Response to Request for Qualifications

I-64/Route 15 (Zion Crossroads) Interchange Improvement

A Design-Build Project

From: 0.30 Mi. W. Int. Rte.15 (1-64 EB & WB)
To: 0.35 Mi E. Rte. 15 (I-64 EB & WB)

Louisa County, Virginia

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

Submitted To: VDOT
Submitted By: SHIRLEY CONTRACTING COMPANY, LLC
In Association With: Dewberry
Offerors shall furnish a copy of this Statement of Qualifications (SOQ) Checklist, with the page references added, with the Statement of Qualifications.

<table>
<thead>
<tr>
<th>Statement of Qualifications Component</th>
<th>Form (if any)</th>
<th>RFQ Cross reference</th>
<th>Included within 20-page limit?</th>
<th>SOQ Page Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statement of Qualifications Checklist and Contents</td>
<td>Attachment 3.1.2</td>
<td>Section 3.1.2</td>
<td>no</td>
<td>i</td>
</tr>
<tr>
<td>Acknowledgement of RFQ, Revision and/or Addenda</td>
<td>Attachment 2.10</td>
<td>Section 2.10</td>
<td>no</td>
<td>iv</td>
</tr>
<tr>
<td>Letter of Submittal (on Offeror’s letterhead)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Offeror’s point of contact information</td>
<td>NA</td>
<td>Section 3.2.1</td>
<td>yes</td>
<td>1</td>
</tr>
<tr>
<td>Authorized Representative’s signature</td>
<td>NA</td>
<td>Section 3.2.1</td>
<td>yes</td>
<td>4</td>
</tr>
<tr>
<td>Principal officer information</td>
<td>NA</td>
<td>Section 3.2.2</td>
<td>yes</td>
<td>1</td>
</tr>
<tr>
<td>Offeror’s Corporate Structure</td>
<td>NA</td>
<td>Section 3.2.3</td>
<td>yes</td>
<td>1</td>
</tr>
<tr>
<td>Affiliated/subsidiary companies</td>
<td>NA</td>
<td>Section 3.2.4</td>
<td>yes</td>
<td>1-2</td>
</tr>
<tr>
<td>Debarment forms</td>
<td>Attachment 3.2.5(a)</td>
<td>Section 3.2.5</td>
<td>no</td>
<td>Included in 3.2</td>
</tr>
<tr>
<td>Offeror’s VDOT prequalification evidence</td>
<td>NA</td>
<td>Section 3.2.6</td>
<td>no</td>
<td>Included in 3.2</td>
</tr>
<tr>
<td>Evidence of obtaining bonding</td>
<td>NA</td>
<td>Section 3.2.7</td>
<td>yes</td>
<td>5-7</td>
</tr>
<tr>
<td>Professional Services Evidence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full size copies of SCC and DPOR registration documentation (appendix)</td>
<td>NA</td>
<td>Section 3.2.8</td>
<td>no</td>
<td>Included in 3.2</td>
</tr>
<tr>
<td>SCC Registration</td>
<td>NA</td>
<td>Section 3.2.8.1</td>
<td>yes</td>
<td>2-3</td>
</tr>
<tr>
<td>DPOR Registration (Offices)</td>
<td>NA</td>
<td>Section 3.2.8.2</td>
<td>yes</td>
<td>3</td>
</tr>
<tr>
<td>DPOR Registration (Key Personnel)</td>
<td>NA</td>
<td>Section 3.2.8.3</td>
<td>yes</td>
<td>3</td>
</tr>
<tr>
<td>Statement of Qualifications Component</td>
<td>Form (if any)</td>
<td>RFQ Cross reference</td>
<td>Included within 20-page limit?</td>
<td>SOQ Page Reference</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>--------------</td>
<td>---------------------</td>
<td>-------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>DPOR Registration (Non-APELSCIDLA)</td>
<td>NA</td>
<td>Section 3.2.8.4</td>
<td>yes</td>
<td>3</td>
</tr>
<tr>
<td><strong>DBE statement within Letter of Submittal</strong> confirming Offeror is committed to achieving the required DBE goal</td>
<td>NA</td>
<td>Section 3.2.9</td>
<td>yes</td>
<td>4</td>
</tr>
<tr>
<td><strong>Offeror's Team Structure</strong></td>
<td></td>
<td></td>
<td></td>
<td>8-12</td>
</tr>
<tr>
<td>Identity of and qualifications of Key Personnel</td>
<td>NA</td>
<td>Section 3.3.1</td>
<td>yes</td>
<td>8-12</td>
</tr>
<tr>
<td>Key Personnel Resume – DB Project Manager</td>
<td>Attachment 3.3.1</td>
<td>Section 3.3.1.1</td>
<td>no</td>
<td>Included in 3.3</td>
</tr>
<tr>
<td>Key Personnel Resume – Quality Assurance Manager</td>
<td>Attachment 3.3.1</td>
<td>Section 3.3.1.2</td>
<td>no</td>
<td>Included in 3.3</td>
</tr>
<tr>
<td>Key Personnel Resume – Design Manager</td>
<td>Attachment 3.3.1</td>
<td>Section 3.3.1.3</td>
<td>no</td>
<td>Included in 3.3</td>
</tr>
<tr>
<td>Key Personnel Resume – Construction Manager</td>
<td>Attachment 3.3.1</td>
<td>Section 3.3.1.4</td>
<td>no</td>
<td>Included in 3.3</td>
</tr>
<tr>
<td>Key Personnel Resume – Public Relations Manager</td>
<td>Attachment 3.3.1</td>
<td>Section 3.3.1.5</td>
<td>no</td>
<td>Included in 3.3</td>
</tr>
<tr>
<td>Organizational chart</td>
<td>NA</td>
<td>Section 3.3.2</td>
<td>yes</td>
<td>11</td>
</tr>
<tr>
<td>Organizational chart narrative</td>
<td>NA</td>
<td>Section 3.3.2</td>
<td>yes</td>
<td>11-12</td>
</tr>
<tr>
<td><strong>Experience of Offeror's Team</strong></td>
<td></td>
<td></td>
<td></td>
<td>13-15</td>
</tr>
<tr>
<td>Lead Contractor Work History Form</td>
<td>Attachment 3.4.1(a)</td>
<td>Section 3.4</td>
<td>no</td>
<td>Included in 3.4</td>
</tr>
<tr>
<td>Lead Designer Work History Form</td>
<td>Attachment 3.4.1(b)</td>
<td>Section 3.4</td>
<td>no</td>
<td>Included in 3.4</td>
</tr>
<tr>
<td><strong>Project Risk</strong></td>
<td></td>
<td></td>
<td></td>
<td>16-20</td>
</tr>
<tr>
<td>Identify and discuss three critical risks for the Project</td>
<td>NA</td>
<td>Section 3.5.1</td>
<td>yes</td>
<td>16-20</td>
</tr>
</tbody>
</table>
ATTACHMENT 2.10

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

RFQ NO. C00086453DB48
PROJECT NO.: 0064-054-703, P101, R201 & C501

ACKNOWLEDGEMENT OF RFQ, REVISION AND/OR ADDENDA

Acknowledgement shall be made of receipt of the Request for Qualifications (RFQ) and/or any and all revisions and/or addenda pertaining to the above designated project which are issued by the Department prior to the Statement of Qualifications (SOQ) submission date shown herein. Failure to include this acknowledgement in the SOQ may result in the rejection of your SOQ.

By signing this Attachment 2.10, the Offeror acknowledges receipt of the RFQ and/or following revisions and/or addenda to the RFQ for the above designated project which were issued under cover letter(s) of the date(s) shown hereon:

1. Cover letter of RFQ 12/06/11 (Date)
2. Cover letter of ________________________________ (Date)
3. Cover letter of ________________________________ (Date)

__________________________________________
SIGNATURE

February 2, 2012
DATE
February 3, 2012

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

RE:  I-64/Route 15 (Zion Crossroads) Interchange Improvement
     From 0.30 Ml. W. Int. Rte. 15 (I-64 EB & WB) To 0.35 Ml. E. Rte. 15 (I-64 EB & WB)
     Louisa County, Virginia. Contract ID Number C0086453DB48
     Letter of Submittal 3.2

Dear Mr. Millikan:

Shirley Contracting Company, LLC (Shirley), as the Offeror, is pleased to submit to the Virginia Department of Transportation (VDOT) our Letter of Submittal in response to your Request for Qualifications for the I-64/Route 15 (Zion Crossroads) Interchange Improvement Design-Build Project (the Project). For this pursuit, we have assembled a Team with experience and expertise that is unparalleled in the industry to assure VDOT that the Project will exceed all expectations.

Our point of contact for this Project will be: The principal officer with whom the contract will be executed on behalf of Shirley
Mr. Garry A. Palleschi Contracting Company, LLC will be:
Vice President Mr. Michael E. Post
Shirley Contracting Company, LLC President/CEO
8435 Backlick Road Shirley Contracting Company, LLC
Lorton, Virginia 22079 8435 Backlick Road
(P) 703-550-8100 (F) 703-550-7899 Lorton, Virginia 22079
gpalleschi@shirleycontracting.com (P) 703-550-8100 (F) 703-550-7899
mpost@shirleycontracting.com

Shirley Contracting Company, LLC, a limited liability company, will be the legal entity, will have financial responsibility for the Project and will have joint and several liability for the performance of the work. There are no liability limitations. Our bonding approach will be to provide performance and payment bonds for the total contract value and time period.

Names and detailed addresses of all affiliated and subsidiary companies:

<table>
<thead>
<tr>
<th>Atkinson Construction (Affiliate)</th>
<th>Atkinson Contractors, LP (Affiliate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7500 Old Georgetown Road, Bethesda, MD 20814</td>
<td>7500 Old Georgetown Road, Bethesda, MD 20814</td>
</tr>
<tr>
<td>Shirley Design/Build, LLC (Affiliate)</td>
<td>SCC Infrastructure (Affiliate)</td>
</tr>
<tr>
<td>8435 Backlick Road, Lorton, Virginia 22079</td>
<td>7500 Old Georgetown Road, Bethesda, MD 20814</td>
</tr>
</tbody>
</table>
Signed Certification Regarding Debarment Forms for Primary and Lower Tiered Covered Transactions are included as an attachment.

Shirley Contracting Company, LLC is currently Prequalified with VDOT. Our Vendor Number is **S018**. A screen shot print out from VDOT’s on-line Prequalified List is attached.

Also attached is a letter from our surety that provides evidence that we are 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.

**State Corporation Commission Registration Numbers for firms providing Professional Services:**

<table>
<thead>
<tr>
<th>Firm</th>
<th>Registration No.</th>
<th>Type of Corp.</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dewberry &amp; Davis, LLC</td>
<td>044733</td>
<td>Limited Liability Company</td>
<td>Active</td>
</tr>
<tr>
<td>Dewberry &amp; Davis, Inc.</td>
<td>1284860</td>
<td>Corporation</td>
<td>Active</td>
</tr>
<tr>
<td>GeoConcepts Engineering, Inc.</td>
<td>0516767</td>
<td>Corporation</td>
<td>Active</td>
</tr>
</tbody>
</table>
Diversified Property Services of Virginia, Inc. 130410 Corporation Active
Old Dominion Settlements, Inc (Key Title) 0243891 Corporation Active
Froehling & Robertson, Inc. 0027211 Corporation Active
Pulsar Advertising, Inc. 160855 Corporation Active
EBA Engineering, Inc. 123900 Corporation Active

Copies of screen shots from the State Corporation Commission website detailing each firm's registration information are included as an attachment.

Commonwealth of Virginia Department of Professional and Occupational Regulation Registration Information for Firms Providing Professional Services:

<table>
<thead>
<tr>
<th>Business Name/Address</th>
<th>Type</th>
<th>DPOR Registration</th>
<th>Expiration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dewberry &amp; Davis, LLC</td>
<td>Business Entity</td>
<td>0407003966</td>
<td>Dec. 31, 2013</td>
</tr>
<tr>
<td>8401 Arlington Boulevard Fairfax, VA 22031</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4180 Innslake Drive Glen Allen, VA 23060</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19955 Highland Vista Drive Suite 170 Ashburn, VA 20147</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diversified Property Services of Virginia, Inc</td>
<td>Real Estate Appraiser Business</td>
<td>4008001190</td>
<td>Nov. 30, 2012</td>
</tr>
<tr>
<td>20 E Timonium Road, Suite 111 Timonium, MD 21093</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Froehling &amp; Robertson, Inc.</td>
<td>Business Entity Branch Office</td>
<td>0411000052</td>
<td>February 29, 2012</td>
</tr>
<tr>
<td>6181 Rockfish Gap Turnpike Crozet, VA 22932</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>714 Westwood office park Fredericksburg, VA 22401</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Commonwealth of Virginia Department of Professional and Occupational Regulation Registration Information for Key Personnel Providing Professional Services:

<table>
<thead>
<tr>
<th>Key Personnel</th>
<th>Type</th>
<th>DPOR Registration</th>
<th>Office Location</th>
<th>Expiration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dave Mahoney P.E.</td>
<td>Professional Engineer</td>
<td>020798</td>
<td>Dewberry &amp; Davis 8401 Arlington Blvd Fairfax, VA 22031</td>
<td>Dec. 31, 2013</td>
</tr>
<tr>
<td>14253 Stone Chase Way Centerville, VA 20121</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>George P. Romack P.E.</td>
<td>Professional Engineer</td>
<td>041824</td>
<td>EBA Engineering, Inc 287 Shingle Oak Lane Nellysford, VA. 22958</td>
<td>Feb. 29, 2012</td>
</tr>
<tr>
<td>96 Hamlin Drive Fredericksburg, VA 22405</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Finally, I am providing the following statement demonstrating our commitment to the Project’s DBE goals:
I personally commit to VDOT that the Shirley Team will achieve a DBE participation goal of 17% through design and construction activities.

Daniel E. Clymore  
Vice President  
Shirley Contracting Company, LLC

On behalf of our Team, we thank the Virginia Department of Transportation for the opportunity to submit this SOQ to the Request for Qualifications and we look forward to your review of our submittal.

Sincerely,

Daniel E. Clymore  
Vice President  
Shirley Contracting Company, LLC

Attachments:  
SCC Registrations  
DPOR Registrations  
Evidence of Prequalification  
Surety Letter
ATTACHMENT NO. 3.2.5(a)

CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS

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

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

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

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

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

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

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

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

February 2, 2012

President/CEO

Signature

February 2, 2012

Date

Title

Shirley Contracting Company, LLC

Name of Firm
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

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

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

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

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

[Signature] 27/27/2012
Date

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

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

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

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

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

Signature  Date  Title

1/27/2012  Assistant Secretary

Dewberry & Davis, Inc.

Name of Firm
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

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

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

[Signature] 1/25/12  President
[Date]  Title

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

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

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

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

[Signature] 1/24/2012 [Date]

Diversified Property Services, Inc.

Name of Firm

[Title]
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

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

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

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

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

[Signature] 1-24-12 [Title]

[Name of Firm] T/A [Key Title]
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

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

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

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

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

[Signature] 01/27/12 First Executive Vice President
Name: [Name]

EBA Engineering, Inc.

Name of Firm
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

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

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

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

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

Signature: ___________________________ Date: 1/20/2012

Title: ___________________________

Name of Firm: Frommelt & Robertson, Inc.
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

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

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

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

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

Signature  1/23/12  Principal/Regional Director
Date       Title

Pulsar Advertising, Inc.

Name of Firm
S1060
SHEPAUL ENTERPRISES, INC.
PREQ. EXP : 09/30/2012

-- PREQ ADDRESS ------------------ -- WORK CLASSES ------------------
P. O. BOX 1638 020 - FENCE
BECKLEY, WV 25802-1638 021 - GUARDRAIL
PHONE : 304-877-6451 023 - S.I.P. FORM & REINFORCED STEEL PLA
FAX : 304-877-5789

BUSINESS CONTACT: HAPUARACHY, SUMITH PETER
EMAIL: SH1912BECK@AOL.COM

-----DBE INFORMATION-----
DBE TYPE : DBE
DBE CONTACT: N/A
DBE/WBE EXP: 05/01/2003

S018
SHIRLEY CONTRACTING COMPANY, LLC
PREQ. EXP : 09/30/2012

-- PREQ ADDRESS ------------------ -- WORK CLASSES ------------------
8435 BACKLICK RD. 002 - GRADING
LORTON, VA 22079-1403 003 - MAJOR STRUCTURES
PHONE : 703-550-8100 007 - MINOR STRUCTURES
FAX : 703-550-7897 045 - UNDERGROUND UTILITIES

BUSINESS CONTACT: CLYMORE, DANIEL EDWARD
EMAIL: DCLYMORE@SHIRLEYCONTRACTING.COM

-----DBE INFORMATION-----
DBE TYPE : N/A
DBE CONTACT: N/A
DBE/WBE EXP: N/A
February 2, 2012

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

Re: Request for Qualifications - Contract ID Number: C00086453DB48 - A Design-Build Project
I-64/Route 15 (Zion Crossroads) Interchange Improvement
From: 0.30 Mi. W. Int. Rte. 15 (I-64 EB & WB) To: 0.35 Mi. E. Rte. 15 (I-64 EB & WB)
Current Estimated Contract Value: $7.5 million

Dear Mr. Millikan:

Travelers Casualty and Surety Company of America (A.M. Best Financial Strength Rating A+, Financial Size Category XV) and their co-surety partners, have the privilege of providing surety bonds for Shirley Contracting Company, LLC. The available bonding capacity on individual projects is in excess of $150,000,000 with an aggregate of $3,500,000,000.

