

LORD FAIRFAX COMMUNITY COLLEGE FAUQUIER CAMPUS









REQUEST FOR QUALIFICATIONS

A DESIGN-BUILD PROJECT

Warrenton Southern Interchange US 15/17/29 From: Route 15/17/29 & Route 15/17/29 Business To: 1.0 mile South of Route 15/17/29 & Route 15/17/29 Business

Fauquier County, Virginia June 2, 2017

State Project No.: 0029-030-121, P101, R201, C501, B616 Federal Project No.: STP-032-7(032) Contract ID Number: C00077384DB100





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Warrenton Southern Interchange US 15/17/29

RFQ No.: C00077384DB100 (A Design-Build

From: Route 15/17/29 & Route 15/17/29

Business To: 1.0 mile South of Route

15/17/29 & Route 15/17/29 Business,

CONSTRUCTION COMPANY

June 2, 2017

Mr. Bryan W. Stevenson, P.E. Alternate Project Delivery Division Virginia Department of Transportation 1401 East Broad Street Richmond, Virginia 23219

Dear Mr. Stevenson:

Orders Construction Company, Inc. (Orders) is pleased to submit our Statement of Qualifications (SOQ) in response to your Request for Qualifications (RFQ) for the Warrenton Southern Interchange US 15/17/29

3.2.1 The full legal name and address of the Offeror is Orders Construction Company, Inc., 501 Sixth Avenue, Saint Albans, WV 25177

RE:

3.2.2 Point of Contact is: Charles Stokes, Vice President 605 Lithia Road Wytheville, VA 24382 276.227.0378 (P) / 276.223.0134 (F) cstokes@ordersconstruction.com

3.2.3 Principal Officer is: Nathaniel R. Orders, President 501 Sixth Avenue Saint Albans, WV 25177 304.722.4237 (P) / 304.722.4230 (F) norders@ordersconstruction.com

Project)

- **3.2.4** Orders is structured as a corporation and will undertake full financial responsibilities for the project for the required bonding and accept the risks and liabilities for the performance of the work.
- **3.2.5** The Lead Contractor for this Project is Orders Construction Company, Inc., and Clark Nexsen, Inc. will be the Lead Designer.
- **3.2.6** Affiliated and/or Subsidiary Companies: Attachment 3.2.6 is provided in Appendix A.
- **3.2.7** Attachments 3.2.7(a) and (b), Certification Regarding Debarment Forms Primary Covered Transactions and Lower Tier Covered Transactions are provided in Appendix A.
- **3.2.8** Orders' prequalification number is O017 and current VDOT prequalification status is active. A copy of our prequalification certificate is included in Appendix A.
- **3.2.9** A letter of verification from our bonding company is included in Appendix A providing evidence that we can obtain performance and payment bonds for the current estimated contract value and that these bonds will cover the Project and any warranty periods.
- **3.2.10** Information regarding SCC and DPOR registration in the Commonwealth of Virginia for the Orders/Clark Nexsen Team and key personnel is provided in the table on Attachment 3.2.10. Full size copies of the certifications and DPOR registrations are included in Appendix B.
- 3.2.11 I personally commit to VDOT that Orders Construction Company will achieve a DBE participation goal of 11% for the entire value of the contract.

Thank you for the opportunity to submit this SOQ and we look forward to partnering with VDOT and all involved to successfully deliver this project.

Very Truly Yours,

Nathaniel R. Orders - President Orders Construction Company, Inc.





OFFEROR'S TEAM STRUCTURE

3.3 Offeror's Team Structure

Orders will be responsible for managing the project in its entirety, supervising and performing the construction. This project falls within our firm's "sweet spot" for projects including both bridge and earthwork with a value between \$10-25 Million, having completed 11 Design-Build projects for State DOT's (10 in West Virginia and 1 for VDOT). Additional subcontractors for various specialty items such as QC, signage and hauling will be under direct subcontract to Orders. We selected Clark Nexsen to lead the design effort for all aspects of the project because of our past success on the Route 60 Clifton Forge Design-Build contract and the expanding relationship as our "go-to engineer" for solving engineering challenges on other projects. The Orders team includes highly qualified subconsultants, which will bring specific expertise to enhance the team and ensure a quality project for VDOT. A complete list of team members follows and an organizational chart of the team is included in Section 3.3.2.

Considering the potential risks and complexities to safely build this project along the highly traveled Route 15/17/29 corridor, a Design-Build team attuned to solving complex challenges, offering innovation solutions and partnering with VDOT and local stakeholders in a collaborative manner is critical to project success. It is with this objective at the forefront of our thinking that led to the assembling of this team.

Orders Construction Company, Inc. - Offeror, Legal Entity, Lead Contractor

Orders is a family owned business, currently managed by third and fourth generation highway contractors and Registered Professional Engineers. With the Orders name on the line, commitment, safety, schedule, budget, quality and building lasting relationships with the owners which it serves is the Orders way of doing business. The goal is zero accidents (which was achieved in 2016), on-time project delivery, earn high CQIP scores and Contractor Performance Evaluations, and to develop and sustain a solid working relationship in transportation districts throughout VA, WV, NC, MD, KY, IN and TN. We are proud of where we have been, what we have accomplished and where we are headed. Orders has assembled quality personnel to tackle complex work as evidenced by each of the projects listed in our work history found in Attachment 3.4.1. With this project falling within our corporate "sweet spot" as noted above, Orders can self-perform both the structural and earthwork components of this project; thereby retaining complete control over project quality, schedule, and budget.

Clark Nexsen - Lead Designer

Clark Nexsen will serve as the Lead Designer for this project and will be responsible for the design QA/QC and managing design work performed by design sub-consultants. Clark Nexsen is a full-service architecture, engineering, and planning firm with offices in Virginia Beach, Richmond, Vienna and Roanoke, Virginia; North Carolina, Georgia, and Texas. Clark Nexsen has been the lead designer on numerous Design-Build projects in 17 states, including Virginia and internationally, with total construction value exceeding \$1.5B.

Subconsultants and/or Major Subcontractors

The Orders /Clark Nexsen team is comprised of highly qualified individuals and sub-consultants knowledgeable in VDOT policies and procedures and experienced with similar VDOT projects. This team of sub-consultants was selected based on their relevant experience and established working history of project success with VDOT, Orders Construction, and/or Clark Nexsen.

Quinn Consulting Services (Quinn) – a DBE certified firm located in Dulles, Virginia has been selected to provide the Quality Assurance Management (QAM) and Inspection for the Orders team. Quinn has been a respected provider of QAM services to VDOT on over almost 40 Design-Build projects with 8 qualified QAM's serving their clients. Specialized Engineering will be their independent testing laboratory.

Engineering Consulting Services (ECS) – recognized as an ENR Top 100 Engineering firm, will provide Orders with Construction Quality Control and Testing & Laboratory Services. ECS has worked on over 50 Design-Build projects across the Commonwealth, specializing in geotechnical and construction materials testing (field and laboratory) services.





DMY Inc. – a minority-owned business certified DBE/SWaM firm located in Richmond, Virginia will supply the team with geotechnical engineering evaluations to integrate their recommendations and judgement with Clark Nexsen's design engineers. DMY has supported 5 Design-Build projects within Virginia.

Bowman Consulting – with their extensive offering of professional services and experience gained from the support of 5 Design-Build projects, Bowman will provide right-of-way acquisition services (including appraisals, notifications, title examinations, negotiations, closings, and coordination with owners); relocations, adjustments and coordination of utilities; environmental permitting; wetland delineations; and project surveying.

McCormick Taylor – as a selected VDOT statewide noise abatement engineering services firm, McCormick Taylor will support our team by completeing a Noise Abatement Design Report (NADR) and any associated barrier design. Having worked on 4 Design-Build projects for VDOT, their services will bring value to our team.

Elite Management Solutions – a Fredericksburg based, service disabled, veteran/woman owned small business communications firm will support the Orders team to provide public relations, information sharing and outreach to the public and stakeholders affected by this construction project.

3.3.1 Key Personnel

Our team consists of highly qualified and experienced individuals selected for their relevant experience and skills for optimum performance on this specific project. These key staff and engineering firms come together with a shared history on successful projects, have established working relationships, and are ready to begin immediately. Our Key Personnel offer extensive road, bridge design, and construction experience delivering projects to VDOT standards. *The Orders Design-Build Team, including Key Personnel, will remain intact for the duration of the project providing consistent leadership to deliver the project to completion.* Key personnel resume forms are included in Attachment 3.3.1 located in Appendix C. A summary of key personnel is described below; expanded project experience for each are listed on the resume forms.

Key Personnel Position	Name	Firm
Design-Build Project Manager	Charles Stokes	Orders Construction Company, Inc.
Construction Manager	Kevin Conner	Orders Construction Company, Inc.
Quality Assurance Manager	Kaushik Vyas, PE, DBIA	Quinn Consulting Services, Inc.
Design Manager	Ian Johnston, PE	Clark Nexsen

<u>Design-Build Project Manager (DBPM)</u>, <u>Charles Stokes – Orders.</u> Mr. Stokes has been constructing VDOT roads and bridges for over 40 years. He has served as Project Manager on over 50 VDOT projects, including DBPM for Route 60 Main Street Bridge Replacement (Design-Build) in Clifton Forge, VA; Gate City, VA Business Rte. 23/Kane Ave in Scott County, VA; and Route 419 and East Main Street Interchange Bridge in Salem, VA. Throughout his career he has excelled in bringing large transportation projects to completion on-time and within budget and with CQIP verified construction quality. As both the DBPM and Vice President of Orders, he has direct control of the necessary equipment fleet and entire Virginia based workforce to allocate the appropriate resources to this project to ensure successful progression of the work.

Quality Assurance Manager (QAM), Kaushik Vyas, PE, DBIA – Quinn. Mr. Vyas is a registered professional engineer in the Commonwealth of Virginia and a DBIA professional with more than 38 years of experience in construction inspection of transportation projects. Mr. Vyas has served as QAM on 7 VDOT Design-Build projects since 2010. He has also worked as a Transportation Engineer on Design-Build and PPTA/P3 projects bringing a wealth of experience ensuring contractors comply with the contract documents and meet material specifications. Mr. Vyas will be independent of the construction operations for the project and will specifically be responsible for all quality assurance (QA) activities as well as project inspection and materials documentation. He will be responsible



for QA inspection and overseeing compliance with the approved project QA/QC Plan as well as the VDOT Minimum Standards for Design-Build and PPTA Projects.

Design Manager (DM), Ian Johnston, PE – Clark Nexsen. Mr. Johnston will manage all design required for this project. He will be responsible for the TMP, complete roadway and bridge design; including road plans, roundabout design, interchange plans, traffic analysis, sign and signal plans, lighting plans, utility designation and relocation, right-of-way acquisition, sound study as well as coordinating compliance with the Categorical Exclusion and environmental permitting. Mr. Johnston will maintain involvement in the project once construction begins to oversee any plan modifications and shop drawings, and review construction activities with the CM as work progresses. He is currently serving as the Project Manager (PM) for the design of several relevant projects: an urban roundabout for the City of Suffolk, the 22nd Street bridge replacement over the Norfolk Southern Railroad in the City of Chesapeake and the two bridge replacement projects for the VDOT Salem District on Route 100; one over Route 11 and the other over the Norfolk Southern Railroad. In the public sector, Mr. Johnston was assigned to the VDOT Project Management Office in the Hampton Roads District. This assignment allowed Mr. Johnston to gain a full understanding of VDOT processes and procedures especially regarding permitting, utility coordination and relocation, right-of-way acquisition, scheduling, and overall project delivery for Design-Build projects and Design-Build projects. He has over 18 years of design and project management experience; exclusively on transportation projects.

Construction Manager (CM), Kevin Conner – Orders. Mr. Conner will oversee the project site for the duration of the project and will be responsible for managing the construction process, including all construction quality control activities. Mr. Conner has been employed with Orders for 13 years and is responsible for successfully completing numerous Design-Build and Design-Build roadway and bridge projects for Virginia and West Virginia DOT: including working with Design-Build Project Manager Charles Stokes on Route 60 Design-Build Main Street Bridge Replacement in Clifton Forge, VA. Mr. Conner holds a Virginia Department of Environmental Quality (DEQ) Responsible Land Disturber (RLD) Certification (formerly administered by the Virginia Department of Conservation and Recreation, DCR) and a VDOT Erosion and Sediment Control Contractor Certification (ESCCC). He will be assigned solely to this project for the duration of construction.

Value Added Personnel

In addition to the required key personnel, we have also provided project leaders who are responsible for major functions as shown in the organizational chart in section 3.3.2.

