I-64 Exit 91 Interchange Improvements
A Design-Build Project

State Project No.: 0064-007-111, P101, R-201, C-501, B-627
Federal Project No.: NH-064-2(152)
Contract ID Number: C00075877DB47

Statement of Qualifications
January 6, 2012

Mr. John Daoulas, PE
Alternate Project Delivery Office
Virginia Department of Transportation
1221 East Broad Street
Main Building, Fourth Floor
Richmond, Virginia 23219

RE: I-64 Exit 91 Interchange Improvements
   State Project No.: 0064-007-111, P101, R-201, C-501, B-627
   Federal Project No.: NH-064-2(152)
   Contract ID Number: C00075877DB47

Dear Mr. Daoulas:

The Lane Construction Corporation (LANE) is pleased to submit this Letter of Submittal for the above referenced design-build project with the Virginia Department of Transportation (VDOT). Our response contains all information requested in the RFQ dated November 3, 2011. Our team’s experience enables us to deliver the kind of high quality and technically sound project VDOT has come to expect from each of our team members.

LANE is the Offeror and will be the overall authority on the project as well as the Lead Contractor. LANE has teamed with H.W. Lochner, Lead Design Consultant, to provide VDOT a team with a solid reputation for completing complex projects on time and often well ahead of schedule. NXL will lead the construction Quality Assurance (QA) effort and will be responsible for the independent QA inspection and testing of all materials used on the Project. The LANE/LOCHNER Team is committed to providing experienced personnel familiar with the VDOT requirements necessary to meet or exceed the quality and schedule demands of the Project. To this end, the LANE/LOCHNER Team additionally includes specialty firms to provide services in their areas of expertise in such areas as geotechnical, utilities, environmental compliance, and right-of-way; these specialists and their qualifications are identified and described in Section 3.3; the experience of each of these firms is described in Section 3.4.

The Lane Construction Corporation is one of America’s premier heavy contractors and the preferred partner on projects that connect and improve the communities and the world in which we live. Founded in 1890, LANE constructs quality bridges, highways, locks and dams, and mass transit and airport systems in 20 states. In its 121-year history, LANE has never failed to complete a contract. LANE has been performing successful work for federal, state, regional and local agencies in the Commonwealth of Virginia for nearly 40 years.

LANE National Rankings

4th Top Highway Contractors in the U.S
8th Transportation Top 20 in the U.S.
8th 50 Domestic Heavy Contractors in the U.S.
~ Engineering News Record, 2011

An Equal Opportunity Employer M/F/D/V
3.2.1. Offeror’s Point of Contact:
Mr. Richard A. McDonough is the official representative and point of contact for the LANE/LOCHNER Team relative to all matters associated with this Qualifications Submittal.

Richard A. McDonough, District Manager
The LANE Construction Corporation
14500 Avion Parkway, Suite 200
Chantilly, VA 20151
Tel: (703) 222-5670
Fax: (703) 222-5960
Cell: (703) 898-3811
Email: RAMcDonough@laneconstruct.com

3.2.2. Principal Officer:
Mr. Joseph P. Lark is a principal officer of The LANE Construction Corporation and the legal entity with whom a design-build contract with VDOT will be written.

Joseph P. Lark
Regional Vice President, Mid-Atlantic
The LANE Construction Corporation
14500 Avion Parkway, Suite 200
Chantilly, VA 20151
Tel: (703) 222-5670
Fax: (703) 222-5960
Email: JPLark@laneconstruct.com

3.2.3. Offeror Structure: The Lane Construction Corporation, Offeror, founded in 1890, is structured as a corporation and was incorporated in the State of Connecticut on April 5, 1902. LANE will solely be responsible for this financial undertaking. As lead contractor, LANE will be responsible for administering the contract, providing the bond, scheduling, quality control, supervising construction, the safety program, maintenance of traffic (MOT), and coordination of all subcontractors and trades. Lochner will be under a subcontract with LANE for all design efforts pertaining to this project, including MOT. The additional subconsultants and/or specialty consultants, required by Lochner in its design efforts, will be under a direct subcontract to Lochner. NXL Construction, Inc., providing the Quality Assurance Manager and support, will also be under direct contract to LANE.

Neither The Lane Construction Corporation, nor its parent, Lane Industries Incorporated, or any of its affiliates have contingent liabilities, financial commitments, or performance commitments that will put limitations on LANE’s financial exposure for this project.

3.2.4. Parent, Affiliated, Subsidiaries and/or Subsidiary Companies: The Lane Construction Corporation has no affiliated companies. The names and addresses of our subsidiary companies are:

**Virginia Paving Company Division**
Main Office: 14500 Avion Parkway, Suite 200
Chantilly, VA 20151; Phone: (703) 230-0850

**Lane Carolinas Corporation**
90 Fieldstone Court, Cheshire, CT 06410
Phone: (203) 235-3351
§ Rea Contracting, LLC
Main Office: 6135 Park South Dr, Suite 400
Charlotte, NC 28210; Phone: (704) 553-6500
§ Prestress of the Carolinas, LLC
11630 Texland Boulevard, Charlotte, NC 28273; Phone: (704) 587-4273

**Virginia Sign and Lighting Company Division**
Main Office: 14500 Avion Parkway, Suite 200
Chantilly, VA 20151; Phone: (703) 222-5670

**Senate Asphalt Division**
Main Office: 6216 Oxon Hill Road, Oxon Hill, MD 20745; Phone: (301) 686-9090

**Cold River Materials Division**
Main Office: 1 Scale Lane, Walpole NH 03608
Phone: (603) 445-2300

**Sunrise Materials Division**
Main Office: 61 Margin Street, Orono, ME 04473
Phone: (207) 866-2194

**Sunquip Division**
Main Office: 1065 Odlin Road, Hermon, ME 04401
Phone: (207) 942-7700

**Wardwell Contracting Division**
Main Office: 14 Earth Plaza, Orland, ME 04472
Phone: (207) 496-3872
3.2.5. Certification(s) Regarding Debarment: Certifications for Debarment for both Primary Covered Transactions and Lower Tier Covered Transactions have been completed and executed for the Offeror and all subconsultants, subcontractors, and other entities as identified as a member of the LANE Team. These may be found in the Appendix.

3.2.6. Offeror's VDOT Pre-Qualification Certificate: A screen-shot printout from VDOT's on-line Prequalified List may be found in the Appendix demonstrating that The Lane Construction Corporation is prequalified for this SOQ's submission.

3.2.7. Surety Letter: A surety letter from the bonding companies is included herein, indicating their willingness to provide any and all bonds for this project. The co-sureties will furnish a single 100% performance bond and a single 100% payment bond.

3.2.8. Organizational Structure of Team and Registrations/Licenses: The following table delineates the required respective state registrations and licensures of the LANE Team. The Offeror and all team members are eligible at the time of this SOQ submittal, under the law and relevant regulations, to offer and to provide any services proposed or related to the Project. Respective copies of the business and individual licenses may be found in the Appendix.

3.2.9. DBE Participation Commitment: LANE supports the Disadvantaged Business Enterprise program and is committed to meeting or exceeding 12% of the design and construction of this project utilizing the services of organizations certified in Virginia as Disadvantaged Business Enterprises. It is also LANE's intention to take all necessary and reasonable steps to ensure that SWaM firms have the maximum opportunity to compete for and perform services in this design-build contract.

The next two sections of this SOQ provide a detailed description of the LANE Team's structure and the directly relevant experience of our team to design and construct this I-64 Exit 91 Interchange Improvements. Further, as a Team, we recognize that the following critical project risks must be addressed for the successful delivery of this Project; these identified risks are more fully described and the appropriate mitigation strategies that the LANE Team intends to implement in Section 3.5 in this submission.

1. Maintenance of Traffic and Transportation Management Plan
2. Utilities
3. Right-of-Way

By implementing sound controls and scheduling, it is our intention to deliver this Project on time and within budget. Our entire LANE Team appreciates you taking the time to review this Letter of Submittal and we look forward to working with VDOT on this project.

Respectfully submitted,

[Signature]

Richard A. McDonough
District Manager
Authorized Representative
The Lane Construction Corporation
January 6, 2012

Joseph A. Clarke, PE
Alternate Project Delivery Office
Virginia Department of Transportation
1401 East Broad Street
Richmond, VA 23219

Re:
I-64 Exit 91 Interchange Improvements
State Project No: 0064-007-111, P101, R-201, C-501, B-627
Federal Project No.: NH-064-2(152)
Contract ID Number: C000758777DB47

Estimated Value of Project $37-39M
Type of Project: D-B

To Whom It May Concern:

We are pleased to share with you our experience as surety for The Lane Construction Corporation. We consider The Lane Construction Corporation one of our outstanding and most valued clients in whom we have the highest confidence. Through the years this company has, in our opinion, remained properly financed, well equipped and most capably managed.

Fidelity and Deposit Company of Maryland and Zurich American Insurance Company have an A.M. Best rating of A+ XV and Liberty Mutual Insurance Company has an A.M. Best rating of A XV. They have approved a surety program for Lane consisting of single project limits of $250,000,000 with a corresponding aggregate bonding capacity of $1,500,000,000.

Fidelity and Deposit Company of Maryland, Zurich American Insurance Company and Liberty Mutual Insurance Company are prepared to give favorable consideration to the execution of any final bonds in association with the above captioned project. Naturally, the execution of any final bonds would be subject to our normal underwriting review which includes the following:

- The Lane Construction Corporation would request us to issue bonds for this project.
- Both The Lane Construction Corporation and Fidelity and Deposit Company of Maryland, Zurich American Insurance Company and Liberty Mutual Insurance Company will have the opportunity to review and find acceptable the contract terms and conditions, bond forms and project financing.
- A satisfactory underwriting review will have been completed at the time the bonds are required.

If we can provide any further assistance please do not hesitate to contact us.

Sincerely,

[Signature]
Fidelity and Deposit Company of Maryland
Zurich American Insurance Company
Liberty Mutual Insurance Company

Stacy Rivera, Attorney-In-Fact
<table>
<thead>
<tr>
<th>Business Name &amp; Registered Address</th>
<th>SCC (3.2.8.1)</th>
<th>SCC #</th>
<th>DPOR (3.2.8.2 / 3.2.3.3 / 3.2.8.4)</th>
<th>DPOR Registration Type</th>
<th>DPOR Reg. #</th>
<th>Expiration</th>
<th>Key Personnel</th>
<th>License # / Expiration</th>
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</thead>
<tbody>
<tr>
<td>The Lane Construction Corporation - 90 Fieldstone Court Cheshire, CT</td>
<td>F025447-6</td>
<td>Contractor Class A</td>
<td>2701011871</td>
<td>1/31/2012</td>
<td>Richard McDonough</td>
<td>James Vogt</td>
<td></td>
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</tr>
<tr>
<td>H.W. Lochner, Inc. - 2727 Enterprise Parkway, Suite 203, Richmond, VA 23294</td>
<td>F055272-2</td>
<td>APELSCIDLA Business Entity/Branch Office</td>
<td>411000631</td>
<td>2/29/2012</td>
<td>John Stuart, PE</td>
<td>402027454 / Exp. 2/28/2012</td>
<td>Karin Ertl, AICP (N/A)</td>
<td></td>
</tr>
<tr>
<td>Clark Nexsen - 6160 Kempsville Circle, Suite 200, Norfolk, Virginia 23502</td>
<td>0190175-0</td>
<td>APELSCIDLA Business Entity</td>
<td>405000238</td>
<td>12/31/2013</td>
<td>Al Patel, PE</td>
<td>402025919 / Exp. 4/30/2013</td>
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<tr>
<td>Williamsburg Environmental Group, Inc - 5209 Center Street, Williamsburg, VA 23188</td>
<td>0357437-3</td>
<td>APELSCIDLA Business Entity</td>
<td>407003693</td>
<td>12/31/2013</td>
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<tr>
<td>Richmond, VA</td>
<td>0357437-3</td>
<td>APELSCIDLA Business Entity/Branch Office</td>
<td>411000596</td>
<td>2/29/2012</td>
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<tr>
<td>Froehling &amp; Robertson - 6181 Rockfish Gap Tpke, Crozet, VA 22932</td>
<td>0027211-2</td>
<td>APELSCIDLA Business Entity/Branch Office</td>
<td>411000052</td>
<td>2/29/2012</td>
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<tr>
<td>Greenhorne &amp; O'Mara, Inc. - 6110 Frost Place, Laurel, MD 20707</td>
<td>0371158-7</td>
<td>APELSCIDLA Business Entity/Branch Office</td>
<td>411000611</td>
<td>2/29/2012</td>
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<tr>
<td>Richmond, VA</td>
<td>0371158-7</td>
<td>APELSCIDLA Business Entity/Real Estate Appraiser Board Business Registration</td>
<td>4008001550</td>
<td>8/31/2013</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Pape &amp; Company - 1421 Sachem Place, Suite 1, Charolottesville, VA22901</td>
<td>S290560-4</td>
<td>APELSCIDLA Business Entity</td>
<td>407005432</td>
<td>12/31/2013</td>
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</table>
3.3 Offeror’s Team Structure

The I-64 Exit 91 Interchange Improvements (Fishersville Interchange) Design-Build Team is led by The Lane Construction Corporation (Lane) which will be responsible to VDOT for the overall management and construction of the project. H.W. Lochner, Inc. (Lochner) will be the lead design engineer.