In our opinion, Shirley is one of the finest, best managed construction firms in the country. Shirley has handled each of its projects in a professional manner and completed all satisfactorily.

As sureties for the above named Contractor, Shirley Contracting Company, LLC, is capable of obtaining 100% Performance Bond and 100% Labor and Materials Payment Bond in the amount of the anticipated cost of construction, and said bonds will cover the project and any warranty periods on behalf of the Contractor, in the event that such firm be the successful bidder and enter into a contract for this project, subject to acceptable review of the contract documents and bond forms, financing, availability of reinsurance, and Shirley Contracting Company, LLC continuing to satisfy other underwriting considerations at the time the bonds are requested.

This letter is not an assumption of liability and is issued only as a prequalification reference from our client.

Sincerely,

Travelers Casualty and Surety Company of America
A.M. Best Rating A+ XV

By:  
Karen C. Bowling, Attorney-in-Fact
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. 219657
Certificate No. 004596638

KNOW ALL MEN BY THESE PRESENTS: That St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company and St. Paul Mercury Insurance Company are corporations duly organized under the laws of the State of Minnesota, that Farmington Casualty Company, Travelers Casualty and Surety Company, and Travelers Casualty and Surety Company of America are corporations duly organized under the laws of the State of Connecticut, that United States Fidelity and Guaranty Company is a corporation duly organized under the laws of the State of Maryland, 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

Diana L. Parker, and Karen C. Bowling

of the City of Columbia, State of Maryland, 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 19th day of October, 2011.

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

State of Connecticut
City of Hartford ss.

By: George W. Thompson, Senior Vice President

On this the 19th day of October, 2011, before me personally appeared George W. Thompson, 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.

Marie C. Theriault, Notary Public

58440-6-11 Printed in U.S.A.

WARNING: THIS POWER OF ATTORNEY IS INVALID WITHOUT THE RED BORDER
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 attestive 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 hereunto set my hand and affixed the seals of said Companies this ___ day of ___, 2010.

[Signature]

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.
LLCM3220 LLC DATA INQUIRY

LLC ID: S082038  3  STATUS: 00 ACTIVE  STATUS DATE: 08/01/02
LLC NAME: Shirley Contracting Company, LLC

DATE OF FILING: 08/01/2002  PERIOD OF DURATION:  INDUSTRY CODE: 00
STATE OF FILING: VA VIRGINIA  MERGER INDICATOR:
CONVERSION/DOMESTICATION INDICATOR: Y
PRINCIPAL OFFICE ADDRESS
STREET: 8435 BACKLICK RD

CITY: LORTON  STATE: VA  ZIP: 22079-0000
REGISTERED AGENT INFORMATION
R/A NAME: CT CORPORATION SYSTEM
STREET: 4701 COX RD STE 301  RTN MAIL:
CITY: GLEN ALLEN  STATE: VA  ZIP: 23060-6802
R/A STATUS: 5 ENTITY AUTHORIZ  EFF DATE: 03/02/04 LOC: 143 HENRICO COUNTY
YEAR FEES PENALTY INTEREST BALANCE
11 50.00

(Screen Id:/LLC_Data_Inquiry)
LLCM3220

LLC DATA INQUIRY

LLC ID: S044733 - 6  STATUS: 00 ACTIVE  STATUS DATE: 10/14/09
LLC NAME: DEWBERRY & DAVIS LLC

DATE OF FILING: 01/01/2000  PERIOD OF DURATION:  INDUSTRY CODE: 0.0
STATE OF FILING: VA VIRGINIA  MERGER INDICATOR:
CONVERSION/DOMESTICATION INDICATOR:
PRINCIPAL OFFICE ADDRESS
STREET: 8401 ARLINGTON BLVD
CITY: FAIRFAX  STATE: VA ZIP: 22031-0000
REGISTERED AGENT INFORMATION
R/A NAME: CORPORATION SERVICE COMPANY
STREET: Bank of America Center, 16th Floor
1111 East Main Street  RIN MAIL:
CITY: RICHMOND  STATE: VA ZIP: 23219-0000
R/A STATUS: 5 ENTITY AUTHORIZ EFF DATE: 04/29/11 LOC: 216 RICHMOND CITY
YEAR FEES PENALTY INTEREST BALANCE
12 50.00

(Screen Id:/LLC_Data_Inquiry)
CISM0180 CORPORATE DATA INQUIRY

CORP ID: F128486 - 0 STATUS: 00 ACTIVE STATUS DATE: 02/26/97
CORP NAME: DEWBERRY & DAVIS, INC.

DATE OF CERTIFICATE: 02/26/1997 PERIOD OF DURATION: INDUSTRY CODE: 73
STATE OF INCORPORATION: NC NORTH CAROLINA STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: 50.00 MON NO:
MON STATUS: MONITOR DTE:
R/A NAME: CORPORATION SERVICE COMPANY

STREET: Bank of America Center, 16th Floor AR KIN MAIL:
1111 East Main Street
CITY: RICHMOND STATE: VA ZIP: 23219
R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 04/29/11 LOC: 216
ACCEPTED AR#: 211 50 2046 DATE: 01/21/11 RICHMOND CITY
CURRENT AR#: 211 50 2046 DATE: 01/21/11 STATUS: A ASSESSMENT INDICATOR: 0

YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
12 100.00 100.00 1,000

(Screen Id:/Corp_Data_Inquiry)
CISMO180 CORPORATE DATA INQUIRY

CORP ID: 0516767 - 1 STATUS: 00 ACTIVE STATUS DATE: 02/25/99

CORP NAME: GEOCONCEPTS ENGINEERING, INC.

DATE OF CERTIFICATE: 02/25/1999 PERIOD OF DURATION: INDUSTRY CODE: 00
STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: 50.00 MON NO: MON STATUS: MONITOR DTE:
R/A NAME: VIVIAN LEWIS GEOCONCEPTS ENGINEERING INC
STREET: 19955 HIGHLAND VISTA DR #170 AR RTN MAIL:

CITY: ASHBURN STATE: VA ZIP: 20147
R/A STATUS: 2 OFFICER EFF. DATE: 11/24/04 LOC: 153
ACCEPTED AR#: 212 01 8189 DATE: 01/05/12 LOUDOUN COUNTY
CURRENT AR#: 212 01 8189 DATE: 01/05/12 STATUS: A ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
12 100.00

(Screen Id:/Corp_Data_Inquiry)
| STREET:     | 3771 VERCAMACHIA DR |
| CITY:      | CHANTILLY          |
| STATE:     | VA                |
| ZIP:       | 20151             |

| R/A NAME: | BRENDAN R HANTZES |
| STREET:   | 3771 VERMACCHIA DR |
| CITY:     | CHANTILLY         |
| STATE:    | VA                |
| ZIP:      | 20151             |

| CORP ID:       | P130410 - 6       |
| STATUS:        | 00 ACTIVE         |
| STATUS DATE:   | 07/01/09          |
| CORP NAME:     | DIVERSIFIED PROPERTY SERVICES OF VIRGINIA, INC. (U) |
| SED IN VA BY:  | DIVERSIFIED PROPERTY SERVICES, INC. |
| DATE OF CERTIFICATE: | 08/05/1997 |
| PERIOD OF DURATION: |  |
| INDUSTRY CODE:  | 00 |
| STATE OF INCORPORATION: | MD MARYLAND |
| STOCK INDICATOR: | S STOCK |
| MERGER IND:      | CONVERSION/DOMESTICATION IND: |
| GOOD STANDING IND: | Y |
| MONITOR INDICATOR: | |
| CHARTER FEE:    | 50.00 |
| MON NO:         | |
| MON STATUS:     | |
| R/A STATUS:     | 2 OFFICER |
| EFF. DATE:      | 08/09/02 |
| LOC:            | 129 |
| ACCEPTED AR#:   | 211 14 4054 |
| DATE:           | 08/08/11 |
| FAIRFAX COUNTY: | |
| CURRENT AR#:    | 211 14 4054 |
| DATE:           | 08/08/11 |
| STATUS: A ASSESSMENT INDICATOR: | 0 |
| YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES |
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<td>R/A NAME:</td>
<td>RONALD H. LAZARUS</td>
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CISM0180

CORPORATE DATA INQUIRY

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

DATE OF CERTIFICATE: 10/11/1924 PERIOD OF DURATION: INDUSTRY CODE: 00
STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: 2480.00 MON NO: MON STATUS: MONITOR DTE:
R/A NAME: WILLIAM H HOOFNAGLE III

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

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<td>PULSAR ADVERTISING, INC.</td>
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<td><strong>STREET:</strong></td>
<td>4701 COX RD STE 301</td>
<td><strong>AR RTN MAIL:</strong></td>
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<tr>
<td><strong>CITY:</strong></td>
<td>GLEN ALLEN</td>
<td><strong>STATE:</strong> VA</td>
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CISM0180  CORPORATE DATA INQUIRY

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

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

STREET: 4701 COX RD STE 301 AR RTN MAIL:

CITY: GLEN ALLEN STATE: VA ZIP: 23060 6802
R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 01/05/04 LOC: 143
ACCEPTED AR#: 211 52 2819 DATE: 09/28/11 HENRICO COUNTY
CURRENT AR#: 211 52 2819 DATE: 09/28/11 STATUS: ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
11 1,700.00 1,000,000

(Screen Id:/Corp_Data_Inquiry)
APELSCIDLA Business License

APELSCIDLA Business License

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<tr>
<th>BUSINESS NAME:</th>
<th>DEWBERRY &amp; DAVIS LLC</th>
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<td>TRADING NAME:</td>
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</tr>
<tr>
<td>ADDRESS:</td>
<td>8401 ARLINGTON BLVD</td>
</tr>
<tr>
<td></td>
<td>FAIRFAX, VA 22031-0000</td>
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<td>REGISTRATION NO:</td>
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<td>MARCH 14, 2000</td>
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<td>EXPIRATION DATE:</td>
<td>DECEMBER 31, 2013</td>
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For the professions offered by this office, please see below.

**Open Complaints: None**

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

**State law prohibits the disclosure of any information about open complaints** [Code of Virginia Section 54.1-108]. Members of the public may review official records and obtain copies only after a complaint investigation is closed.

**Closed Complaints: None**

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

To inquire about any disciplinary actions prior to 1990, contact the department's Public Records Section at (804) 367-8583 or RecordsMgt@dpor.virginia.gov.
Associated Professional Licensing Information

(A firm may only offer and/or practice those professional services for which it has licensed/certified professionals associated with the firm.)

| NAME:          | COUTURE, DENNIS M                      |
| CITY, STATE:   | VIENNA, VA                            |
| OCCUPATION:    | LANDSCAPE ARCHITECT 0406              |
| LICENSE:       | 000847                                |
| INITIAL CERTIFICATION: | MARCH 09, 1998          |
| EXPIRATION DATE:  | MARCH 31, 2012                    |

Open Complaints: None

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

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Closed Complaints: None

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

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

NAME: STONE, DONALD EDWARD JR
CITY, STATE: FAIRFAX, VA
OCCUPATION: PROFESSIONAL ENGINEER 0402
LICENSE: 026519
INITIAL CERTIFICATION: NOVEMBER 27, 1995

APELSCIDLA Business License

APELSCIDLA Business License

BUSINESS NAME: DEWBERRY & DAVIS INC
TRADING NAME: 
ADDRESS: 4180 INNSLAKE DR GLEN ALLEN, VA 23060-0000
BUSINESS TYPE: BUSENTITY BRANCH OFFICE
REGISTRATION NO: 0411000231
INITIAL CERTIFICATION DATE: MARCH 27, 2000
EXPIRATION DATE: FEBRUARY 29, 2012

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

Open Complaints: None

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

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To inquire about any disciplinary actions prior to 1990, contact the department's Public Records Section at (804) 367-8583 or RecordsMgt@dpor.virginia.gov.
Associated Professional Licensing Information

(A firm may only offer and/or practice those professional services for which it has licensed/certified professionals associated with the firm.)

| NAME:       | MAXWELL, DAVID SCOTT |
| CITY, STATE:| GLEN ALLEN, VA       |
| OCCUPATION: | PROFESSIONAL ENGINEER 0402 |
| LICENSE:    | 032880               |
| INITIAL CERTIFICATION: | JANUARY 25, 1999 |
| EXPIRATION DATE: | JANUARY 31, 2013 |

Open Complaints: None

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

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APELSCIDLA Business License

APELSCIDLA Business License

BUSINESS NAME: GEOCONCEPTS ENGINEERING INC
TRADING NAME: 
ADDRESS: 19955 HIGHLAND VISTA DRIVE
SUITE 170
ASHBURN, VA 20147-0000
BUSINESS TYPE: BUSINESS ENTITY
REGISTRATION NO: 0407004404
INITIAL CERTIFICATION DATE: MARCH 28, 2003
EXPIRATION DATE: DECEMBER 31, 2013

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

Open Complaints: None

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Associated Professional Licensing Information

(A firm may only offer and/or practice those professional services for which it has licensed/certified professionals associated with the firm.)

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<thead>
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<th>NAME:</th>
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<tr>
<td>CITY, STATE:</td>
<td>ASHBURN, VA</td>
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Open Complaints: None

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APELSCIDLA Business License

APELSCIDLA Business License

BUSINESS NAME: EBA ENGINEERING INC
TRADING NAME: 
ADDRESS: 714 WESTWOOD OFFICE PARK FREDERICKSBURG, VA 22401-0000
BUSINESS TYPE: BUS ENTITY BRANCH OFFICE
REGISTRATION NO: 041100871
INITIAL CERTIFICATION DATE: OCTOBER 17, 2011
EXPIRATION DATE: FEBRUARY 29, 2012

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

Open Complaints: None

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1/31/2012
Associated Professional Licensing Information

(A firm may only offer and/or practice those professional services for which it has licensed/certified professionals associated with the firm.)

<table>
<thead>
<tr>
<th>NAME</th>
<th>SHIRLEY, KENNETH JAMES</th>
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<td>CITY, STATE</td>
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Open Complaints: None

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Real Estate Appraiser Business

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<th>BUSINESS NAME</th>
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<tr>
<td>TRADING NAME</td>
<td></td>
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<tr>
<td>ADDRESS</td>
<td>20 E TIMONIUM ROAD SUITE 111 TIMONIUM, MD 21093-0000</td>
</tr>
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APELSCIDLA Business License

APELSCIDLA Business License

BUSINESS NAME: FROEHLING & ROBERTSON INC

TRADING NAME: 

ADDRESS: 6181 ROCKFISH GAP TURNPIKE CROZET, VA 22932-0000

BUSINESS TYPE: BUS ENTITY BRANCH OFFICE

REGISTRATION NO: 041100052

INITIAL CERTIFICATION DATE: APRIL 08, 1992

EXPIRATION DATE: FEBRUARY 29, 2012

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

Open Complaints: None

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To inquire about any disciplinary actions prior to 1990, contact the
associated professional licensing information

(A firm may only offer and/or practice those professional services for which it has licensed/certified professionals associated with the firm.)