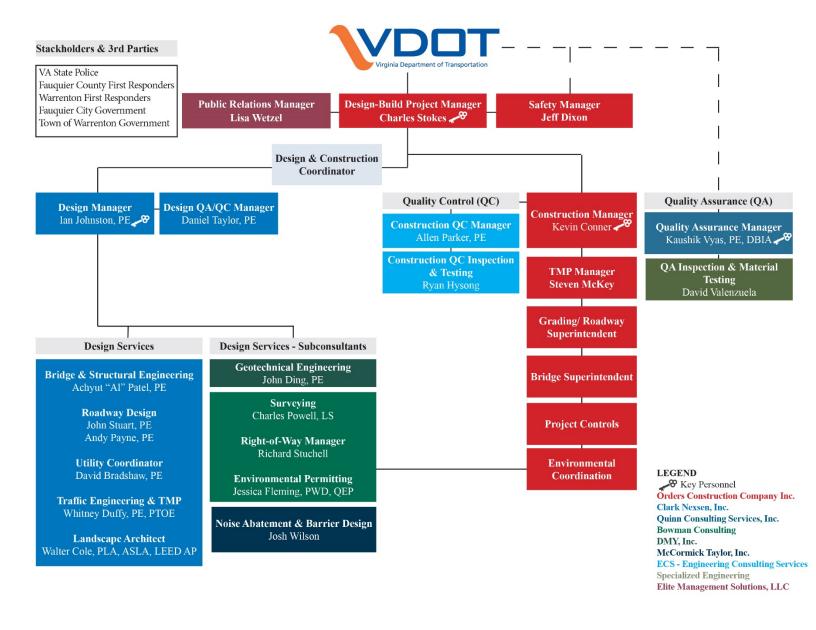
<u>Safety Manager, Jeffrey Dixon, Jr. – Orders.</u> Mr. Dixon will report directly to the Design-Build Project Manager (DBPM) and work closely with him to ensure all construction activities are performed safely and in a safety conscious environment. This value added safety focus on our craftsmen, the traveling public and VDOT has earned Orders a **Zero Accident record in 2016**. Recognizing the challenges to safety with the extensive MOT operations required to construct this project, Mr. Dixon brings a laser focus to ensure and advise our team on safe construction operations, with specific focus on how the public navigates Orders' work zone. *Mr. Dixon led the safety efforts for Orders, winning a first place VTCA Safety Award for 2016*.

<u>Public Relations, Lisa Wetzel – Elite.</u> Ms. Wetzel, a Fredericksburg resident, brings a local perspective to the communications needs of the surrounding community; residents, commuters and stakeholders. As a former employee of the American Traffic Safety Service Association (ATSSA) in Fredericksburg, her knowledge of work zone safety will support Mr. Dixon's efforts to ensure our work zone is safe for both our employees and the public. Furthermore, she will lead our communication efforts to disseminate our team's construction activities, MOT phasing and project expectations, including how motorists may best navigate the future roundabout.



3.3.2 Organizational Chart

As depicted on the organizational chart below, the Order's team chain of command is shown by solid lines representing primary lines of responsibility; with dashed lines delineating communication and coordination relationships







Functional Relationships of Key Personnel

The Orders team is structured to allow the DBPM to exercise direct "command and control" to guide and manage the design and construction team. This structure has proven to be effective when delivering projects to meet both the technical and functional requirements of the contract documents. By following the solid and dashed lines of authority, the established communication and decision making relationships and protocols are clearly defined.

Design-Build Project Manager (DBPM), Charles Stokes will be VDOT's primary point-of-contact and will be incharge of all phases of the project, with full authority over all aspects of the Orders team and directly responsible to and communicate with VDOT regarding the success of this project. He will lead, manage and coordinate all project disciplines with full authority to resolve issues that may arise. He will keep the team focused on delivery of a quality project. Working with our Public Relations Manager, our team will communicate with the public and private stakeholders as well as coordinate all public outreach regarding construction activities. Currently, serving as the DBPM on the VDOT I-81 Bridges over Halls Bottom Road in the Bristol District of VDOT. Charles is actively engaged in successfully delivering this project, which will be completed prior to the start of the Warrenton Southern Interchange US 15/17/29 project.

Quality Assurance Manager (QAM), Kaushik Vyas, PE, DBIA will report directly to the DBPM and will have direct, independent access to VDOT with authority to stop work. He will implement the Quality Assurance (QA) program and will coordinate directly with VDOT and have full autonomy to report findings directly, supervise project QA inspection staff and coordinate with the QA testing agency. He will maintain conformance with the Contract Documents and will have the overall responsibility for the Design-Build QA/QC Plan to ensure full compliance with the Contract Documents. He will also interact with the project DM and the QCM.

Design Manager (DM), Mr. Ian Johnston, PE will report to the DBPM and be responsible for the successful delivery of quality design and construction documents as well as coordinating and integrating both internal design disciplines and specialty sub-consultant services. Communication protocols within the team will be set to allow Mr. Johnston to communicate with VDOT technical staff when required, and assure follow-up communication with the DBPM. He will also establish and oversee the Design QA and QC program. Design QA/QC Manager, Danny Taylor, P.E., will perform independent QC of all design work prior to each submittal.

Construction Manager (CM), Kevin Conner will report directly to the DBPM and will be responsible for managing the construction process, subcontractors, and all construction QC activities. He will supervise the construction superintendents. Mr. Conner will work closely with the TMP Manager to implement a safe and effective plan to allow motorists to safely navigate the work zone. As the full-time on-site leader of the Orders team workforce, he will coordinate all subcontractor work and construction quality control activities with the construction QCM. The CM will be accountable for construction contribution to achieve the team's DBE goal of 11%. Mr. Conner is currently assigned to a project in Charlottesville, VA which is scheduled for completion in November 2017. He will be temporally reassigned upon completion to another project until such time that the Warrenton Design-Build project begins.

Value Added Positions

The Orders team is exceeding the stated requirement by committing to the following Value Added positions:

Safety Manager, Jeffrey Dixon, is an in-house position within Orders who reports directly to the DBPM and reviews all field construction activities to ensure the work zone provides a safe environment for the construction team and the traveling public. This Value Added position will support the Orders team to focus and maintain awareness on industry and company safe working practices.

Public Relations, Lisa Wetzel of Elite Management will work directly for the DBPM and closely with the team to ensure our messaging is easily understood by the target audience; public and stakeholders. This Value Added position will assist the Safety Manager to foster a safe work zone with the knowledge she gained while working for ATSSA.





EXPERIENCE OF OFFEROR'S TEAM

3.4: Experience of Offerer's Team

The Orders team has been involved in numerous VDOT, PPTA, and Design-Build projects together as well as on other teams, all completed within schedule and budget. Our personnel know what needs to be done, with whom we need to coordinate, and how to make things happen. We bring all this experience together to provide the best team for this project.

Orders/Clark Nexsen Design Build Team:

Orders Construction Company and Clark Nexsen have developed a strong working relationship built on mutual respect as evidenced by jointly constructing the award-winning Rte. 60 Clifton Forge Design-Build Project, which was among the most risky, complex Design-Build project VDOT has undertaken. This small project presented unique problems due to the bridge structure abutting up to commercial and historic buildings which were elevated over what was once the town's Main Street. The successful completion of the Clifton Forge Design-Build project ahead of schedule and under budget, is evidence of a strong team. Orders and Clark Nexsen have kept the contractor-engineer team together, delivering 10 Design-Bid-Build projects with Orders serving as the General Contractor and Clark Nexsen as the construction phase consulting engineer. Our successes include: Bridge over Lake Flannagan in Dickenson Co., VA; Avens Bridge over South Holston Lake in Washington Co., VA; I-64 Maury River Delta Frame in Rockbridge Co., VA; Rte. 501 Bridge over the James River in Bedford and Amherst Counties, VA; Rte. 220 Bridge over Pigg River in Franklin Co., VA, in addition to others. This strong working relationship has blossomed into an intimate working partnership that is rarely encountered between a builder and a designer. The Design-Build project in Clifton Forge earned numerous accolades and awards, including:

- ACEC (Virginia Chapter) 2014 Honor Award as Design Build Transportation Project of the Year
- APWA (Mid-Atlantic Chapter) 2014 Project of the Year
- Chosen as a key presentation for Design-Build Transportation Projects Under \$5 million at the 2014 Design-Build Institute of America (DBIA) Annual Transportation Conference in San Jose, CA, March 2014. The presentation team included VDOT, Orders and Clark Nexsen.

Below is an overview of similar road and bridge projects correlated with relevant scope of work items that will be encountered on the Warrenton Southern Interchange:

Project Name	Client	Design-Build	Design-Bid-Build	Partnered with Clark Nexsen	Bridge Construction	Road Construction	Construction over active Road/Railroad	Utility Relocation	Extensive MOT	Public Involvement	Right of Way
Rte 60 Clifton Forge	VDOT	X		X	X			X	X	X	
I-81 Halls Bottom	VDOT	X			X	X	X	X		X	
Rte. 220 Interchange	VDOT		X	X	X		X	X			
Rte 738 Botetourt Co	VDOT		X	X	X	X	X	X			
Rte 501 over James River	VDOT		X	X	X	X	X	X			
I-64 Bridges over Maury River	VDOT		X	X	X	X	X	X			
Bridge over Lake Flannagan	VDOT		X	X	X		X	X			
Avens Bridge over Holston Lake	VDOT		X	X	X	X	X	X			
Rte 250 Highlan Co	VDOT		X	X	X		X	X			
I-81 Exit 7 Bristol	VDOT		X	X	X	X	X	X			



Project Name	Client	Design-Build	Design-Bid-Build	Partnered with Clark Nexsen	Bridge Construction	Road Construction	Construction over active Road/Railroad	Utility Relocation	Extensive MOT	Public Involvement	Right of Way
Morgans Ford Bridge	VDOT		X	X	X		X	X			
Artz Road Bridge	VDOT		X	X	X	X		X			
White & Silver Creek Bridges	WVDOH	X			X	X	X	X	X	X	X
Annamoriah Bridge	WVDOH	X			X	X	X	X	X	X	X
Coopers Creek Bridge	WVDOH	X			X	X	X	X	X	X	X
Hurricane Creek Bridge	WVDOH	X			X	X	X	X	X	X	X
Van Meter Ford Bridge	WVDOH	X			X		X	X		X	
Summersville Lake Bridge	WVDOH	X			X			X		X	
CR 6 Slide Repair	WVDOH	X			X		X	X	X	X	X
MET Bridge	Met Resources	X			X	X				X	
WV RTE 4	WVDOH	X			X		X	X		X	
WV 20 Bridge Repair	WVDOH	X			X	X	X	X		X	
WV 19 Bridge Repair	WVDOH	X			X	X	X			X	

Lead Contractor - Orders Construction Company:

From the complexities of Rte. 60, Clifton Forge Design-Build, to the I-81 Exit 7 interchange, to the more than 50 years of bridge and excavation experience, the Orders team of professionals bring a culture of quality and safety to the table that is paramount in delivering projects on-time and under budget. We have developed a teaming concept with owners and localities by which we build our projects to assure that our team meets expectations. From the award winning Route 60 Clifton forge project to the John Martin International Partnering Award winning Avens bridge project, working together as a team has found a home in the Orders way of doing business. The Warrenton Southern Interchange US 15/17/29 is a perfect match with the kind of project Orders' employees tackle every day. Orders has completed numerous projects similar in size and scope to this one in Faquier County, VA. Information on three of Orders' recent projects is included in Appendix C as Attachment 3.4.1(a).

Orders has additional extensive experience with roadway, bridge, and interchange work, including:

I-81 Tabler Station Interchange, Berkeley Co, WV: Orders constructed a new bridge and ramp from Rte. 11 to I-81; 100,000 CY of excavation; water & sanitary sewer relocations; all within a high traffic volume and environmentally sensitive area. The 2 busiest routes in the Tabler Station area were brought together with this interchange project. A very complex and detailed MOT plan was implemented to sustain traffic flow and eradicate backups on I-81; included signalization of Rte. 11.

I-81 Marlowe Interchange, Berkeley Co. WV: The existing I-81 bridges, 2 lanes northbound and 2 lanes southbound over Rte. 11 were replaced with 2 new structures with 2 lanes northbound and 3 lanes southbound. The interchange with Rte. 11 was modified and expanded with 2400LF of ramp approaches. The interchange required complex shoring for phased construction and a detailed MOT plan to keep I-81 and Rte.11 traffic flowing safely.



220/Scuffling Hill Road, Rocky Mount, VA: Project included widening Rte. 220, a new bridge structure with on/off ramps with Scuffling Hill Road, which in either direction leads to the industrial areas of the Town. Construction of the WB right turn lane onto Scuffling Hill required a 26,000 CY rock cut excavation at this very busy intersection surrounded by local commerce facilities and a nursing home. A detailed MOT plan was put into place to handle lane shifts and lane closures. Project also included new water and sanitary sewer lines.

In addition to this experience, Orders has a portfolio of Design-Build projects completed for satisfied owners. The management team of Orders feels that the Design-Build process allows the company to show its strengths on the multitude of intangible qualifications not considered on low-bid projects. Because of these intangibles, Orders has been awarded contracts on more than 50% of the Design-Build projects it has pursued; a much higher success rate than traditional low-bid work. Orders excels at building and inspecting its projects with minimal owner oversight and its commitment to quality is one reason Orders is the preferred Design-Builder for many repeat clients.

Lessons Learned: Orders has completed many projects for highway departments of Virginia, West Virginia and many others in the Mid-Atlantic region and learned many lessons relevant to the Warrenton Southern Interchange Project:

- The most effective MOT plans start with a detailed study of the work zone before design plans are developed. Local law enforcement, emergency services, school districts and local businesses with local knowledge are consulted. Maintaining flexibility in operations and willingness to adjust the plan as the work zone evolves allows us to meet the needs of the traveling public and earns significant good will and social capital.
- Including VDOT and related stakeholders in planning and scheduling how the work could be performed to
 minimize impacts to traffic has proven to be an asset to community relations. These outreach efforts have
 enabled stakeholders to feel a part of the process rather than a victim of it and aided in scheduling the work to
 have the fewest interruptions and least amount of congestion problems possible.
- A well-informed public achieved through media and television outreach during construction is critical and helps reduce congestion and traffic delays which improves safety during construction.
- Upfront meetings with utility companies and agencies as well as with stakeholders during planning and executing utility relocations have, along with performing interrupting type tasks at low-demand off peak times, made these often difficult items of work more palatable for all involved.
- Working together with VDOT Construction Managers, Inspectors, and Environmental Specialists to monitor storm events, control runoff and meet all criteria for in-stream work and hazardous material monitoring and abatement has proven to mitigate problems often encountered with other agencies who have local jurisdiction and made permitting, modifications and environmental management a lesser burden for all parties.