Lane will have the overall responsibility for delivering the Fishersville Interchange project under the direction and management of Design-Build Project Manager, Mr. Rich McDonough. Lane plans to self-perform all primary roadway and bridge construction and augment certain elements of construction with specialty subcontractors. Lane will focus on maximizing subcontracting to disadvantaged and small businesses as part of achieving the Commonwealth of Virginia’s procurement goals through our two-step subcontracting plan.

Lochner will lead the design effort for all aspects of the project, will execute and manage the design effort, and will be responsible for design QA/QC. Several specialty design subconsultants will be under the direct responsibility of Lochner: Clark-Nexsen (CN) for the bridge design and supporting roadway and utilities engineering design services, Froehling and Robertson (F&R) for geotechnical engineering services, Greenhorne & O’Mara (G&O) for right-of-way acquisition and utility coordination services, and Williamsburg Environmental Group (WEG) for environmental permitting services.

Lane will subcontract directly with NXL Construction Services (NXL) to provide the Quality Assurance Manager (QAM) for construction. The QAM will be directly responsible to Lane’s Design-Build Project Manager. Lane will be responsible for quality control for the entire project during construction and will ensure that all construction activities meet applicable state and federal requirements.

The Lane Design-Build Team consists of experienced contractors and designers who will bring this project to successful completion on schedule and budget.

<table>
<thead>
<tr>
<th>Firm Name</th>
<th>Project Role</th>
<th>Capabilities/Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Lane Construction Corporation</td>
<td>Prime, Contractor</td>
<td>Construction, safety, inspection, materials testing, quality control</td>
</tr>
<tr>
<td>H.W. Lochner, Inc.</td>
<td>Lead Engineer/Lead Environmental</td>
<td>Roadway design, hydraulics/hydrology, utilities, traffic engineering, signal design, lighting design, and environmental compliance</td>
</tr>
<tr>
<td>Clark-Nexsen</td>
<td>Structural Engineering and Supporting Engineering</td>
<td>Bridge/structures engineering, roadway design, signal design, utilities and landscaping/streetscaping.</td>
</tr>
<tr>
<td>NXL Construction Services (DBE)</td>
<td>Quality Assurance Manager (QAM)</td>
<td>Construction Quality Assurance</td>
</tr>
<tr>
<td>Froehling and Robertson (SWaM)</td>
<td>Geotechnical</td>
<td>Construction geotechnical engineering and materials testing</td>
</tr>
<tr>
<td>Greenhorne &amp; O’Mara</td>
<td>ROW Manager and Utilities Coordination</td>
<td>Right-of-way acquisition [appraisal review] and utility relocation coordination</td>
</tr>
<tr>
<td>Pape &amp; Company</td>
<td>Appraisal preparation</td>
<td>Appraisal preparation</td>
</tr>
<tr>
<td>Williamsburg Environmental Group</td>
<td>Environmental Permitting</td>
<td>Environmental permitting and mitigation</td>
</tr>
<tr>
<td>LLC (DBE, SWaM)</td>
<td>Survey</td>
<td>Design Survey</td>
</tr>
<tr>
<td>H&amp;B Surveying and Mapping, LLC</td>
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</tbody>
</table>

SECTION 3.3 - OFFEROR’S TEAM STRUCTURE
Management Approach
LANE is one of the largest and most diversified heavy highway contractors, continually at the forefront of highway, bridge and other civil project construction projects. We self-perform nearly all work components to include: earthwork, storm drainage, wet utilities, bridge and drainage structures, concrete and asphalt paving, and signs and lighting. LANE maintains a permanent regional office in Chantilly, Virginia which supports more than 700 employees working throughout the Commonwealth and brings vast resources that benefit VDOT and the local economy. With over 40 years of experience in Virginia, LANE has consistently delivered challenging projects with the highest level of quality and care. Our employees are proud of their reputation in Virginia and strive to construct projects with lasting value of the utmost quality. LANE is also a leader in achieving effective partnering on alternative delivery projects in Virginia with similar characteristics to the Fishersville Interchange project and looks forward to implementing those practices on this exciting opportunity.

Partnering
The LANE Design-Build Team is seasoned in creating and maintaining collaborative teaming and partnering practices to ensure that effective communication and coordination take place among key project stakeholders. We will apply valuable lessons and proven methods to ensure the Fishersville Interchange Project Team shares a forward-thinking, productive relationship. We will maintain positive teaming and partnering relationships with VDOT, Augusta County, Greater Augusta Regional Chamber of Commerce, other stakeholders, and the Augusta Medical Center, by:

- Maintaining a strong partnering ethic that extends to project owners and third-parties
- Proactively identifying and addressing unique project issues through a flexible design and construction risk management approach
- Facilitating monthly partnering meetings led by Mr. Richard McDonough, the Design-Build Project Manager, involving all project principals, monthly partnering evaluations and a kick-off meeting to develop a partnering charter with key stakeholders, team leads and local government and business entities

Our approach to dispute avoidance and issue resolution provides:

- Honest and timely discussion of project issues
- Implementation of VDOT partnering
- Early coordination with major stakeholder groups (including the Augusta Medical Center and Expo Center)
- Fostered atmosphere of trust and honesty
- Proven track-record of highly successful owner, local government, and project stakeholder relations
- Performance evaluations to identify areas for improvement

3.3.1 Key Personnel
The LANE Team has carefully chosen the following individuals to fulfill the roles of Key Personnel as identified in the RFQ. A number of them have previously worked together on Design-Build projects in Virginia. The following Key Personnel Staffing Table summarizes their roles, responsibilities and reporting chain of command. Additional details for each of the Key Personnel can be found in their resumes in the Appendix.
## Key Personnel Staffing

<table>
<thead>
<tr>
<th>Name / Role</th>
<th>Responsibilities</th>
<th>Reporting &amp; Coordination</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Richard McDonough - Design-Build Project Manager (LANE)</strong></td>
<td>• Overall management and implementation of all elements of the project</td>
<td>Reports to the Project Team and the VDOT Project Manager</td>
</tr>
<tr>
<td>• 32 years experience</td>
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<tr>
<td>• Led construction of over 30 miles of roadway and 36 bridges</td>
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<td></td>
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<tr>
<td>• Sudley-Manor Design-Build</td>
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<td></td>
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<tr>
<td>• Route 50 Gilberts Corner Design-Build</td>
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<tr>
<td><strong>Michael Saunders, PE, CCM – QAM (NXL)</strong></td>
<td>• QA inspection and testing of all materials used and work performed on the project</td>
<td>Reports to Design Build Project Manager</td>
</tr>
<tr>
<td>• 10 years VDOT experience</td>
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<tr>
<td>• Independent quality assurance and verification on Design-Build</td>
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<tr>
<td>• Route 36 Interchange Design-Build</td>
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<td></td>
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<tr>
<td>• I-295 Meadowville Interchange Design-Build</td>
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<tr>
<td><strong>John Stuart, PE - Design Manager (Lochner)</strong></td>
<td>• Coordinate individual design disciplines</td>
<td>Reports to Design-Build Project Manager and project design team</td>
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<td>• 22 years experience – Interchanges, Widening, &amp; Reconstruction</td>
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<tr>
<td>• I-80 Widening &amp; Interchange Improvements Design-Build/CMGC</td>
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<tr>
<td>• Mid-Currituck Bridge Design-Build/P3, Currituck County, NC</td>
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<tr>
<td>• Volvo-Lynnhaven Parkway, Cities of Virginia Beach/Chesapeake</td>
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<tr>
<td><strong>James Vogt - Construction Manager (LANE)</strong></td>
<td>• Manage the construction process on the project site</td>
<td>Reports to Design Build Project Manager</td>
</tr>
<tr>
<td>• Route 50 Gilberts Corner Design-Build</td>
<td></td>
<td></td>
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<tr>
<td>• Sudley-Manor Design-Build</td>
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<tr>
<td>• I-66 Spot Improvements</td>
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<tr>
<td><strong>Al Patel, PE - Lead Structural Engineer (CN)</strong></td>
<td>• Structural design of bridges and retaining walls</td>
<td>Reports to Design Manager</td>
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<tr>
<td>• Route 60 Bridge Replacement Design-Build</td>
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<tr>
<td>• Route 288 Bridges Design-Build/P3</td>
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<tr>
<td>• I-95/Route 627 Interchange Bridges</td>
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<tr>
<td><strong>Karin Ertl, AICP - Environmental Compliance (Lochner)</strong></td>
<td>• Ensure compliance with all environmental commitments during construction</td>
<td>Reports to Construction Manager directly, and as needed to Design Manager for peer reviews</td>
</tr>
<tr>
<td>• 20 years experience</td>
<td></td>
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<tr>
<td>• NEPA documentation, wetland and water quality permitting</td>
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<td></td>
</tr>
<tr>
<td>• Route 50 Gilberts Corner Design-Build</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• US Route 1 Widening, Colonial Heights, Virginia</td>
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</tbody>
</table>
Leading the Lane Team is **Design-Build Project Manager, Mr. Richard A. McDonough.** He is responsible for the overall project, construction quality management, and contract administration. He will facilitate communication among team partners, monitor design efforts to proactively eliminate potential constructability issues prior to breaking ground, and delegate resources to deliver the project on time. Mr. McDonough has been managing design-build projects for more than ten years and has led construction for more than 30 miles of highway and 36 bridges, most of which have been in the Commonwealth of Virginia. He is an active member of the Virginia Transportation Contractors Association having served as president (2007-2008) as well as a founding leader of the Virginia Department of Transportation Joint Committee on Design-Build Delivery since its inception. Mr. McDonough has a proven record of success as an effective communicator and decision maker in employing the effective project controls to achieve planned schedules and budgets. He is committed to a team approach and will champion the Partnering process on the project as the leader of the management team.

As displayed in the Organization Chart, the following managers will report directly to the **Design-Build Project Manager**, leading their respective groups. Highlights of their credentials and capabilities are summarized below.

**Quality Assurance Manager (QAM) – Mr. Michael Saunders, PE, CCM (NXL)** brings 10 years of VDOT construction management and quality assurance experience having served in the roles of VDOT Construction Project Manager, VDOT Area Construction Engineer, and VDOT Project Control Engineer for Design-Build and Locally Administered projects. His experience includes the critical role of independent quality assurance and verification on Design-Build projects. His current role with NXL is Project Manager/Quality Assurance Manager. As the independent QAM, he holds the authority to shut down the job if quality issues warrant.

**Design Manager – Mr. John Stuart, PE (Lochner)** is a Senior Project Manager with 22 years of experience in managing engineering projects and construction delivery for a wide range of transportation infrastructure projects including interstate, interchange, primary and secondary facilities as well as rural and urban widening and reconstruction projects. His recent experience includes Route 1/Boulevard Modernization with the City of Colonial Heights, Mid-Currituck Design-Build/P3 in North Carolina, and I-80 Design-Build/CM-GC in Salt Lake County, UT. John was also instrumental in the preliminary plan development that moved forward the VDOT Route 50 Gilberts Corner Design-Build project which was constructed by Lane ahead of schedule and on budget in 2009.

**Construction Manager – Mr. James Vogt (Lane)** brings nearly 20 years of experience in heavy construction management with increasing levels of responsibility from Job Engineer to Project Manager. He brings extensive experience in the implementation of safety and quality measures as well as maintaining schedule milestones, organizing manpower, and managing project budgets. Mr. Vogt’s most recent experience includes the completed I-66 Spot Improvements project in Arlington County involving the full-depth reconstruction and widening to three lanes of the interstate facilities. While there is a clear separation between the Construction Manager and the Quality Assurance Team members, Mr. Vogt will be in constant communication with the Quality Assurance Manager during construction to receive feedback on overall project quality.

**Lead Structural Engineer – Mr. Al Patel, PE (CN)** is a Senior Structural Engineer bringing 27 years of experience in structural design, load ratings, cost estimates and production of contract documents and submittals for bridge structures. Mr. Patel’s experience includes the design of new bridges and most recently the Route 60 Bridge Replacement over Smith Creek, Clifton Forge – a Design-Build project with the Staunton District.

**Environmental Compliance Manager – Ms. Karin Ertl, AICP (Lochner)** is a Senior Environmental Planner and Project Manager with 20 years of environmental compliance experience from planning through permitting. Karin served as the Environmental Compliance Manager on the Lane Team for the VDOT Route 50 Gilberts Corner Design-Build traffic calming project. She has performed as the environmental compliance leader on projects ranging from the Pole Green Road Improvement project – a locally administered project constructed in Hanover County to the Chesapeake Expressway, a toll facility in Hampton Roads.

Ms. Ertl will also lead the Public Involvement initiative providing outreach to project stakeholders for public information and project updates.
3.3.2 Organizational Chart and Narrative

The LANE Team’s organizational chart is shown on page 12 of this Statement of Qualifications. The following narrative describes the structure of the team and the individuals’ reporting roles as pictured in the Team Organizational Chart.

The LANE Team is proposing an organizational structure that clearly outlines the reporting and functional relationships of the assigned personnel. Mr. Richard McDonough, Design Build Project Manager, will serve as the single point-of-contact for VDOT. He will develop a plan specifically for this project that clearly confirms the role responsibilities and expectations for each subcontractor and subconsultant. He will work with the project team (Lane and VDOT) to establish the project schedule and implement a work plan that is communicated to each team member.

Reporting and functional relationships of each of the key personnel are provided in the Key Personnel Staffing Table on page 3.