<table>
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<tr>
<th>NAME</th>
<th>SIMMONS, CLYDE ANDERSON II</th>
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<tbody>
<tr>
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<td>EXPIRATION DATE</td>
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Open Complaints: None

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<table>
<thead>
<tr>
<th>NAME</th>
<th>PAPPAS, J L</th>
</tr>
</thead>
<tbody>
<tr>
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<td>STUARDS DRAFT, VA</td>
</tr>
<tr>
<td>OCCUPATION</td>
<td>PROFESSIONAL ENGINEER 0402</td>
</tr>
<tr>
<td>LICENSE</td>
<td>012231</td>
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</table>
APELSCIDLA Individual License

APELSCIDLA Individual License

NAME: MAHONEY, DAVID JOHN
CITY, STATE: FAIRFAX, VA
OCCUPATION: PROFESSIONAL ENGINEER
0402
LICENSE: 020798
INITIAL CERTIFICATION DATE: JANUARY 26, 1990
EXPIRATION DATE: DECEMBER 31, 2013

Open Complaints: None

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

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Note: The official record copy of the data obtained from this search is maintained by the specific board offices at the Department of Professional
APELSCIDLA Individual License

APELSCIDLA Individual License

NAME: ROMACK, GEORGE PATTON
CITY, STATE: FREDERICKSBURG, VA
OCCUPATION: PROFESSIONAL ENGINEER 0402
LICENSE: 041824
INITIAL CERTIFICATION DATE: FEBRUARY 02, 2006
EXPIRATION DATE: FEBRUARY 29, 2012

Open Complaints: None

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3.3 OFFEROR'S TEAM STRUCTURE

INTRODUCTION
Shirley Contracting Company, LLC (Shirley) has the experience and personnel to effectively manage all of the design-build elements of the I-64/Route 15 (Zion Crossroads) Project (the Project). Shirley is committing the same Team Members and Key Personnel to the Project that have been responsible for managing more than $450 million of design-build roadway and bridge projects in Northern Virginia including the Route 28 Corridor Improvements Project, Dulles Greenway Capital Improvements Project, Battlefield Parkway, and Pacific Boulevard Design-Build Projects. On each of these projects, Shirley was the Lead Contractor and Dewberry & Davis LLC was the Lead Designer. Further, each of these design-build projects have been, or will be, completed ahead of schedule, at a fixed price, and without a single claim or other outstanding issue. Moreover, because our Team members and Key Personnel have worked together on these critical design-build projects for almost 10 years now, we have developed close working relationships with each other. Having a thorough understanding of each other’s abilities allows us to efficiently manage each discipline and reduces project risk.

3.3.1 KEY PERSONNEL
Information for the following Key Personnel are included as Attachment 3.3.1 - Key Personnel Resume Forms.

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Design-Build Project Manager</strong></td>
<td>Jeffrey Austin, PE</td>
<td>Shirley Contracting Company, LLC</td>
</tr>
<tr>
<td><strong>Design Manager</strong></td>
<td>David Mahoney, PE</td>
<td>Dewberry &amp; Davis LLC</td>
</tr>
<tr>
<td><strong>Construction Manager</strong></td>
<td>Greg Johannes</td>
<td>Shirley Contracting Company, LLC</td>
</tr>
<tr>
<td><strong>Quality Assurance Manager (QAM)</strong></td>
<td>George P. Romack, PE</td>
<td>EBA Engineering, Inc.</td>
</tr>
<tr>
<td><strong>Public Relations Manager</strong></td>
<td>Jim Wright</td>
<td>Pulsar Advertising, Inc.</td>
</tr>
</tbody>
</table>

As the resumes indicate, each of the individuals we have selected for the Key Personnel roles have extensive experience in the design, construction and administration of VDOT design-build projects, as well as significant overall design and construction expertise.

Because design-build projects require a higher level of coordination and integration among the various disciplines, it is crucial that the Key Personnel of the design-build team have an extended history of working together and a clear understanding of how all the project disciplines interact. In addition to the design, construction and quality assurance/quality control aspects of a design-build project, a successful team must also integrate the right-of-way, utility, permitting, safety, third-party coordination, and public relations disciplines into a single, cohesive project. To that end, the Shirley Team is also committing two additional key managers to the Project who will play a significant role in our ability to complete the work ahead of schedule, under budget, and in a safe, quality manner with minimal resource requirements from VDOT. These additional key managers include:

**Right-of-Way Manager** - A critical service that our Team brings to the Project and VDOT is our in-house capability of managing the acquisition of the right-of-way and easements needed to clear the project for construction. While most other firms must bring in an outside consultant for right-of-way acquisition management, Shirley can provide this service and expertise in-house, eliminating any inefficiency regarding the right-of-way needs of the Project. If the needs of the Project dictate changing the order of
acquisitions, having this function in-house allows us to react quickly and maintain the goals and schedule for the Project. It also provides a much greater level of coordination between the design, utility, permitting, and construction disciplines. Our Right-of-Way Manager, Seth Bourne will be involved throughout the design stage, providing feedback and recommendations regarding minimizing property impacts, researching proffers, and keeping landowners informed. As the Project progresses through the acquisition phase, Seth will manage our VDOT prequalified consultants to complete the appraisals, appraisal reviews, title reports, offers, negotiations, certificates, and settlements.

As we progress through the design phase, we will provide continuous review of the potential impacts of the various design components and provide feedback to the Design Team in order to keep impacts to an absolute minimum. Concurrently, the impacts to and relocation of utilities will be coordinated with the right-of-way to minimize these costs as well. Available proffers will be researched and coordinated with Louisa County, and budgets will be prepared and constantly monitored. Property acquisitions will be prioritized to meet the overall Project schedule, and once right-of-way plans are approved, we will release appraisals and title reports. Offer packages will be prepared and after approval by VDOT, offers will be made to landowners and negotiations undertaken. We will handle settlements in the case of voluntary settlements, or, if one cannot be reached, we will prepare certificate of take packages for VDOT approval and acquire the property through eminent domain. After filing of certificate of take, our Team will continue to assist VDOT in reaching a settlement with the landowner.

**Utility Manager** - A design-build project as important as the I-64/Rt. 15 (Zion Crossroads) Project cannot be successful without effectively managing the utility impacts associated with the Project. Shirley is in an excellent position to expedite this work because of our experience and knowledge of the existing utilities and the potential for impacts. Our Utility Manager, Mr. Todd Kief has managed the utility relocations for nearly $450 million in design-build construction in Virginia over the last 10 years through his work on the Route 28 Corridor Improvements, Dulles Greenway Capital Improvements, Battlefield Parkway and Pacific Boulevard Projects. More importantly, his relationship with the individual utility owners will be a significant benefit to the Project. Todd’s experience on these design-build projects has enabled him to cultivate close relationships with the representatives of over 25 public and private utilities, including many of the known utilities located in the vicinity of the I-64/Route 15 Project.

Todd will be tasked with overseeing all aspects of the utility coordination process on the Project. This process starts with accurately identifying the existing utilities impacted and making contact with each utility owner. Our first priority is to review these utilities with the Design and Construction Teams to create a solution that avoids the utilities altogether. If this cannot be done, we will look at design alternatives that serve to minimize the utility relocations. If relocation is required, we will meet with each utility owner to review the impacts, determine prior rights and cost responsibility, and obtain relocation designs and cost estimates. The relocations will then be coordinated with the acquisition of right-of-way, permit approval, and construction schedule. We will then manage the utility relocation construction activities to conclusion, including coordinating with the construction activities in the field and tracking and updating the CPM schedule to ensure that the relocation work proceeds on schedule.

The keys to a successful utility relocation management on the I-64/Rt. 15 (Zion Crossroads) Project will be to have a Team that has performed this function on time and on budget on previous design-build projects and to have a Team in place that has established positive relationships with the utility companies. The Shirley Team exceeds both of these criteria.
3.3 OFFEROR’S TEAM STRUCTURE

3.3.2 ORGANIZATIONAL CHART

The Shirley Team’s Organizational Chart for the Project is described narratively and graphically below. The “chain of command” is depicted on the chart by solid lines, which represent the primary reporting relationships, and by dashed lines, which represent communication relationships, between the major project disciplines and participants.

Major Project Disciplines include:

**VDOT:** As the Owner, VDOT will maintain oversight responsibility for all aspects of the Project to ensure compliance with the Contract Documents and to take final acceptance when complete. We anticipate that VDOT will also want to be the primary liaison between certain outside third-party stakeholders and the Project Team.

*Design-Build Project Manager (Jeffrey Austin, PE):* This Key Personnel position on our Team is tasked with full and complete authority over all aspects of the Shirley Team’s responsibilities. In addition to being the primary point of contact with VDOT after award of the Project, the Design-Build Project Manager (D/B PM) has ultimate responsibility for Contract management and to coordinate and integrate the various project disciplines successfully, including design, construction, quality control, right-of-way, utilities, and safety. The D/B PM will also serve as the primary support to VDOT’s efforts to communicate with certain third-party stakeholders, and at VDOT’s discretion, can take the lead effort in communicating and
coordinating with these third parties. Mr. Austin as the Design-Build Project Manager has managed a significant number of Shirley Contracting Company’s most challenging design-build projects. He brings over 19 years of experience to the D/B Project Manager role and has delivered each of his design-build projects on time and budget.

*Design Manager (David Mahoney, PE):* Reporting to the D/B PM, this Key Personnel position has overall responsibility for management of all aspects of the design process, including roadway, structural, hydraulic, permitting, traffic, and geotechnical. In addition, the Design Manager will establish and oversee the Design QA/QC program. Of vital importance is the Design Manager’s role in integrating the various design disciplines with the Construction, Right-of-Way, Utility, and Safety elements. Mr. Mahoney is an experienced Design Manager with 28 years of experience. He has been the Design Manager on many of Dewberry’s design-build projects and has also been the Design Manager for numerous VDOT design-build projects where Shirley was the Lead Contractor.

*Right-of-Way Manager (Seth Bourne):* Reporting to the D/B PM, the Right-of-Way (ROW) Manager will manage the process to acquire all right-of-way and easements needed to construct the Project. Reporting to the ROW Manager will be the VDOT Prequalified sub-consultants performing appraisals, appraisal reviews, title reports, offers, negotiations, and settlements. The ROW Manager will facilitate communication with the affected landowners and will at all times maintain the status of the process for VDOT. The ROW Manager will coordinate closely with the Design, Utility, and Construction disciplines.

*Utility Manager (Todd Kief):* The Utility Manager plays a vital role in achieving completion of the Project on time and within budget. Reporting to the D/B PM, the Utility Manager will actively coordinate existing and proposed utilities with the Design, Right-of-Way, Safety, and Construction Managers and disciplines. He will serve as the liaison with each individual utility company to ensure that utilities are integrated into the Project. Working with the design team, the Utility Manager’s first priority is to avoid relocations. If not possible, the focus will be to minimize these relocations to the greatest extent practical. When relocations are unavoidable, he will ensure that they are coordinated with construction and completed within schedule.

Mr. Kief brings extensive experience to the Utility Manager role having managed the utility relocations on over $450 million in design-build for the Shirley team in Virginia. Todd’s relationships with numerous utility companies in the area are one of the major reasons he is able to ensure utility relocations are properly managed.

*Safety Manager (Randy Reale):* Reporting to the D/B PM, the Safety Manager will review the plans and all field activities to provide a safe environment for VDOT, the construction workers, and the traveling public. The Safety Manager will train and inform those engaged on the Project of specific safety hazards and will enforce all aspects of applicable industry safety standards, Shirley’s Corporate Safety Policy and the Project’s Health, Safety and Welfare Plan. Working closely with the Construction Manager, the Safety Manager will monitor the field activities and crews and has full and complete authority to halt or suspend any activity not in compliance with the applicable safety standards. Mr. Reale’s extensive safety training and experience will be utilized to ensure the Shirley team will deliver a safe project for everyone involved in the construction of the project as well as for the traveling public.

*Construction Manager (Greg Johannes):* Reporting to the D/B PM, this Key Personnel position has the responsibility to manage all aspects of project construction and the Quality Control process. Prior to construction commencing, the Construction Manager will facilitate all constructability reviews for each aspect of the design, work closely with the Utility Manager to plan for necessary relocations, and coordinate with the Right-of-Way Manager to prioritize and schedule the acquisition process. During
construction, he will be on site at all times, and will maintain the project schedule, coordinate with the QC Manager, Project Manager, and Superintendent to ensure all construction materials and activities are in accordance with the Contract Documents. Additionally, the Construction Manager will communicate with the Design Manager to arrange for design engineer’s review of construction activities through the witness and hold points.

*Quality Assurance Manager (George P. Romack, PE):* In this Key Personnel role the Quality Assurance Manager (QAM) reports directly to the D/B PM and is completely independent from the construction operations and QC inspections. The QAM has full responsibility for assuring that the Project is in compliance with the Contract Documents, manages all aspects of the QA program, and will direct the QA inspections by the QA inspector and independent QA testing technicians from Froehling & Robertson, Inc.. This position is unique in that the QAM has the autonomy to report findings directly to VDOT in addition to the D/B PM, and if the work is not in compliance with the Contract Documents, he has the authority to unilaterally halt or suspend the work and the responsibility to assure corrective action is taken before the work is accepted and certified for payment.

*Public Relations Manager (Jim Wright):* In this Key Personnel role the Public Relations Manager will be responsible for managing all external project communications with project stakeholders, the media, and the general public during the design and construction of the project. The proposed Diverging Diamond Interchange concept planned for this project is not a typical interchange configuration with very few in the U.S. The Public Relations Manager will have a critical role in disseminating information to the public in advance of the project completion so that drivers will be familiar with the driving procedures on this rarely seen concept. Mr. Wright brings over 38 years of experience to the Public Relations Manager role. He has extensive experience providing public relations, community outreach, and marketing on VDOT projects including the Virginia Megaprocesses, the Springfield Interchange, and the Virginia Highway Safety Corridors.

*Denotes Key Personnel*
**KEY PERSONNEL RESUME FORM**

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

**a. Name & Title:** JEFFREY S. AUSTIN, P.E., VICE PRESIDENT

**b. Project Assignment:** DESIGN-BUILD PROJECT MANAGER

**c. Name of Firm with which you are now associated:** SHIRLEY CONTRACTING COMPANY, LLC

**d. Years experience:** With this Firm 11 Years With Other Firms 8 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.):

**SHIRLEY CONTRACTING COMPANY, LLC (SHIRLEY DESIGN/BUILD, LLC) Contract Manager, September 2004 to Present**

- University Boulevard PPTA Project—March 2011–Present Design Build Project Manager responsible for managing the Shirley/Dewberry Team for this $29 million Prince William County project.
- Pacific Boulevard Design-Build Project, July 2008 to August 2010—Design Build Project Manager responsible for managing the Shirley/Dewberry Team for the $19 million VDOT project.
- Battlefield Parkway Design-Build Project, July 2007 to April 2009—Design Build Project Manager responsible for managing the Shirley/Dewberry Team for the $26.5 million VDOT project.
- Route 28 Corridor Improvements Project, September 2004 to Present—Responsible for managing the design and construction teams for portions of the $330 million PPTA project.
- Dulles Greenway Capital Improvements Program, March 2005 to December 2007—Responsible for managing the Shirley/Dewberry Team for the $71 million design-build project.

**Senior Project Manager, October 2000 to September 2004**

- Springfield Interchange Phase IV, October 2000 to September 2004—Responsible for managing the construction of the $139 million project.

**ALPHA CORPORATION Various Positions, August 1994 to October 2000**

- Prince George’s County, January 2000 to October 2000, Senior Engineer responsible for development of specifications and standards for installation, maintenance and relocation of utilities within the County’s right-of-way.
- Route 7 / Fairfax County Parkway Interchange Project, March 1998 to December 1999, Senior Inspector and Office Engineer responsible for quality assurance and quality control.
- Route 58 over Hardy Creek and Route 58 over Cave Fork, January 1998 to March 1998, Engineer for design of two bridges.
- Route 7 and Route 15 Interchange Project, June 1996 to January 1998, Office Engineer for quality assurance and quality control.
- Cascades Parkway Widening Project from Route 625 to Nokes Boulevard, February 1996 to February 1997, Senior Inspector for quality assurance and quality control.
- Maryland State Highway Administration, November 1995 to February 1996, Scheduling and claims review for two MDSHA highway construction projects.
- Various Clients, August 1994 to December 1994, Engineer for the design of cofferdams, excavation support systems, crane supports, grade beams, and deck slabs.

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

**VIRGINIA POLYTECHNIC INSTITUTE, BLACKSBURG, VA / BS / 1992 / CIVIL ENGINEERING**

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

1999 / PROFESSIONAL ENGINEER / 0402 033555

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

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

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

**1. UNIVERSITY BOULEVARD PPTA PROJECT**

Shirley Design/Build, LLC, Design-Build Project Manager, March 2011 – Present

Mr. Austin is responsible for management and direction of the discipline managers for the overall design-build process including design, permitting, utility relocations, right-of-way acquisition, quality assurance & quality control, and construction for this $29 million design-build PPTA project for Prince William County. The project elements include construction of University Boulevard between Sudley Manor Drive and Hornbaker Road as a six-lane divided urban roadway including two bridges. Mr. Austin is also overseeing another element of the project which is the upgrading of 7,000 L.F. of Hornbaker Road to a four-lane divided roadway.
Mr. Austin is the main point of contact for the Shirley/Dewberry Team and is responsible for communication and coordination with Prince William County, VDOT, permitting agencies, impacted property owners, and other stakeholders on the project. He developed the CPM schedule and continues to monitor progress on the project.