Lead Designer - Clark Nexsen

Clark Nexsen was founded in Lynchburg, Virginia in 1920 and is one of the largest full-service firms in Virginia with over 124 transportation professionals in the region who provide expertise in roadway, structures, hydraulics, utilities, environmental, landscaping, and other transportation related disciplines. With experience and technical know-how resulting from the completion of similar transportation projects, they are well prepared to meet the schedule requirements. Clark Nexsen has **completed more than one hundred (100) state and federal Design-Build projects**, **four (4) P3 projects** in Virginia, and prepared more than **twenty (20)** RFP's for state and federal clients for Design-Build projects.

Clark Nexsen has completed numerous roadway and bridge projects providing similar design services as required for the Warrenton Southern Interchange US 15/17/29 such as roundabout design, roadway widening, bridge design, interchange improvements, extensive staged construction within tight right-of-way constraints, utility coordination and relocation, public outreach and awareness, and complex Maintenance of Traffic plans. Through designing projects for VDOT, local urban cities, towns, and counties, Clark Nexsen has gained extensive experience in designing projects in both urban and rural settings. In addition to the three relevant projects which are included in the Appendix C as Attachment 3.4.1(b), the following projects illustrate more of Clark Nexsen's relevant road, bridge, and interchange design experience:





Tidewater Drive (Route 168) Interchange Improvements, Norfolk, VA (2012): Lead Design Firm for this project which consisted of improving interchange ramps to comply with VDOT and AASHTO guidelines and standards. Project included interchange ramp design, drainage, utility coordination and relocation, coordination with Norfolk Southern Railroad, a detailed Maintenance of Traffic (MOT) / and Traffic Management Plan (TMP) plans. Public involvement was also a key component in the plan which included alerting the local civic leaders and business owners to the project before construction began to help minimize impacts and increase awareness.

Route 100 NBL Bridge Replacement over Norfolk-Southern Railroad, Dublin, Pulaski County, VA (Design Completed 2017): Lead Design Firm for a single span 150 feet long steel plate girder bridge over N & S RR. Worked closely with the project geotechnical engineer in the global analysis and stability as well as constructability of 30 feet tall MSE walls which are supported over a soft to medium stiff clay underlain by rock. Based upon life cycle cost and constructability analyses, a steel multi-girder superstructure with integral abutments was selected.

22nd Street Bridge Replacement, Chesapeake, VA (Under design): Lead Bridge Design Firm for designing a 4-span (111'-134'-134'-111') continuous curved steel girder bridge over highly skewed (70 degree) railroad tracks with approach roadways within limited ROW. The project required extensive Sequence of Construction (SOC) and Maintenance of Traffic planning to facilitate the proposed construction while minimizing impacts to the existing traffic patterns while the new bridge is constructed adjacent to the existing bridge. Significant design accommodations were required to allow motorists to utilize the existing bridge crossing as long as practicable while the new bridge is being constructed in order to minimize the duration of temporary detours.

College Drive Roundabout, Suffolk, VA (Under construction): Lead Design Firm for a 2-lane roundabout located in the northern region of the City of Suffolk at the intersection of three urban arterial roadways. The new roundabout will serve traffic flows to the existing Tidewater Community College campus, a trucking distribution facility and a new 50-acre commercial site development located in the southeast quadrant of the intersection. The project required significant MOT/SOC planning to allow for construction of the roundabout under heavy truck and traffic volumes.

Lessons Learned:

Clark Nexsen has completed Design-Build and numerous Design-Bid-Build transportation projects and learned many valuable lessons throughout the course of these projects which are relevant to this project:

- MOT greatly influences design, construction cost and schedule; therefore, it must be considered earlier in the design phase to facilitate schedule and construction phasing that results in a cost-effective solution.
- Engaging the public and being transparent with project related design and construction information mitigates frustration resulting from the project while under construction. This helps reduce congestion and traffic delays, and improves safety during construction.
- Working closely with the construction manager to determine actual construction space requirements ensures smooth phasing of construction.
- Timely coordination and notification to utility owners during the design phase and the incorporation of relocations into construction plans will avoid costly delays and change orders.
- Regular utility partnering meetings during design and construction are essential to a project's success.
- An up-front meeting between the Design-Build team and all VDOT review disciplines to identify applicable standards and procedures, improves the review process and schedule.



PROJECT RISKS

3.5 Project Risk

1. Maintenance of Traffic (MOT)

Why the risk is critical

Upon issuance of the Notice to Proceed, one of the first important aspects of the project will be the implementation of the MOT plan. Safety of the traveling public and minimizing access impacts to the Town of Warrenton, Lord Fairfax Community College, Foxland Village and the landfill are risks that the Orders team considers critical components of this project. Traversing a safe work zone as motorists follow the Traffic Management Plan (TMP) is essential.

Impact on the Project

The proposed MOT plan includes a 3-phased approach over the project life cycle to build the project outside of the existing traffic pattern, especially the western roundabout on Business 17. However, this necessitates dramatic changes to the traffic patterns motorists traditionally utilize to access Business 17 and the residences, college and landfill to the east of Route 15/17/29. The construction of the "jug handle" at Station 100+15 under Phase I with a temporary signal is a major change to the traffic pattern. Transitioning to Phase II with the traffic detour is also significant. As Phase III is implemented, the motorists will be more accustomed to the work zone MOT transitions and ultimately less confusing.

The project demands a well-planned and coordinated MOT, TMP and related Sequence of Construction (SOC). In order to sustain and Average Daily Traffic (ADT) of 46,000 vehicles per day and maintain effective property access at the project location. The following items must be addressed:

- *Increased Public Frustration* An MOT/SOC plan that does not consider the access to Business 13 and the homes, college and landfill needs and hours of operation will likely create schedule delays and "public perception" issues for the Design-Build team and VDOT. Significant time may be spent responding to concerns, providing input for public relations communications, and incorporating any operational requirements that the motorists have.
- Schedule Delays To facilitate the proposed project construction sequencing, certain activities will be required to be performed in a sequential order. For example, as temporary pavement will be required to construct the proposed TMP, the relocation and de-conflicting of the utilities with the MOT/SOC footprint to allow the bridge and roundabout to be constructed is essential. This consideration for all required public utility relocations and offsets has the potential to cause delays to construction and impact the throughput on Route 15/17/29.
- Increased Costs Delays associated with poor MOT/SOC planning and responding to citizen complaints will
 ultimately keep construction crews idle, and therefore not fully utilized; thereby ultimately increasing costs for
 the Design-Build team.
- Motorist Safety The routine and historic speeds through this section of Route 15/17/29 will require vigilance by the motorists and the construction team, requiring constant situational awareness as the phased MOT plan is implemented and all parties become accustomed to the shifts. Additionally, with the Lord Fairfax Community College student traffic, not all attendees are expected to be seasoned drivers. The Design-Build team is concerned for new drivers' ability to navigate a complex MOT while entering the College. Similarly, with motorists hauling debris to the landfill and oftentimes with trailers, the safety of all parties is of concern as they traverse the work zone.

Mitigation strategies

Mitigation efforts to help minimize or avoid the risks associated with the project MOT/SOC for the Warrenton Southern Interchange include the following:

❖ Early coordination with the adjacent property owners, businesses and emergency services during the design process to make them aware of the proposed MOT/SOC plan, and any specific issues that need to be addressed for these and other stakeholders.



- ❖ Evaluating the potential for various MOT/SOC options during the RFP response period. The preliminary options that have been identified include:
 - Provide Temporary Traffic Control Plans: independent review of the plan ensuring compliance with the MUTCD and VDOT Work Area Protection Manual criteria and coordination with emergency services.
 - Evaluate the potential for a Traffic Operations Plan that includes on-site and/or on-call wrecker service as determined by the Design-Build team. With the indicated accident rate equally split between property damage crashes and injury crashes, our team will evaluate cost effective clearance measures to sustain throughput on the Route 15/17/29 as well as access to the Town of Warrenton and the stakeholders to the east.
- Since the project includes the construction of two roundabouts, it will be important to convey to the public the SOC process for these design features, and how they are to be navigated in the interim and final construction phases. The Orders team's experience converting traditional intersections designs into roundabouts include the Volvo Parkway/Independence Parkway intersection in Chesapeake, VA, and the College Drive Roundabout in Suffolk, VA, where a four-legged intersection was converted to a roundabout, with a high truck percentage. Our experience with this process will help mitigate the risks associated with this item and communicate this to the public.
- ❖ We will categorize each potential delay as either within Orders' direct control or controlled (in whole or in part) by a third-party. For schedule risks within Orders' control, the PM would identify the staff member(s) responsible for mitigating the risk, inform them of the situation, follow up as part of the weekly schedule update process to determine the status of the mitigation, and ensure that project progress is not affected. For schedule risks controlled by a third-party, the process is much the same: identify the responsible party, communicate with them both to explain the risk and monitor progress.
- Our team includes Lisa Wetzel of Elite Management Solutions who is a communications expert who will guide our team to ensure our messaging regarding our MOT and SOC are easily understood and relevant to the public.

Role of VDOT and Other Agencies

VDOT District and traffic operations personnel will only need to be engaged as stakeholders in the planning and execution of the TMP. The Orders' Team comprehensive TMP is designed to reduce VDOT's workload and risk during design and construction.

2. Utility Relocations

Why the risk is critical

The proposed VDOT schedule allows for 34 months between project award and construction completion. Any delays in the pre-construction work caused by the evaluation, coordination and design of the necessary utility relocations and the actual construction of the relocation or adjustment of utilities could potentially delay the construction time or negatively impact the Maintenance of Traffic implementation plan. The current concept plans indicate that numerous utility facilities will conflict with the proposed roadways. Utility facilities located within the project boundary include gas transmission lines, power, telephone, gas distribution, cable TV, independent telecommunication lines; water and sanitary sewer facilities owned by the locality.

Impact on the Project

Coordination with Columbia Gas, Dominion Virginia Power and other utility owners have the potential to impact the schedule in all phases of the Design-Build process. These two major utilities require a team that understands and anticipates their requirements for approvals and permits for design and construction activities and can effectively manage the impacts of necessary relocation efforts.

The most significant utility facility is the skewed Colombia Gas 20" gas pipeline crossing the mainline and relocated Lord Fairfax Road south of the existing intersection at approximate station 109. With the road widening and relocation of Lord Fairfax Road, there will be a new crossing of about 100 feet in length. If these existing pipeline crossings are in casing pipe then they are likely to end under pavement. A second gas pipeline crossing is near the end of the project at station 139 and could be affected by the SWM #4. There is also a gas distribution pipe that could be affected by the reconstruction of Travelers Way.





Dominion Virginia Power has a double circuit overhead line running south from the intersection and parallel to the west side of the mainline. The line crosses at approximate station 107 to their line paralleling Lord Fairfax Road and east side of the mainline. There is potential conflict with both crossings. With the proposed road widening it will have to be determine if a relocated overhead crossing is possible or an underground bore is needed.

The only water facility is a crossing near the end of the project and the proposed SWM should be designed to allow it to remain in place.

There is a 4" sanitary sewer force main that runs from the pump station near the proposed Brigham Park & Ride Lot north along Lord Fairfax Road and Turkey Run Drive. Portions of this line may be in conflict and will have to be relocated. The sanitary sewer force main crosses the mainline at the end of the project and the SWM design should avoid this facility.

There are significant telecommunication facilities within the project footprint. There are 2 or 3 telephone or fiber optic cables running

project team is essential. Our team meets with utility owners in one room to walk the project using visual 3-D technology to identify conflicts and agree upon resolution strategies. Both Verizon and Dominion Power have complimented our staff on this approach. This team approach, early in the design process, has resulted in a surprising level of cooperation where we have modified designs in these meetings to help the utilities rather than tell them "you are in my way."

Getting utility owners on board the

along the west side of the mainline, running from the south end of the project and continuing into Warrenton. The Dominion overhead crossing also includes telecommunications and Cable TV cables. There are 2 or 3 telecommunication cables running along Lord Fairfax Road on the east side of the mainline with possible conflicts.

Lastly there are several ITS cameras and devices located within the project footprint and likely fiber optics cables connecting them to the VDOT traffic operations center (TOC). These will have to be evaluated and coordinated with VDOT.

The risk potential resulting from the scheduling of utility relocations is a significant risk factor. The following items summarize the main utility relocation risks:

- Lack of priority for the utilities to perform the necessary relocation work
- Delay in obtaining permits and approval for crossings
- Requirement to encase the Columbia Gas Line affects project sequencing
- Increase time for utility companies to evaluate the potential utility conflicts
- Delays with obtaining utility company relocation designs
- Delays with obtaining the required utility easements
- Obtaining agreements and VDOT's approval for utility construction and splicing of feed to the TOC
- Any relocation of the 20" gas transmission line could take up to 9 months and be dependent on time of year restriction for a shutdown.