Project Team Leaders (design, right-of-way, safety and construction) are each responsible for the oversight and productivity of their respective staff members and will report directly to Mr. McDonough, the Design-Build Project Manager. He will facilitate project meetings to include all Project Team Leaders who will report on current project status, identify issues and foster a continued understanding of project progress of all aspects of the project. VDOT personnel will be invited to attend these and all other coordination meetings. QA staff will report directly to and primarily communicate with Mr. McDonough to ensure that an objective view of project plans is maintained. QA comments and findings will be communicated to individual Project Team Leaders by the Design-Build Project Manager, ensuring a separation of the Construction QA and QC team staff.

The Design Manager, Mr. John Stuart PE, will lead the design phase of the project and report directly to the Design-Build Project Manager. Mr. Stuart has divided the design phase of the project into key sub activities including: Roadway Design, Structure Design, Hydraulics/Hydrology, Geotechnical Engineering, Environmental, Traffic/Signal Design, Utility Design, and Roadway Lighting Design. Each area is led by experienced personnel as indicated on the organizational chart.

These respective task leaders are identified with their responsibilities and reporting structure below.

Design Quality Assurance – Mr. Scott Lucas, PE (Lochner) currently serves as the firm’s Technical Resource Leader for Alternative Delivery encompassing design-build, CM/GC and P3 project delivery methods. He is best known for his freeway and interchange design and oversight expertise and has built a reputation for developing economical, efficient alternatives. He brings strength to our team through his balance of design-build and complex interchange design experience including having served as the QAM on both the I-80 and Mountain View Corridor projects. In addition, he has served as the Design-Build Project Manager for the following projects: $95M Design-Build of I-15, South Layton Interchange in Layton City, UT which included a new single point urban interchange, removal of an existing partial interchange, and widening of I-15; $120M widening and reconstruction of six miles of urban roadway including a new SPUI interchange for the 12300/12600 South, 700 East to Bangerter Highway Design-Build project in Salt Lake County, UT; and the 10 miles of new roadway for the SR-68 (Redwood Road), Bangerter Highway to Saratoga Springs Design-Build project in Salt Lake County, UT. He has also served as the QC/QA Manager on several CM/GC Design projects.

QC Manager – Mr. Russell Lauer (Lane) will direct QC field technicians, as well as oversee the QC laboratory testing program. Mr. Lauer began his career with Lane in 2002 as a Job Engineer. In 2007, he assumed the duties of Quality Control Manager and Job Engineer and in 2009 was promoted to Sr. Job Engineer in conjunction with his role as Quality Control Manager. He is certified in Erosion and Sediment Control in Virginia and has received training from the U.S. Army Corps of Engineers in Construction Management. Mr. Lauer also has design-build experience having performed on the NCTA North Wake Expressway (I-540) D-B, NC where his responsibilities included subcontractor coordination, quantity tracking and pavement quality tracking, traffic management, erosion and sediment control management, coordination of on-road earthmoving operation, and cost tracking. He will report directly to the Construction Manager, Mr. Jim Vogt.

Geotechnical Engineer – Mr. Clyde Simmons, III, PE (F&R) will play an active role in the design process by completing a final geotechnical investigation and design report for the proposed
bridge and roadway design and construction. After receiving the required review and approval from VDOT, the geotechnical design recommendations will be implemented in the final design and construction. Mr. Simmons will coordinate closely with the QAM to ensure testing and inspection frequencies are in compliance with the approved QA/QC manual. He reports directly to the Design Manager.

Mr. Simmons has oversight responsibility as project engineer for materials testing on various construction projects during earthwork and foundation phases which include the excavation and replace procedures, proofrolling subgrades, placement of structural fill, foundation observations related to bearing capacity, and the use of dynamic cone penetrometers.

**Utilities Relocation Coordination – Mr. Dave Malinoski (G&O)** will be responsible for coordination of all utility relocations for the project. He will report to the Design Manager but will also have additional reporting and coordination responsibilities with the Design-Build Project Manager that will help ensure proactive coordination of utility relocation activities and accurate tracking, reporting and achievement of schedule milestones. With more than 32 years of experience in the management, design and coordination of public and private utilities, Mr. Malinoski has been responsible for coordinating and scheduling utility relocations with the contractor, field verification of utility relocations and preparation of as-built drawings. His extensive utility experience includes several innovative delivery, design/build and public-private projects including: Route 895 Pocahontas Parkway, Jamestown 2007, Treyburn Drive, Jamestown 2007, Dulles Metrorail Extension, and the I-495 Capital Beltway HOT Lanes Project (the latter two projects with LANE and other current proposed team members.) These projects have given her a firm understanding of working with the Contractor’s schedule and needs.

**Ms. Karen Pape (Pape & Company)** will be responsible for preparing the appraisals and preparing offers in conjunction with VDOT ROW staff. She will report directly to Ms. Jones, the Right-of-Way Manager. Both Pape & Company and Ms. Pape herself are prequalified VDOT Right-of-Way consultants and listed on VDOT’s Senior Appraiser list, respectively. Ms. Pape is also qualified to serve as an expert witness in a variety of courts in the greater Central Virginia area and she has served on the Board of Directors for the Virginia Commonwealth Chapter of the Appraisal Institute. Both she and her firm have teamed with G&O on several VDOT projects including the I-495 HOT Lanes, Virginia Capital Trails, Route 218 Improvements in Stafford County and the 10th Street Improvements project in Roanoke.

As necessary, Ms. Jones and Ms. Pape will call upon Ms. Ertl for public outreach assistance in the course of their right-of-way and utilities coordination performance.

**Team Interaction**

The LANE Team’s personnel will interact directly with VDOT and/or third parties during various phases of the project. For example, the Design Manager will interact directly with VDOT Location and Design personnel to facilitate plan reviews, submittals and design topic meetings. Correspondence will be properly routed with copies to the appropriate personnel to ensure clear communication and reporting is maintained throughout the project. Furthermore, our team members have worked on various projects together and have established working relationships in place that are helpful in advancing timely successful project delivery.
3.4 Experience of Offeror’s Team

The Lane Construction Corporation (Lane) established in 1890 and incorporated in the State of Connecticut, is one of the largest and most well-respected transportation contractors in the nation. The Corporation has regional offices throughout the Eastern United States including Chantilly, Virginia which supports multiple office locations throughout the Commonwealth.

Lane consistently ranks among the top 10 transportation contractors in the nation, as reported by Engineering News-Record, and is currently ranked the 8th largest transportation contractor. We have successfully participated in 50 Design-Build projects ranging in scope from $15M to $1.5B Capital Beltway HOT Lanes in Northern Virginia. We understand the critical importance of partnering to make the design-build process a success and have partnered on teams that have constructed more than $2.8 billion in Design-Build projects in the last decade.

3.4.1 Experience Delivering Similar Projects

The benefits of the design-build delivery method are enhanced when the team members are familiar with each other. The Lane Team members have worked on numerous projects together and are proud to have successfully delivered many using this contracting method. Our long-standing relationships create significant added value to VDOT.

Advantages of Design-Build with Lane include partnering with a contractor that has:

- Experienced Design-Build personnel
- Design-Build project experience on both large and small projects
- A proven track record of successful Design-Build contract administration
- The ability to self-perform up to 75% of the critical work activities on most projects
- A proven track record of completing work on time or ahead of schedule
- One of the industry’s best safety records
- A reputation for delivering only the highest quality workmanship

Lane maintains a full time presence in Virginia employing a permanent workforce in excess of 700 craftsmen; we understand the issues that drive the Commonwealth and recognize the transportation investment that VDOT is making with this D-B project. Our experienced Virginia workforce is very familiar with the stakeholders that need to be represented and communicated with for this project to ensure its success.

Lane has been the active leader on numerous high profile projects for VDOT over the last 30 years including:

- $1.5B Capital Beltway HOT Lanes D-B Project (ongoing and on-schedule)
- I-66 Third Lane Widening, $10M (completed 12/5/11)
- Gilberts Corner Route 50 Roadway Improvements D-B, $13.4 M (completed 2009 – early delivery and under budget)
- Springfield Interchange $75M (completed – early delivery)

H.W. Lochner, Inc. (Lochner) will serve as the Lead Designer. With 30 offices in 18 states, Lochner is a multi-disciplined firm with a primary focus on transportation. Lochner employs nearly 600 civil and structural engineers, planners, environmental scientists, design technicians, and support professionals. Since 1944, Lochner’s ongoing accomplishments have contributed to its well-deserved reputation as a top consulting firm. Today, Lochner remains independently-owned and holds strong relationships with its partners and the communities it serves. Lochner and the proposed staff bring a great deal of experience in three vital areas to this project: 1) interchange design, 2) VDOT standards and procedures, and, 3) the full cycle of Design-Build project delivery.

Experts in delivering Design-Build, Public-Private Partnerships and CM/GC projects, Lochner professionals have been providing contractors with low-cost solutions for more than 15 years. Lochner provides on-site engineering resources to serve the project team, resulting in the rapid development,
review and approval of innovative design solutions. Lochner serves as a partner during the pursuit process to identify stakeholder needs and utilizes this information to develop lowest cost solutions.

Recent Lochner Design-Build engagements include the following notable projects:

**South Layton Interchange Design-Build Layton City, Utah** - Lochner provided lead design services for this $95M reconstruction project, including a new single-point urban interchange, removal of a partial interchange, widening of 1.8 miles of I-15 to extend the I-15 HOT express lanes, and various local street improvements.

**Mid-Currituck Bridge P3 Project, Currituck County, North Carolina** - Lochner is providing the engineering and design for North Carolina’s first Public-Private Partnership transportation project. With an estimated construction cost of $650M, work involves development of design alternatives for a proposed seven-mile toll bridge facility, complex environmental and constructability issues, and focus on delivering sustainable solutions and zero-waste construction.

**SR 520: Eastside Transit HOV Design-Build King County, Washington** - Lochner is the lead design firm for this $306 million, 2.5-mile urban highway improvement project that provides the needed congestion relief through an integrated, multimodal operational system. The corridor serves as a “Gateway” to the influential communities and businesses east of Seattle across Lake Washington.

**Rte. 60 Bridge Replacement over Smith Creek, Clifton Forge (Design-Build)** - Complete engineering design to replace a 164 feet long concrete T-beam bridge structure with new 3-span (48'-56'-43') prestressed concrete box beam structure supported on a frame bent piers. CN was responsible for preparation of environmental permit sketches and design of prestressed concrete box beams, piers and foundation on rock. CN is also providing support services including approach roadway design, transportation management plans, hydraulics and scour analysis, geotechnical analysis, surveying and utility designs. This project is currently under construction.

**Lesner Bridge Replacement, Rte 60 over the Lynnhaven Inlet, Virginia Beach** - This project replaces twin 1,530 ft. long structures over the Lynnhaven Inlet with a signature bridge, and creating a gateway into the City along a major primary route (43,000 VPD) with extremely tight alignment. CN provided the coordination and relocation of a wide variety

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**Clark Nexsen (CN)** is a full-service engineering, architecture and planning firm headquartered in Norfolk, Virginia with nine offices in the Mid-Atlantic Region. Founded in 1920 by Pendleton S. Clark, the firm currently has approximately 550 employees and is ranked #147 of the top 500 design firms in the rankings by the Engineering News-Record (ENR). Clark Nexsen has a substantial design build practice which includes a variety of project types including transportation facilities, building facilities, and waterfront structures. The firm has completed over 100 design-build projects as well as four (4) Public Private Partnership Projects over the past 5 years for state and federal agencies. CN has been the lead design firm for design-build projects for VDOT, the Commonwealth of Virginia, the United States Customs and Borders, the United States Army Corps of Engineers and the United States Navy (NAVFAC). This comprehensive background and experience in the successful completion of many design-build projects provides the CN staff with the capabilities to address the needs and requirements for this design-build project. CN is currently engaged on the following design–build project in the Staunton District:
of utilities to include water, sanitary sewer, communications, electrical distribution, and 115 kv electrical transmission lines.

**Brambleton Avenue, Norfolk** – CN produced final roadway and bridge plans, construction staging and MOT plans for widening and complete deck replacement on a 14-span, 700’ long structure over a tidal creek in downtown Norfolk. Structure design included a major 6-lane artery into downtown Norfolk, two hospitals and Old Dominion University.

**Froehling & Robertson, Inc. (F&R)** is a woman owned business and is a Virginia certified SWaM (#649650). F&R will be providing professional geotechnical services and materials testing for construction. They maintain a fleet of drilling equipment as well as accredited geotechnical and construction materials testing laboratories that are utilized by each of their twelve offices. F&R’s laboratories are accredited by the AASHTO (AMRL/CCRL), U.S. Army Corps of Engineers, and WACEL. Technical personnel are certified by agencies including ACI, ASTM, AWS, ICC, NICET, and WACEL. F&R is accredited by the Virginia DPOR as a licensed training provider for various asbestos disciplines. F&R has completed the geotechnical engineering on a number of sites on the project corridor including the following: Interstate Business Park – Expo Road; Ivy Ridge Lots M3/M6/10 – Ivy Ridge Lane/Route 285; Sheetz – Route 285; Tinkling Spring Church – Route 285; Eavers Tire Center – Route 285; and Augusta Medical Center – Route 640. F&R has partnered with each of our team members on various projects throughout Virginia.