**Owner Contact:** Prince William County 5 County Complex Court, Prince William, VA 22192, Mr. Khattab O. Shammout, PE, (703)792-6826

### 2. Pacific Boulevard Design-Build Project

Shirley Design/Build, LLC, Design-Build Project Manager, July 2008 – August 2010

Mr. Austin was responsible for management and direction of the discipline managers for the overall design-build process including design, permitting, utility relocations, right-of-way acquisition, quality assurance & quality control, and construction for this $19 million design-build project which extends from Auto World Drive to Severn Way in Loudoun County, Virginia. Mr. Austin is the main point of contact for the Shirley/Dewberry Team and is responsible for communication and coordination with the VDOT, permitting agencies, impacted property owners, and other stakeholders on the project. He developed the CPM schedule and continues to monitor progress on the project, which was completed on schedule in August 2010. In cooperation with VDOT, Mr. Austin coordinated with the Eugenia Investments, the primary property owner impacted by the Project, and the Design Team to prepare exhibits and cost estimates and ultimately revise the Project’s design the incorporate improved entrance features for the property. As a result of this partnering effort, Eugenia Investments agreed to dedicate the right-of-way at no cost, saving VDOT over $3 million and facilitating the early start of construction activities.

**Owner Contact:** VDOT Northern Virginia District, 4975 Alliance Drive, Fairfax, VA 22030, Ms. Susan Shaw, PE, (703)259-1995

### 3. Battlefield Parkway Design-Build Project

Shirley Design/Build, LLC, Design-Build Project Manager, July 2007 – April 2009

As the Design-Build Project Manager for the Shirley/Dewberry Team, Mr. Austin was responsible for contract administration and management of the overall design-build process including design, permitting, utility relocations, right-of-way acquisition, quality assurance & quality control, and construction for the $26.5 million design-build project to extend Battlefield Parkway from Kinkaid Boulevard to Route 7 in Leesburg, Virginia. He was also the point of contact for communication and coordination with VDOT, the Town of Leesburg, permitting agencies, impacted property owners, and local communities on the project. Mr. Austin developed the CPM schedule for the project. The project was completed on schedule April 2009.

**Owner Contact:** VDOT Northern Virginia District, 4975 Alliance Drive, Fairfax, VA 22030, Ms. Susan Shaw, PE, (703)259-1995

### 4. Dulles Greenway Capital Improvements Program


Mr. Austin was responsible for overall contract administration for the $71 million Design-Build project which included widening the mainline roadway from four to six lanes, expansion of the mainline toll plaza, improvements to the existing Greenway interchange at Route 606, and new interchanges at Routes 653 and Route 654. He managed and integrated the individual design-build disciplines of the Shirley/Dewberry Team including design, permitting, utility relocations, and construction to ensure constructability and eliminate conflicts. Mr. Austin was the main point of contact for the communication and coordination with the Owner, VDOT, the Town of Leesburg, MWAA, permitting agencies, and other stakeholders on the Project. He developed the CPM schedule and monitored project controls for the duration of the contract to ensure on-time project completion. As a result of the Design-Build Team’s excellent performance through the first eighteen months of the three year project, Mr. Austin was able to negotiate the addition of the Greenway / Route 772 Interchange to the project. With Mr. Austin’s leadership, the D/B Team was able to complete the design, permitting, utility relocations, and construction of this added project in just 16 months and to complete the entire project by the original completion date of December 2007. In recognition of the success of this project, Mr. Austin was part of the design-build team that received the Design-Build Institute of America (DBIA) 2008 Regional Design-Build Excellence Award.

**Owner Contact:** Toll Road Investors Partnership L.P., 45305 Catalina Court, Suite 102, Sterling VA 20166, E. Tom Sines (703) 707-9096

### 5. Centreville Road Widening Project


Mr. Austin was Contract Manager responsible for leading the Shirley/Dewberry Team through all phases of the Design-Build process including design, permitting, ROW acquisition, and utility relocations and coordinating the design and construction with VDOT, local land owners, developers, and the Fairfax County Department of Transportation and Board of Supervisors for the Centreville Road Widening Project. Shirley Contracting was awarded a $26 million change order to design and construct the Centreville Road Widening Project as part of the Route 28 Corridor Improvements Project. Mr. Austin as Contract Manager, along with Mr. Todd Kiefer as Utility Manager, and Dewberry as Lead Designer, coordinated the relocation of, or designed around, numerous utilities located within the project limits including 10,000 feet of aerial Dominion Power and Verizon lines, a 48” FCWA waterline, and numerous fiber optic, gas and other utilities.

**Owner Contact:** VDOT Northern Virginia District, 4975 Alliance Drive, Fairfax, VA 22030, Ms. Susan Shaw, PE, (703)259-1995
**Brief Resume of Key Personnel anticipated for the Project.**

<table>
<thead>
<tr>
<th>a. Name &amp; Title:</th>
<th>GEORGE P. ROMACK, PE, SENIOR CONSTRUCTION MANAGER</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Project Assignment:</td>
<td>QUALITY ASSURANCE MANAGER</td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated:</td>
<td>EBA ENGINEERING, INC.</td>
</tr>
<tr>
<td>d. Years experience: With this Firm</td>
<td>1</td>
</tr>
</tbody>
</table>

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

**EBA ENGINEERING, INC.** Senior Construction Manager August 2010-Present
- Responsible for pursuit of construction, engineering and inspection contracts and providing construction engineering/management services as needed.

**VIRGINIA DEPARTMENT OF TRANSPORTATION** Various Positions 2004-2010 and also 1970-1974
- VDOT, Fredericksburg District Construction Engineer-October 2006-May 2010. Responsible for managing the district materials laboratory and contract administration program of maintenance and construction funded road and bridge contracts.
- VDOT, Fredericksburg Area Construction Engineer- January 2004-October 2006. Responsible for providing direct engineering management of one third of the district’s contract administration program of maintenance and construction funded road and bridge contracts, interpreting contract specifications, resolving disputes, notice of intents, claims, reviewing CPM schedules and adhering to quality control and quality assurance protocol.
- Virginia Department of Transportation Bridge Designer-1970-1974 providing design services related to bridges and special culverts.

**FEDERAL HIGHWAY ADMINISTRATION** Various Positions 1974-2004
- Federal Highway Administration (FHWA), Senior Engineer/Program Manager-1993-2004. Responsible for leading the federal bridge and tunnel management program nationwide, establishing standards of practice for inventory and maintenance activities associated with bridges and tunnels.
- Federal Highway Administration (FHWA), Structural Engineering Manager-1989-1992. Responsible for leading a team of structural engineers in programmatic research of bridge joints, heated bridge deck technologies, rules and regulations for federal bridge program and underwater bridge inspection program.
- Federal Highway Administration (FHWA), Highway Structural Engineer-1977-1988. Responsible for performing oversight of States’ compliance with federal construction and maintenance procedures, FHWA, Structural Design Engineer reviewing federally funded project designs, preparing basic bridge designs and providing engineering recommendations to management and division staff.
- Federal Highway Administration (FHWA), Highway Structural Design Engineer-1974-1977. Responsible for reviewing federally funded project designs, preparing basic bridge designs and providing engineering recommendations to management and division staff.

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

**VIRGINIA POLYTECHNIC INSTITUTE, BLACKSBURG, VA / BS / 1968 / CIVIL ENGINEERING**

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

2006/CIVIL ENGINEERING/VA 041824

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

(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)
1. **ROUTE 639 BRAGG ROAD** Spotsylvania County, VA VDOT District Construction Engineer (2008-2010). Responsible for resolving numerous complaints and issues from business owners and residents along the road over access, dust, noise, etc. communicating regularly with inspection staff and the contractor to address the concerns, including meeting with the home owner’s onsite. Through effective oversight and involvement, the roadway widening project adding two signals and a noise abatement wall was finished 6 months early and within budget.

**Owner Contact:** VDOT, 1401 E. Broad Street, Richmond, VA 23219; Mark Cacamis, P.E. CCM, 804-371-2531

2. **ROUTE 208 COURTHOUSE BYPASS** Spotsylvania County, VA VDOT District Construction Engineer (2006-2009). Responsible for resolving challenges associated with 3 miles of traffic detours, accommodating the needs of local businesses, addressing environmental issues, and providing assistance to the Office of the Attorney General to litigate a lawsuit from a property owner with a final result of an on time and on budget delivery of the project.

**Owner Contact:** VDOT, 1401 E. Broad Street, Richmond, VA 23219; Mark Cacamis, P.E. CCM, 804-371-2531

3. **ROUTE 630 COURTHOUSE ROAD** Stafford County, VA VDOT District Construction Engineer (2006-2008). Responsible for leading informational meetings to engage public stakeholders under daily inconvenience by the major improvements, realignment and resurfacing of 2 miles of roadway with much of the work being constructed in place.

**Owner Contact:** VDOT, 1401 E. Broad Street, Richmond, VA 23219; Mark Cacamis, P.E. CCM, 804-371-2531

4. **ROUTE 624 CAT POINT CREEK** Richmond County, VA VDOT District Construction Engineer (2006-2008). Responsible for resolving issues pertaining to access, construction techniques, field testing of high strength bolts, and project schedule associated with this bridge replacement project to build an 8-span bulb tee structure.

**Owner Contact:** VDOT, 1401 E. Broad Street, Richmond, VA 23219; Mark Cacamis, P.E. CCM, 804-371-2531

5. **ROUTE 610 INDIANTOWN ROAD** King George County, VA VDOT Area Construction Engineer (2005-2006). Responsible for providing engineering services to ensure construction in accordance with the contract, plans, and specifications of two miles of an inadequate secondary road, and two major drainage structures.

**Owner Contact:** VDOT, 1401 E. Broad Street, Richmond, VA 23219; Mark Cacamis, P.E. CCM, 804-371-2531
ATTACHMENT 3.3.1
KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: DAVID MAHONEY, P.E., SENIOR VICE PRESIDENT

b. Project Assignment: DESIGN MANAGER

c. Name of Firm with which you are now associated: DEWBERRY & DAVIS LLC

h. Years experience: With this Firm 25 Years With Other Firms 3 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.)

   DEWBERRY & DAVIS LLC Various Positions
   • Intercounty Connector (ICC) Contract C, February 2008 to 2011, Design Manager for the Shirley D/B Team
   • Pacific Boulevard Design-Build Project, July 2008 to Present, Design Manager for the Shirley D/B Team
   • Battlefield Parkway Design-Build Project, July 2007 to November 2008, Design Manager for the Shirley D/B Team
   • Route 28 Corridor Improvements Project, September 2002 to Present, Design Manager for the Shirley led design-build team
   • I-66 Widening Project from Route 234 to Route 29/Gainesville Road, June 1999 to Present, Project Manager
   • Dulles Greenway Capital Improvements Program, March 2005 to July 2006, Design Manager for the Shirley D/B Team
   • Route 1/Route 123 Interchange, March 1997 to June 2004, Project Manager
   • Route 123 Widening from I-495 to Dulles Toll Road, January 2001 to January 2002, Project Manager
   • Spriggs Road Widening from Hoadly Road to Route 234, February 1996 to March 1999, Project Manager
   • Sam Eig Interchange at Washingtonian Center, August 1994 to July 1996, Project Manager

d. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
   SOUTH DAKOTA STATE UNIVERSITY, BROOKINGS, SD / BS / 1984 / CIVIL ENGINEERING

e. Active Registration: Year First Registered/ Discipline/VA Registration #:  
   MEMBER OF THE DESIGN BUILD INSTITUTE OF AMERICA AND THE AMERICAN PUBLIC WORKS ASSOCIATION

f. 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.)

I. ROUTE 28 CORRIDOR IMPROVEMENTS PROJECT Dewberry, Design Manager, Sept 2002 - Present

   Mr. Mahoney, as the Design Manager for the Shirley/Dewberry Design-Build Team, is responsible for the overall design of this $400 Million project for roadway widening, ten (10) new interchanges and various secondary roadways, including implementation and monitoring of all Design QA/QC measures to ensure that the Plans, Specifications, and other documents prepared by the Design Team meet applicable standards and the Contract Documents. Mr. Mahoney attends weekly meetings with the contractor and owner to handle construction issues, oversight of the project engineers responsible for the design of individual roadway elements, coordination with VDOT and local agencies including MWAA, Loudoun County, Fairfax County, as well as the NVRPA. He held public hearings and other community and public involvement meetings during development of the secondary roadway projects to ensure that the local residents and businesses were involved in the development process. He actively monitors the design schedule and allocation of staff resources to ensure compliance with the design schedule. As part of his commitment to his profession, Mr. Mahoney has made presentations regarding the project to the Design-Build Institute of America (DBIA), is a member of the team that received the Tower of Dulles Award for this successful project, and was a contributor in the publishing an article in the Mid-Atlantic Builder magazine which highlighted the success of the Route 28 project.

   Owner Contact: V VDOT Northern Virginia District, 4975 Alliance Drive , Fairfax, VA 22030, Ms. Susan Shaw, PE, (703)259-1995

2. DULLES GREENWAY CAPITAL IMPROVEMENTS PROGRAM Dewberry, Design Manager, March 2005 - July 2006

   Mr. Mahoney, as the Design Manager for the Shirley/Dewberry Team, was responsible for all roadway and bridge design of this $71 million design-build project to upgrade the Dulles Greenway. The improvements included: expansion of the mainline plaza to 18 lanes, widening the mainline roadway from four (4) lanes to six (6) lanes, two (2) new interchanges,
upgrades to two (2) additional interchanges, and a new ramp access to Dulles Airport. Mr. Mahoney’s Design Team developed environmentally sensitive plans for the highway corridor including protection of Goose Creek, a state scenic river, and innovative wetland mitigation design. Mr. Mahoney guided the division of the improvements into multiple packages to facilitate construction in the design-build mode. Mr. Mahoney attended weekly meetings with the contractor to handle construction issues, oversight of the project engineers responsible for the design of the improvements, and coordination with VDOT and local agencies. He implemented a Design QA/QC program to monitor design quality and constructability through the design process and actively monitored the design schedule and allocated staff resources to achieve compliance with the design schedule. Mr. Mahoney and his team received an award from the Design-Build Institute of America (DBIA) for the Dulles Greenway project recognizing their expertise in the design-build method of project delivery.

3. **INTERCOUNTRY CONNECTOR CONTRACT C** Dewberry, Design Manager, February 2008 – June 2009 (Design)

As part of the Shirley/Dewberry Team, Mr. Mahoney is responsible for all aspects of the design for Contract C of the ICC, a $513M design-build project which includes new three-level interchanges with both Route 29 and I-95, as well as a diamond interchange with Briggs Chaney Road. Mr. Mahoney directed a team of qualified engineers to complete the design for the interchanges and roadways including; twenty (20) bridges, twelve (12) retaining walls, five (5) noise walls, stormwater management facilities, floodplain analysis, scour analysis, permitting and environmental approvals, mapping, surveys, geotechnical investigations, utility designations and test pitting, utility relocation design, ITS and ETC design, lighting, signing and marking, signals and maintenance-of-traffic. Mr. Mahoney coordinates the design with the other discipline managers including permitting, right-of-way, utilities and construction and monitors and documents all design QA/QC efforts.

Owner Contact: Maryland State Highway Administration, 11700 Beltsville Drive, Suite 200, Beltsville, MD 20705, Ms. Melinda Peters, PE, (301)586-9265

4. **BATTLEFIELD PARKWAY** Dewberry, Design Manager, July 2007 – November 2008

Responsibilities: As Design Manager for the Shirley/Dewberry Team, Mr. Mahoney was responsible for overall design for this 3,500 linear foot extension of a four (4) lane urban arterial roadway including dual 1,250 foot bridges over the W&OD Trail and Tuscarora Creek Flood Plain. Design elements included mapping, surveys, geotechnical investigations and recommendations, roadway design, bridge and retaining wall design, stormwater management, floodplain analysis, scour design, utility relocation design, lighting, landscaping design, maintenance-of-traffic design, signing and marking design, and signal design. Mr. Mahoney was also responsible for the development and implementation of the Design QA/QC plan.