Mitigation strategies

Our Team has a VDOT experienced Utility Coordination Manager, Richard Bennett who has delivered utility relocations on major projects such as the Woodrow Wilson Bridge replacement and the Route 495 HOT Lane project. He will work closely to support the Design and Construction Coordinator and will be the liaison between David Bradshaw as the Design Utility Coordinator during construction. His proven record of planning and coordinating utility relocations to have them completed in the scheduled time has produced successful projects.

A part of that success will be from early contact with the utility owners securing information to be considered in the detailed design stage. These items will be factored into the master schedule and right-of-way acquisition timing. The Utility Relocation Team would also identify and provide the Design Project Manager and Design-Build Manager with other issues and possible solutions for review and coordination with VDOT.





Coordinated Efforts: The Orders team will be proactive from the Notice of Award forward, addressing the utility requirements early with the utility companies. We will partner with our internal engineering team to advance the design by developing alternatives to eliminate or minimize utility conflicts and relocations. The ROW plan submission and schedule will be made based on the team's need to clear various areas for utility relocations to support the MOT plan early, and will be linked to our coordination with the utility companies to possible work segments (i.e. Dominion Virginia Power road crossing where only a couple of parcels are to be acquired to allow the crossing work to commence) and to clear areas for roadway and roundabout construction.

Role of VDOT and Other Agencies

VDOT will be required to provide timely review and approval of the utility relocation PS&E assemblies, so that utility construction can commence as early as possible. Additionally, participating in the visual 3-D project walk through will be most beneficial. Furthermore, VDOT's utility coordinator may elect to participate in our periodic coordination meeting with the utility owners where the schedule and issues will be reviewed and resolved. Maintaining this developed schedule and quickly addressing and resolving issues will minimize any potential delay risks.

3. Public Relations

Why the risk is critical

Public acceptance and understanding how each individual motorist, stakeholder, resident, business owner, landowner and institute of higher learning will be affected by this project is the risk and challenge for both the Design-Build team and for VDOT. There are numerous interests that must be included in project communications regarding construction, MOT, traffic shifts, Design-Build contractor work hours and significant project milestones such as the setting of bridge girders during the project life cycle. Without an effective public relations component to the project with the express purpose to keep the public informed so they understand the specific components of the project as they are planned and then as they are executed, the risk to safety, schedule, budget and citizen "good will" is high.

Impact on the Project

When the public lacks critical and time sensitive information to make informed mobility decisions, they may engage the media, elected representatives and stakeholders to voice frustration. As the MOT plan is implemented in stages, a lack of relevant information on such activities may endanger public safety and that of the Design-Build team workers should motorists not be aware of traffic shifts and non-traditional traffic movements as they navigate the work zone.

With traffic increasing at over 2% per year, the current daily traffic volume of 47,000 is expected to grow. When the crash history of the intersection is considered, the northbound approach at the intersection of Lord Fairfax Drive/US 15/17/29/Business 15/17/29 maintains the highest amount of crashes, with the preponderance during peak hours. The noon hour sees the highest number of crashes, followed by equal numbers at 9AM and 6PM. Fortunately, no recorded fatalities have occurred at the project location. Our team does not want to contribute in any way towards increasing the number of crashes.

Considering the need for a complex MOT plan to facilitate construction of the major project features (bridge and roundabout) while maintaining full access to all roadways and facilities, coupled with traditional "rubbernecking" of construction activities, the need to communicate all project activities is essential. Coupled with the lack of familiarity with roundabout operations, the potential for increased crashes and erratic driver behavior within the project work zone dictates a robust communications plan. Furthermore, there are many stakeholders within the area such as the State, County and Town offices, police, sheriff, fire/EMS, commuters, tourists, residents and business owners. Each will have unique information requirements and their expectations must be met by providing accurate and current information regarding the project to make informed traveling decisions, bring people to their facilities and ensure all are safe transiting the work zone.





An ill-informed public is an angry public which then becomes an activist public, ultimately becoming a detriment to project progress.

Lastly, there are residents of the Foxland Village community that have expressed concerns that no sound wall is included in the project; expressed at the public meeting on May 9, 2017. This has the potential to divert project resources for both VDOT and the Design-Build team responding to these residents regarding the sound wall selection and decision making process.

Mitigation strategies

The public relations communications process must be led by a strong communications professional and integrated throughout both the design and construction phases. Our team has identified Ms. Lisa Wetzel who will serve as Communications Director and work closely with the Orders Design-Build team key personnel.

She will maintain continuous dialogue and open communication with the local and regional stakeholders including:

- Local businesses and establishments (town, county, state, and federal government entities; officials, courts, law enforcement, and public services; transportation bodies such as VDOT; parks; utilities including power, water, sewage and communications such as internet, cable, and phone; fire/EMS)
- Residents and homeowners
- Commuters (commercial vehicles and private vehicles)
- Academia (schools, Community College, training centers)

All avenues of communication will be evaluated to ensure widest dissemination of project information; press releases, media buys, variable message signs, social media, community groups and publications and email alerts to interested parties.

Role of VDOT and Other Agencies

Collaboration with and review by VDOT of major project milestone communications activities developed by the Orders team will ensure consistency in communications with the public and affected stakeholders. VDOT will be offered the opportunity to critique media buys and advertising efforts to ensure appropriate messaging and branding of such efforts.

As a former employee of the American Traffic Safety Service Association in Fredericksburg, Lisa is intimately familiar with the safety requirements of work zones and construction site activities and how they impact motorists in this area. She developed materials for the National Work Zone Awareness Week campaigns in Virginia and distributed materials nationwide. Lisa can connect and communicate with all stakeholders as part of the VDOT outreach and planning efforts encompassing the entire



3.1.2 STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

ATTACHMENTS 2.10 ACKNOWLEDGEMENT OF RFQ, REVISION AND/OR ADDENDA

ATTACHMENTS 3.2.6 AFFILIATED AND SUBSIDIARIES COMPANY

ATTACHMENTS 3.2.7(A) AND (B), CERTIFICATION REGARDING DEBARMENT FORMS

VDOT PREQUALIFICATION CERTIFICATE

SURETY LETTER

ATTACHMENT 3.1.2

<u>Project: 0029-030-121, P101, R201, C501, B616</u> <u>STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS</u>

Offerors shall furnish a copy of this Statement of Qualifications (SOQ) Checklist, with the page references added, with the Statement of Qualifications.

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15- page limit?	SOQ Page Reference
Statement of Qualifications Checklist and Contents	Attachment 3.1.2	Section 3.1.2	no	APPENDIX A
Acknowledgement of RFQ, Revision and/or Addenda	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	APPENDIX A
Letter of Submittal (on Offeror's letterhead)				
Authorized Representative's signature	NA	Section 3.2.1	yes	PAGE. 1
Offeror's point of contact information	NA	Section 3.2.2	yes	PAGE. 1
Principal officer information	NA	Section 3.2.3	yes	PAGE. 1
Offeror's Corporate Structure	NA	Section 3.2.4	yes	PAGE. 1
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	PAGE. 1
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	APPENDIX A
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	APPENDIX A
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	APPENDIX A
Evidence of obtaining bonding	NA	Section 3.2.9	no	APPENDIX A

ATTACHMENT 3.1.2

Project: 0029-030-121, P101, R201, C501, B616 STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Form (if any)	RFQ Cross reference	Included within 15- page limit?	SOQ Page Reference
Attachment 3.2.10	Section 3.2.10	no	APPENDIX B
NA	Section 3.2.10.1	no	APPENDIX B
NA	Section 3.2.10.2	no	APPENDIX B
NA	Section 3.2.10.3	no	APPENDIX B
NA	Section 3.2.10.4	no	APPENDIX B
NA	Section 3.2.11	yes	PAGE. 1
NA	Section 3.3.1	yes	PAGE. 2-4
Attachment 3.3.1	Section 3.3.1.1	no	APPENDIX C
Attachment 3.3.1	Section 3.3.1.2	no	APPENDIX C
Attachment 3.3.1	Section 3.3.1.3	no	APPENDIX C
Attachment 3.3.1	Section 3.3.1.4	no	APPENDIX C
NA	Section 3.3.2	yes	PAGE. 5
NA	Section 3.3.2	yes	PAGE. 6
	Attachment 3.2.10 NA NA NA NA NA NA Attachment 3.3.1 Attachment 3.3.1 Attachment 3.3.1 Attachment 3.3.1 NA	Form (if any) Cross reference Attachment 3.2.10 Section 3.2.10 NA Section 3.2.10.1 NA Section 3.2.10.2 NA Section 3.2.10.3 NA Section 3.2.10.4 NA Section 3.2.11 NA Section 3.3.1 Attachment 3.3.1 Section 3.3.1.1 Attachment 3.3.1 Section 3.3.1.3 Attachment 3.3.1 Section 3.3.1.4 NA Section 3.3.2	Form (if any) RFQ Cross reference within 15-page limit? Attachment 3.2.10 Section 3.2.10 no NA Section 3.2.10.2 no NA Section 3.2.10.3 no NA Section 3.2.10.4 no NA Section 3.2.10.4 yes NA Section 3.2.11 yes Attachment 3.3.1 Section 3.3.1.1 no Attachment 3.3.1 Section 3.3.1.2 no Attachment 3.3.1 Section 3.3.1.3 no Attachment 3.3.1 Section 3.3.1.4 no NA Section 3.3.2 yes

ATTACHMENT 3.1.2

Project: 0029-030-121, P101, R201, C501, B616 STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15- page limit?	SOQ Page Reference
Experience of Offeror's Team				
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	APPENDIX D
Lead Designer Work History Form	Attachment 3.4.1(b)	Section 3.4	no	APPENDIX D
Project Risk				
Identify and discuss three critical risks for the Project	NA	Section 3.5.1	yes	PAGE. 11-15

ATTACHMENT 2.10

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION

0029-030-121, P101, R201, C501, B616

C00077384DB100

RFQ NO.

PROJECT NO.:

ACKNOWLEDGEMEN	NT OF RFQ, REVISION AND/C	R 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 – April 26, 2017 (Date)				
2. Cover letter of	RFQ Addendum #1- May 22, (Date)	2017			
3. Cover letter of	(Date)				
Nu In		6-2-17			
SIGNATUR	E	DATE			
NATHANIEL R. ORDE	:AS	PRESIDENT			
PRINTED NA		TITLE			

ATTACHMENT 3.2.6

State Project No. 0029-030-121, P101, R201, C501, B616

Affiliated and Subsidiary Companies of the Offeror

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

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

Relationship with Offeror (Affiliate or Subsidiary)	Full Legal Name	Address
Affiliate	Paramount Builders, LLC.	505 Sixth Avenue, St. Albans, WV 25177
Affiliate	Central Contracting, Inc.	515 Sixth Avenue, St. Albans, WV 25177
Affiliate	Underground Contractors, Inc.	501 Sixth Avenue, St. Albans, WV 25177
Subsidiary	Summit Corporation	501 Sixth Avenue, St. Albans, WV 25177
Subsidiary	Middle Ridge Properties, LLC.	501 Sixth Avenue, St. Albans, WV 25177

CERTIFICATION REGARDING DEBARMENT PRIMARY COVERED TRANSACTIONS

Project No.: 0029-030-121, P101, R201, C501, B616

- 1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
- a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency.
- b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; and have not been convicted of any violations of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false statements, or receiving stolen property;
- c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1) b) of this certification; and
- d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- 2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this form.

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

Signature Date PRESIDENT Title

ORDERS CONSTRUCTION COMPANY, INC.

Name of Firm

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project No.: 0029-030-121, P101, R201, C501, B616

- 1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- 2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this form.

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

Jakle	6/2/2017	_Principal_	
Signature	Date	Title	
Clark Nexsen, Inc.			
Name of Firm			

Name of Firm

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project No.: 0029-030-121, P101, R201, C501, B616

- 1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- 2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this form.

Shapeth CA	June 2, 2017	President
Signature	Date	Title
Quinn Consulti	ng Services, Inc.	
Name of Firm		

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project No.: 0029-030-121, P101, R201, C501, B616

- 1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- 2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this form.

alley R. Can	5/25/17	Principal Engineer
Signature	Date	Title
ECS Mid-Atlan	tic, LLC	
Name of Firm		

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project No.: 0029-030-121, P101, R201, C501, B616

- 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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Signature	5/31/2017 Date	Chief Operating Officer Title
Bowman Consult	ting Group, Ltd.	
Name of Firm		

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project No.: 0029-030-121, P101, R201, C501, B616

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Jhom) 05/24/2017		Principal Engineer	
Signature	Date	Title	
DMY Inc			
Name of Firm			

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project No.: 0029-030-121, P101, R201, C501, B616

- 1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- 2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this form.

HARON		Chief Wielenson, Officer
100 mg	5/24/2017	Chief Visionary Officer
Signature /	Date	Title
McCormick Taylo	r, Inc.	
Name of Firm		

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project No.: 0029-030-121, P101, R201, C501, B616

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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 form.

	5/11/2017	VP of Business Development
Signature Date		Title
DIW Group, Inc. t/a Specialized	Engineering	
Name of Firm		

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project No.: 0029-030-121, P101, R201, C501, B616

- 1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- 2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this form.

