maintenance yards have been used to store various material and equipment of the years and could be a source of environmental concern. Early evaluation by performing a Phase I Environmental Site Assessment (ESA) and then a Phase II ESA will provide the information needed to assess and plan for these risks.

Conservation Easement: The Skylar property on the northeastern quadrant of I-95 and Route 606 is encumbered by a conservation easement.

Mitigation Strategy: The Skylar property located on the northern side of Route 606 (northeastern quadrant of I-95 and Route 606) has a land conservation easement on the property that is held by the Virginia Outdoors Foundation (VODF). Currently, a temporary construction easement is required outside of the VDOT easement and on this property. Early coordination with the VODF will provide an understanding of the timing impact associated with the temporary construction easement. Otherwise, the roadway will require a shift to the south, which will further impact the existing gas station, and require environmental studies to clear/understand the RECs associated with the gas station.

Stormwater: Protection of downstream stormwater conveyance systems from post-development pollutant load and flow rate.

Mitigation Strategy: All drainage outfalls on the project must release into conveyance systems that will be able to handle the post-construction stormwater. The stormwater emphasis on the project has been focused on the southeast quadrant of the interchange and the outfall centered on two proposed Best Management Practice (BMP) facilities.

While the majority of the proposed new impervious area is directed in this direction, there is still a significant
3.5.1 CRITICAL RISKS

amount of stormwater from the widening of the bridge and the ramps that appears, from the preliminary plans, to be draining west to east and then south to north into the northwest quadrant of the interchange. No BMP appears in the preliminary plans in this quadrant.

Our strategy would consist of verifying and grandfathering the older UPC 100829 project to ensure that Part II C Technical Criteria (as opposed to Part II B regulations) pertains to this portion of the overall, combined project. After verification of the regulations, we will verify with VDOT and VADEQ that we can have a project that has split regulations (Part II B for the UPC 105463 portion of the project and Part II C for the UPC 100829 portion of the project). If this is not allowed, we will focus on a strategy for meeting the Part II B criteria for the area discharging to the northwest quadrant, in addition to the outfall on Mallard Road.

The team will alleviate the potential risks to the aforementioned items through:

- the identification of critical items,
- managing time lines and costs to account for the additional time and expense, and
- understanding how avoidance, minimization, and use of other conservation methods can provide the project with more predicable timelines and costs.

Early action and progress in determining the environmental resources, quantifying potential impacts and understanding the timing and cost implications is crucial to the success of the project.

Role of VDOT and Other Agencies in Addressing Risk:
The team views VDOT as a partner in the mitigation process. VDOT will be asked to review permit applications and documents prior to submittal to the various agencies. We believe your active involvement will promote collaboration, provide a comprehensive understanding of project details, and garner support of the local, State and Federal agencies involved.

Risk III: Project Safety via MOT/TMP and Mobility Throughout Construction

Why This Risk Is Critical: I-95 through Spotsylvania County, including the Route 606 interchange, was opened to traffic in 1964. The interchange consists of a traditional diamond configuration with ramps serving all quadrants of the interchange. Within the project’s limit, I-95 operates with a posted speed limit of 70MPH and the NB and SB roadways have three lanes each separated by a 40ft median.

Route 606 functions as a two-lane undivided roadway posted at 35MPH and provides direct access to the community of Thornburg. The route provides east-west travel throughout Spotsylvania County.

The average annual daily traffic (AADT) on I-95 at this project site is frequently above 108,000 vehicles per day (vpd), with high volumes during the rush hour periods. Also the traffic volumes on Route 606 are anticipated to be about 18,000 vpd by the time the I-95 bridge replacement construction becomes active.

Our team anticipates maintaining the current three lanes for NB and SB directions of I-95 during construction, with provisions to shift I-95 traffic as needed to accommodate the construction zones. We are aware that this segment of I-95 experiences a high crash history and will apply provisions to promote awareness to motorists. We anticipate the median areas will present various challenges to construction vehicle ingress and egress as well as to the construction staff’s general safety as they will be surrounded by six lanes of heavy freeway traffic operating at high speeds as well as heavy truck traffic volumes.