Owner Contact: VDOT Northern Virginia District, 4975 Alliance Drive, Fairfax, VA 22030, Ms. Susan Shaw, PE, (703)259-1995

5. **I-66 WIDENING** Dewberry, Design Manager, June 1999 - Ongoing

Mr. Mahoney was responsible for all aspects of the design of the $350 million project for the widening of seven (7) miles of I-66 from Route 234 to Route 29 from four (4) to eight (8) lanes, as well as a new single point urban diamond interchange at Route 29/Linton Hall Road and a grade separation over the Norfolk/Southern Railroad line. This also included new major reconstruction of the Route 29/I-66 Interchange, ten (10) new bridges, and maintenance-of-traffic for over 150,000 cars a day through the project site. Additionally, Mr. Mahoney was responsible for negotiations of the contract with VDOT and subsequent modifications/supplements. Additional responsibilities as Design Manager included: all roadway and bridge design, stormwater management design, utility relocation coordination, oversight of the project engineers responsible for the design of the interchanges and other roadway improvements, coordination with VDOT and local agencies, and oversight of public involvement activities. Mr. Mahoney also actively monitors the design schedule and allocates staff resources to achieve compliance with the design schedule.

Owner Contact: VDOT Northern Virginia District, 4975 Alliance Drive, Fairfax, VA 22030, Mr. Amir Salahshoor, P.E., (703)259-1957
**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> GREG JOHANNESES, PROJECT MANAGER</td>
</tr>
<tr>
<td><strong>b. Project Assignment:</strong> CONSTRUCTION MANAGER</td>
</tr>
<tr>
<td><strong>c. Name of Firm with which you are now associated:</strong> SHIRLEY CONTRACTING COMPANY, LLC</td>
</tr>
<tr>
<td><strong>d. Years experience:</strong> With this Firm <strong>5</strong> Years With Other Firms <strong>31</strong></td>
</tr>
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**SHIRLEY CONTRACTING COMPANY, LLC January 2007 to Present**
- January 2008 to Present – Client: Maryland State Highway Administration. Project Manager for construction of the Intercounty Connector Contract C Design-Build Project, as part of the Shirley/Dewberry Team.
- January 2007 to January 2008 Estimator Shirley Contracting Company, LLC

**THE LANE CONSTRUCTION CORPORATION April 1980 to November 2006**
- March 2002 to February 2004– Client: WMATA. Project Manager on Largo Blue Line Design-Build Extension work in Laurel, Maryland
- June 2000 to February 2002 – Client: TRIP II Limited Partnership. Project Manager on Dulles Greenway Widening, Loudoun County, Virginia
- January 2000 to June 2000 – Client: VDOT. Project Manager on Bush Hill Road Bridge Demolition, Alexandria, Virginia Maryland
- November 1998 to December 1999 Client: FHWA. Project Manager on Clara Barton Parkway Improvements, Glen Echo, Maryland.
- July 1997 to October 1998 Client: VDOT. Project Manager for the Route 28/1-66 Improvements, Fairfax County, Virginia
- July 1996 to June 1997 Client: Greenvest, LLC. Project Manager for the Cameron Station Stormwater Channel, Alexandria, Virginia
- March 1994 to June 1996 Client: VDOT. Project Superintendent for the I-95 HOV, Woodbridge, Virginia

<table>
<thead>
<tr>
<th><strong>e. Education:</strong> Name &amp; Location of Institution(s)/Degree(s)/Year/Specialization:</th>
</tr>
</thead>
<tbody>
<tr>
<td>S.U.N.Y. ALFRED AGRICULTURAL &amp; TECHNICAL COLLEGE, ALFRED, NY / AAS / 1979 / CIVIL ENGINEERING</td>
</tr>
</tbody>
</table>

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<tr>
<th><strong>f. Active Registration:</strong> Year First Registered/ Discipline/VA Registration #:</th>
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</thead>
<tbody>
<tr>
<td>WILL OBTAIN DCR RESPONSIBLE LAND DISTURBER (RLD) CERTIFICATION AND VDOT EROSION AND SEDIMENT CONTROL CONTRACTOR CERTIFICATION (ESCCC) PRIOR TO COMMENCEMENT OF CONSTRUCTION.</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<td>3. Provide beginning and end dates for each assignment.</td>
</tr>
</tbody>
</table>

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

**1. INTERCOUNTRY CONNECTOR CONTRACT C DESIGN-BUILD PROJECT**  
Shirley Contracting Company, LLC, Project Manager, January 2008 – Present

As the Project Manager for the design-build team, Mr. Johannes is responsible for constructability reviews during the design process, coordination of utility design and relocation work and oversight of construction in accordance with the approved contract plans. Mr. Johannes verifies Quality Control for environmental permitting and ensures that the plans are within permit and regulatory requirements for this $513 million design-build project to complete 3.4 miles of the Intercounty Connector in Maryland. Mr. Johannes provides monthly project status reports to the Maryland State Highway Authority, updates the project’s CPM schedule, conducts regular progress and jobsite safety meetings, prepares/obtains and reviews required materials. Trainee, DBE, EEO and certified payroll documentation. Mr. Johannes is responsible for the daily scheduling of work activities including Shirley’s personnel and subcontractors, material deliveries, rental equipment and trucks. He is also responsible for coordinating with the Project’s Quality Control staff to ensure that all construction materials and activities are inspected as required. The overall scope of the project includes 3.4 miles of a new 6-lane freeway facility including twenty two (22) bridges, sixteen (16) retaining walls, five (5) noise barrier walls and fourteen (14) stormwater management ponds. The project includes incentives from the Owner for maintaining erosion and sediment control devices on the project and the Shirley team has earned over $1.8 million in incentives since the project began reflecting Shirley’s commitment to the projects environmental objectives.

**Owner Contact:** Maryland State Highway Administration, 707 N. Calvert Street Baltimore, Maryland 21202, Ms. Melinda Peters, PE, (301) 586-9265

**2. I-540 CONSTRUCTION WAKE COUNTY**  
The Lane Construction Corporation, Project Manager, March 2004 to
Mr. Johannes was the Project Manager the $102 million I-540 construction in Wake County, North Carolina. The project included the construction of over five (5) miles of six (6) lane divided highway on a new alignment. The project scope also included multiple interchanges in an urban setting. As the Project Manager, Mr. Johannes was responsible for constructing the project in accordance with the approved plans, and within permit and regulatory requirements. Mr. Johannes developed and updated the Project CPM schedule, coordinated subcontractor safe start meetings, conducted regular progress and job site safety meetings, and prepared/obtained and reviews required materials documentation. He ensures compliance with the Project’s QC requirements, managed the overall project erosion and sediment control measures, traffic safety functions and other work disciplines throughout the course of the Project. Mr. Johannes was responsible for scheduling all of Lane’s crews and subcontractors, material deliveries, rental equipment, and trucks for the work that includes roadway and bridge construction, temporary and permanent signals, lighting, box culverts, retaining wall construction, utility relocations, storm water management basins, as well as other typical roadway construction activities.

Owner Contact: NCDOT, 1574 Mail Center. Raleigh, North Carolina 27699, Mr. Phillip Johnson, PE, (919)733-9499

3. LARGO STATION BLUE LINE  The Lane Construction Corporation Project Manager, March 2002– February 2004

As part of the extension of the WMATA Blue Line, the Lane Construction Corporation was a awarded a $217 million design-build contract to complete a three (3) mile extension of the Blue Line including the Largo station. Mr. Johannes was the Structural Project Manager representing Lane with its joint-venture partner and was responsible for constructability reviews during the design process. He provided Quality Control oversight of construction in accordance with the approved contract plans and within permit and regulatory requirements. He developed and updated the Project CPM schedule, coordinated subcontractor safe start meetings, conducted regular job site safety meetings, and prepared/obtained and reviewed required material documentation. Additionally, Mr. Johannes was responsible for daily coordination and scheduling of work including Lane’s crews and subcontractors, material deliveries, rental equipment, trucks, quality assurance & quality control staff and directed QC staff activities as needed. Work included a cut and cover tunnel, aerial bridge structures, track work, electrical, communication and systems controls.

Owner Contact: Washington Metropolitan Transit Authority (WMATA), 1600 Fifth Street, NW, Washington, DC 20001, Mr. Colin Meyers, (202)962-1621

4. DULLES GREENWAY WIDENING  The Lane Construction Corporation, Project Manager, June 2000 – February 2002

Mr. Johannes was the Project Manager for the $10.8 million widening of the Dulles Toll Road in Loudoun County, Virginia. Mr. Johannes, as the Project Manager of Construction was responsible for ensuring the Project was constructed in accordance with the approved plans and specifications. In addition, he provided Quality Control oversight of construction in accordance with the approved contract plans and within permit and regulatory requirements. Mr. Johannes developed and updated the CPM schedule, coordinated subcontractor safe start meetings, conducted regular job site safety meetings, notified TRIPP II, the general public, police & fire and rescue of proposed traffic switches, prepared/obtained and reviewed required material documentation. Additionally, he was responsible for daily coordination and scheduling of work including Lane’s crews and subcontractors, material deliveries, rental equipment, trucks and lane closures, with quality assurance & quality control staff. The scope of the project involved widening the Dulles Toll Road by adding one lane in each direction for five (5) miles. Three (3) bridges were required to be widened as part of the project scope and the project included utility relocations, storm water management basins as well as other typical roadway construction activities. One of Mr. Johannes’s primary responsibilities in addition to the construction of the Project was to maintain traffic flow during construction operations so as to minimize the impacts to toll revenues for the Project’s Owners.

Owner Contact: TRIPP II, 45305 Catalina Court, Sterling, VA 20166, Mr. Tom Sines, (703)707-909

5. ROUTE 28/I-66 IMPROVEMENTS  The Lane Construction Corporation, Project Manager, July 1997- October 1998

Mr. Johannes was the Project Manager responsible for management of construction for the $6.1 million Route 28/I- 66 Interchange Improvements project for the Virginia department of Transportation. Mr. Johannes’s duties included updating, and monitoring of the CPM schedule for the project, daily coordination and scheduling of the work including material deliveries, rental equipment, trucks, Lane’s construction crews, subcontractors and lane closures. Daily communication with VDOT and consultant inspectors for scheduling the work and Quality Control and Quality Assurance inspections, submission of shop drawings, RFIs, materials documentation, EEO documentation and pay requests. Work included extensive traffic control/traffic detours, widening and overlay of two (2) existing bridges, construction of two (2) new ramps, the widening of Route 28 as well as other typical roadway construction activities.

Owner Contact: VDOT, Mega Projects Office 6363 Walker Lane Suite 500 Alexandria, VA 22030, Larry Cloyd (571)483-2584
**ATTACHMENT 3.3.1**  
**KEY PERSONNEL RESUME FORM**

<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel anticipated for the Project.</th>
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<tbody>
<tr>
<td><strong>a.</strong> Name &amp; Title: <strong>JIM WRIGHT, REGIONAL DIRECTOR/STRATEGIC MARKETING AND OUTREACH PLANNING</strong></td>
</tr>
<tr>
<td><strong>b.</strong> Project Assignment: <strong>PUBLIC RELATIONS MANAGER</strong></td>
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<tr>
<td><strong>c.</strong> Name of Firm with which you are now associated: <strong>PULSAR ADVERTISING</strong></td>
</tr>
<tr>
<td><strong>d.</strong> Years experience: With this Firm <strong>7 Years</strong> With Other Firms <strong>31 Years</strong></td>
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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.).

**PULSAR ADVERTISING**  **Regional Director 2005—Present**  
Responsible for developing strategic marketing and outreach plans for clients including the Virginia Department of Transportation’s Virginia Megaprojects, the 511 Virginia website, Hampton Roads Transit/TRAFFIX branding and communications plan, as well as the launch of HRT’s new light rail service – The Tide. All of these campaigns included integrated advertising/marketing and stakeholder outreach plans as well as identifying cost efficient ways to brand the unique product/service within the target audience. In addition, Mr. Wright is a trained facilitator and has experience in leading and directing outreach to community and business groups to inform and educate about numerous transportation projects (construction mitigation and transportation management plan strategies).

**LEONARD RESOURCE GROUP, INC. (LRG)**  **Sr. Vice President, Business Partnerships 1997 – 2005**  
Co-founder of LRG, a woman-owned full service public affairs firm, ranked as tenth largest public affairs firm by *Washington Business Journal*, specializing in Business Partnerships, Communications & Marketing, Community Outreach and Development, Government Relations, and Association Management. Directed strategic planning and operational implementation for seven-year public affairs/economic development campaign to develop public-private partnerships on behalf of Job Corps (federal program to assist economically disadvantaged youth). Secured ten national partnerships for Job Corps over a 24 month period including: AAMCO, American Fence Association, HCR Manor Care, Jiffy Lube, Penske Auto Centers, Pepsi-Cola, Sears, Roto-Rooter, the U.S. Army, and Walgreens. Worked with senior officers and staff of the U.S. Army, U.S. Navy and U.S. Coast Guard Recruiting Commands to secure national partnerships and to create successful local partnerships at over 50 centers across the country.

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<th>e.</th>
<th>Education: Name &amp; Location of Institution(s)/Degree(s)/Year/Specialization:</th>
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<tr>
<td><strong>STATE UNIVERSITY OF NEW YORK, ALBANY, NY / BS / 1986 / BUSINESS, CONCENTRATION MARKETING</strong></td>
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<th>f.</th>
<th>Active Registration: Year First Registered/ Discipline/VA Registration #:</th>
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<td><strong>NONE</strong></td>
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<th>g.</th>
<th>Document the extent and depth of your experience and qualifications relevant to the Project.</th>
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<tr>
<td>1. Note your specific responsibilities and authorities for each assignment, not those of the firm.</td>
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<td>2. Note whether experience is with current firm or with other firm.</td>
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<td>3. Provide beginning and end dates for each assignment.</td>
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(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)

**1. VIRGINIA MEGAPROJECTS-NORTHERN VIRGINIA**  **Project Director, Employer Solutions Team (2008 to Ongoing)**  
Mr. Wright has been the strategic leader in creating the *Virginia Megaprojects Employer Solutions Team (EST)* responsible for developing a B2B strategy to businesses in Tysons Corner, one of the nation’s top 10 largest business centers. Jim provides strategic direction and planning for the EST, who meet directly with employers, chambers of commerce, property managers and trade associations in addition to Fairfax County government officials to encourage businesses to develop strategies and
practices that help their employees reduce commuter related vehicle trips during the Dulles Metrorail Extension and I-495 HOT Lanes construction phases. In addition to directly engaging hundreds of businesses in the last year, Jim and the EST have created a comprehensive communications network reaching more than 80,000 employees through the use of the Megaprojects Customer Relationship Management.

**Owner Contact:** Virginia Department of Transportation, 1401 E. Broad Street, Richmond, VA. Chris Arabia 804-786-1059

2. **SPRINGFIELD INTERCHANGE COMMUNICATIONS-SPRINGFIELD, VA Marketing Communications Manager (2005-2008)**

Mr. Wright was responsible for directing the strategic communications effort for this multi-modal, multi-media project on behalf of Pulsar. The Springfield Interchange project was one of the largest public works projects in the nation impacting thousands of travelers in one of the country’s busiest transportation corridors. Project elements include community input, direct mail, radio, public relations, special events and a dedicated

**Owner Contact:** Virginia Department of Transportation, Northern Virginia District Office, Steve Titunik 571-483-2591

3. **VIRGINIA HIGHWAY SAFETY CORRIDORS -NORTHERN VIRGINIA Project Director (2005-2010)**

Mr. Wright was responsible for securing key stakeholder input to direct Pulsar’s development of a communications and marketing campaign to support VDOT’s grant from Virginia Department of Motor Vehicles and in cooperation with the Virginia State Police to reduce accidents and fatalities in the three highway safety corridors within the state (I-81 in SW Virginia, I95 in the City of Richmond, and I-95 in Prince William County). The campaign elements included: radio, outdoor, transit, print and direct mail.

**Owner Contact:** Virginia Department of Transportation, 1401 E. Broad Street, Richmond, VA. Tamara Rollison 804-786-271
3.4 EXPERIENCE OF OFFEROR'S TEAM

THE SHIRLEY TEAM

Shirley Contracting Company, LLC
In order for the I-64/Route 15 (Zion Crossroads) Interchange Improvement Project to be a success for the Virginia Department of Transportation (VDOT), VDOT must select a team that has the capability and proven track record of performing all of the elements of the Project from concept to completion. Under a design-build method of delivery, the team must have extensive design experience, unparalleled construction expertise, and proven quality assurance/control programs, along with the talent, ability and resources to manage the acquisition of the right-of-way, relocate utilities (or effectively design around them), coordinate with stakeholders, and obtain the environmental and historic permits and clearances. Above all else, the team must be able to deliver on these commitments to VDOT in a concurrent process, on time and on budget. Shirley has the distinct advantage of already having a complete design-build team in place that exceeds these requirements. Shirley is one of the area’s largest and most experienced design-build general contractors. With its corporate office in Northern Virginia, Shirley has provided high-quality, comprehensive construction services to public transportation and highway authorities and private developers in the Washington, D.C. metropolitan area for over 37 years. We enjoy an excellent reputation with VDOT, having completed many large-scale highway construction projects for them. Shirley has earned numerous awards for quality and safety and specializes in completing complicated projects on a fast-track basis.