MARN C	use	5/23/2017_	CEO	
Signature	Date		Title	
Elite Manage	ment Solution	ns LLC		
Name of Firm		,		



Virginia Department of Transportation

Department's List of Prequalified Vendors Includes All Qualified Levels As Of 2/3/2017 - 0 -

12:00 AM

Date Printed: 02/03/2017

Page 319

Vendor ID:

O017

Vendor Name: ORDERS CONSTRUCTION COMPANY, INC.

Prequal Exp: 07/31/2017

-- PREQ Address --

501 6TH AVENUE ST. ALBANS, WV 25177-0000

Phone: 304-722-4237

Fax: 304-722-4230

002 - GRADING

003 - MAJOR STRUCTURES 007 - MINOR STRUCTURES

Work Classes (Listed But Not Limited To)

019 - ERECT FABRICATED STRUCTURAL

MATERIAL

055 - BRIDGE REPAIRS

Bus. Contact: CARR, STEVEN MICHAEL

Email:

STEVENC@ORDERSCONSTRUCTION.COM

-- DBE Information --

DBE Type:

DBE Contact: N/A

Vendor ID:

O062

N/A

Vendor Name: ORION ASSOCIATES, INC.

Prequal Exp: 07/31/2017

-- PREQ Address --

1317 CAVALIER BLVD.

CHESAPEAKE, VA 23323-1501

Phone: 757-558-6400

Fax: 757-558-1009

Work Classes (Listed But Not Limited To)

005 - DRAINAGE STRUCTURES

011 - CLEARING AND GRUBBING

033 - ROADSIDE DEVELOPMENT

045 - UNDERGROUND UTILITIES

101 - EXCAVATING

Bus. Contact: HEBENSTREIT, JEFFREY RICHARD

Email:

ORIONEMAIL@AOL.COM

-- DBE Information --

DBE Type:

N/A

DBE Contact: N/A



USI Insurance Services LLC 1 Hillcrest Drive East Charleston, WV 25311 www.usi.biz 304-347-0611

May 25, 2017

Bryan Stevenson Alternate Project Delivery Office Virginia Department of Transportation 1401 East Broad Street Richmond, VA 23219

Re:

Orders Construction Company, Inc.

St. Albans, WV

Project:

Warrenton Southern Interchange US 15/17/29

A Design-Build Project Fauquier County, VA

State # 0029-030-121. P101, R201, C501, B616

Federal # STP-032 7(032)
Contract ID # C00077384DB100

Dear Sirs:

Orders Construction Company has made us aware of their desire to become prequalified and to bid on the subject project in November, 2017. It is our understanding that the estimate on the project is \$20,000,000. Orders Construction is capable of obtaining a bond for a project of this magnitude. If Orders Construction is the successful bidder and enters in to a contract to construct this project, we will, according to the terms and conditions of the required bid bond, issue the 100% performance and 100% labor and material payment bonds to warrant the integrity of this design-build project including the warranty period.

Orders Construction's surety credit is underwritten by Zurich Surety. Zurich has an A.M. Best rating of A+(-), Size Category XV (\$2B+), their Federal T-Listing limit is in excess of \$700,000,000, and they are authorized to do business in Commonwealth of Virginia. We have previously issued bonds on Orders' behalf in the \$200,000,000 range. And, there is currently plenty of capacity in Orders' work program to accommodate this work.

This letter is intended for reference purposes and any formal and specific bond approvals will be based on current and pertinent underwriting factors at the time of the request.

If you have questions concerning this matter, please call me at 304-347-0666. Thank you for your consideration.

Sincerely,

Douglas P. Taylor
Sr. Vice President

ATTACHMENT 3.2.10.1 & 3.2.10.2 TEAM SCC AND DPOR COPIES

ATTACHMENT 3.2.10.3 & 3.2.10.4 DPOR COPIES FOR KEY PERSONAL

ATTACHMENT 3.2.10

State Project No. 0029-030-121, P101, R201, C501, B616

SCC and DPOR Information

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

				OR BUSINESSES (RFQ Se		<u>'</u>		
Business Name	SCC Information (3.2.10.1)			DPOR Information (3.2.10.2)				
	SCC Number	SCC Type of Corporation	SCC Status	DPOR Registered Address	DPOR Registration Type	DPOR Registration Number	DPOR Expiration Date	
Orders Construction Company Inc.	F026850-0	Foreign Corporation	Active	501 6 th Ave. St. Albans, WV 25177	Contractor Class A	2701032711	08-31-2018	
Clark Nexsen, Inc.	0190175-0	Corp	Active	4525 Main Street, Suite 1400 Virginia Beach, VA 23462	Business Entity - ENG	0407006529	12-31-2017	
Clark Nexsen, Inc	0190175-0	Corp	Active	1111 E. Main Street Richmond, VA 23219	Business Entity ENG	0411001119	02-28-2018	
Clark Nexsen, Inc	0190175-0	Corp	Active	Towers Crescent 8000 Towers Crescent Dr., Ste. 1350 Vienna, VA 22182	Business Entity - ENG	0411001121	02-28-2018	
Quinn Consulting Services, Inc.	0492551-7	Corp	Active	14160 Newbrook Dr. Suite 220 Chantilly, VA 20151	Business Entity - ENG	0407003733	12-31-2017	
ECS Mid-Atlantic LLC	S1208216	LLC	Active	14026 Thunderbolt Place, Suite 100 Chantilly, VA 20151	Business Entity - ENG	0407003089	12.31.2017	
ECS Mid-Atlantic, LLC	S1208216	LLC	Active	915 Maple Grove Dr., Ste 100 Fredericksburg, VA 224074-6935	Business Entity - Branch - ENG	0411000383	02-28-2018	
ECS Mid-Atlantic, LLC	S1208216	LLC	Active	2119-D North Hamilton St. Richmond, VA 23230	Business Entity - Branch - ENG	0411000384	02-28-2018	

ATTACHMENT 3.2.10

State Project No. 0029-030-121, P101, R201, C501, B616

SCC and DPOR Information

Bowman Consulting Group, Ltd.	04481982	Corp	Active	3951 Westerre Park- way, Suite 150 Richmond, VA 23233	Business Entity - ENG	0411000610	02-28-2018
Bowman Consulting Group, Ltd.	04481982	Corp	Active	14020 Thunderbolt Place, Suite 300, Chantilly, VA 20151	Business Entity - ENG, LS, LA	0407003896	12-31-2017
DMY, Inc.	0724389-2	Corp	Active	14241 Midlothian TNPK, Suite 230 Midlothian, VA 23113	Business Entity – ENG	0405001794	12-31-2017
McCormick Taylor, Inc.	F1296914	Foreign Corporation	Active	North Shore Commons A 4951 Lake Brook Drive, Suite 275 Glen Allen, VA 23060	Business Entity – ENG	0407004111	12-31-2017
DIW Group Inc. t/a Specialized Engineering	F1281908	Foreign Corporation	Active	4845 International Blvd. Suite 104 Frederick, MD 21703	Business Entity – ENG	0407004748	12-31-2017
Elite Management Solutions, LLC	S3209857	LLC	Active	N/A	N/A	N/A	N/A

ATTACHMENT 3.2.10

State Project No. 0029-030-121, P101, R201, C501, B616

SCC and DPOR Information

DPOR INFORMATION FOR INDIVIDUALS (RFQ Sections 3.2.10.3 and 3.2.10.4)							
Business Name	Individual's Name	Office Location Where Professional Services will be Provided (City/State)	Individual's DPOR Address	DPOR Type	DPOR Registration Number	DPOR Expiration Date	
Clark Nexsen, Inc.	Ian Johnston, PE	Virginia Beach, VA	111 Windham Road Norfolk, VA 23505	PE	0402041863	05-31-2018	
Quinn Consulting Services, Inc.	Kaushik Vyas, PE, DBIA	Chantilly, VA	10170 Spring Drive Gordonsville, VA 22942	PE	0402039004	06-30-2018	
Bowman Consulting Group, Ltd.	Richard Stuchell	Chantilly, VA	10012 Shadowridge Ct. Fredericksburg, VA 22407	Real Estate Appraiser	4001011856	11-30-2016	



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Select Language | ▼ (Javascript:void(0))

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Questions or comments about this WEB SITE. Contact WebCoordinators door virginia gov (mailto WebCoordinators door virginia gov)

WAI Level Compliant (http://www.m3.org/WAI/WCAG1A-Conformance| | Web Policy (WebPolicyr) | Logo Use Guidelines (huploadedFires/MeinSite/Content/About/DPOR Logo Use Guidelines.pdf) Copyright © 2000-2012 Virginia Department of Professional and Occupational Regulation Jay W. DeBoer, Director (/About/Director blof)

f (http://www.facebook.com/VirginiaDPOR)

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05/30/17

CISM0180

CORPORATE DATA INQUIRY

11:49:34

CORP ID: F026850 - 0 STATUS: 00 ACTIVE STATUS DATE: 08/08/14

ORDERS CONSTRUCTION COMPANY, INC.

CORP NAME: ORDERS CONSTRUCTION COMPANY, INC.

DATE OF CERTIFICATE: 07/05/1973 PERIOD OF DURATION: INDUSTRY CODE: 00

STATE OF INCORPORATION: WV WEST VIRGINIA STOCK INDICATOR: S STOCK

MERGER IND:

CONVERSION/DOMESTICATION IND:

GOOD STANDING IND: Y

MONITOR INDICATOR:

CHARTER FEE: 2000.00 MON NO:

MON STATUS: MONITOR DTE:

R/A NAME: CHARLIE STOKES

STREET: ORDERS CONSTRUCTION COMPANY INC

AR RTN MAIL:

605 LITHIA RD

CITY: WYTHEVILLE

STATE: VA ZIP: 24382-0000

R/A STATUS: 2 OFFICER

EFF. DATE: 07/08/15 LOC: 198

ACCEPTED AR#: 216 54 9999 DATE: 04/13/17

PENALTY

WYTHE COUNTY

CURRENT AR#: 216 54 9999 DATE: 04/13/17 STATUS: A ASSESSMENT INDICATOR: 0

YEAR FEES

INTEREST TAXES BALANCE

TOTAL SHARES

17 370.00

370.00

50,000

(Screen Id:/Corp_Data_Inquiry)



Commonwealth & Hirginia



State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That Clark Nexsen, Inc. is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is November 27, 1978;

That the period of its duration is perpetual; and

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

Nothing more is hereby certified.



Signed and Sealed at Richmond on this Date: November 22, 2016

Joel H. Peck, Clerk of the Commission

CISECOM
Document Control Number: 1611225690

EXPIRES ON

12-31-2017

Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500

NUMBER

0407006529

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

PROFESSIONS: ENG, LA, ARC, CID



CLARK NEXSEN INC 4525 MAIN ST STE. 1400 VIRGINIA BEACH, VA 23462 DPOK

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



02-28-2018

Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500

NUMBER 0411001119

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

PROFESSIONS: ENG



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

CLARK NEXSEN INC 1111 E MAIN ST STE 1905 RICHMOND, VA 23219 DP OR



(SEE DEVENSE SIDE FOR DRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)

EXPIRES ON 02-28-2018

Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500

NUMBER 0411001121

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

PROFESSIONS: ENG



CLARK NEXSEN INC TOWERS CRESCENT 8000 TOWERS CRESCENT DR STE 1350 VIENNA, VA 22182



Jan W. De Bores
Jay W. DeBoes. Director

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

DUBTIC IUPIDUTE!

EXPIRES ON 05-31-2018

Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500

NUMBER 0402041863

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



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

IAN D JOHNSTON 111 WINDHAM ROAD NORFOLK, VA 23505



DPOR-1 10 (05/2015)



Commonwealth of Hirginia



State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

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

That the date of its incorporation is October 24, 1997;

That the period of its duration is perpetual; and

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

Nothing more is hereby certified.