**WEG** is a full-service environmental consulting firm that serves both the public- and private-sectors in providing timely and cost-effective solutions to today’s complex environmental issues. The firm, a DMBE-certified small business (#10645), was founded in 1990 and has grown from two partners to a present staff of nearly 100 professionals with offices located in Williamsburg, Richmond, and Fredericksburg. WEG is well versed in environmental requirements regarding roadway construction projects as stipulated by the Federal Highway Administration (FHWA), Virginia Department of Transportation, U.S. Army Corps of Engineers (Corps), and the Virginia Department of Environmental Quality (DEQ). WEG is committed to providing comprehensive environmental support during each phase of the project in order to complete the environmental commitments outlined in the approved Categorical Exclusion (CE) in the most efficient and cost effective manner.
3.5 PROJECT RISK

The LANE Team has identified three critical risks for the Fishersville project that impart the most potential for impact to the project cost and schedule. The strategies that we will implement to mitigate or eliminate these impacts for a successful on time delivery are described in the following tables. The development of the master project schedule will consider these mitigation strategies for each of the risk areas identified. Subsequently, the project implementation plan and document control software will be used to ensure proactive monitoring and adherence to the project schedule. Working closely with VDOT and the Design-Build Team, the Design-Build Project Manager will perform a thorough and in-depth risk assessment and revisit the initially identified risk areas and modify as needed before going forward.

RISK 1 – MAINTENANCE OF TRAFFIC

One of the major identified risks by the project team is related to the maintenance of traffic (MOT) during construction. As indicated in the RFQ documentation, the purpose of the project is to improve capacity, reduce queuing on the interstate ramps, and improve access and reduce delay to the regional hospital. The need for the project is due to the existing heavy traffic volumes on Route 285 and increased land development in the region.

With no clear or approvable detour routes, it is apparent that the LANE Team will need to conduct all construction operations while at least maintaining the same number of travel lanes under the current/existing condition. This must be done with safety as the principle concern.

Ensuring safe and uninhibited access to the Augusta Medical Center facilities is of the utmost importance. Maintaining access to the existing commercial properties is vital to the local economy. Coordination of construction activities with major events at the Augusta Expo is also a critical element of the TMP.

RISK 2 - UTILITY RELOCATION

Several utilities that are present on the Fishersville project will have to be coordinated for relocation as part of the design process. The LANE Team has identified utility conflicts and relocation segments and will focus on confirming these locations and addressing the most efficient relocation plan with the owners early in the final design process.

The LANE Team has determined that the following utilities have facilities within the project area: Dominion Virginia Power; Verizon Virginia; Comcast; Lumos Networks; and Augusta County Service Authority. Differing slightly from the listed utilities in the RFQ plans, Shenandoah Valley Electric Coop and Columbia Gas of Virginia have facilities nearby, but not within the project limits.

Supplementary sub-surface utility surveying will be executed early in the schedule including the vicinity of Expo Road. Goose Creek Road and its intersection with Route 285 have a major presence of waterline, telecommunications and utility pole relocations. Coordination with Verizon is expected to require the most intensive effort for coordination in order to minimize schedule impacts.

RISK 3 - RIGHT-OF-WAY ACQUISITION

The right-of-way (ROW) acquisition process has the potential to severely impact the construction schedule if the Design-Build team does not work aggressively and in strict accordance with the applicable laws. The Maintaining access to the existing commercial properties and also Team has an exceptional and experienced group that will effectively manage the process and mitigate risks to a minimum.

A detailed review of these risk items and respective mitigation strategies is provided in the following tables.
## Maintenance of Traffic / Sequence of Construction Risks and Mitigation

<table>
<thead>
<tr>
<th>General Project MOT Risks</th>
<th>Areas of Criticality</th>
<th>Mitigation Strategies</th>
</tr>
</thead>
</table>
| Maintenance of traffic for emergency and fire/rescue access | Emergency Services  
*Ensuring that the surrounding community, emergency and first responders, local government, and other stakeholders are fully informed of the construction operations and associated scheduling.*  
Failure to address this risk will likely increase communication problems and perception issues with project stakeholders and the general public for both the design-build team and VDOT. The Augusta Health Community Hospital is a critically important medical facility for the Shenandoah Valley community. | Proactive and early coordination with VDOT, FHWA, and project stakeholders in development of the Maintenance of Traffic and Sequence of Construction plans.  
- Detailed development of the Traffic Operations component of the Traffic Management Plan (TMP) with the project stakeholders. All proposed traffic lane closures, shifts, etc. will be fully analyzed to effectively plan the sequence of construction.  
- Detailed development of the TMP’s public involvement component to effectively communicate the construction schedule and operations with the public, as well as to encourage potential alternate travel routes for non-emergency and other thru traffic. |
| Safe & Efficient Movement of Traffic | VDOT Mission - Safety  
*Ensuring smooth and safe traffic operations for the traveling public for the duration of project construction is critical.* The commercial properties along the Route 285 corridor and Augusta Expo are vital economic resources to the region. |  
- Select night construction operations will be an effective option for mitigating impacts on existing traffic operations.  
- Careful consideration will be taken to minimize impacts potentially created by ROW issues with the Tinkling Springs Presbyterian Church [or other] and to keep traffic moving throughout the area. |
| Ramp reconstruction | Ramp Gore Reconstruction  
*The ramp gore areas may require full demolition and reconstruction in order to comply with design standards.*  
If full reconstruction is required, then some form of temporary pavement and traffic shift may be required on the ramps since full ramp closure must be avoided. | An efficient design of temporary pavement widening on the ramps will be accomplished that will allow for pavement demolition and reconstruction of pavement in the gore areas. Early coordination will be accomplished with VDOT and FHWA to confirm compliance with the maintenance of traffic requirements. |
### Description/Impact

**The ROW Acquisition Process** has a number of variables that present potential risks to the project in terms of schedule impacts and the level of effort for negotiations.

**Existing ROW Information and Ownership on Design Plans Are Not Correct.**

**ROW Limits Not Finalized**

**Pre-negotiation and Post-negotiation Activities**

**Legislation - Proposed Constitutional Amendment for Eminent Domain**

### Areas of Criticality

- **Inaccurate identification of existing ROW and ownership** can create substantial schedule delay and additional ROW cost. Incomplete and incorrect finalization of ROW limits can create significant impacts to the schedule and cost of the project.

- **ROW impacts beyond what is identified in the approved environmental document** will require a NEPA re-evaluation and potentially a schedule impact.

- **High variability in dealing with the public, and an excessive time expenditure on pre-negotiation and post-negotiation activities** is a major risk item that can be a major impact on project schedule.

**Proposed Constitutional Amendment:**

- **Second consideration** in 2012. If passed it will be public referendum in Nov. 2012.
- **Approved referendum could be enacted 7/1/13**, which could coincide with property acquisition phase of DB project.

**This is a major potential risk in terms of compensation to property owners for lost access and claimed lost profits, and also a potential risk for the DB team if the acquisition schedule is interrupted because of the potential legislative changes.**

### Mitigation

- **Confirmation of ROW**
  - Early supplemental survey will be completed including confirmation of existing ROW and easements.
  - Early completion of title research will be executed to confirm ownership

- **Minimization of Impacts**
  - Design focus on minimization of ROW and easement impacts
  - Design focus on final assessment ROW/easements for utilities and/or stormwater management facilities.

- **Proactive ROW Acquisition Procedures**
  - Advance processes as early as possible including early proactive communications with property owners
  - Detailed and methodical procedures tracking progress of ROW acquisition
  - Close coordination of ROW activities with construction schedule

- **NEPA Re-evaluation**
  - Execute re-evaluation if necessary (Rte 50 Gilberts Corner DB re-evaluation completed in 4 weeks)

- **Legislative Awareness**
  - Maintain awareness of activity
### Utilities Risk and Mitigation

<table>
<thead>
<tr>
<th>Description/Impact</th>
<th>Why Critical</th>
<th>Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Schedule</strong></td>
<td>Utility relocation is a critical path element of the project schedule and unforeseen utility impacts starting with identification, and completing the required relocations are a major risk to advancing the roadway widening.</td>
<td>Early survey and subsurface utility designation and test hole data.</td>
</tr>
<tr>
<td><strong>Cost</strong></td>
<td>If utility owners are not engaged early in the project development to identify cost, there is significant risk that cost will increase beyond budgeted amounts.</td>
<td>Early identification of utilities requiring avoidance and relocation. First mitigation strategy will be to design to minimize impacts to utilities.</td>
</tr>
<tr>
<td><strong>Impacts to unknown utilities is a major cost risk.</strong></td>
<td></td>
<td>Coordination of utility relocations with construction schedule (critical path). Establish utility easements and right-of-way early in the project to provide ample time for utility owners to provide relocations where necessary.</td>
</tr>
<tr>
<td><strong>Public Satisfaction</strong></td>
<td>Disruption of utility services will generate significant public outcry. Additional efficient execution of relocation activity while minimizing impacts on traffic operation is critical.</td>
<td>Early/proactive coordination with Utility Owners. Enforce “Prior Rights” requirements to hold down project costs.</td>
</tr>
</tbody>
</table>

- Utilities that have not been located and shown on the plans, or have been located, but the owner is unknown
- Right-of-way or utility easements that have not been acquired for relocations
- Timely responses of private utilities
- Severe weather can limit or redirect relocation efforts.
- Available manpower of the utility companies can be limited due to current workload, labor strikes or heavy seasonal demands that restrict relocation schedules.
- Utilities incorrectly relocated and still in conflict with the project.
ATTACHMENT 2.10

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

RFQ NO. C00075877DB47
PROJECT NO.: 0064-007-111, P101, R-201, C-501, B-627

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 11/03/2011 (Date)
2. Cover letter of (Date)
3. Cover letter of (Date)

[Signature] 11/6/12

SIGNATURE DATE
ATTACHMENT NO. 3.2.5(a)
CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS

Project No.: 0064-007-111, P101, R-201, C-501, B-627

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

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

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

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

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

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

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

Signature  January 6, 2012  District Manager
Date  Title

The Lane Construction Corporation

Name of Firm
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-007-111, P101, R-201, C-501, B-627

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

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

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

[Signature] January 6, 2012 [Date] Vice President [Title]

H.W. Lochner, Inc.

[Signature] Name of Firm
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-007-111, P101, R-201, C-501, B-627

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.

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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] January 6, 2012 [Principal]

[Signature] Date [Title]

Clark Nexsen, PC
Name of Firm
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-007-111, P101, R-201, C-501, B-627

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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]  1/4/12  [President]
[Date]  [Title]

[Name of Firm]
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-007-111, P101, R-201, C-501, B-627

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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] 11/14/2011 Principal
Date

Title

Williamsburg Environmental Group, Inc

Name of Firm
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-007-111, P101, R-201, C-501, B-627

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

[Signature]
[Date] 11/10/11
[Title] Regional Vice President

[Name of Firm] Fruehling & Robertson, Inc.
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-007-111, P101, R-201, C-501, B-627

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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]  12/16/11  Regional Vice President  
[Date]  
Title

Greenhorne & O'Mara, Inc.
Name of Firm

LOWER TIER COVERED TRANSACTIONS – DEBARMENT FORM | 6
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-007-111, P101, R-201, C-501, B-627

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: [Signature] Date: January 6, 2012

Pape & Company, Inc.

Name of Firm

President

Title
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-007-111, P101, R-201, C-501, B-627

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

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

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

[Signature] Date [Title]

[Name of Firm]
L002
THE LANE CONSTRUCTION CORPORATION
PREQ. EXP : 06/30/2012

--PREQ ADDRESS -----------------   -- WORK CLASSES -----------------------
90 FIELDSTONE COURT                002 - GRADING
CHESHIRE, CT 06410-1212            003 - MAJOR STRUCTURES
PHONE : 203-235-3351               004 - BITUMINOUS CONCRETE PAVING
FAX   : 203-686-0696               006 - PORTLAND CEMENT CONCRETE PAVING
                                      007 - MINOR STRUCTURES
                                      045 - UNDERGROUND UTILITIES

BUSINESS CONTACT: ALGER, ROBERT EVERETT
EMAIL: VAPREQUAL@LANECONSTRUCT.COM

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Commonwealth of Virginia

State Corporation Commission

I Certify the Following from the Records of the Commission:

H. W. LOCHNER, INC., a corporation existing under the laws of WISCONSIN, holds a certificate of authority to transact business in Virginia, and is in good standing.

The certificate was issued on August 31, 1987.

Nothing more is hereby certified.

Signed and Sealed at Richmond on this Date:
March 17, 2008

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

I Certify the Following from the Records of the Commission:

CLARK, NEXSEN, OWEN, BARBIERI & GIBSON, P. C. is a corporation existing under and by virtue of the laws of Virginia, and is in good standing.

The date of incorporation is November 27, 1978.

Nothing more is hereby certified.

SCC # 0190175-0

Signed and Sealed at Richmond on this Date:
June 2, 2008

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

State Corporation Commission

I Certify the Following from the Records of the Commission:

NXL Construction Co., Inc. is a corporation existing under and by virtue of the laws of Virginia, and is in good standing.

The date of incorporation is November 17, 1989.

Nothing more is hereby certified.

Signed and Sealed at Richmond on this Date:
July 10, 2007

Joel H. Peck
Clerk of the Commission

SCC # 0349742-8
Commonwealth of Virginia

STATE CORPORATION COMMISSION

Richmond, November 2, 2001

This is to Certify that the certificate of incorporation of

WILLIAMSBURG ENVIRONMENTAL GROUP, INC.

was this day issued and admitted to record in this office and that
the said corporation is authorized to transact its business subject
to all Virginia laws applicable to the corporation and its business.
Effective date: April 17, 1990

State Corporation Commission
Attest:

[Signature]
Clerk of the Commission

SCC # 0357437-3
Commonwealth of Virginia

State Corporation Commission

I Certify the Following from the Records of the Commission:

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

The date of incorporation is October 11, 1924.

Nothing more is hereby certified.