Dewberry & Davis LLC
Dewberry & Davis LLC (Dewberry), the Lead Designer, has extensive VDOT design experience and resources to dedicate to the Project. For over 10 years, Shirley and Dewberry have worked together on similar design-build projects, providing VDOT with an unmatched level of expertise and experience in the performance of all of the project elements. In addition to the Team’s design-build experience, the relationship between Shirley and Dewberry extends back 37 years across multiple traditional design-bid-build projects for VDOT as well as other owners.

Shirley and Dewberry have completed more design-build projects, acquired more rights of way and moved more utilities than any other team in the Commonwealth of Virginia. We have the resources in-house and the team in place to begin immediately. Having worked closely together for such an extended period of time, we know firsthand each other’s talents and we know what the I-64/Route 15 (Zion Crossroads) Interchange Improvement Project will require. The strength of our Team will ensure the success of the Project for VDOT, Augusta County, and the public.

Currently, Shirley and Dewberry are completing the first Public-Private Transportation Act (PPTA) project in Northern Virginia for VDOT. The Route 28 Corridor Improvements Project is a $350 million design-build project to construct 10 grade separated interchanges and widen and upgrade several secondary roads in Fairfax and Loudoun Counties. The initially funded scope of the original 5 year project included design, right-of-way acquisition, utility relocations, permitting, quality assurance and control, and construction of six 6 grade separated interchanges along Route 28. As a result of our successful track record of completing the first phase on time and on budget, the Shirley/Dewberry Team was issued a change to add funding for the 4 remaining interchanges called for in the overall project scope. The $109 million change order was signed in late 2007 and as of this submission, nine interchanges are complete and open to traffic and the tenth is expected to open in the summer of 2012.

Shirley has also completed two contracts under VDOT’s Design-Build Program. In 2007, Shirley and Dewberry were awarded the $25 million Battlefield Parkway Design-Build Project in Leesburg,
Virginia, and in April 2008, the Shirley/Dewberry Team was awarded the $19 million Pacific Boulevard Design Build Project from Severn Way to Autoworld Circle. Both projects were completed on schedule and on budget and further demonstrate the responsibility of our Team in the design-build field.

**ADDITIONAL TEAM MEMBERS**
In addition to Dewberry, the Shirley Team is also committing the following critical subconsultants who will be involved in specific aspects of the Project’s design, right-of-way acquisition, and QA/QC Program:

**GeoConcepts Engineering, Inc.**
A valuable member of the Shirley Team will be GeoConcepts Engineering, Inc. GeoConcepts is a premier provider of geotechnical engineering services in the Virginia. The VDOT-certified DBE company offers personal service and technical expertise to provide unique design solutions to its clients and their projects. In the past 10 years, GeoConcepts has grown from the 4 founders to a staff of over 50 by developing long term relationships with their clients. The staff’s focus is on proactively identifying cost effective geoscience-related solutions and responding to client needs. GeoConcepts was recognized in 2001 as the New Business of the Year by the Town of Leesburg and also as an Entrepreneur Finalist of the Year by Loudoun County. GeoConcepts has successfully completed thousands of projects with a variety of site conditions and challenges.

During the design phase of the I-64/Route 15 Project, GeoConcepts will provide the geotechnical investigations and recommendations to Dewberry. In addition to supporting this geotechnical program, during construction GeoConcepts will provide quality control testing technicians in the field, laboratory testing and geotechnical inspection of foundations to Dewberry as part of the Quality Control program. GeoConcepts continues to be an important member of the Shirley Team on several VDOT design-build projects, including the Route 28 PPTA project and the Battlefield Parkway and Pacific Boulevard design-build projects.

**EBA Engineering, Inc.**
Since 1981, EBA Engineering, Inc. (EBA) has provided exceptional professional engineering and management services to a wide variety of satisfied clients in both the public and private sectors. EBA has earned a reputation for stability and longevity and has proven its ability to handle challenges of any magnitude with imagination, foresight, and sound design principals. EBA employs multidisciplined professionals who both have a respect for established principals and a willingness to develop and utilize new and innovative techniques.

For the I-64/Route 15 (Zion Crossroads) Interchange Improvement Project, EBA will provide the independent Quality Assurance Manager (QAM) to the Project. George P. Romack, PE as the QAM brings over 41 years of experience to the position, 10 of those years working for VDOT in the Fredericksburg District.

**Froehling & Robertson, Inc.**
Established in 1881, Froehling & Robertson, Inc. is the oldest independent consulting engineer/testing firms in the United States. Froehling & Robertson, Inc. a minority-owned business, provides geotechnical, materials testing, and environmental engineering services for thousands of projects across dozens of industries. For the I-64/Route 15 (Zion Crossroads) Interchange Improvement project,
Froehling and Robertson will provide the Quality Assurance Testing Technicians in the field and Laboratory testing working under the project’s independent Quality Assurance Manager from EBA Engineering, Inc.

**Key Title (Old Dominion Settlements, Inc.)**
Having closed on over 50,000 properties since 1973, the staff of Key Title has accumulated immeasurable experience in all aspects of the real estate closing process. Key Title has an excellent track record of providing titles, title insurance and settlement services on VDOT projects for many years. Since 2004, Key has been an important member of Shirley’s design-build Team by providing all of our title and settlement services on the Route 28 Corridor Improvements, Battlefield Parkway, Pacific Boulevard, and Spotsylvania County Design-Build Projects, among others. On these projects, Key Title has provided these services for the acquisition of over 200 parcels on time, on budget, and in a quality manner.

**Diversified Property Services, Inc.**
Diversified Property Services, Inc. (Diversified) is a VDOT prequalified right of way consultant that offers a comprehensive array of right of way and land acquisition services including appraisals, appraisal reviews, negotiations, acquisitions, and partial and full relocations of both residential and commercial properties. Diversified’s talented group of right of way experts have an in depth knowledge of all of the laws, regulations and ordinances applicable to right of way acquisitions for VDOT including the Uniform Relocation Assistance and Real Property Acquisitions Policies Act and the VDOT Manual of Right of Way Acquisitions. In addition, Diversified is trained in the use of the VDOT Right of Way and Utility Management System (RUMS). Diversified will report directly to our Team’s Right of Way Manager and will use only VDOT Prequalified Fee Appraisers and Review Appraisers.
In 2002, the design-build team led by Shirley Contracting Company, LLC, serving as the Lead Contractor, was awarded the first Public-Private Transportation Act (PPTA) project to be implemented in the Northern Virginia area by VDOT. The scope included the design-build construction of (10) grade-separated interchanges and numerous secondary road improvements along the Route 28 Corridor between I-66 and Route 7. The Design/Build Team is responsible for all design and engineering, permitting, right-of-way acquisition, utilities relocation, construction, maintenance of traffic, QA/QC, and coordination of public involvement for all project work. This complete scope of work performed by our Team has permitted VDOT to only assign (3) full-time personnel to oversee the Project. To date, each and every component of the Project has been completed on or ahead of schedule and without a single claim.

Many of the Key Managers proposed for the I-64/Route 15 (Zion Crossroads) Interchange Improvement Project are the same Key Managers that have worked so closely together for the past (10) years on Route 28. We have developed, implemented, and improved upon proven techniques and practices during this time that allow us to efficiently manage the design-build process. From Route 28, we have learned that it is absolutely essential to integrate all of the various design and construction disciplines from the earliest stages of concept development until final completion. Our Construction Team members have day-to-day input on every stage of the design and our Team pledges to not submit any plans until this constructability review is complete. We create this “buy-in” from the Construction Team as early as possible to produce an efficient design and to begin the overall project scheduling and phasing elements. We know that it is critical for the right-of-way and utility disciplines to closely coordinate their work, and to further integrate these elements with the design. We also have learned that it is critical to accurately identify all of the existing utilities that can be impacted by the design, to meet with the individual utility companies early to explain the project scope and start the design process, and to closely track and manage the entire utility relocation process.

Since having acquired more than 200 parcels of right-of-way on Route 28, we have learned how vital the timely completion of the right-of-way acquisition process is to the project schedule and budget. As part of the constructability process we focus our efforts on developing a right-of-way priority list early on, in order to optimize the construction and utility schedule. We also look early at whether there are any total relocations that could affect the utility profiles that may be available, and any hazardous, historic, or other environmental issues affecting any property. We have also facilitated the negotiation of settlements whereby the property owner dedicates the necessary right-of-way for utility relocation for the benefit of the design/build project and the owner. These types of agreements have resulted in savings in the overall project cost while expediting the right-of-way acquisition process.

We are constantly looking for ways to reduce or eliminate property impacts. This keeps project costs down and helps the project schedule. This worked particularly well on the Route 28-Westfields Interchange where all of the right-of-way anticipated for the interchange was acquired in the late-1980’s. However, by the time design was undertaken in 2003, changes in design standards and overall capacity requirements created the need for additional land. This would have negatively impacted both the budget and schedule. In partnership with the entire Team, Shirley worked with each landowner, the overall design, and the utility companies and was ultimately successful in obtaining all of the rights-of-way necessary at no additional cost to VDOT.

Another instance where our Team worked through significant right-of-way issues was on the Route 28/McLearen Road Interchange. Early in the design process for this interchange, Metropolitan Washington Airports Authority (MWAA) advised that they had planned development that was in conflict with the proposed interchange. Our Team redesigned the interchange to relocate the loop ramps 250 feet to the south, thus avoiding MWAA’s planned development. This design modification required MWAA to change their Airport Layout Plan (ALP) - a process that the Shirley Team supported and that took over a year for MWAA to complete. Even with this long delay, Shirley was able to re-sequence the construction schedule by prioritizing the work on the East side of Route 28 first, including the east abutment and pier of the bridge. After the revised ALP was approved, we then completed the bridge and the work on MWAA property and were still able to complete the project before its original completion date with no increased cost to VDOT.

Through the Route 28 project we have developed close relationships with over 25 public and private utilities that will benefit the I-64/Route 15 (Zion Crossroads) Interchange Improvement Project. In constructing the (10) interchanges and secondary road improvements we have successfully relocated more than 52,000 feet of overhead and underground power lines, 205,000 feet of communication/fiber optic lines, 31,000 feet of water lines, 6,400 feet of sanitary sewer, and 5,100 feet of gas lines. On the Centerline Road Widening Project, a component of the Route 28 Corridor Improvements Project, we were able to eliminate or reduce many utility relocations by coordinating with the utility companies, raising the roadway profile, and other innovative design changes. Shirley’s utility coordination effort contributed to a 35% reduction in the utility relocation costs on the project, saving VDOT over $1.9 million from the Utility Relocation Allowance.

All of the improvements on the Route 28 Project were constructed without permanent removal of any of the existing traffic movements or reduction in traffic capacity during construction. One of the very first design activities conducted by the Team has been to evaluate the existing and projected traffic volumes and movements. From this data, the ultimate design concepts are created by our Team, presented to VDOT, the Counties, and other affected parties, and ultimately approved for final design. But along with this, the Team carefully evaluates the data to determine maintenance of traffic requirements during construction. By involving the construction teams early on in this process, we are better able to plan each phase of the work. For example, in most cases, the new interchanges have been located approximately in the same location as the existing signalized intersections. This has lead to innovative solutions for detour intersections during construction, but also for creative and well-thought out solutions for opening the new interchanges when construction is complete. One example of this is the Route 28/Westfields Blvd Interchange. With significant input from the construction team, Dewberry adjusted the profiles of the detour intersection and ultimate ramp/loop profiles so that they were as close as possible. Thus when the new interchange was ready to open to traffic, there was the bare minimum of work to do to switch traffic from the old detour pavement to the new pavement utilities. As a result, we were able to open the new interchange in just 24 hours in non-peak traffic periods with virtually unnoticed impact to the traveling public. As an additional level of planning and coordination, we created detour plans that were distributed to all affected public sources including: Board of Supervisors office, Homeowner associations, and posted on the project website to make sure the public was informed. This same level of effort was required on the Sterling Blvd, Westpark Road, McLearen Road, and Old Os Road Interchanges. Each of these complex openings was completed with minimal impacts to traffic. The Route 28 Project has had such a positive impact that the entire Team was awarded the prestigious 2004 Tower of Dulles Award by the Committee for Dulles in recognition of distinguished service. The I-64/Route 15 (Zion Crossroads) Interchange Improvement Project will require very similar emphasis of maintenance of traffic and the interface of the new work with the existing roadways.
The Dulles Greenway Capital Improvement Program (Greenway) included eight individual projects combined into a single design-build program. The original scope of this program included new interchanges at Battlefield Parkway and Shreve Mill Road, enhancements to existing interchanges at Route 606 and Route 772, widening of mainline roadway from four (4) to six (6) lanes, expansion of the mainline toll plaza, and widening of the existing twin 660 foot long, 100 foot high bridges over Goose Creek. Shirley and Dewberry provided all design, construction, permitting, utility relocations, and construction administration, all in a format to allow VDOT acceptance at completion. In August 2006, TRIP II awarded Shirley a change order to design and construct improvements to the Route 772/Greenway Interchange. Even with this added scope, the Design-Build Team completed the original contract work and the additional interchange by the original completion date of December 2007.

Impacts to traffic were not only a project safety concern and an inconvenience to the traveling public, but also directly affected the Owner’s profitability, which made this Project unique. In addition to enhanced safety features and increased capacity in final design, our Team developed detailed traffic management plans that focused on maintaining lane widths and travel speeds, and reduced the impact to traffic during interim construction phases. Shirley and Dewberry are committed to bringing this experience to the I-64/Route 15 (Zion Crossroads) Interchange Improvement Project in order to develop traffic management plans that minimize the impact to the traveling public.

On the Battlefield Parkway Interchange, Shirley partnered with the Town of Leesburg and the local community to avoid impact to soccer fields during the summer of 2005. A segment of the Town’s right-of-way between the Greenway and Evergreen Mills Road that was acquired for the project was currently being used for little league soccer games. Shirley re-sequenced the CPM schedule to avoid impacting the area until after the completion of the soccer season allowing the community time to find alternate playing fields for the next season without impacting their 2005 season. This schedule re-sequencing was completed at no cost to the Owner, without impacting the project completion date and is an example our Team’s willingness to partner with the Owner and local communities to maintain positive public perception.

Shirley is committed to providing a safe and healthy environment for our employees, subcontractors and to the general public who may enter our jobsite or workzone. We consider the prevention of accidents to be an integral part of our operation, and to these ends, we established a comprehensive, project specific, Safety and Health Program for the Greenway to assure the continued safety of everyone on the project. On the Greenway our employees logged more than 300,000 man hours with no lost-time accidents. We continue to develop and enhance our safety program and proactively train our employees and subcontractors to repeat this success on all future projects. The Shirley Team will implement a project specific Safety Program on the I-64/Route 15 (Zion Crossroads) Project to ensure the safety of our employees, subcontractors and the traveling public.

With Shirley as the Lead Contractor and Dewberry as the Lead Designer, the Dulles Greenway Capitol Improvements Program provides yet another example of the Team’s proven design-build experience. Shirley and Dewberry completed this $71 million design-build program, including design, environmental permitting, utility relocations, construction, and VDOT acceptance in less than three years earning our Team recognition as a recipient of the 2008 Regional Design-Build Excellence Award for large transportation projects presented by the Design-Build Institute of America (DBIA). This was accomplished by completing the Plan review and approvals that were required by multiple agencies and jurisdictions, including more than 20 individual Plan submission packages. The Shirley Team will bring the many lessons learned on the Dulles Greenway project and on our other successfully completed design-build projects to the I-64/Route 15 (Zion Crossroads) project in order for the project to be a complete success.
(3) Battlefield Parkway Design-Build Project  
Leesburg, Virginia

**DESIGN-BUILD**  
(Lead Contractor: Shirley)  
(Lead Designer: Dewberry)

Shirley Design/Build, LLC, was selected by VDOT in May 2007 using VDOT’s design-build procurement process to design and construct 0.7 miles of 4-lane roadway including dual 1,250 ft. bridges spanning the W&OD trail and the Tuscarora Creek floodplain. The Design-Build Team’s responsibilities included all design and engineering permitting, right-of-way acquisition, utility relocations, construction, and quality assurance and quality control. The project required close coordination with the Northern Virginia Regional Park Authority (NVRPA) to reduce the impacts to the W&OD Trail. The Project was completed on schedule in the Fall of 2009.