Signed and Sealed at Richmond on this Date: July 5, 2016

Joel H. Peck, Clerk of the Commission

CISECOM

Document Control Number: 1607056086





Virgin

01/19/17

CISM0180 CORPORATE DATA INQUIRY 11:52:29

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

CORP NAME: QUINN CONSULTING SERVICES INCORPORATED

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

STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK

MERGER IND: S SURVIVOR CONVERSION/DOMESTICATION IND:

GOOD STANDING IND: Y MONITOR INDICATOR:

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

R/A NAME: JOHN H QUINN JR

STREET: 2208 S KNOLL ST AR RTN MAIL:

CITY: ARLINGTON STATE: VA ZIP: 22202-2134

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

ACCEPTED AR#: 216 13 3280 DATE: 08/29/16 ARLINGTON COUNT CURRENT AR#: 216 13 3280 DATE: 08/29/16 STATUS: A ASSESSMENT INDICATOR: 0 YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES

16 100.00 5,000

(Screen Id:/Corp_Data_Inquiry)

1 of 1 1/19/17, 11:53 AM

EXPIRES ON 12-31-2017

Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500

NUMBER 0407003733

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

PROFESSIONS: ENG



QUINN CONSULTING SERVICES INC 14160 NEWBROOK DR STE 220 CHANTILLY, VA 20151



DPOR-LIC (05/2015)

(DETACH HERE)

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPDK COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA BUSINESS ENTITY REGISTRATION

NUMBER: 0407003733 EXPIRES: 12-31-2017

PROFESSIONS: ENG

QUINN CONSULTING SERVICES INC

14160 NEWBROOK DR STE 220

CHANTILLY, VA 20151

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

DPOR-PC (05/2015)

EXPIRES ON 06-30-2018

Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500

NUMBER 0402039004

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



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

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

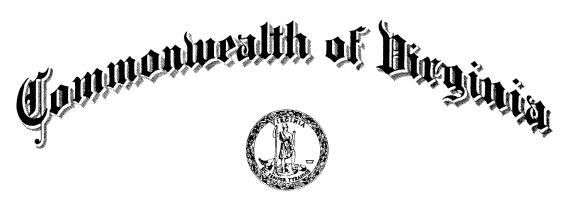
DP OR

Jan W. De Borer
Jay W DeBoer Director

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)





STATE CORPORATION COMMISSION

Richmond, April 16, 2004

This is to certify that the certificate of organization of

Engineering Consulting Services - Mid-Atlantic, LLC

SCC ID: S1208216

was this day issued and admitted to record in this office and that the said limited liability company is authorized to transact its business subject to all Virginia laws applicable to the company and its business. Effective date: April 16, 2004



State Corporation Commission Attest:

Clerk of the Commission

EXPIRES ON

12-31-2017

Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500

NUMBER

0407003089

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



ENGINEERING CONSULTING SERVICES LTD 14026 THUNDERBOLT PL SUITE 100 CHANTILLY, VA 20151

DP ORT

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)

(DETACH HERE)

COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA BUSINESS ENTITY REGISTRATION NUMBER: 0407003089 EXPIRES: 12-31-2017 PROFESSIONS: ENG ENGINEERING CONSULTING SERVICES LTD 14026 THUNDERBOLT PL SUITE 100 CHANTILLY, VA 20151

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

DPOR-PC (05/2015)

EXPIRES ON

02-28-2018

Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500

NUMBER

0411000383

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

PROFESSIONS: ENG



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



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

EXPIRES ON

02-28-2018

Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500

NUMBER

0411000384

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

PROFESSIONS: ENG



ECS MID-ATLANTIC LLC 2119-D NORTH HAMILTON ST RICHMOND, VA 23230

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

DPOR-LIC (05/2015)

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Business Entities

UCC or Tax Liens

Court Services

Additional Services

BOWMAN CONSULTING GROUP, LTD.

General

SCC ID: 04481982 Entity Type: Corporation Jurisdiction of Formation: VA

Date of Formation/Registration: 6/7/1995

Status: Active

Shares Authorized: 360000

Principal Office

3863 CENTERVIEW DRIVE SUITE 300 CHANTILLY VA20151

Registered Agent/Registered Office

CORPORATION SERVICE COMPANY BANK OF AMERICA CENTER, 16TH FLOOR 1111 E. MAIN STREET RICHMOND VA 23219 RICHMOND CITY Status: Active Effective Date: 8/17/2016

Select an action

File a registered agent change File a registered office address change

Resign as registered agent File an annual report

Pay annual registration fee

Order a certificate of good standing

Submit a PDF for processing (What can I submit?)

View eFile transaction history Manage email notifications

New Search Home

Screen ID: e1000

Need additional information? Contact scc.virginia.gov Website questions? Contact: webmaster@scc.virginia.gov PowerPoint (,ppt) Viewer webmaster@scc.virginia.gov PowerPoint (,ppt) Vie

EXPIRES ON 02-28-2018

Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500

NUMBER 0411000610

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

PROFESSIONS: ENG, LS



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

BOWMAN CONSULTING GROUP LTD 3951 WESTERRE PKWY SUITE 150 RICHMOND, VA 23233



Jan W. De Bores

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)

EXPIRES ON 12-31-2017

Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500

NUMBER 0407003896

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

PROFESSIONS: ENG, LA, LS



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

BOWMAN CONSULTING GROUP LTD 14020 THUNDERBOLT PLACE SUITE 300 CHANTILLY, VA 20151 DPOR

Jay W. De Boer. Director

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)

EXPIRES ON 11-30-2018 Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500

NUMBER 4001011856

REAL ESTATE APPRAISER BOARD

CERTIFIED GENERAL REAL ESTATE APPRAISER



RICHARD DAVID STUCHELL 10012 SHADOWRIDGE COURT FREDERICKSBURG, VA 22407



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

DPOR-LIC (05/2015)

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05/24/17 CISM0180 CORPORATE DATA INQUIRY 14:39:23 0724389 - 2 CORP ID: STATUS: 00 ACTIVE STATUS DATE: 06/14/10 DMY Inc. CORP NAME: DATE OF CERTIFICATE: 06/14/2010 PERIOD OF DURATION: INDUSTRY CODE: 70 STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK MERGER IND: CONVERSION/DOMESTICATION IND: GOOD STANDING IND: Y MONITOR INDICATOR: CHARTER FEE: 50.00 MON NO: MON STATUS: MONITOR DTE: R/A NAME: JOHN Z DING STREET: 14241 MIDLOTHIAN TPKE, SUITE 230 AR RTN MAIL: STATE: VA ZIP: 23113-0000 CITY: MIDLOTHIAN R/A STATUS: 1 DIRECTOR EFF. DATE: 10/18/11 LOC: 120 ACCEPTED AR#: 216 51 7471 DATE: 05/09/16 CHESTERFIELD CO CURRENT AR#: 216 51 7471 DATE: 05/09/16 STATUS: A ASSESSMENT INDICATOR: 0 FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES YEAR 17 100.00 100

(Screen Id:/Corp_Data_Inquiry)

EXPIRES ON

12-31-2017

Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500

NUMBER

0405001794

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

PROFESSIONS: ENG



DMY INC 14241 MIDLOTHIAN TNPK SUITE 230 MIDLOTHIAN, VA 23113

Status can be verified at http://www.dpor.virginia.gov (SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)



Commonwealth & Hirginia



State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That McCORMICK TAYLOR, INC., a corporation incorporated under the law of Pennsylvania, is authorized to transact business in the Commonwealth of Virginia;

That it obtained a certificate of authority to transact business in Virginia from the Commission on June 2, 1997; and

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

Nothing more is hereby certified.



Signed and Sealed at Richmond on this Date: August 5, 2014

Joel H. Peck, Clerk of the Commission

CISECOM
Document Control Number: 1408055525

SCC eFile > Entity Search > Entity Details



SCC eFile

SCC eFile Home Page Check Name Distinguishability Business Entity Search Certificate Verification FAQs Contact Us Give Us Feedback

Business Entities

UCC or Tax Liens

Court Services

Additional Services

McCORMICK TAYLOR, INC.

General

SCC ID: F1296914

Entity Type: Foreign Corporation Jurisdiction of Formation: PA

Date of Formation/Registration: 6/2/1997

Status: Active

Shares Authorized: 70000

Principal Office

2001 MARKET STREET 10TH FLOOR PHILADELPHIA PA19103

Registered Agent/Registered Office

NATIONAL CORPORATE RESEARCH, LTD. 250 BROWNS HILL COURT MIDLOTHIAN VA 23114

CHESTERFIELD COUNTY 120

Status: Active

Effective Date: 6/9/2014

Select an action

File a registered agent change File a registered office address change

SCC eFile **Business Entity Details**

Resign as registered agent

File an annual report

Pay annual registration fee

Order a certificate of good standing

View eFile transaction history

Manage email notifications

New Search Home

Screen ID: e1000

EXPIRES ON 12-31-2017

Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500

NUMBER 0407004111

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

PROFESSIONS: ENG



MCCORMICK TAYLOR INC NORTH SHORE COMMONS A 4951 LAKE BROOK DR SUITE 275 GLEN ALLEN, VA 23060

DPOR-LIC (05/2015)

(DETACH HERE)

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA BUSINESS ENTITY REGISTRATION NUMBER: 0407004111 EXPIRES: 12-31-2017

PROFESSIONS: ENG MCCORMICK TAYLOR INC NORTH SHORE COMMONS A

4951 LAKE BROOK DR SUITE 275 GLEN ALLEN, VA 23060

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

DPOR-PC (05/2015)



Commonwealth & Hirginia



State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That DIW GROUP, INC., a corporation incorporated under the law of Maryland, is authorized to transact business in the Commonwealth of Virginia;

That it obtained a certificate of authority to transact business in Virginia from the Commission on January 30, 1997; and

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

Nothing more is hereby certified.



Signed and Sealed at Richmond on this Date: June 12, 2014

Joel H. Peck, Clerk of the Commission

CISECOM
Document Control Number: 1406125758

COMMONWEALTH of VIRGINIA

EXPIRES ON 12-31-2017 Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500

NUMBER 0407004748

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

PROFESSIONS: ENG



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DIW GROUP INC SPECIALIZED ENGINEERING 4845 INTERNATIONAL BLVD #104 FREDERICK, MD 21703 DPOR

Jan W. De Borgs
Jay W. DeRoer. Director

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015) (DETACH HERE)



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UCC or Tax Liens

Court Services

Additional Services

Elite Management Solutions, LLC

General

SCC ID: S3209857

Entity Type: Limited Liability Company

Jurisdiction of Formation: VA

Date of Formation/Registration: 3/18/2010

Status: Active

Principal Office

1671 JEFFERSON DAVIS HIGHWAY SUITE 203 FREDERICKSBURG VA22551

Registered Agent/Registered Office

MELISSA WETZEL 7609 BAILEYS ROAD SPOTSYLVANIA VA 22551 SPOTSYLVANIA COUNTY

Status: Active

Effective Date: 4/26/2014

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ATTACHMENTS 3.3.1 KEY PERSONNEL RESUME

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

- a. Name & Title: Charles Stokes, Vice President
- b. Project Assignment: Design Build Project Manager
- c. Name of all Firms with which you are employed at the time of submitting SOQ. In addition, please denote the type of employment (Full time/Part Time): **Orders Construction Company Full Time**
- d. Employment History: With this Firm 7 Years With Other Firms 40 Years
 Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):

Orders Construction Company (2010 --Present) Vice President - Responsible for Construction Services in Virginia, primarily highways and bridges. Responsibilities include: bidding, scheduling, safety, resource allocations, contract administration, quality, coordination, public relations, change orders and value engineering proposals. And major pursuits. During this period Orders has expanded its presence in Virginia to become one of the leading contractors in the Commonwealth. This period saw Orders more than triple its volume of work, become a true partner with VDOT and the Virginia Transportation Construction Alliance, addressing issues and safety in the work place. Orders had formed a true partnership with many Districts to bring added value to the work. Today the Virginia Branch of Orders Construction operates as the largest of the branches in Order's team of branches and subsidiaries. In 2012 Orders chose to expand on its bid-build successful operation into the Design Build Arena. This expansion endeavor was led by Mr. Stokes. With the company completing 12 design build projects, both public and private, including the award winning Rt. 60 Bridge Replacement in Clifton Forge VA, as the Design-Build Project Manager.

Corte Construction Company (1992—2010) President - Responsible for bidding, management, and construction of Highway, Bridge, Tunneling, Grading, Commercial Buildings including daily operations, resource allocations, scheduling, safety and quality. From 1992 to 2010, Corte Construction Company doubled its size, adding both territorial coverage and markets, a direct result of Mr. Stokes' efforts. In 1996 Corte bought Fort Chiswell Construction Company, a Virginia based Highway and Bridge Contractor and operated it as a wholly owned subsidiary. In 1999 Mr. Stokes was appointed president of Fort Chiswell Construction Company. With this dual leadership role, Fort Chiswell was also guided to increased size, more than doubling its average work load. In the early 2000's the companies entered the tunnel refurbishing market which proved to be a successful venture. This venture included major renovations to Virginia's East River Mountain Tunnel and Big Walker Mountain Tunnel. The Company also entered the Design Build arena, completing one of VDOT's earliest Design Build Projects, located in Giles County VA.

- e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: University Of Pittsburgh (Pittsburgh PA) N/A N/A N/A
- f. Active Registration: Year First Registered/ Discipline/VA Registration #: N/A
- g. Document the extent and depth of your experience and qualifications relevant to the Project.
 - 1. Note your role, responsibility, and specific job duties for each project, not those of the firm.
 - 2. Note whether experience is with current firm or with other firm.
 - 3. Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.

(List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)

Rte. 60 Clifton Forge VA Design Build Bridge Replacement. Role: Design Build Project Manager. Responsibilities - Mr. Stokes was responsible for all facets of the project including, Contract Administration, Schedule, Safety, Quality, Public Relations and Resource Allocations for this unique project in a very congested area that has a bridge abutting and in some instances touching commercial buildings including the historic Masonic Theater. A very complex MOT plan was needed for both highway and pedestrian traffic to navigate through and around the work areas. The project concept was for bridge foundations on drilled shafts but due to the confines of the footprint Mr. Stokes worked with the designer (Clark Nexsen) and the Virginia Department of Transportation to change the foundations to spread footers which cut vibrations that would be transferred to the adjacent buildings and in partnering with the Town of Clifton Forge, VDOT and the Research Council changed the riding surface over the concrete beams from asphalt to a modified concrete overlay. This project was completed on time and under budget and was presented at the San Jose California Design Build Transportation Conference as the small transportation project of the year. Orders Construction Company, 2011-2012.