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

Joel H. Peck, Clerk of the Commission

SCC # 0027211-2

CIS0357
Commonwealth of Virginia

STATE CORPORATION COMMISSION

Richmond, August 3, 2009

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

GREENHORNE & O’MARA, INC.
formerly known as: G & O VIRGINIA, INC. (USED IN VA BY:
GREENHORNE & O’MARA, INC.)
Date of qualification: May 30, 1986

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

State Corporation Commission
Attest:

[Signature]
Clerk of the Commission

SCC # F051099-2
CISM0180 CORPORATE DATA INQUIRY

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CERTIFICATE OF FACT

I Certify the Following from the Records of the Commission:

That H & B Surveying and Mapping, LLC is duly organized as a limited liability company under the law of the Commonwealth of Virginia;

That the date of its organization is April 27, 2009; and

That the limited liability company is in existence in the Commonwealth of Virginia as of the date set forth below.

Nothing more is hereby certified.

Signed and Sealed at Richmond on this Date:
September 9, 2011

Joel H. Peck, Clerk of the Commission
**Contractor Business License**

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### APELSCIDLA Business License

#### CLARK NEXSEN OWEN BARBIERI & GIBSON PC

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### APELSCIDLA Business License

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### APELSCIDLA Business License

#### WILLIAMSBURG ENVIRONMENTAL GROUP INC

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SCC/DPOR INFORMATION

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
02-29-2012

NUMBER
0411000595

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

PROFESSIONS: ENG

WILLIAMSBURG ENVIRONMENTAL GROUP INC
1011 BOULDER SPRINGS DR
STE 225
RICHMOND, VA 23225

Gordon H. Diaka, Director

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
02-29-2012

NUMBER
0411000052

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

PROFESSIONS: ENG

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

Gordon H. Diaka, Director

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
02-29-2012

NUMBER
0411000611

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

PROFESSIONS: ENG

GREENHORNE & O'MARA, INC.
10800 MIDLOTHIAN TPKE STE 310
RICHMOND, VA 23235

Gordon H. Diaka, Director
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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

expires on 12-31-2013

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

PROFESSIONS: LS

H & B SURVEYING & MAPPING LLC
201 W. 7TH ST., 2ND FLOOR
RICHMOND, VA 23224

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

Gordon N. Dixon, Director
DPOR Licenses - Key Personnel

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

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

MICHAEL WILLIAM SAUNDERS
4500 LITCHFIELD DRIVE
CHESTERFIELD, VA 23832

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

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

JOHN ALEXANDER STUART
801 HEPLER RD
RICHMOND, VA 23229-6821

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

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

ACHYUT G PATEL
729 QUEEN ELIZABETH DR
VIRGINIA BEACH, VA 23452
# Non-APELSCIDLA DPOR Licenses

## Real Estate Appraiser Business

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Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: **RICHARD A. McDONOUGH / DISTRICT MANAGER**

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

c. Name of Firm with which you are now associated: **LANE CONSTRUCTION**

d. YEARS EXPERIENCE: With this firm: 5 years  With other firms: 27 years

Please list chronologically your employment history, position, and general experience or fields of practice for the last fifteen (15) years:

2009 – Present: **The Lane Construction Corporation - District Manager** – Responsible for the construction operations in Virginia. Responsible for overall administration of projects, addresses project issues, communicates design progress to owners, adheres to project schedules. Interacts with the Construction Manager, the Owner, and all other involved stakeholders regarding the progress of construction, schedule, budget, quality control, and safety. He has managed/led construction for more than 30 miles of highway and 36 bridges.

2006 – 2009: **The Lane Construction Corporation** - Rich joined The Lane Construction Corporation as a Project Manager through the Moore Brothers acquisition in October 2006. He was promoted to Assistant District Manager in December 2007. Assists with Lane Mid-Atlantic operations and Virginia Sign and Lighting company (division of Lane), Project Manager for Linton Hall Road, and Design-Build Project Manager for Gilberts Corner/Route 50 Traffic Calming Improvements, VA. He participated in the development of new projects for construction, negotiations with Owners, and plan development. Responsible for overall administration of projects, addressed project issues and took corrective actions as necessary, communicated design progress to owners, adhered to project schedules. Interacted with the Construction Manager, the Owner, and all other involved stakeholders regarding the progress of construction, schedule, budget, quality control, and safety.

1997 – 2006: **Moore Brothers Construction - Vice President of Operations** - Responsible for field operations: safety, project staffing, means and methods of construction, direct oversight of all bridge construction operations, estimating for bids and change orders, budget review, and project development.

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

BS/ 1979/ Civil Engineering/ Virginia Military Institute

f. ACTIVE REGISTRATION: Year First Registered/Discipline/VA Registration #: N/A

Virginia Transportation Construction Alliance (VTCA) Board Member (1999–2010)
- Served as VTCA President (2007–2008)
- Serves on the VTCA/VDOT Design-Build Subcommittee (2007–Present)

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 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.)

**Sudley Manor Drive Design-Build Project, Prince William County, VA (DESIGN-BUILD PROJECT)**
Project Manager for this $26M contract for design-build of roadway improvements. Major project elements consisted of three bridges, replacement of substandard 2-lane roadway with a new 4-lane divided highway and new multi-use trails. The work completely reconstructed the 2-lane secondary road into a 4-lane divided highway with turn lanes. It included bridges, highway, geotechnical work, hydraulics, hydrology and erosion control, permitting, utility coordination, project management, construction and QA/QC.

As the Senior Project Manager, he was responsible for the project(s) budget and schedule milestones; regular coordination with Prince William County staff; allocation of construction resources, both manpower and equipment; overseeing subcontractors; coordination and synchronization of work packages; and, most importantly, supervision and enforcement of quality control and safety measures. Worked with the project sponsor’s designers providing input to the design for constructability, maintenance of traffic, value engineering concepts and cost. Responsible for overall administration for construction of project. Accountable for addressing all project construction issues and taking proactive measures to ensure issues did not impede progress of the project schedule. Interacted with the Construction Manager, the owner, and all other involved stakeholders regarding the progress of construction, schedule, budget, quality control, and safety.

Lane Construction, 2006 -2009
VDOT Route 50 Traffic Calming Improvements Project [Gilberts Corner Roundabouts]  
Loudoun County, VA  
(DESIGN-BUILD PROJECT)
Design-Build Project Manager of this innovative $13 million dollar design-build traffic-calming project for VDOT. The scope for this project was to add four roundabouts within the existing roadway, under traffic, to calm and make safe travel through this congested commuter corridor. As Design-Build Project Manager, his responsibilities included overall overall administration of project – Design, Public Relations, Construction, and Quality Management. He was also responsible for chairing weekly coordination meetings between Lane Team and VDOT to maintain a homogeneous work effort for design, construction, schedule and permitting. Accountable for addressing all project issues and taking proactive measures to ensure unforeseen conflicts and problems do not impede progress of the project schedule.
Interacted with the Construction Manager, the Owner, and all other involved stakeholders regarding the progress of construction, schedule, budget, controls, and safety.
Lane Construction, 2007 - 2009

Interstate 95 Widening Improvements, Stafford/Spotsylvania Counties, VA
Executive Sponsor for $30 million dollar new I-95 interchange with primary road improvements for the new Stafford Airport. Facilitated, supported and participated in the formal Partnering process of the project to improve project communications, relations and problem solving. Led the effort for several construction Value Engineering Proposals which resulted in financial savings and schedule improvements. Responsible for all facets of field management, project supervision oversight and direct supervision of bridge superintendents for construction of four bridges. Interacted with senior construction managers, supported Owner relations, negotiated change orders, accountable for budget, and safety.
Moore Brothers, 2004 -2006

VDOT I-66 HOV Lane [Widening], Prince William County, VA
Executive Sponsor and on-site Construction Manager for all facets related to field management of this major $37M project. The scope challenge for this project was to reconstruct four miles of four lane interstate and four new lanes. Project included highway, geotechnical work, hydraulics, hydrology and erosion control, permitting, utility coordination, project management and construction As Executive Sponsor, he supervised project staffing, provided input to estimating costs and budget review and made recommendations for means and methods of construction. In addition, he facilitated, supported and participated in the formal Partnering process of the project to improve project communications, relations and problem solving on the project. Led the effort for several construction Value Engineering Proposals which resulted in financial savings and schedule construction Value Engineering Proposals which resulted in financial savings and schedule improvements. Supervised senior project staff, negotiations with the Owner, estimating, budget, and input for means and methods of construction. Direct supervision of superintendents and subcontractors for all structure construction to include bridges, retaining walls and shoring for support of excavation.
Moore Brothers, 2004 -2006
**ATTACHMENT 3.3.1.2**

**KEY PERSONNEL RESUME FORM**

<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel anticipated for the Project.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Name &amp; Title:</td>
</tr>
<tr>
<td>Michael W. Saunders, PE, CCM, Project Manager/Quality Assurance Manager</td>
</tr>
<tr>
<td>b. Project Assignment:</td>
</tr>
<tr>
<td>Quality Assurance Manager</td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated:</td>
</tr>
<tr>
<td>NXL Construction Services, Inc.</td>
</tr>
<tr>
<td>d. Years experience:</td>
</tr>
<tr>
<td>With this Firm ≤1 Years With Other Firms 7 Years</td>
</tr>
</tbody>
</table>

Please list chronologically your employment history, position and general experience or fields of practice for the last fifteen (15) years:

**VDOT Project Control Engineer/Area Construction Engineer for Design-Build & Locally Administered Projects, Richmond District.** Mr. Saunders was responsible for quality assurance and for coordinating constructability reviews to include developing pre-advertisement schedules and sequence of construction as well as for coordination of post-award schedule reviews and District Wide NOI and claims analysis. He was assigned as the Responsible Charge Project Manager for various Design Build projects throughout the Richmond District. The assignment included serving on the selection panel during the procurement phase and serving as Project Manager of the construction phase. Other responsibilities included attending weekly progress meetings and multiple design meetings and ultimately serving as the Responsible Charge Engineer, acting on behalf of the owner. His role was ensuring that the independent assurance and verification was performed for Design-Build projects, that all contract requirements and specifications are appropriately met, all required quality control testing and independent quality assurance is carried out in accordance with applicable requirements, and payments appropriately processed. Projects included the Route 36 BRAC Design-Build Project, I-295 Meadowville Interchange and the Fort Lee/Jefferson Park Road Roundabout Design-Build. Mr. Saunders was also responsible for Locally Administered Projects in the Richmond District. This assignment included handling post-award activities including monitoring project schedule and developments. He was also responsible for approving monthly pay vouchers on behalf of the Department prior to reimbursement to localities. **May 2011-November 2011.**

**VDOT Area Construction Engineer, Richmond District, Southern Area Construction.** Mr. Saunders was responsible for executing a 6-year program to include managing all aspects of construction/maintenance contracts safely, with quality, on time and within budget. He provided Responsible Charge supervision and technical guidance to Construction Managers and Inspectors during project delivery for design-build and design-bid-build projects. He used Primavera for manpower planning and schedule reviews and approvals. He coordinated with project controls staff in preparation and review of Work Orders, Notices of Intent and Claims to validate the necessity of work and level of federal participation. Mr. Saunders performed Responsible Charge duties on no-plan projects, minimum-plan projects and full-plan projects of varying complexity. He also assisted the Fredericksburg District with the administration of a Regional Design-Build Bridge Replacement project. His duties included making Responsible Charge decisions and coordination activities for projects in the Richmond District. **January 2007-May 2011.**

**VDOT Construction Project Manager, Salem District, Southern Area Construction.** Mr. Saunders supervised all phases of multi-operational roadway and structural construction projects to ensure all work was performed in accordance with project plans, specifications and special provisions. He supervised the work and career development of several construction inspectors and he resolved contractual disputes with contractors. He prepared and presented the project showings and preconstruction conferences, prepared and submitted work orders and tracked project cost to assure projects remained within the designated budget, on multiple
projects of varying complexity. He mitigated Notices of Intent with use of time impact and cost analysis, and prepared reports, correspondence and documents clearly and on time. Mr. Saunders conducted on-site field visits to ensure all elements of design and construction were within scope of contract and within established standards and specifications to provide feedback to the appropriate parties and perform follow-up reviews with project staff and management to support implementation of recommendations. He conducted periodic assessments to ensure compliance with the contract documents and established guidelines, procedures and policies. Projects involved but were not limited to new horizontal and vertical alignment projects, surface treatment, sidewalks, grading and drainage, bridge super structure/sub structure repair, concrete joint replacement and asphalt schedule work. **November 2005-January 2007.**

**VDOT Permits/Subdivision Supervisor, Christiansburg Residency.** Mr. Saunders was responsible for the supervision and administration of the subdivision, rural streets and land use permits programs. Duties included networking with government officials and staff, developers, engineers and VDOT staff to discuss the engineering impacts of land development projects; responsibility for land development within the Residency to include utilities, commercial and subdivision streets, private entrances, land use permits, commercial development projects, etc. impacting transportation networks maintained by the State; participation in the development, plan review, inspection and acceptance of addition to the secondary system and ensuring compliance with rules and regulations. **April 2005 - October 2005.**