While the proposed bridge is being constructed adjacent to the existing bridge that will eventually be removed, there will be safety challenges. In addition, it will cross all six lanes of I-95. These concerns are related to both construction workers as well as motorists. We will develop MOT plans and implement a “Type C” Transportation Management Plan addressing traffic operations and a comprehensive public involvement and awareness program. A significant component of this TMP will address safety within the construction work-zone as well as the overall project’s vicinity.

A new Dominion Raceway facility will create an increased pattern for pedestrian activities throughout the project area, though accommodation is not currently present. The raceway will generate an additional 11,600 vehicle trips on a typical Friday and this volume will significantly impact traffic operations at the interchange. This will be a critical issue during the MOT phases. Our MOT plans will address Context Sensitive Solutions and
adequately provide means for pedestrian safety through and around the project’s vicinity. Our plans will be developed with the flexibility to accommodate unforeseen conditions as this Raceway facility poses a major risk to the MOT operations.

We believe that the safety risk needs to be proactively managed and properly mitigated. Consequences include major impacts to commerce as well as the travelling public along one of the then county’s busiest corridors.

**Mitigation Strategy:** Our team recognizes the severity of this risk and will design and implement a MOT/TMP focused on maximizing safety and mobility throughout construction. The team understands that one of the primary goals for a successful I-95 bridge replacement project is the efficient handling of traffic through and around construction operations; while giving paramount importance to the safety of motorists, construction crew as well as Emergency Services personnel. Our team plans to prepare a comprehensive “Type C” TMP and site specific Temporary Traffic Control Plan (TTCP) that is consistent with VDOT’s IIM-241.5 (work-zone safety and Mobility) and TE351 (Work Zone Speed Analysis) requirements.

Our team is equipped with construction crews, engineers and a wide array of critical support staffing that have extensive experience in working on interstate highway projects involving bridge replacement. The TMP and TTC plan will be designed, implemented, and inspected by staff with VDOT certification in Work Zone Traffic Control. Our staffing is also experienced in applying the principles of the 2009 MUTCD and VDOT’s 2011 Virginia Work Area Protection Manual (Revision 1).

One of the primary goals for this I-95 bridge replacement project is to deliver a project that minimizes impacts to the roadway users and stakeholders. Some of the items that pose risks to key stakeholders and the travelling public include:

- crashes or other incidents within the construction work-zones,
- inadequate warning and/or signage of the construction operations especially delays,
- inability of the design-builder to accommodate peak hour traffic schedule,
- inadequate accommodations for emergency operation vehicles, and
- precise communication to the traveling public.

The team is aware that communication is one of the key items in gaining the trust, as well as patience, of the travelling public and stakeholders. Through our public involvement manager, our team will ensure that road users and stakeholders are continually updated on work progress and schedule, delays with the project’s vicinity, and accidents as well as lane closures.

Notifications will be done through our proactive communications and outreach efforts in support for the TMP. The strategies will include using portable changeable message signs (PCMS) to warn motorists of changes to the traffic patterns within the project limits. We will work through VDOT and with the Regional Traffic Operations Center (TOC) to control the PCMS boards, as well as notify 511 Virginia and possible local radio and television stations. The TMP strategies will be coordinated with other VDOT projects along the I-95 corridor as well as within the local vicinity surrounding the project site to ensure a smooth transition into the various work-zones.

We will work with our team members and stakeholders to implement an incident management plan that is informative and responsive, while making reasonable accommodation for unforeseen project risk.

Our team’s approach will involve ensuring that work operations are shut down on the interstate 30 minutes prior to peak traffic hours. We will monitor the construction to ensure that complicated operations are assessed prior to the shut-down periods so they do not extend beyond the allowable work hours. Based on our experiences with past bridge replacement projects, we are aware that this can sometimes be challenging as field and other external conditions sometimes cause unforeseen delays. However, we will utilize “lessons learned methodologies” to continually monitor field conditions as construction work is being performed.

**Role of VDOT and Other Agencies in Addressing Risk:** During the development of the TTC and TMP documents, we anticipate VDOT will: review and approve plans; access and approve our methods of safely switching traffic onto the temporary and permanent roadways; and be a part of the public outreach processes and work with our public involvement coordinator as the TMP/MOT plans are developed and advanced into construction.