The Shirley Team, including Shirley Contracting Company, LLC as the Lead Contractor, and Dewberry as the Lead Designer, continued their long standing successful partnership performing design-build projects together. On the Battlefield Parkway Project, public involvement and coordination with local businesses, residents and the traveling public was always essential to provide a high level of customer service to the affected community. One end of Battlefield Parkway is located within a sensitive residential community and park, the middle spans the heavily used W&OD Trail park, and the other end ties into a high volume primary roadway. Our Team attended multiple local HOA meetings and provided other correspondence and notices, including creating and maintaining a project website to ensure that the community and traveling public was kept abreast of the project schedule and changing project conditions.

One of the major hurdles to getting started with construction on any design-build project is the acquisition of right-of-way. On the Battlefield Parkway Project, 80% of the new roadway was located on six (6) parcels owned by four different property owners. Understanding that we had proposed an aggressive schedule for the Project, early acquisition of this right-of-way was critical to meeting our project goals. Immediately after the Date of Commencement we began discussions with each of the affected property owners. Within five months we were able to execute Right-of-Entry agreements with all four property owners allowing Shirley to start construction more than three months ahead of schedule. We have learned the importance of early communication and coordination with affected property owners, a lesson that we will bring to the I-64/Route 15 (Zion Crossroads) Interchange Improvement Project.

The Battlefield Parkway Project required close coordination with the Town of Leesburg and adjacent property owners during the design phase to minimize future costs for completing future road improvements proposed within the project limits. At no cost to VDOT, our Team prepared exhibits of the future Route 7 and Battlefield Parkway interchange for review by the Town of Leesburg and VDOT and set the profile elevation on our project at an agreed upon elevation to reduce rework during construction. We also coordinated with VDOT and the Town to include a “T” intersection and stub-out to the future alignment of Russell Branch Parkway, providing exhibits and cost estimates for the additional turn lanes and pavement area. We delayed construction in this area until funding for these improvements could be approved through the Town of Leesburg and the scope added to our contract. We then rescheduled the schedule so these additional improvements could be completed without delay to the original completion date.

The Battlefield Parkway Project included many elements that are similar to the I-64/Route 15 (Zion Crossroads) Interchange Improvement Project including, roadway construction, signals, utility relocations, right-of-way acquisition, environmental permitting, and significant maintenance of traffic (MOT) coordination.

The Battlefield Parkway Project enabled our Team to gain significant experience in coordinating and obtaining Environmental Permits through VDOT’s Interagency Coordination Meeting (IACM) process. On the Battlefield Project our Team completed wetland surveys and stream assessments and obtained the Jurisdictional Determination from the Corp of Engineers prior to the Date of Commencement. Immediately after the Date of Commencement we worked with VDOT’s Project Manager and the NOVA District Environmental Section to secure the necessary mitigation and submit the Joint Permit Application (JPA). Finally, after presenting the project to the permitting agencies at the IACM meeting we obtained the Environmental Permit within only four months from the start of the project. Working jointly with VDOT through the IACM process we were able to obtain the Environmental Permit for the Battlefield Parkway Design-Build Project months ahead of the planned construction start date ensuring that there would be no construction delays due to Environmental Permitting.

For the I-64/Route 15 (Zion Crossroads) Interchange Improvement Project we are proposing to use key team members that have worked successfully on the Battlefield Parkway Project including, Shirley Contracting, Dewberry, Diversified Property Services, and Key Title and can therefore offer an experienced design-build team that is in place and can begin immediately.

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<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Narrative describing nature of Firm’s Responsibilities</th>
<th>c. Client/Owner/Project Manager who can verify Firm’s responsibilities. Include address and current phone number.</th>
<th>d. Contract Completion Date (Original)</th>
<th>e. Contract Completion Date (Actual or Estimated)</th>
<th>f. Original Contract Value</th>
<th>g. Final or Estimated Contract Value</th>
<th>h. Value of Work for Which Firm Was/Is Responsible</th>
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<tr>
<td>Battlefield Parkway Design-Build Project</td>
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<td>Ms. Susan Shaw PE, Project Manager</td>
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<td>* Difference Due to Owner added scope</td>
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Dewberry, in the role of the Lead Designer as part of the Shirley Design-Build Team, was selected by VDOT on the first Public-Private Transportation Act (PPTA) Project to be implemented in the Northern Virginia area. This design-build project includes design and construction of 10 grade-separated interchanges to replace at-grade signal-controlled intersections along heavily-traveled Route 28 between I-66 and Route 7. Dewberry is responsible for all preliminary and final roadway and interchange design, bridge design, stormwater management, mapping, surveys, geotechnical investigations, environmental investigations, permitting, lighting design, utility relocation designs, floodplain studies, maintenance-of-traffic design and construction inspections. The original six interchanges were completed and opened to traffic on schedule before May 2007. The success and timely completion of the first six interchanges was a key element in the decision by the Tax District landowners, Loudoun County, Fairfax County and VDOT to extend the contract by issuing a change order for the remaining four interchanges, which were completed and opened to traffic November 2009.

In addition to the 10 interchanges, the Team was also responsible for design and construction of numerous secondary road improvements including the widening of Centreville Road from two-lanes to four-lanes, a new four-lane section of Loudoun County Parkway from Smith Switch Road to Route 7, a new four-lane section of Atlantic Boulevard (including a new bridge over the W&OD Trail), and two additional sections of Pacific Boulevard, from Sterling Boulevard to Cedar Green Road and Seventh Way to Nokes Boulevard. The Team was responsible for all design, permitting, right-of-way acquisition (residential and commercial properties), utility relocations, construction, quality assurance and quality control for all project work.

The Design-Build Team worked diligently to accelerate portions of projects, so that right-of-way acquisitions and utility relocations did not need to be completed prior to the start of construction. Constant communication between construction and design staff, facilitated by weekly meetings, helped to identify critical packages which needed to be finished early. In several cases, this resulted in advance steel packages for bridges, advance detour and MOT packages, or stand alone utility packages.

The lessons learned from the construction of the various interchanges and secondary road improvements on the Route 28 project will be used to expedite expected delivery of the I-64/Route 15 (Zion Crossroads) Interchange Improvement Project for VDOT. The knowledge of how to assess the critical path and prioritize items such as environmental permitting; utility easements, utility relocations, and avoidance of utility impacts; right-of-way issues, in particular issues with land owned by federal agencies; phased design development that coincides with construction activities; and proper construction execution and delivery are all processes that our Team has worked through in coordination with VDOT. With 10 interchanges and five secondary road projects, the Route 28 Corridor Improvements Project is essentially equivalent to completing 15 projects simultaneously for VDOT in the expedited design-build delivery mode. Our proven work process and coordination not only with VDOT, but with FCPA and all appropriate stakeholders will be used to make the I-64/Route 15 (Zion Crossroads) Interchange Improvement Project a success.

A specific example of the lessons learned on Route 28 will we use on the I-64/Route 15 (Zion Crossroads) Interchange Improvement Project is the advance consideration of the Maintenance of Traffic (MOT) issues and opportunities to mitigate them. For instance, at the Route 28/Willard Road Interchange, we recognized that existing northbound traffic turning left to go west on Willard Road was backing up into the mainline travel lane of Route 28. As we initiated design of a detour intersection, we proposed geometry that would allow construction of dual left turn lanes at this location instead of the single left. This additional capacity provided during the MOT phase greatly reduced potential congestion and safety hazards during construction, and in fact provided additional capacity beyond what existed, at no cost to VDOT.

Another example occurred at the Route 28/Willard Road Interchange. Interchange where our design and construction teams worked together to establish unique profiles for our detour phase that worked to dramatically reduce the time necessary to switch from the detour phase to the final interchange operation. This significant switch-over phase, which initially was projected to take weeks to accomplish (building up from the temporary detour elevations to the final roadway elevations and then paving) was planned instead to be completed over a three day period. The actual switch-over phase was then completed even faster than planned by Shirley, who made the ultimate switch-over in just a forty-two hour period. This significantly reduced impact to the public and was only possible as a result of the extensive planning and coordination by the Design, Construction and VDOT Teams.

Another lesson learned on Route 28 is the potential issue of significant sewer issues associated with bridge crossings over streams. At the Route 28/Frying Pan Road Interchange, we completed the detailed hydraulic analysis for the 500 year storm, which required the proposed footings to be set much lower than the footings previously built for bridges in this same vicinity (due to changes in hydraulic design requirements in recent years).

Additionally, extensive coordination with numerous parties for the replacement Sully Access Road was necessary as part of the Route 28/Barnsfield Road Interchange Project. Significant differences between the Metropolitan Washington Airports Authority (MWAA) and the Fairfax County Park Authority (FCPA) prevented the scheduled construction of the access road. This had the very real potential to cause delays in opening the interchange, which is the only access to the Air and Space Museum at Dulles Airport. Through close coordination with MWAA, Shirley and Dewberry created and implemented temporary access plans, which allowed the interchange to open on time. Over the next four years, Shirley, Dewberry, and VDOT worked extensively with MWAA, FCPA, various historic and regulatory agencies, and adjacent property owners to resolve any conflicts to allow design and construction of the access road to move forward.

Finally, on the Route 28/Nokes Blvd. Interchange, the discovery of approximately 49 historical graves in the vicinity of the proposed interchange could have caused significant delays to the schedule for design and construction. Shirley and Dewberry worked with the Department of Historical Resources (DHR), Loudoun County, and the descendants of the family cemetery to catalog and relocate the remains to a cemetery location acceptable to the descendants. This potentially sensitive issue was coordinated swiftly and with appropriate sensitivities, which allowed the gravesites to be relocated and the project to proceed without impact to the schedule. The coordination required with this sensitive and unique issue demonstrates our Team’s experience dealing with potential risks which could impact a project schedule and is an example of the experience we bring to the I-64/Route 15 (Zion Crossroads) Interchange Improvement Project.
The Design-Build Team of Dewberry as the Lead Designer and Shirley as the Lead Contractor constructed the Dulles Greenway Capital Improvement Program. This $71 million design-build program included two new interchanges at Route 653 and Route 654 (Battlefield Parkway), widening of the mainline roadway from four to six lanes, expansion of the mainline toll plaza from 10 to 18 lanes, four new ramp toll plazas, widening of the 660' bridges over Goose Creek, a new ramp from the main toll plaza directly into Dulles Airport, and modifications to the existing Route 606 Interchange to add the ultimate ramp network and complete the cross-road widening. Following the start of construction, the Owner decided to add the design and construction of the ultimate improvements to the Route 772 Interchange to the contract, which was completed within the original contract timeline. Dewberry provided all roadway and interchange design, bridge design, stormwater management, aerial mapping, surveying, geotechnical investigations, floodplain studies, scour analysis, environmental investigations permitting, maintenance-of-traffic (MOT) design, and utility relocation design. In addition to design and permitting, Dewberry also contracted separately with TRIP II to provide all QA and QC Testing and Inspection Services for the project.

While the layout for each improvement was anticipated in the 1980s and 1990s, several improvements were modified based on adjacent development and to work with ongoing site plans, as well as the need to avoid all right-of-way acquisition. This design process required close coordination with VDOT, Loudoun County, the Town of Leesburg, MWAA, the U.S. Army Corps of Engineers, the Department of Environmental Quality, as well as other permitting agencies.

A major criterion to this Design-Build Project was the MOT of over 75,000 vehicles per day on the existing Greenway, and the need to avoid traffic impacts to avoid reduction of ridership and resulting revenue for the Owner. Shirley and Dewberry worked together with the Owner to create a Transportation Management Plan that minimized traffic disruptions during construction. Because of this planning there was no loss of capacity during construction.

In order to assure minimal disruption to traffic, our design-build team developed a MOT plan for the mainline Greenway widening that maintained the full travel lane widths and provided a full lane outside shoulder during construction. Temporary improvements with additional asphalt depths (milling and overlay) was required to shift traffic onto the outside shoulders, similar to what our design had accomplished in the past for VDOT on such projects as the I-66 widening.

Many of the lessons learned and processes of coordination expected between Shirley, Dewberry, and VDOT that were used on the Greenway to advance design and construction activities will be used on the I-64/Route 15 (Zion Crossroads) Interchange Improvement Project. Identification of critical path activities and priorities were completed in coordination the Owner (TRIP II) as well as VDOT, which was involved in reviews and approvals. Multiple plan packages were developed as noted above, structural steel packages were completed in advance (to ensure this long lead item was delivered to the site on time), environmental permitting was advanced (with early design support identified and completed to support this effort), and emphasis given to completing the mainline Greenway widening in a fashion to minimize disruption to the traveling public.

A specific example of a lesson learned on the Greenway involved interaction with the Town of Leesburg. The Town requested we provide separate-format grading plans and other information to them for the Battlefield Parkway Interchange, in addition to the VDOT plans that we were preparing for the balance of the project. To avoid impact to the project schedule, our design team produced a separate set of grading plans and other information, and the construction team re-scheduled the work. As a result, the Battlefield Parkway Interchange opened on time.

The Team also coordinated with the Greenway owner, the Town of Leesburg, and the adjacent developer to incorporate auxiliary lanes and intersection improvements that ensured reconstruction efforts were not needed by the Greenway, the developer, the Town, or VDOT. The need to coordinate with the many intersecting roadways and work through issues with adjacent developers, utility owners and Loudoun County was a coordination effort our Team took part in as part of the Greenway and we are prepared to do so again on the I-64/Route 15 (Zion Crossroads) Interchange Improvement Project.

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Narrative describing nature of Firm’s Responsibilities</th>
<th>c. Client/Owner/Project Manager who can verify Firm’s responsibilities. Include address and current phone number.</th>
<th>d. Contract Completion Date (Original)</th>
<th>e. Contract Completion Date (Actual or Estimated)</th>
<th>f. Estimated Value (in Thousands)</th>
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<tbody>
<tr>
<td>(2) DULLES GREENWAY CAPITAL IMPROVEMENT PROGRAM Loudoun County, Virginia DESIGN-BUILD (Lead Designer: Dewberry) (Lead Contractor: Shirley)</td>
<td>The Design-Build Team of Dewberry as the Lead Designer and Shirley as the Lead Contractor constructed the Dulles Greenway Capital Improvement Program. This $71 million design-build program included two new interchanges at Route 653 and Route 654 (Battlefield Parkway), widening of the mainline roadway from four to six lanes, expansion of the mainline toll plaza from 10 to 18 lanes, four new ramp toll plazas, widening of the 660' bridges over Goose Creek, a new ramp from the main toll plaza directly into Dulles Airport, and modifications to the existing Route 606 Interchange to add the ultimate ramp network and complete the cross-road widening. Following the start of construction, the Owner decided to add the design and construction of the ultimate improvements to the Route 772 Interchange to the contract, which was completed within the original contract timeline. Dewberry provided all roadway and interchange design, bridge design, stormwater management, aerial mapping, surveying, geotechnical investigations, floodplain studies, scour analysis, environmental investigations permitting, maintenance-of-traffic (MOT) design, and utility relocation design. In addition to design and permitting, Dewberry also contracted separately with TRIP II to provide all QA and QC Testing and Inspection Services for the project. While the layout for each improvement was anticipated in the 1980s and 1990s, several improvements were modified based on adjacent development and to work with ongoing site plans, as well as the need to avoid all right-of-way acquisition. This design process required close coordination with VDOT, Loudoun County, the Town of Leesburg, MWAA, the U.S. Army Corps of Engineers, the Department of Environmental Quality, as well as other permitting agencies. A major criterion to this Design-Build Project was the MOT of over 75,000 vehicles per day on the existing Greenway, and the need to avoid traffic impacts to avoid reduction of ridership and resulting revenue for the Owner. Shirley and Dewberry worked together with the Owner to create a Transportation Management Plan that minimized traffic disruptions during construction. Because of this planning there was no loss of capacity during construction. In order to assure minimal disruption to traffic, our design-build team developed a MOT plan for the mainline Greenway widening that maintained the full travel lane widths and provided a full lane outside shoulder during construction. Temporary improvements with additional asphalt depths (milling and overlay) was required to shift traffic onto the outside shoulders, similar to what our design had accomplished in the past for VDOT on such projects as the I-66 widening. Many of the lessons learned and processes of coordination expected between Shirley, Dewberry, and VDOT that were used on the Greenway to advance design and construction activities will be used on the I-64/Route 15 (Zion Crossroads) Interchange Improvement Project. Identification of critical path activities and priorities were completed in coordination the Owner (TRIP II) as well as VDOT, which was involved in reviews and approvals. Multiple plan packages were developed as noted above, structural steel packages were completed in advance (to ensure this long lead item was delivered to the site on time), environmental permitting was advanced (with early design support identified and completed to support this effort), and emphasis given to completing the mainline Greenway widening in a fashion to minimize disruption to the traveling public. A specific example of a lesson learned on the Greenway involved interaction with the Town of Leesburg. The Town requested we provide separate-format grading plans and other information to them for the Battlefield Parkway Interchange, in addition to the VDOT plans that we were preparing for the balance of the project. To avoid impact to the project schedule, our design team produced a separate set of grading plans and other information, and the construction team re-scheduled the work. As a result, the Battlefield Parkway Interchange opened on time. The Team also coordinated with the Greenway owner, the Town of Leesburg, and the adjacent developer to incorporate auxiliary lanes and intersection improvements that ensured reconstruction efforts were not needed by the Greenway, the developer, the Town, or VDOT. The need to coordinate with the many intersecting roadways and work through issues with adjacent developers, utility owners and Loudoun County was a coordination effort our Team took part in as part of the Greenway and we are prepared to do so again on the I-64/Route 15 (Zion Crossroads) Interchange Improvement Project.</td>
<td></td>
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<td>Toll Road Investors Partnership II (TRIP II) 45305 Catalina Court, Suite 102 Sterling, VA 20166 Mr. Tom Sines p. 703.707.9096 f. 703.707.8876</td>
<td>Dec 2007</td>
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*I-64/Route 15 Interchange Improvements | Zion Crossroads*
**ATTACHMENT 3.4.1(b), DESIGNER WORK HISTORY FORM (LIMIT 1 PAGE PER PROJECT)**