**VDOT Architect/Engineer I, Salem, Virginia.** Mr. Saunders assisted in the Land Development and Maintenance Program Operations for the Salem Residency. Duties included performing site plan reviews and providing comments to designers; involvement in the inspection and acceptance of additions to the secondary street system, and worked with the Maintenance Manager to set a budget for the Area Headquarters’ upcoming fiscal year. Also, he was assigned to the Bedford Residency to perform Acting Assistant Resident Engineering duties and Construction Project Management. Mr. Saunders duties included presenting the Six-Year Plan at a public hearing with the Board of Supervisors and involvement with the development of projects with the Contract Administrator to prepare for the advertisement phase, to include SAAP projects. Mr. Saunders also performed Construction Project Manager duties to include both bridge and grading projects of varying complexity. Responsibilities included preparing and presenting project showings and preconstruction conferences for the projects; reviewed work in progress and project records prepared by field staff to assure compliance with the contract documents and environmental regulations set by all agencies; handling potential work orders and claims issues and aiding in decisions made at the Residency level; tracking project cost and productivity to determine if projects would be completed on time and on budget; and performing final review and acceptance of projects from the contractor on behalf of the Department. **March 2004-April 2005.**

**VDOT Transportation Engineer Associate, Salem, Virginia.** Mr. Saunders completed the Associate Engineers Program at the Christiansburg Residency in the Salem District. While in this position, Mr. Saunders rotated through various sections within the Department to include Construction Management, Maintenance Operations, District Divisions, Contract Administration, and Residency Operations. Positions that were held during this period were Project Engineer, Assistant Resident Engineer, and Contract Administrator. Responsibilities with each of these various roles included meeting VDOT and FHWA standards and specifications. **June 2001 – February 2004**

e. Education: Degree(s)/Year/Specialization:
   Bachelor of Science/2001/Civil Engineering, Virginia Tech

f. Active Registration: Year First Registered/ Discipline/VA Registration #:
   2005/Professional Engineer/0402 041295

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 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.)
Region 4 Design-Build Structures Project, Various Counties
VDOT’s Project Manager during the construction of various bridge superstructure replacements throughout the Richmond District. Duties included making responsible charge decisions, attending regularly scheduled progress meetings, reviewing project documentation for compliance with contract documents, coordinated IA/IV testing and handled public/stakeholder concerns throughout the duration of the project.
Virginia Department of Transportation, April 2010 – November 2011

Meadowville Interchange, Chesterfield Virginia
VDOT’s Project Manager during final design and construction of phase one, the diamond, of an ultimate cloverleaf interchange. Duties included attending regularly scheduled progress meetings, reviewing project documentation for compliance with contract documents, reviewed and approved pay applications and coordinated IA/IV testing.
Virginia Department of Transportation, April 2010 – November 2011

Route 10 Widening, Chesterfield Virginia
Area Construction Engineer - Responsible charge engineer overseeing the construction of this project which included coordination with Chesterfield County, the contractor, Dominion Virginia Power, CSX railroad and the FHWA. Duties included but were not limited to acting on behalf of the Department during negotiations and problem resolution meetings, reviewing and approving monthly payment applications and ensuring project testing and documentation was being kept in accordance with contract and VDOT requirements.
Virginia Department of Transportation, April 2010 – November 2011
<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel anticipated for the Project.</th>
</tr>
</thead>
</table>
| **a. Name & Title:** John Stuart, PE  
Vice President, Senior Project Manager |
| **b. Project Assignment:** Design Manager |
| **c. Name of Firm with which you are now associated:**  
H.W. Lochner, Inc. |
| **d. Years experience:** With this Firm 6 Years  
With Other Firms 15 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.): |
| **2005 – Current: H.W. Lochner – Senior Project Manager/Office Manager**  
Responsible for managing and performing roadway/civil engineering tasks for transportation infrastructure projects. His niche expertise includes both design-bid-build and design-build engineering for roadways, interchanges, hydrology and hydraulic, stormwater management and the associated construction phasing. |
| **2001 – 2005 : Louis Berger Group – Project Manager**  
Roadway and civil engineering project management and design for both design-bid-build and design-build projects. Projects included U.S. Route 1 Widening/Improvements in Fairfax County, US 29/Gallows Road in Fairfax County, and USAID Reconstruction Facility Design-Build, Kabul, Afghanistan. |
| **1999 – 2001: Moffatt & Nichol Engineers – Project Manager**  
Roadway and civil engineering project management and design for VDOT and Virginia Port Authority projects. Experience includes Route 275/613 Interchange preliminary design, Route 265/29 Dan Daniel Memorial Highway.  
**1997 – 1999: AECOM (Formerly EarthTech/Rust E&I) – Project Manager/Project Engineer**  
Roadway and civil engineering project management and design. |
| **e. Education:** Name & Location of Institution(s)/Degree(s)/Year/Specialization:  
Virginia Military Institute, Lexington, VA/Bachelor of Science/1985/Civil Engineering  
University of North Carolina, Chapel Hill, NC/Masters of Science/1995/General Business |
| **f. Active Registration:** Year First Registered/ Discipline/VA Registration #:  
1998/Professional Engineer (PE)/# 27454 |
| **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.) |
| **Mid-Currituck Bridge, Design-Build/Private-Public Partnership, Currituck County, North Carolina.**  
Project Engineer responsible for quality assurance review of design criteria and resolution of compliance with owner reviews and comments. Project is a proposed seven-mile toll-bridge project between US 158 on the Currituck County mainland and NC 12 on the Outer Banks is expected to reduce travel time and congestion, as well as provide an alternative hurricane evacuation route for the northern Outer Banks. Interchanges at project termini with complex environmental and constructability issues focused on delivering sustainable solutions and zero-waste construction. Preliminary project costs are estimated at $650 million.  
| **Volvo-Lynnhaven Parkway (VDOT), Cities of Chesapeake and Virginia Beach, Virginia**  
Project Manager for final construction plans for the widening and reconstruction of the 4-mile project beginning at Kempsville Road (Route 190) in Chesapeake and ending at Indian River Road (Route 605) in Virginia Beach. Lochner conducted all studies required for the environmental impact assessment (including Sections 4(f) and 106) and NEPA documentation, traffic forecasting and analysis, and assisted VDOT with the public information program. The project design contained a number of challenging elements, such as incorporating at-grade intersections for 43 cross streets and associated signalization design. The 4-lane roadway and 27 noise barriers had to be contained within an 80-ft right-of-way in a manner that did not require any residential relocations and did not impact parkland running parallel to the corridor. The total construction cost for the entire project is $42M.  
I-80, State Street to 1300 Street Interstate and Interchange Widening and Reconstruction, CM/GC (Design-Build), Salt Lake County, Utah.

Lead lighting design engineer for roadway and structure lighting for the fast-track design-build contract. Design included the use of induction lighting fixtures resulting in reduced energy use and anticipated lower maintenance costs. Lochner provided environmental support, alternative analysis, and preliminary and final engineering to address traffic needs and deficiencies along a busy stretch of I-80. Project elements included improvements to ramp and main line geometry, pavement condition, medians, bridge structural integrity, noise mitigation, signalization, and aesthetics. To compress the construction schedule, Lochner developed concepts for several rapid construction and accelerated bridge construction methods, including self-propelled modular transporter (SPMT), horizontal slide and elevated drop in (EDI) elements. In all, Lochner designed seven bridges, three of which were moved into position using SPMT. Construction costs for this project was $104 million. This was the 2010 AGC-Utah Transportation Project of the Year.


Route 50 Traffic Calming (VDOT), Loudoun/Fauquier Counties, Virginia.

Project Manager and Lead Design Engineer for the completion of the preliminary traffic study and design of reconstruction, and intersection improvements along the 27-mile corridor of the scenic Route 50 from Paris to Lenah through Fauquier and Loudoun Counties. The project includes traffic data collection and analysis, roadway and drainage design, and landscaping. Alternative intersection treatments are being considered and analyzed including directional splitters and roundabouts. Three initial project segments are being developed and constructed at a cost of $27M including improvements in the towns of Upperville and Aldie, and preliminary design the Route 15/50 Gilberts Corner Design-Build project. Mr. Stuart managed the completion of design support services to VDOT for the procurement of the Route 50 Gilberts Corner Design-Build project including technical proposal review and quality assurance review support.


Route 265/29 Dan Daniel Memorial Highway (VDOT), Pittsylvania County, Virginia.

Project Manager and Design Engineer for two-mile segment of the highway project in sub-consultant role to Michael Baker Engineers (Prime). Responsible for the completion of construction plans for expansion from two-lane limited access highway originally built on four-lane right-of-way. Traffic Management Plan development included coordination for the transition and connections with the existing four-lane segment on north end and the new four-lane segment on the south end. The project was designed to interstate standards and including storm sewer design, stormwater management and a grade separation with bridge overpass. The overall project included seven miles of roadway with four bridges and one fully directional interchange at a $67M construction cost.

Moffatt & Nichol Engineers, February 1999 – February 2001
### Brief Resume of Key Personnel anticipated for the Project.

#### a. Name & Title:
**JAMES VOGT / SUPERINTENDENT AND CONSTRUCTION MANAGER**

#### b. Project Assignment:
**CONSTRUCTION MANAGER**

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

#### d. YEARS EXPERIENCE:
- With this firm: **15 years**
- With other firms: **2 years**

Please list chronologically your employment history, position, and general experience or fields of practice for the last fifteen (15) years:

**The Lane Construction Corporation, 2007 – Present:** Superintendent/Construction Manager – As a Superintendent, Jim is in charge of the general day-to-day activities of a project at the construction site. His duties include working with the owner, senior management, subcontractors and Lane work crews. He is responsible for implementing and adhering to all safety and quality measures as well as maintaining schedule milestones, organizing manpower, managing the project budget and delivering the project on time or ahead of schedule. He additionally functions as the Quality Control Manager on projects.

**The Lane Construction Corporation, 1997 – 2007:** Jim worked his way from a Project Engineer to Assistant Superintendent where he was increasingly responsible for field operations: safety, project staffing, means and methods of construction, direct oversight of project site construction operations, and providing on-site engineering calculations and drawings.

**e. Education:**
- Pennsylvania State University, University Park, PA/ BS/Civil Engineering 1993

**f. ACTIVE REGISTRATION:**
- Year First Registered/Discipline/VA Registration #: **N/A**
- **Certifications:** SuperPave Level I, ACI Concrete Field Testing Technician– Grade I, PennDOT Concrete Field Testing Technician, WACEL Concrete Level I and Soils Level I, OCHS Safety Training, and U.S. Army Corps of Engineers Construction Quality Management for Contractors, DCR Responsible Land Disturber, VDOT ESCCC.

**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 end dates for each assignment.**

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

**VDOT I-66 Spot Improvements Project, Arlington County, VA**
Superintendent for this $10M, 2-mile roadway widening project constructed in multiple phases with full-depth reconstruction and widening of the inside and outside shoulders. The work also included storm water management pond improvements, new and upgraded drainage, underdrain, curb, barrier wall, guardrail, bridge widening, variable and static overhead message signs, traffic management systems, roadway lighting and landscaping. Responsibilities: supervised all aspects of construction; developed and maintained project schedule; coordinated and scheduled subcontractors’ activities.

Lane Construction, 2010 -2011

**VDOT Route 50 Traffic Calming Improvements Project [Gilberts Corner Roundabouts]**
**Loudoun County, VA**
(The Design-Build Project)
Superintendent for this $13M traffic calming project which consisted of design and construction of four roundabouts in line with existing roadways and a ½-mile new section of rural roadway. The project also involved new and upgraded drainage, underdrain, decorative concrete truck apron, concrete curb and gutter, guardrail, pavement milling and overlay, roundabout lighting, striping, signage, utility relocations and landscaping. Responsibilities: supervised all aspects of construction; implemented and enforced corporate safety policy; EEO officer who ensured a workplace free of discrimination, harassment, and intimidation; performed constructability review of design drawings; developed and maintained project schedule; scheduled and coordinated subcontractors’ activities.

Lane Construction, 2007 -2009
VDOT Sudley Manor Drive Design-Build Project, Prince William County, VA (DESIGN-BUILD PROJECT)
Project Engineer for this $11.5M project to construct 3 miles of new roadway. Construction included excavation and embankment, storm pipe culverts and inlets, sanitary sewer relocation, waterlines, underdrain and roadway subbase. Responsibilities: supervised engineering and QC staff; developed and maintained project schedule; tracked and evaluated project costs; review submittals for compliance with project specifications; scheduled and coordinated subcontractors’ activities; procured daily material deliveries; provided on-site engineering calculations and drawings. 
Lane Construction, 2005 - 2006

Metropolitan Washington Airports Authority Taxi-lane B Shoulder Rehabilitation
Washington Dulles International Airport, Loudoun County, VA
Project Engineer in Charge for this $1.2 million project to demolish and widen an existing taxi-lane shoulder in 90 days. The work involved demolition of existing asphalt shoulder and lighting system, excavation to widen shoulder by 10 feet, paving for the new shoulder section, installing a new taxi-lane edge light system, and placement of sod and seed. Responsibilities: supervised all aspects of construction; Quality Control Manager; developed and maintained project schedule; scheduled subcontractors’ activities; reviewed submittals for compliance with project specifications; procured daily material deliveries; provided on-site engineering calculations and drawings. 
Lane Construction, 2007
# ATTACHMENT 3.3.1  
KEY PERSONNEL RESUME FORM

<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel anticipated for the Project.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Name &amp; Title:</td>
</tr>
<tr>
<td>Achyut (Al) Patel, P.E., Senior Structural Engineer</td>
</tr>
<tr>
<td>b. Project Assignment:</td>
</tr>
<tr>
<td>Lead Structural Engineer</td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated:</td>
</tr>
<tr>
<td>Clark Nexsen, PC</td>
</tr>
<tr>
<td>d. Years experience: With this Firm 7 Years With Other Firms 20 Years</td>
</tr>
<tr>
<td>Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):</td>
</tr>
</tbody>
</table>

**January 2005 to Present: Clark Nexsen - Senior Structural Engineer**
Lead Structural Engineer responsible for the design and management of all types of bridge design projects using AASHTO LRFD and ASD design specifications. These included design of straight and curved structures over creeks and rivers, highways and railroads, as well as bridge widenings and rehabilitation of existing structures. Duties included preparation of preliminary and final bridge design and plans, environmental permit sketches, cost estimates, load ratings, daily coordination with design staff, and review of design and CADD work to ensure that the production of contract documents were performed in accordance with VDOT standards and specifications. Responsible for coordination with owner’s project managers, other disciplines, subconsultants, and supervision of staff engineers and CADD technicians. Provided mentoring, professional guidance, and problem solving to design staff. Reviewed shop drawings and attended field coordination meetings during construction phase and provided design changes due to unforeseen field conditions.