Rte.'s 501 & 130 Interchange and Bridge replacement in Bedford and Amherst Counties VA. Role: Project Manager. Responsibilities - Mr. Stokes was responsible for all phases of this project from Earthwork, MSE Walls, 865 LF bridge over CSX Railway and the James River, Mass Concrete operations, demolition of existing structure over the James River and CSX railroad. Mr. Stokes partnered with VDOT to eliminate 2 causeways in the environmentally sensitive James River and utilize floating barge platforms for cofferdam work, pier construction and steel erection. Worked with VDOT to make the mass concrete operation a success and have it presented at the ACI board meeting in Chicago IL., and offered process improvements to the group. Upon conclusion of the concrete operations, he held a joint meeting with involve parties including the Research Council to review the mass operations and adapt specifications due to lessons learn. The project had a great deal of interface the CSX Railroad due to extensive work near and over busy tracks, including the boring and jacking of storm drains under the railway. All work affecting the CSX system was completed without incident. The project completed ahead of schedule, under budget and earned an early completion incentive. Orders Construction Company, 2015-2016.

Rte. 220 Business Interchange in Rocky Mt. VA. Role Project Manager. Responsibilities - Mr. Stokes was responsible for all facets of this road and bridge project which included rock excavation and grading in a busy intersection, phased construction of the Rte. 220 bridge replacement over the Pigg River, utility relocation, curbs, sidewalks, traffic signals and demolition of an existing concrete arch structure over the Pigg River. Developed a very detailed Transportation Management Plan to allow business and public access to local areas as well as navigating through the town of Rocky Mount. All bridge foundation work and demolition had to be scheduled around a time of year restriction, which was accomplished despite issues with design changes. Work on the east abutment and consequently demolition of the existing concrete arch bridge had to be rescheduled not only to meet design changes but also time of year restrictions. The project saw abutment foundation issues that Mr. Stokes solved by working with the designer. The abutment was intended to be on founded spread footers in shallow rock (assumed from the soil borings). However, rock was not encountered until 25 feet below ground. Working with the designer, Mr. Stokes developed a complex shoring and dewatering system to excavate the area, expose the rock, install the foundations and recover the schedule. Mr. Stokes partnered with VDOT to work through the 5-month design delay by changing phasing and the project was completed within the original contract time frame and within budget. Orders Construction Company, 2012-2013

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

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

KEY PERSONNEL RESUME FORM

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Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title: Kevin Conner
b. Project Assignment: Construction Manager
c. Name of all Firms with which you are employed at the time of submitting SOQ. In addition, please denote the type of employment (Full time/Part Time) Orders Construction Company - Full Time
d. Employment History: With this Firm 13 Years With Other Firms 17 Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):
Orders Construction Company: Superintendent/Construction Manager (1994—Present Responsible for construction, scheduling, safety, quality, and owner relations on major construction projects for various owners. Day to day duties include ensuring traffic movement is safe, all environmental controls are in place and functioning, crews are in place as well as machines and materials. Working hand in hand with the Project Manager, Safety Director, Quality Contro Manager, Environmental Manager, Stakeholders and the Owner to turn over a quality project of time. From the complex Route 9 WV project, the traffic sensitive Tabler Station-I81 interchange and the Rte. 60 Clifton Forge Design-Bbuild project to the bridge over Rte. 29 in Charlottesville Kevin has been a leader in working in traffic sensitive situations and environmentally sensitive areas Kevin has also been in the forefront of helping Orders Construction implement its Work Force Development Program, setting up site specific plans and performing as a mentor to new employee's His expertise, not only in bridge construction, but roadway and utility construction has made him a well-rounded and versatile component of the Orders company. Having experience as a field engineer prior to coming to Orders has made for a versatile and well-rounded Construction Manager
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Bluefield State College, Bluefield WV. BS, Civil Engineering 1987 Civil.
f. Active Registration: Year First Registered/ Discipline/VA Registration #: N/A

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

(List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)

WV Rte. 9, Berkley and Jefferson Counties, WV. Responsibilities - include on site management of day to day operations of earthwork, drainage, paving, traffic control, and environmental compliance. This project included 1.9M cubic yards of excavation, 9 bridges, 1880 LF of box culverts, over 17,000 LF of storm drainage piping, both asphalt and concrete pavement and water and sanitary sewer relocations. Mr. Conner was instrumental in successful management of traffic in and though the 4.9 mile construction site. Made sure that the 1.9M cubic yards of excavation ended up in the proper location and that all environmental controls were in place and maintained properly. Working in conjunction with the construction manager, Bob Frame, Mr. Conner developed project plans and schedules that permitted many activities in sensitive areas of traffic congestion to be done in off hour timeframes minimizing impacts. Also working with the construction manager, Mr. Conner was instrumental in both establishing and manufacturing on site rock material to meet the requirements of MSE wall backfill as well as assisting in the establishment of an onsite concrete batch plant to manufacture the concrete product for concrete pavement. Project was performed for Orders Construction Company (2008-2010).

I-81 over Maury River, Rockbridge County VA. Responsibilities - included scheduling manpower, equipment, sub-contractors and overseeing quality control on this \$19M project that included replacement and widening of twin bridges over Maury River on a heavily traveled section of I-81. The approach roadway was widened and a truck climbing lane added by moving over 300,000 cubic yards of excavation. The new bridge structures 800 LF long, one four spans and one five spans. Mr. Conner designed a temporary work bridge plan that was approved as a substitution for a temporary causeway in the Maury River. Was instrumental in the projects use of a full-time safety patrol service to ensure and maintain safe passage for the traveling public. Through efforts in the setup of double shifts, Mr. Conner's leadership and experience played a key role in reducing time frames of construction activities that led the project to an early completion and receiving a full incentive. *The project also won the VTCA Safety Award for 2016.* Project was performed for Orders Construction Company (2004-2006).

I-81 Tabler Station Interchange, Berkeley Co. WV. Responsibilities - include all day to day operations from directing crews, equipment, sub-contractors to managing traffic control and quality. This project included more than 100,000 cubic yards of excavation and new bridge structure the tie in of Rte. 11 with I81 presented some very complex traffic issues, along with earthmoving type trucks in and near active roadways being of concern, Mr. Conner could keep traffic moving and incident free. The project design called for the new bridge foundations to be on micro piles and caissons. Working with Orders management and the highway department, the area for foundations was analyzed and it was determined that pre-bored pile would serve as an acceptable and economical alternative. Through Mr. Conner's work a value engineering proposal was approved with a savings of nearly \$500,000.00 for the owner. Time being of essence on most all construction projects, especially Interstate Interchanges requires detailed planning and experience in these situations and brought the expertise of Mr. Conner into the limelight. Traffic was able to move in and around the construction site without incident the project also included demolition of buildings, extensive drainage work, a complex traffic signal system located on Rte. 11 at the interchange as well as paving. Project was performed for Orders Construction Company (2010-2011).

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

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

Mr. Conner is currently assigned to a project in Charlottesville, VA which is scheduled for completion in October 2017. He will be temporarily re-assigned upon completion until the Warrenton Design Build project begins.

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

- a. Name & Title: Kaushik Vyas, P.E., DBIA, Quality Assurance Manager
- b. Project Assignment: Quality Assurance Manager
- Name of all Firms with which you are employed at the time of submitting SOQ. In addition, please denote the type of employment (Full time/Part Time): Quinn Consulting Services, Inc. Full Time
- d. Employment History: With this Firm <u>7</u> Years With Other Firms <u>31</u> Years

 Please list chronologically (most recent experience first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked. Project specific experience shall be included in Section (g) below):

Quinn Consulting Services, Inc., Quality Assurance Manager - March 2010 to Present

Kaushik is a registered Professional Civil Engineer in Virginia and a certified Professional of the Design Build Institute of America (DBIA). His professional record includes 31 years of experience in engineering, quality assurance, and quality control on transportation and other heavy civil projects. Kaushik has provided professional services on both PPTA/P3 Projects (Public Private Partnership Projects) and Design-Build Transportation projects where he has held the positions of Quality Assurance Manager (QAM) on **7 VDOT D-B projects** and Area QC Resident Engineer on the 495 Express Lanes. His responsibilities as Quality Assurance Manager have included the supervision of Quality Assurance inspection staff and responsibility for material record documentation as required for payment application approval. His responsibilities also include the Quality Assurance and oversight of the construction operations, including the QA testing technicians; review of test reports, daily reports, safety reports, and environmental reports; he determined and certified to VDOT whether the materials and work complied with the Contract Documents; he conducted preparatory inspection meetings prior to the start of any new work; provided oversight and directed the independent quality assurance testing and inspections; and reviewed QA and QC documentation for conformance to VDOT's Minimum QA/QC Requirements Manual and the project Quality Control Plan.

TRC, Formally Site-Blauvelt, Transportation Engineer – April 2001 to March 2010

Kaushik worked as Transportation Engineer on various Transportation Projects to include the PPTA Route 895 Pocahontas Parkway Project in Richmond, VA; Design-Bid-Build Projects such as the I-95, Rte. 627 Interchange Project in Stafford County VA, Discovery Blvd. Project, and Phase II Spriggs Road Widening Project in Prince William County, and Design-Build Projects such as the Rte. 15 Widening, Linton Hall Road Widening Design-Build Projects in Prince William County. His Responsibilities included ensuring construction work on these projects were performed as per Project Plans and Specifications. Also, he ensured adequate materials testing was performed, materials documentation was in order, and pay items were verified. His role on Prince William County Design-Build Projects was as Owner's Representative where his responsibilities included ensuring construction work was performed as per approved plans and specifications. He also ensured the testing of the materials, reviewed reports, and the Materials Notebook. In addition, he verified pay quantities and pay applications and coordinated with utility companies for utility relocations.

Gujarat Electricity Board, Civil Engineer – June 1985 to July 2000

Mr. Vyas worked as Civil Engineer in Gujarat Electricity. His responsibility included ensuring quality of construction for various electric substations, transmission lines tower foundations as per plans & specifications. His wide range of duties included preparing estimates for civil works, providing initial line-out/lay out of electrical substations civil components work like structure foundations, control room buildings, residential buildings, cable trenches, roadway construction, overhead tanks, ensuring precise construction work as per civil drawings in co-relation with electrical structures foundation drawings & recording the work in measurement books for the payment. Mr. Vyas also worked as Civil Engineer in Generation Department/ in Power Plants and his duties included Ensuring construction & maintenance of different foundation components of the structures related to Turbine structures, Bottom Ash Hopper, Chemical Plants, C.W. (Canal Water) Pump House structures Foundations in the power plant. His duties also included to ensure that work was completed without interruption of Power Generation thus making sure that work was completed in the Particular Unit of the Plant during Unit Maintenance schedule time frame to ensure un-interrupted Power Generation.

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

- f. Active Registration: Year First Registered/ Discipline/VA Registration #: Professional Engineer VA 2004 / Civil Engineer / 0402 039004
- g. Document the extent and depth of your experience and qualifications relevant to the Project.
 - 1. Note your role, responsibility, and specific job duties for each project, not those of the firm.
 - 2. Note whether experience is with current firm or with other firm.
- 3. Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.

(List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)

I-66 Route 15 Diverging Diamond Interchange, VDOT Design Build, Haymarket, VA. Responsibilities - Mr. Vyas is the Quality Assurance Manager (QAM) for this \$36 million dollar project to build a diverging-diamond interchange (DDI) on U.S.15 at I-66 to relieve congestion, enhance public safety, operations and capacity, and accommodate forecasted traffic demand in the area. As part of this diverging-diamond interchange, the project includes constructing two new bridges to carry U.S. 15 traffic over I-66 with two crossover intersections; ramp improvements (including a spur ramp to ease traffic flow from westbound I-66 to northbound U.S. 15 to westbound Heathcote Boulevard); improvements on U.S. 15 from just north of the railroad tracks to just south of Heathcote Boulevard; wider intersections on U.S. 15 at Heathcote Boulevard and Route 55, adding turn lanes to both; and a 10-foot-wide shared-use path on the east side of U.S. 15 for pedestrians and bicyclists. His responsibilities included conducting preparatory inspection meetings prior to the start of each new activity; providing oversight and directing the independent quality assurance testing and inspections; reviewing Pay Applications and comparing the QA and QC tests to ensure that they are within the tolerances established by VDOT's Minimum QA/QC Requirements Manual. He also developed and resolved project Non-compliance reports (NCR's) and deficiencies and maintained the project punch list. Quinn Consulting Services, Inc., Quality Assurance Manager (March 2015 to August 2017)

Belmont Ridge Road, VDOT Design Build, Loudoun County, VA. Responsibilities - Mr. Vyas served Quality Assurance Manager (QAM) for this \$45 million dollar project located along Route 659 (Belmont Ridge Road) in Loudoun County, VA between Route 642 (Hay Road) and Route 2150 (Gloucester Parkway). The total Project length is approximately 1.9 miles. The purpose of this Project is to address current and future traffic volume needs along the corridor by widening the existing two-lane roadway to a four-lane median divided facility. A Bridge, for grade-separation is being constructed at the Washington & Old Dominion (W&OD) Trail and shared use paths will be provided on both sides of Route 659 (Belmont Ridge Road) with direct connections to the W&OD Trail. His responsibilities included conducting preparatory inspection meetings prior to the start of new activity; providing oversight and directing the independent quality assurance testing and inspections; reviewing Pay Applications and comparing the QA and QC tests to ensure that they are within the tolerances established by VDOT's Minimum QA/QC Requirements Manual. In addition, he oversaw QA inspection staff and monitored the QC staff for compliance with the project specific QA/QC Plan. Quinn Consulting Services, Inc., Quality Assurance Manager (September 2016 to December 2018)