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Narrative describing nature of Firm’s Responsibilities</th>
<th>c. Client/Owner/Project Manager who can verify Firm’s responsibilities</th>
<th>d. Contract Completion Date (Original)</th>
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<th>f. Estimated Value (in Thousands)</th>
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<td>(3) BATTLEFIELD PARKWAY DESIGN-BUILD PROJECT</td>
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<tr>
<td>Leesburg, Virginia</td>
<td>Dewberry, serving as the Lead Designer with Shirley as the Lead Contractor, was selected by VDOT using the Department’s design-build procurement process to design and construct 0.7 miles of four-lane roadway, including dual 1,250 foot long bridges spanning the W&amp;OD Trail and the Tuscarora Creek Floodplain. Dewberry provided all roadway design, bridge and structural design, geotechnical investigations and recommendations, stormwater management, floodplain studies, scour analysis, environmental investigations, permitting, maintenance-of-traffic (MOT), utility relocation design, landscaping design, and lighting design. This project required close coordination with the Northern Virginia Regional Park Authority (NVRPA) and DHR to reduce impacts and provide mitigation related to a new bridge over the W&amp;OD trail. Coordination was also required with the Town of Leesburg, along with VDOT in the plan review process. Through coordination with VDOT, the Town of Leesburg and adjacent landowners, Shirley and Dewberry successfully added ultimate intersection improvements at Russell Branch Parkway to the project. Because of this addition the Town did not need to reconstruct the roadway when Russell Branch was extended. Based on this early and constant coordination, a better overall product was delivered to VDOT, adjacent landowners and the traveling public. Dewberry also provided the QA / QC Testing and Inspection as part of the Design-Build Team, providing these services in conformance with the latest VDOT Design-Build requirements. Per current VDOT requirements, our Team also provided the independent Quality Assurance Manager (QAM) for the testing and inspection. This specific expertise will be implemented on the I-64/Route 15 (Zion Crossroads) Interchange Improvement Project. An example of the Team working towards an outstanding final product on the Battlefield Parkway Project was the need to provide a quick analysis of the future Route 7/Battlefield Parkway Interchange, including preliminary vertical alignments. Although there are no immediate plans or funding to construct this interchange, nor was this analysis a contract requirement, Dewberry analyzed available information to confirm the future interchange configuration that would cause the least impact to the Parkway under construction by our Team. This preliminary study allowed our Team to confirm for VDOT and the Town of Leesburg that our initial vertical alignment for Battlefield Parkway approaching Route 7 worked well with the future grade separation planned for the Route 7/Battlefield Parkway Interchange. Our Team also worked with VDOT and the Town after discovering issues with an existing box culvert previously constructed by the Town as part of a separate project. After much analysis and coordination, we were able to incorporate the appropriate modifications and corrections into our project without delays to the overall schedule or future corrective reconstruction. Another example of a lesson learned on this project was related to the impacts and opportunities for future development of an adjacent private property owner. Our Team worked with VDOT and the Town of Leesburg throughout preliminary and final design to minimize the size of a preliminary stormwater management pond and coordinate their future entrances. This helped facilitate the right-of-way negotiations and should produce future benefits for the landowner, the Town and VDOT.</td>
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<td>Nov 2009</td>
<td>Nov 2009</td>
<td>24,527</td>
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<tr>
<td>VDOT Northern Virginia District Office</td>
<td>Alliance Drive</td>
<td>Fairfax, VA 22030</td>
<td>Mr. Susan Shaw, PE</td>
<td>Project Manager</td>
<td>p. 703.259-1995</td>
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* Difference Due to Owner added scope
INTRODUCTION
The Shirley Team, with our extensive experience successfully completing VDOT design-build projects, takes a very proactive approach when dealing with project risk. Our identification and mitigation of these risks serves to reduce the risks to VDOT, which has resulted in lower than anticipated project costs, saving VDOT critical dollars. As a result of our approach to project risk and our ability to mitigate these risks, the Shirley Team has completed all of our design-build projects on-time and on-budget, and without a single claim. The following section addresses what our Team has identified as the three most critical project risks to the I-64/US 15 (Zion Crossroads) Project, describes why the risks are critical, how our Team will mitigate the risks, and VDOT’s role in addressing the risks.

CRITICAL RISK #1 – The Diverging Diamond Interchange Concept
This will be the first Diverging Diamond Interchange (DDI) project constructed in the Commonwealth of Virginia. While the configuration reduces the amount of conflict points, it requires drivers to travel on the opposite side of the road than they are accustomed to for a short period of time. Obviously, this is not a normal driving pattern, so driver safety and expectations, as well as a thorough understanding of how a DDI will work, is a critical project risk. Our Team is well prepared to notify and educate the public on the operations of a DDI interchange.

The Shirley Team has kept abreast of the prior research and “lessons learned” from other DDIs in the United States and will work with VDOT to implement those lessons learned as part of our strategy to mitigate this project risk and ensure the project is a success. Dewberry has previously developed a DDI interchange in North Carolina as part of a design-build project which is now under construction. With this being the Commonwealth’s first DDI, our Team understands the spotlight that this project will be under and our past experience is critical to helping VDOT deliver this interchange safely and gain public support for any future potential DDIs.

The risk is critical because it represents a new way of driving through an interchange in a manner that is not normal, expected, or anticipated, and therefore is likely to cause driver confusion which could lead to accidents. To address this project risk, our Team has identified multiple solutions designed to reduce or eliminate the risk.

Our Team will implement several items designed to increase driver comfort and acceptance of this new type of interchange. First, geometric elements at the crossover intersections will be designed so it is obvious which direction drivers are to travel in an effort to avoid accidental wrong-way maneuvers into oncoming traffic. Light shields are another key element learned from other DDI installations as oncoming headlights from the right side violate driver expectancies.

Another solution we will implement will be clear roadway signage to communicate with the travelling public, which is critical for the success of this project. Our sign design experts will provide the necessary advanced signs to alert drivers of each steering maneuver they will need to make. A conceptual signing plan will also be provided to the public, state and local agencies, and the Department of Motor Vehicles in advance so they can understand what signs will be present to guide them through the proposed interchange.

An additional solution is our focus on temporary construction activities. There are several maintenance of traffic challenges to be considered for this project. For example, bridge edge line pavement markings will have to be eradicated and switched so that the yellow stripe is on the left and the white stripe is on the right. The markings will also need to be shifted to provide a wider right shoulder for driver expectancy and to address the bicycle and pedestrian accommodation comment from
the Design Public Hearing in June 2011. High visibility advanced signing and portable changeable
messages signs will have to be in place to alert drivers to slow down from an existing posted speed of
45mph to the lower speed of 25mph to navigate the new geometry. Finally, guardrail terminals and
other bridge parapet protection will also have to remain in place until traffic direction is switched.

Our team will develop a detailed and thorough Transportation Management Plan (TMP) and Temporary
Traffic Control (TTC) plan focused on maximizing safety while minimizing mobility impacts to the
traveling public. Our designers are certified in VDOT Advanced Work Zone Traffic Control and have
significant experience in interchange work zone designs with high truck traffic. Examples are I-95/Telegraph Rd reconstruction (Fairfax County), I-66/US-29 reconstruction (Prince William County),
and I-66/Route 234 (Prince William County).

Our fourth solution to mitigating this project risk will be to implement a successful Public Outreach
Program. Our Key Personnel Public Relations Manager, Jim Wright of Pulsar Advertising, Incorporated,
will be responsible for managing all external project communications with the various stakeholders of
the Project including the general public, the media and local businesses during the design and
construction phases of the project.

We will employ a comprehensive public outreach campaign to notify travelers and nearby residents and
businesses of the dates of the upcoming pattern traffic changes. Potential notification techniques include
hosting public information meetings, advertising in local newspapers, radio and television, preparing
exhibits for public distribution, installing portable changeable message signs (PCMS), creating a “how
to navigate” guide for DDIs, and feeds to VDOT’s Facebook and Twitter accounts. Our Team will also
provide VDOT with the necessary exhibits and information for updates on the VDOT website and 511
Virginia. Given the prevalence of GPS systems and on-line directions, we will also send an alert to the
leading GPS and map providers so updates to their turn-by-turn navigation systems can be implemented
as soon as possible.

Our Team will take the lead in managing the Public Involvement process for the project. As our partner,
we will ask that VDOT facilitate any public meetings to provide information to the stakeholders. We
would also ask that VDOT provide a link to the project on their website where important information
developed by the design-build team regarding the project and its progress can be found.

CRITICAL RISK #2 – Utility Relocations
Utilities have the potential to significantly impact the Project schedule and cost. On design-build
projects this risk is even greater for several reasons. First, at this stage of the Project’s development, the
roadway plans are at a very preliminary level of completion and utility test pits have not been
performed. It is difficult at this stage to determine the accurate location of the existing utilities or the full
extent of the impact the design will have on them. Second, the majority of the utility companies have not
begun their design and analysis of the cost and schedule for their potential relocations. Finally, there is
limited leverage available to the design-builder to affect the utility companies to complete their work
within the overall project schedule. The risk that utility impacts can have to the project represents a
project risk and is one that can have a detrimental impact to the project schedule and project cost unless
it is properly addressed.

Relocating utilities and acquiring the associated right-of-way are significant, interconnected schedule
risks, and are reliant upon third party cooperation. Utility relocation routes have to be finalized in order
for easements to be determined. Electric and communication utility owners often have regional, instead
of local, representatives and can be subject to reassignment in the event of emergencies. Acquiring
right-of-way and easements from individual landowners requires either their consent or a longer process of condemnation. If the adjacent property owners are not cooperative, the acquisition process will quickly affect the project critical path.

Based on recent field visits by our design-build team, there are a couple of areas where utilities are a concern. First, our Team recognizes from our field visits that there is an underground communication line running along Southbound US 15 that is not designated on the RFQ plans. There is also a potential for the proposed cut slopes on the southwest corner to impact this line. Also, it appears that the proposed cut slope on the northeast quadrant of the project will affect several overhead electric poles. As with any potential utility impact, our Team’s first priority will be avoidance and/or protection to leave the utilities in place. This early investigation shows our team’s diligence to identify and mitigate utility risk as early in the project as possible.

The key to the successful completion of utility relocations within the project schedule is having the experienced resources and relationships in place at the time the project starts. Through our long history of completing design-build projects for VDOT and other Owners, the Shirley Team has gained extensive experience working with and coordinating relocations for over 25 different public and private utility owners, including all of the utility owners affected by this project. In addition to the multitude of utility conflicts that we have avoided through alternate design solutions, our Team has successfully completed the relocation of utilities totaling more than $40 million on our design-build projects over the last 10 years. This direct experience has allowed us to form close relationships and a working knowledge of the individual utility companies, their processes and procedures. It is because of this experience that we have learned first-hand the importance of avoiding utility conflicts and relocations altogether. This will be our first priority throughout the design and construction phases of the project. If conflicts cannot be avoided by design, then we will work diligently to minimize these relocations through a combination of design and/or protection improvements for the utilities in place. Only as a last resort will we relocate utilities to eliminate conflicts with the new construction.

It is precisely our Team’s experience managing these risks that has lead to the successful completion of every one of our design-build projects for VDOT. We have a proven strategy for mitigating these risks, one that VDOT can count on the Shirley Team implementing on the I-64/ US 15 Interchange Project. These strategies include:

- Designating a full time Utility Manager, with significant VDOT design-build experience, whose primary focus is to manage the utility scope of the Project from concept to completion.
- Completely integrating utilities with all other project disciplines including design, right of way, permitting, construction, and QA/QC.
- Prioritizing relocations based on the lead time required.
- Creating a realistic Project Schedule with input from the utility and other disciplines.
- Holding weekly (at a minimum) Construction Progress Meetings on the jobsite.
- Supplementing and assisting the Utility companies with their work.

VDOT’s role will be to review any proposed relocations and administer the necessary VDOT and Federal documentation. We have extensive experience successfully using the VDOT Utility Manual for utility relocations and familiarity with the 2011 changes with regard to prior rights. Right-of-way and utility easement acquisitions will follow the VDOT Right-of-Way Manual of Instructions.
3.5 Project Risks

Critical Risk #3 – Project Schedule

The schedule provided in the RFQ allows approximately 14 months from Notice of Award to Substantial Completion to complete all elements of the Project including design and engineering, permitting, right-of-way acquisitions, utility relocations, and construction. While the Shirley Team is confident that we will meet this schedule, it will be extremely critical to closely manage and monitor all of these elements in order to avoid the risk that this schedule is not met. Fortunately, the Shirley Team has significant experience under design-build meeting critical deadlines. The Team has developed specific processes and procedures to control the schedule and we are proud to say that every one of our design-build projects has been completed on-time or ahead of schedule. The following narrative highlights our approach to mitigating the Project Schedule risk:

Project Schedule

The first step towards managing the Project Schedule risk is to create a detailed CPM that is realistic, that has all of the activities accounted for, that correctly sequences and prioritizes these activities, that fully integrates the various elements into a cohesive design-build format, that has “buy-in” from each discipline, and that has been communicated with each discipline. The second step is to ensure that the CPM is regularly updated and maintained with timely and realistic information. Third, the Team needs to have an established procedure for reacting to schedule issues, such as slippages or changed conditions, in a manner that allows for mitigation of the issue. Finally, it is vitally important throughout all phases of the Project to clearly communicate the schedule with all Team members, including VDOT.

Design

Completion of the design and engineering is one of the most important aspects of meeting the overall Project schedule. Besides correctly identifying and prioritizing the various components of the design, this discipline must be fully integrated with all other project disciplines. One area that distinguishes the Shirley Team is that we recognize the importance of beginning design activities prior to an executed contract from VDOT. As we have done on past design-build projects, our Team will start initial design activities, such as updating survey information, verifying utility designations, and preliminary design to assess right-of-way and utility impacts, at our own risk, upon receiving Notice of Intent to Award. In addition, we will explore opportunities for advancing “early-start” design packages, such as right-of-way and MOT plans, for critical elements of the Project schedule.

Right-of-Way Acquisitions

In reviewing the RFQ documents, it appears that the majority right-of-way acquisitions needed are for utility and temporary construction easements. Knowing this, we will develop the Project schedule and sequence the work to allow construction to begin while avoiding these areas until land rights are acquired. If possible, the Team will focus on design alternatives that eliminate and/or reduce these impacts. Further, our Team has had enormous success working directly with landowners to obtain Right-of-Entry Agreements that allow the work to begin during acquisition activities.

Utility Relocations

Of critical importance to meeting the Project schedule will be identifying existing utilities and determining if they conflict with the work. As with design, our Team will begin this process prior to the Contract at our risk. We will then focus on design alternatives that avoid and/or minimize the utility conflict. If unavoidable, we will closely coordinate with the utility owner to communicate the Project schedule and to affect the timely relocation. As on past design-build projects, we will explore opportunities for completing portions of the relocation with our own forces in an effort to advance
progress and more closely control the schedule. These include drilling/setting poles and constructing ductbanks, and other self-perform activities.

As with any design-build project, VDOT’s role in mitigating the schedule risk will primarily be related to timely review of all submittals and committing to turn documents around in a timely fashion. Our past experience on VDOT design-build projects reflects a partnership with VDOT and its commitment to working with our design-build team to meet the stated project schedule.

**SUMMARY**
As this is the inaugural Diverging Diamond Interchange in the Commonwealth of Virginia, our Team is keenly aware of the spotlight the project is under. We will use our prior experience in working with VDOT to successfully and smoothly deliver this project – and through the process, to gain public support for any future potential DDIs.