**1997 to December 2005: Reid Structure & Bridge, Inc. - Senior Structural Engineer**
Mr. Patel was responsible for the planning, design and coordination over 60 steel and prestressed concrete bridges of using AASHTO ASD and LFD design specifications during his tenure at Reid Structure & Bridge. Managed and designed bridge projects on straight and curved alignments from preliminary to final design submittals and also worked closely with VDOT project managers to fulfill their requirements and complete projects. Supervise and guide staff engineers and CADD technicians in daily design process and production of plans. Duties included design of prestressed and steel superstructures on a straight and curved alignment, integral and MSE wall abutments, multi column and tall hammerhead piers using design software such as SIMON, CONSPAN, DESCUS, STAAD and RC-Pier, preparation of environmental permit sketches, cost estimates and load rating. Also responsible for coordination with other disciplines and subconsultants. Performed inspections for highway bridges, navy drydocks and piers, and prepared rehabilitation reports and repair plans. Reviewed shop drawings and provided design changes during construction due to changed field conditions. Participated and prepared successful proposal schemes during bridge interview process for municipalities and VDOT.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:  
University of Virginia / M.E. / 1994/ Civil Engineering (Structures)  
New Jersey Institute of Technology / B.S. /1990/ Civil Engineering

f. Active Registration: Year First Registered/ Discipline/VA Registration #:  
1994 /Professional Engineer / Virginia #025919
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 (3), but no more than (5) relevant projects for which you have performed a similar function.)

**Rte. 60 Bridge Replacement over Smith Creek, Clifton Forge, VA (Design Build)**

*Design Manager* in charge of complete design for the complex replacement of a 164 foot long concrete T-beam bridge that is bordered along each side with historic buildings located less than 1 inch away for the length of the bridge. The new structure is a 3-span (48’-56’-43’ with end cantilevers) prestressed concrete box beam superstructure supported on concrete frame bent piers founded on rock. Also coordinated all support services including approach roadway design, transportation maintenance plans, hydraulics and scour analysis, geotechnical analysis, surveying and utility designs. Worked closely with contractor, hydraulic engineer and geotechnical engineer to determine the most cost effective foundation system.

Clark Nexsen; *Design Build Project Manager*  
2010 (Under Construction)

**Brambleton Avenue Bridge Widening and Deck Replacement, Norfolk, VA.**

*Lead Structural Engineer* responsible for design and overall project management for the 13 span, 700 ft. long bridge crossing over waterway. Stage construction was employed to maintain 3 lanes of traffic during construction. Designed prestressed concrete superstructure and substructure widening, and complete deck replacement to accommodate 10 foot path. The new deck slab was detailed as 2 span continuous units to reduce number of deck joints. Prepared cost estimates, environmental permit sketches and coordinated design with other disciplines and utility companies. Provided construction period services to include shop drawings review periodic meetings with contractor and design changes to accommodate unforeseen conditions.

Clark Nexsen; *Lead Structural Engineer*  
2006 - 2006

**Rte. 288 Interchange Bridges, Goochland Co., VA. (PPTA Project)**

*Lead Structural Engineer* in charge of preliminary and final plans and cost estimates for 4 new bridges and one widening including curved flyover ramp structure. Coordinated all design requirements with PPTA contractor and roadway consultant. Also provided post design services during construction. Structures included:

- Ridgefield Parkway over Route 288: 72 meter long, 2 span continuous steel bridge
- Ramp A Flyover Route 288: 101 meter long, 2 span continuous curved steel bridge
- Route 288 NBL over Tuckahoe Creek: 160 meter long, 7 span continuous prestressed concrete bridge
- Route 288 SBL Widening over Tuckahoe Creek: 160 meter long, 7 span continuous prestressed concrete bridge

Reid Structure & Bridge; *Lead Structural Engineer*  
2001 - 2003

**I-95/Route 627 Interchange Bridges, Stafford County, VA**

*Lead Structural Engineer* responsible for the preliminary and final design and plans for three grade separation bridges for Stafford County Airport Interchange project. Coordinated all design with roadway and geotechnical consultants. Structures included:

- Rte. 627 Bridge Replacement over I-95: 430 ft. long, curved 5 span continuous prestressed concrete bridge
- WB Connector CD Lane over I-95: 600 ft. long, 5 span continuous steel plate girder bridge
- WB Connector CD Lane over Rte. 1: 282 ft. long, 4 span continuous steel wide flange beam bridge

Reid Structure & Bridge; *Lead Structural Engineer*  
2001-2003

**Rte. 58 Widening over I-85, South Hill, VA**

*Lead Structural Engineer* responsible for structural inspection and preparation of alternatives study for widening of five-span twin bridges. Prepared final design plans for the alternative that included replacement of a superstructure and multi-column piers. A new superstructure was designed as a 5-span continuous steel structure with integral backwall abutments to eliminate deck joints. Total length 342 feet.

Reid Structure & Bridge; *Lead Structural Engineer*  
1996-1997
ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

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

a. Name & Title:
   Karin Ertl, Senior Environmental Manager

b. Project Assignment:
   Environmental Compliance Manager

c. Name of Firm with which you are now associated:
   H.W. Lochner, Inc.

d. Years experience: With this Firm 3 Years With Other Firms 19 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.):
   **2009 – Current: H.W. Lochner - Senior Environmental Manager**
   Responsible for project management and oversight of environmental compliance activities for road and rail projects with an emphasis on NEPA compliance, Section 106 compliance, and resource agency coordination.

   **1997 – 2009: Vanasse Hangen Brustlin (VHB) – Senior Environmental Planner/Scientist**
   Fields of practice included environmental planning, NEPA compliance, & wetland and water quality permitting. Conducted field investigations, prepared technical reports and permit applications, implemented public involvement programs, and coordinated extensively with resource agencies regarding environmental compliance issues for wide variety of transportation and land development projects.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
   Kenyon College, Gambier, OH/Bachelor of Arts/1982/Biology

f. Active Registration: Year First Registered/Discipline/VA Registration #:
   2002/American Institute of Certified Planners (AICP)/# 018119

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.
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   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.)

   **Boulevard Modernization, City of Colonial Heights.** Lochner’s Environmental Compliance Manager responsible for preparing NEPA document (CE), clearing the project with US Army Corps of Engineers/DEQ, overseeing hazardous materials investigations, and ensuring compliance with Section 106 Memorandum of Agreement regarding mitigation for impacts to historic properties.
   H.W. Lochner, Inc., June 2009 - ongoing

   **Gilberts Corner Roundabout, VDOT Design/Build contract.** Served as Environmental Compliance Manager for the Lane Construction/VHB Team. Responsible for update to VDOT’s Categorical Exclusion due to design changes, securing wetland and water quality permits through VDOT’s IACM process, and ensuring that commitments made during the NEPA process were met during construction (including monitoring of vibration impacts to nearby historic structure).

   **Dominion Boulevard Road/Bridge Improvements, City of Chesapeake.** VHB’s Environmental Lead (as a subconsultant to Parsons Brinckerhoff). Responsible for assisting with preparation of Environmental Assessment (EA), overseeing complex wetland delineation, securing jurisdictional wetland determination from US Army Corps of Engineers, and participating in all public meetings/hearings.
## LEAD DESIGNER - WORK HISTORY FORM

### (LIMIT 1 PAGE PER PROJECT)

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

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Narrative describing nature of Firm’s Responsibilities</th>
<th>c. Client/Owner/Project Manager who can verify Firm’s responsibilities. Include address and current phone number</th>
<th>d. Contract Completion Date (original)</th>
<th>e. Contract Completion Date (Actual or Estimated)</th>
<th>f. Estimated Cost (in Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ROUTE 50 TRAFFIC CALMING</strong></td>
<td>Construction of four roundabouts and a connector road.</td>
<td>Virginia Department of Transportation</td>
<td>December 2009</td>
<td>December 2009</td>
<td>$13,200</td>
</tr>
<tr>
<td><strong>IMPROVEMENTS – GILBERTS CORNER ROUNDABOUTS</strong></td>
<td>Lane constructed four roundabouts and a connector road with minimal traffic disruption. Maintenance-of-Traffic (MOT) was also a constant challenge due to high volumes of commercial, commuter and tourist traffic on this 2-lane rural roadway, which is part of the Virginia Scenic Byway. Since the majority of the construction was performed along the existing roadway, the project was broken into a ten-phased sequence with multiple traffic switches. Drainage was a continual challenge and accommodated through roundabout design—the design drains to the center of the roundabouts. Historic and environmentally sensitive challenges posed serious and daily constraints, including the preservation of the Mount Zion Church (an important landmark through the Civil War), and President James Monroe’s home (Oak Hill plantation).</td>
<td>Loudoun County, VA</td>
<td><strong>DELIVERY METHOD:</strong> DESIGN-BUILD</td>
<td><strong>PROJECT BACKGROUND</strong></td>
<td><strong>PROJECT BENEFITS</strong></td>
</tr>
<tr>
<td><strong>CATEGORICAL OF WORK:</strong></td>
<td><strong>PROJECT DESCRIPTION</strong></td>
<td><strong>CONTRACTOR:</strong></td>
<td>The Lane Construction Corporation (Chantilly, VA)</td>
<td>The new roundabouts offer traffic calming and an unexpected benefit - faster travel and congestion relief for motorists in the northern Virginia region. Benefits to drivers and the business community include:</td>
<td>Less stop-and-go traffic</td>
</tr>
<tr>
<td>• Roundabouts</td>
<td>Lane constructed four roundabouts and a connector road with minimal traffic disruption. Maintenance-of-Traffic (MOT) was also a constant challenge due to high volumes of commercial, commuter and tourist traffic on this 2-lane rural roadway, which is part of the Virginia Scenic Byway. Since the majority of the construction was performed along the existing roadway, the project was broken into a ten-phased sequence with multiple traffic switches. Drainage was a continual challenge and accommodated through roundabout design—the design drains to the center of the roundabouts. Historic and environmentally sensitive challenges posed serious and daily constraints, including the preservation of the Mount Zion Church (an important landmark through the Civil War), and President James Monroe’s home (Oak Hill plantation).</td>
<td><strong>PRELIMINARY DESIGNER:</strong></td>
<td>H.W. Lochner</td>
<td>Accomplished traffic calming</td>
<td>Evidence of Performance</td>
</tr>
<tr>
<td>• Drainage</td>
<td></td>
<td></td>
<td></td>
<td>Project was delivered ahead of schedule and under budget. “The project received several awards and much acclaim from local and national media, citizens and elected officials. VDOT’s goals and objectives were all met or exceeded by the Lane Team.”</td>
<td>* Kenny Lee Robinson, VDOT Project Manager</td>
</tr>
</tbody>
</table>
Evidence of Performance

"... commend [Lane] for ... meet[ing] your substantial completion date ... and provide[ing] all deliverables as stated herein."

– Larry Cloyed, Project Manager
VDOT Springfield Interchange Project Manager

**WORK HISTORY FORM  |  2**

<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>
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<th>f. Estimated Cost (in Thousands)</th>
<th>Dollar Value of Work for Which Firm Was/Is Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-95/I-495 SPRINGFIELD INTERCHANGE</td>
<td>Fairfax County, Virginia</td>
<td>PROJECT SCOPE This complex interchange involved the construction of 5 new multi-span bridges and reconstruction and widening of two existing bridges with four cast-in-place retaining walls totaling 14,591 cubic meters of structural concrete.</td>
<td>Virginia Department Of Transportation 6363 Walker Lane, Ste 500 Alexandria, VA 22310</td>
<td>November 2003 November 2003</td>
<td>$57,718 $74,348* $74,348</td>
<td>*included bonus for achieving expedited schedule</td>
</tr>
<tr>
<td>DELIVERY METHOD: DESIGN-BID-BUILD</td>
<td></td>
<td>PROJECT DESCRIPTION In a high profile project, Lane built this complex interchange project (convergence of I-95, I-494 and I-395 South of Washington, DC) under some of the heaviest traffic conditions in the country. Lane performed all of the structure, excavation and paving work itself, the project took extraordinary efforts to coordinate with other contractors and the Client. Work included the widening of ramps and reconstruction of the existing interstate with additional median lanes. Lane was the Lead Contractor for Phase V of the Springfield “Mixing Bowl” Interchange, a $75 million major highway and bridge contract for the Virginia Department of Transportation. The construction of this phase of the long term multi-phased project contributed to the ultimate creation of a seamless HOV network on I-95/I-395, the Capital Beltway, I-66, the Dulles Toll Road, and future HOV lanes on Braddock Road (enabling easier access to I-66). This phase of the Springfield Interchange project also required significant Maintenance of Traffic measures for what is probably one of the busiest interchanges in the greater Washington Metropolitan area which only increases at peak rush hour times. Both a high profile and highly visible project, the Springfield Interchange also included significant public involvement efforts and coordination with other proximate highway and roadway projects. Community meetings of affected residential neighborhoods and business areas were conducted regularly; updated traffic conditions and project progress were regularly uploaded to the project website for the travelling public’s advisement; and, community input solicited for sound wall placement and construction, among others.</td>
<td>Virginia Department Of Transportation 6363 Walker Lane, Ste 500 Alexandria, VA 22310</td>
<td>November 2003 November 2003</td>
<td>$57,718 $74,348* $74,348</td>
<td>*included bonus for achieving expedited schedule</td>
</tr>
<tr>
<td>CATEGORY OF WORK:</td>
<td>- HIGHWAY INTERCHANGE</td>
<td>- BRIDGES</td>
<td>- EXCAVATION</td>
<td>- GRADING</td>
<td>- DRAINAGE</td>
<td>- SOUND WALLS</td>
</tr>
<tr>
<td>CONTRACTOR:</td>
<td>THE LANE CONSTRUCTION CORPORATION (Chantilly, VA)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEAD DESIGNER:</td>
<td>HNTB</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Lane completed this project on an Owner-requested expedited schedule and received a $6.5 million incentive completion bonus.
ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR—WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

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

<table>
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<tr>
<th>a. Project Name &amp; Location</th>
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</tr>
</thead>
<tbody>
<tr>
<td>I-495 CAPITAL BELTWAY HOT LANES Fairfax County, Virginia</td>
<td><strong>PROJECT SCOPE</strong> Construction of four new general-purpose traffic lanes (two in each direction) outside of the existing lanes on the Capitol Beltway. Work includes the reconstruction of ramps, interchanges, frontage roads, overpasses and underpasses, bridges and other necessary crossings. <strong>PROJECT DESCRIPTION</strong> Lane is constructing two new lanes in each direction on a 14-mile stretch of I-495 from the Springfield Interchange to just north of the Dulles Toll Road. The project will encompass the replacement of more than $260 million of aging infrastructure, including more than 50 bridges and overpasses. Construction of Springfield Interchange Phase VIII creates a seamless HOV network on I-95/395, the Capital Beltway I-66, the Dulles Toll Road and future HOV lanes on Braddock Road (allowing for easier connection to I-66). There will be three new access points to the Capital Beltway at Rte. 29/Lee Highway, Westpark Bridge and Jones Branch Drive. Upgrades to 12 key interchanges will promote driver safety. Lane is also building more than 70,000 linear feet of sound walls to double the existing protection for local neighborhoods. <strong>PROJECT BACKGROUND</strong> The Virginia Department of Transportation began studying short and long-term solutions to growing traffic congestion on the Capital Beltway in the late 1980s. By 1994 it had concluded High Occupancy Vehicle (HOV) lanes were needed. A private developer submitted plans for High Occupancy Toll (HOT) lanes in 2002 to the Commonwealth, which resulted in selecting that alternative in 2005. The HOT Lanes project is the most significant package of improvements to the Capital Beltway in a generation. When completed, they will provide drivers with the option of paying a toll for a faster, more predictable trip. Drivers using the HOT lanes will also have access to (HOV) lanes usually limited to vehicles with multiple occupants. <strong>PROJECT BENEFITS</strong> The new HOT Lanes will offer faster travel choices and congestion relief for motorists in the Northern Virginia/Washington, D.C. region. Benefits to drivers, carpoolers, public transportation users and the business community include: • Less stop-and-go traffic • Improved opportunities for reliable bus service for public transportation users • Reduced cut-through traffic on local neighborhood streets • Positive environmental impact because vehicles move through the area more quickly, reducing emissions</td>
<td>Virginia Department of Transportation Northern Virginia District 4975 Alliance Drive Fairfax, VA 22030 Mr. Garrett Moore District Administrator 703.259.1959</td>
<td>December 2012</td>
<td>Anticipated December 2012 Project is on schedule</td>
<td>Original Contract Value</td>
</tr>
<tr>
<td>----------------------------</td>
<td>----------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------</td>
<td>---------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$1,300,000</td>
<td>$1,500,000</td>
<td>$500,000</td>
<td></td>
</tr>
</tbody>
</table>

Evidence of Performance

“A solid experienced company that has built to standard and worked well under difficult traffic and space constraints to minimize impact on travel.”

~ Garrett Moore, VDOT NOVA District Administrator
**LEAD DESIGNER - WORK HISTORY FORM**

**LIMIT 1 PAGE PER PROJECT**

<table>
<thead>
<tr>
<th>Work by Lead Designer - three (3) projects which best illustrates current qualifications relevant to this Project.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Project Name &amp; Location</td>
<td>b. Narrative describing nature of Firm’s Responsibilities</td>
</tr>
<tr>
<td>Volvo/Lynnhaven Parkway Final Design Cities of Chesapeake and Virginia Beach, VA</td>
<td>With the goals of improving congestion on the Volvo Parkway and serving new developments in the area, the Virginia Department of Transportation (VDOT) sought to connect the Volvo and Lynnhaven Parkways and widen both from two to four lanes. This 4-mile project ran through an intensely residential corridor, beginning at Kempsville Road (Route 190) in Chesapeake and ending at Indian River Road (Route 605) in Virginia Beach. Lochner was the prime consultant from preliminary engineering through final construction documents. The project’s residential location necessitated in-depth noise, cultural resource, socio-economic, and air quality studies, as well as traffic forecasting and analysis. These studies assessed the various impacts on the surrounding area and made recommendations to mitigate negative effects. In addition, Lochner conducted all studies required for the environmental impact assessment (including Sections 4(f) and 106) and NEPA documentation. Lochner also assisted VDOT with the public involvement program to convey the findings of these studies and receive community feedback. The project design contained a number of challenging elements, such as incorporating at-grade intersections for 43 cross streets and associated signalization design. The project required Lochner to perform noise barrier and acoustic design to incorporate 27 noise barriers while retaining adequate sight distance for motorists. The 4-lane roadway and the noise barriers had to be contained within an 80-ft right-of-way in a manner that did not require any residential relocations and did not impact parkland running parallel to the corridor. Construction for the first 1.5-mile section of the roadway, with noise walls along the majority of its length, was successfully completed in June 2007. Lochner is currently working on the final design and construction documents for the remaining 2.5-mile section. Total ROW and construction cost for the project is $42.6M.</td>
</tr>
<tr>
<td>Virginia Department of Transportation Hampton Roads District Project Management Office 1992 South Military Highway Chesapeake, VA 23320-4423</td>
<td>Mr. N. Ty Lee, PE 757-494-5485</td>
</tr>
<tr>
<td>DELIVERY METHOD: Design-Bid-Build</td>
<td></td>
</tr>
</tbody>
</table>
| CATEGORY OF WORK: | - Roadway widening and reconstruction  
- Traffic Signals  
- Noise barriers  
- Sidewalks  
- Crosswalks  
- ROW  
- MOT  
- Environmental Compliance  
- Public Involvement |
| LEAD DESIGNER: | H.W. Lochner, Inc. |

<table>
<thead>
<tr>
<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>
</tr>
</thead>
<tbody>
<tr>
<td>Virginia Department of Transportation Hampton Roads District Project Management Office 1992 South Military Highway Chesapeake, VA 23320-4423</td>
<td>2012</td>
<td>2012</td>
<td>$1,193</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$2,222</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$1,697</td>
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<tr>
<td>Dollar Value of Work for Which Firm Was/Is Responsible</td>
<td></td>
<td></td>
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</tr>
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<td>Mr. N. Ty Lee, PE 757-494-5485</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ATTACHMENT 3.4.1(b)**
### ATTACHMENT 3.4.1(b)

**LEAD DESIGNER - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

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<th>e. Contract Completion Date (Actual or Estimated)</th>
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</tr>
</thead>
</table>
| Mid-Currituck Bridge       | The Currituck County Outer Banks, separated from the North Carolina mainland by the Currituck Sound, attract millions of tourists each year. The northern Outer Banks currently have only one roadway link to the mainland: the US 158 Wright Memorial Bridge, which connects to NC 12 on the Outer Banks. Congestion is a frequent problem during the summer months and travel times can be excessive. To address these issues and improve hurricane evacuation time for residents and visitors, the North Carolina Turnpike Authority (NCTA) is advancing the construction of a new toll-bridge facility in mid-Currituck County.  

The Mid-Currituck Bridge project is the first Public Private Partnership (P3) transportation project undertaken in the state of North Carolina. Under the pre-development agreement (PDA) the Design-Build team has been involved in the project’s conceptual phase, assisting NCTA to evaluate the viability of bridge construction, financing, and operation. Lochner is leading all engineering and design work in this milestone project.  

Lochner is responsible for the development and evaluation of project design alternatives and the final roadway and bridge design for the selected alternatives. The proposed bridge will consist of two consecutive structures—a two-mile structure over Maple Swamp and a five-mile structure over the Currituck Sound. Both will carry two lanes of traffic, but be wide enough to carry three in emergency situations. The project will also involve improvements to NC 12 and US 158, a new US 158 interchange, and toll plaza construction.  

The Mid-Currituck Bridge is being planned to be a sustainable, zero-waste project. Sustainable design features being considered include pervious pavement; solar or LED sidewalk lighting; replacement of signalized intersections with roundabouts; and the use of LEED standards in toll plaza construction. The team will also investigate ways to reuse or recycle materials from the project site to minimize construction waste. |
| Currituck County, NC       | The Mid-Currituck Bridge project is the first Public Private Partnership (P3) transportation project undertaken in the state of North Carolina. Under the pre-development agreement (PDA) the Design-Build team has been involved in the project’s conceptual phase, assisting NCTA to evaluate the viability of bridge construction, financing, and operation. Lochner is leading all engineering and design work in this milestone project.  

Lochner is responsible for the development and evaluation of project design alternatives and the final roadway and bridge design for the selected alternatives. The proposed bridge will consist of two consecutive structures—a two-mile structure over Maple Swamp and a five-mile structure over the Currituck Sound. Both will carry two lanes of traffic, but be wide enough to carry three in emergency situations. The project will also involve improvements to NC 12 and US 158, a new US 158 interchange, and toll plaza construction.  

The Mid-Currituck Bridge is being planned to be a sustainable, zero-waste project. Sustainable design features being considered include pervious pavement; solar or LED sidewalk lighting; replacement of signalized intersections with roundabouts; and the use of LEED standards in toll plaza construction. The team will also investigate ways to reuse or recycle materials from the project site to minimize construction waste. |
| DELIVERY METHOD: Public Private Partnership Design-Build | | DEVELOPER: Currituck Development Group  
ACS Infrastructure  
OWNER: North Carolina Turnpike Authority  
1578 Mail Service Center  
Raleigh, NC 27699  
OWNER PROJECT MANAGER: Steve DeWitt, PE, Chief Engineer North Carolina Turnpike Authority 919-707-2705 |
| CATEGORY OF WORK:  
- Design-Build/Public Private Partnership  
- Roadway Design  
- Bridge Design  
- Cost Estimates  
- Design Review Meeting Coordination and Documentation  
- Bicycle Facilities Planning/Design  
- Aesthetic Treatments  
- Alternative Analysis | | 2010 (Phase 1) | 2011 (Phase 1) | 2013 (Phase 2) |
| CONTRACTOR: Mid-Currituck Constructors, JV of Dragados USA Traylor Brothers Weeks Marine | | Phase 1 Fee: $5,300  
Phase 2 Fee: TBD  
Construction: $650,000 | | | $5,300 + $3,400 |
<p>| LEAD DESIGNER: Lochner MMM LLP. Partnership of H.W. Lochner, Inc. MMM Group | | | | | |</p>
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<tbody>
<tr>
<td>I-80, State Street to 1300 East Environmental Study &amp; CM/GC Design Salt Lake County, Utah</td>
<td>Lochner provided environmental support, alternative analysis, and preliminary and final engineering to address traffic needs and deficiencies along a busy stretch of I-80. Project elements included improvements to ramp and main line geometry, pavement condition, medians, bridge structural integrity, noise mitigation, signalization, lighting and aesthetics. To compress the construction schedule, Lochner developed concepts for several rapid construction and accelerated bridge construction methods, including self-propelled modular transporter (SPMT), horizontal slide and elevated drop in (EDI) elements. In all, Lochner designed seven bridges, three of which were moved into position using SPMT. Structural design efforts included: I-80 mainline over Highland Drive; 1300 East EB off-ramp over Highland Drive; I-80 mainline over 600 East; 700 East EB off-ramp over 600 East; and 700 East WB on-ramp over 600 East.</td>
<td>Owner: Horrocks Engineering Owner: Utah Department of Transportation Region Two 2010 S 2760 W Salt Lake City, UT 84104 Reference: John Montoya, PE Utah Department of Transportation 801-910-2570 <a href="mailto:johnmontoya@utah.gov">johnmontoya@utah.gov</a></td>
<td>2010</td>
<td>2010</td>
<td>FEE: $506 CONSTRUCTION $104,000 FEE: $3,927 FEE: $3,924</td>
</tr>
</tbody>
</table>

**DELIVERY METHOD:** Construction Manager General Contractor

**CATEGORY OF WORK:**
- Accelerated Construction Techniques
- Environmental Study Support
- Interchange Design
- Bridge Design
- Roadway Design
- Intersection Design
- Noise Barrier Design
- Retaining Wall Design
- Hydraulics / Hydrology Analysis
- Lighting Design
- Public Involvement
- Cost Estimate Development
- 3D Visualization