Gloucester Parkway Extension, VDOT Design Build, Loudoun County, VA. Responsibilities - This \$26 million dollar project extended Gloucester Parkway from the Loudoun County Parkway to the intersection of Pacific Boulevard and Nokes Boulevard. The project consisted of the design and construction of a four-lane divided highway, a new bridge over Broad Run, intersection improvements at Loudoun County Parkway (Route 607) and Pacific Boulevard (Route 1036), and trail and sidewalk improvements. As the Quality Assurance Manager (QAM), Kaushik coordinated with QA/QC teams to execute the work according to the approved plans & VDOT Specifications. His responsibilities included checking test reports, daily reports, MOT reports, and environmental reports. Kaushik was also responsible for the Quality Assurance of the construction operations, including the supervision of the QA testing technicians; and he determined and certified to VDOT whether the materials and work complied with the Contract Documents. In addition, conducted preparatory inspection meetings prior to the start of any new activity; reviewed pay applications, provided oversight and directing the independent quality assurance testing and inspections; compared the QA and QC tests to ensure that they are within the tolerances established by VDOT's Minimum QA/QC Requirements Manual. In addition, Kaushik worked closely with both VDOT and DB Contractor to resolve Non-Compliance issues and to prevent repeat occurrences. Quinn Consulting Services, Inc., Quality Assurance Manager (November 2014 to September 2016)

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

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

I-66/Rt 15 Interchange – August 2017, Belmont Ridge Road – December 2018

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

- a. Name & Title: Ian Johnston, PE, Transportation Engineer
- b. Project Assignment: Design Manager
- c. Name of all Firms with which you are employed at the time of submitting SOQ. In addition, please denote the type of employment (Full time/Part Time): **Clark Nexsen, Inc. Full Time**
- d. Employment History: With this Firm 8 Years With Other Firms 10 Years
 Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):

Clark Nexsen, Inc.: Project Manager (2011-present): Responsible for management of transportation projects for state and local government clients. Project types managed include roadway improvement projects, new bridge and bridge replacement projects, intersection improvements including roundabouts, and new signal/signal upgrade projects, and drainage improvements. Direct responsibilities include oversight of project scope, schedules, and budgets, and ensuring that both in-house and sub-consultant design teams are providing project deliverables in accordance with established schedule and quality requirements. Responsible for financial status and reporting of projects to management team. Primary point of contact with the client and responsible for ensuring that all activities and deliverables are to their satisfaction and that quality assurance and quality control measures are implemented and followed. Activities include running and facilitating project meetings, planning and implementing change management actions, and leading and motivating design and project staff. Responsible for marketing and business development in support of firm's business goals.

VDOT Hampton Roads District PMO: Design Project Manager (2005-2011): Responsible for the management of preliminary engineering projects for the Hampton Roads District of VDOT. Responsible for the project scope, schedules, and budgets, and delivering projects in accordance with the VDOT Dashboard guidelines. Projects managed were primarily consultant designs, and therefore was responsible for scoping and negotiating the consultant contracts, overseeing the fiscal control of the contracts, and ensuring payment in accordance with the Prompt Payment Act. Some elements of design projects were in-house designs, and therefore was responsible for coordinating with internal staff and section managers for successful delivery. Responsible for maintaining and updating project information and budgets within VDOT's Integrated Project Manager (iPM), Six Year Improvement Program (SYIP), and Project Cost Estimating System (PCES) databases. As project leader, responsible for coordinating and communicating info related to assigned projects with representatives from the Federal Highway Administration, local governments and the Metropolitan Planning Organization, as well as the District and Central Offices. Responsible for making presentations to citizens, stakeholders, and local authorities. Upon successful delivery of design projects to construction, responsible for coordinating any design changes or revisions because of changed conditions or errors and omissions. Served as a District Project Manager on a wetland mitigation Design-Build project and the Midtown Tunnel/Martin Luther King Extension PPTA project.

Clark Nexsen: Senior Roadway/Civil Engineer (2002-2005): Roadway/Civil Engineer responsible for the design of state and local government transportation and public works improvement projects, as well as Federal/Department of Defense design projects. Responsible for design projects from preliminary design to final construction documents, including development of plans, estimates, and specifications. Performed designs using Microstation and AutoCad design software. Responsible for overseeing design work of junior staff, and providing quality control reviews. Activities also included coordinating designs with project manager, other internal design sections, sub-consultants, and client technical staff. Developed fee estimates in support of cost proposal submissions to clients. Attended construction progress meetings and coordinated construction services on projects, including reviewing shop drawings, responding to RFI's, and performing plan revisions. Supported business development initiatives by firm's project managers. Worked primarily on the VDOT Route 1 widening in Richmond, and Elbow Road and Seaboard Road for the City of Virginia Beach. Was lead designer on a roadway relocation project for the DoD in Key West, Fla.

Hayes Seay Mattern & Mattern: Civil Engineer (2001-2002): Civil/Transportation engineer responsible for roadway and drainage design for VDOT and local government clients. Developed designs in Microstation, Geopak, and AutoCad. Projects included arterial road widening projects and site development projects. Worked primarily on the VDOT Warwick Boulevard widening project in Newport News, Virginia.

Earth Tech: Transportation Engineer (1998-2001): Transportation engineer responsible for developing design documents for VDOT and SCDOT projects. Developed designs in Microstation and iGRDS. Responsible for preparing design documents, performing quantity take-offs, and preparing estimates. Worked primarily on the Route 288 project in Richmond, Virginia, from the James River Bridge to Broad Street, approximately 6 miles.

- e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
 Rochester Institute of Technology, NY/ B.S. /1998/Civil Engineering Technology
 SUNY Alfred, NY/A.A.S./1994/Construction Engineering Technology
- f. Active Registration: Year First Registered/ Discipline/VA Registration #: Professional Engineer / Civil / 2004 / Virginia # 0402041863
- g. Document the extent and depth of your experience and qualifications relevant to the Project.
 - 1. Note your role, responsibility, and specific job duties for each project, not those of the firm.
 - 2. Note whether experience is with current firm or with other firm.
 - 3. Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.

(List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)

College Drive & Harbour View Boulevard Intersection Improvements/Roundabout (U000-133-377), Suffolk, VA. Responsibilities - Mr. Johnston is the Design Project Manager for this locally administered intersection improvement project located in the northern section of the City of Suffolk. The project is located at the intersection of College Drive and Harbour View Boulevard/Armstead Road, and is converting a two-way stop controlled intersection into a dual-lane roundabout. The project is being constructed to support planned future developments on the Tidewater Community College campus to the north, as well on City owned property to the east of the existing intersection. The major elements of the project design include grading plans, storm drainage and stormwater management, lighting and landscaping plans, and maintenance of traffic and sequence of construction plans. The project will be constructed while maintaining traffic on the existing roadways, while grading and paving operations occur in the four outside corners of the existing intersection. After completion of operations in the corners, traffic will be shifted into a circular pattern while central island and median approaches are constructed. Close coordination and staged construction is required where the new roundabout pavements cross the existing roadway pavements, with alternating build ups of pavement. The project was awarded for construction in the winter of 2016, with construction being started in late spring of 2017 – after the franchise utility relocations are complete. Mr. Johnston is currently managing this project for Clark Nexsen, and will see it through the entirety of the construction process. The total combined PE, R/W, and CN cost for the project is \$2 million. Clark Nexsen (2013-Present).

I-264/64 Ramp Widening (0264-122-F08) & Newtown Interchange, Norfolk, VA. Responsibilities - Mr. Johnston was VDOT's Design Project Manager for this interchange project, which includes widening the I-64 westbound to I-264 eastbound ramp, construction of 3 new bridges, addition of a new collector-distributor road on I-264, and construction of MSE and noise barrier walls along I-64. The project also includes the construction of a new collector-distributor road that extends through the existing Newtown Road interchange. The NEPA document was a Categorical Exclusion and was approved in the Spring of 2011, the Design Public Hearing was conducted in July of 2011, and approval of the Interstate Modification Report was issued by FHWA in October. The project construction contract was awarded in September of 2016, with construction beginning in November. The expected project completion is in October of 2019. The project is consultant designed with survey support from the District. Mr. Johnston managed this project while employed at VDOT from 2006 thru 2011, and was responsible for delivering the project from scoping through Public Hearing. The total combined PE, R/W, and CN cost is \$158.7 million. VDOT Hampton Roads District (2006-2011)

I-264/Witchduck Interchange (0264-134-102), Virginia Beach, VA. Responsibilities - Mr. Johnston was the Design Project Manager for this interchange project which is downstream from the interstate improvements associated with the I-264/64 Ramp project (0264-121-F08). The project includes interchange improvements at the Newtown and Witchduck interchanges, interstate widening and collector distributor roads, arterial street improvements on Greenwich, Newtown and Witchduck Roads, signal improvements at the interchange off-ramps, a bridge crossing over I-264 on new location, and a new roundabout at the Newtown Interchange/I-264 eastbound on-ramp. Approximately 70 parcels are impacted by the project, with 12 being total acquisitions/displacements. The project is currently in the right-of-way acquisition stage, with an expected construction advertisement in summer of 2017. The project is consultant designed with survey support from the District. Mr. Johnston managed this project while employed at VDOT from 2006 thru 2011, and was responsible for delivering the project from scoping through Public Hearing. The total combined PE, R/W, and CN cost for the project is \$194.5 million. VDOT Hampton Roads District (2006-2011)

- * On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.
- h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment.

WORK HISTORY FORM ATTACHMENT 3.4.1 (A) - LEAD CONTRACTOR ATTACHMENT 3.4.1 (B) - LEAD DESIGNER

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design	c. Contact information of the Client or Owner	d. Contract	e. Contract	f. Contract Value (in thousands)		g. Dollar Value of Work
	consulting firm responsible for	and their Project Manager who can verify	Completion	Completion	Original Contract	Final or Estimated	Performed by the Firm identified
	the overall project design.	Firm's responsibilities.	Date	Date (Actual	Value	Contract Value	as the Lead Contractor for this
			(Original)	or Estimated)			procurement.(in thousands)
Name: I-81 Exit 7	Name: Virginia Department	Name of Client/ Owner: Virginia Department					
Interchange Improvement	of Transportation	of Transportation					
		700 East Main Street					
Location: City of Bristol,		Abingdon, VA 24210	08/2015	09/2015	\$3,394	\$3,384	\$3,384
Washington County, VA		Phone: 276-676-5504	00/2013	07/2015			
		Project Manager: Robert Baker					
		Phone: 276-698-9377					
		Email: Robert.Baker@VDOT.Virginia.gov					

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.

Relevance to the US 15/17/29 Interchange

- ✓ Roadway
- ✓ Bridge
- ✓ Geotechnical
- ✓ Environmental
- ✓ MOT & TMP
- Public Outreach

PROJECT NARRATIVE Orders served as general contractor for this \$3.4 million project, which included widening of Old Airport Road, the Northbound I-81 off ramp, new water and sewer facilities and a bridge over Beaver Creek. This project was both complex and compact. Exit 7 at Bristol, Virginia is one of I-81's busiest interchanges with peak hour congestion, an issue that VDOT had struggled with for many years. The project added lanes to Old Airport Road as it passes under the I-81 overpass. A retaining wall was constructed in front of the southern abutment of the overpass to allow widening of the roadway. This gravity wall now helps support the I-81 overpass abutment. Temporary shoring was installed to allow for the excavation and construction of the wall. The project design incorporated a new 12" diameter water line and an 8" diameter sanitary sewer line through the project and it was to be located near the centerline of Old Airport Road.



INNOVATION: In partnering with VDOT and Bristol Virginia Utilities, Orders proposed to move the water and sewer lines out of Old Airport Road to the Southbound shoulder. Bristol Virginia Utilities agreed with the proposal as a betterment to their operation. This not only eliminated traffic issues, but a savings of nearly \$100,000 was passed back to VDOT. The I-81 Northbound off ramp had a turn lane added to facilitate turning left or right onto Old Airport Road. This widening required a 13 feet deep, 30 inch culvert to be installed in the ramp travel

lane. Working with VDOT, Orders was able to eliminate this traffic nightmare by moving the pipe to the new lane, raising the flow line and inlet elevations, and actually eliminating part of the storm pipe and changing the drainage to a paved ditch. This not only eased traffic problems, but afforded VDOT nearly \$30,000 in savings. The project also included widening of a double box culvert, new traffic signals, curb & gutter, and asphalt paving.

MOT SOLUTIONS: Under the original project MOT/Sequence of Construction plan, Linden Drive, which is a major access route to Bristol's "Bristol Commons" shopping and dining area was planned to be closed during Old Airport Road bridge construction and the subsequent addition of a new I-81 southbound access ramp and turn lanes. By incorporating a shoring system for abutment construction and creative girder erection techniques for bridge construction as well as night time lane closures for ramp tie-ins, Orders could keep Linden Drive open, which in turn reduced congestion at the nearby Old Airport Road/Rte. 11 intersection.

EVIDENCE OF GOOD PERFORMANCE: Orders completed this project on-time and under budget, assisted the Bristol District with elimination of traffic issues, and assisted VDOT and Bristol Virginia Utilities (BVU) with the relocation water and sanitary sewer lines outside of the traveled path allowing better traffic flows plus affording BVU greater service access for future expansion.

LESSONS LEARNED: Orders gained valuable experience controlling high volume traffic through a congested interchange, working in and through difficult soil conditions, and meeting the demands of a discriminating traveling public, partnering with VDOT to maintain access to both the spring and fall Bristol NASCAR races and by inviting and including local people with local knowledge to participate in planning, it was proven to be a success and a large part of the way we do business.

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

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design	c. Contact information of the Client or Owner	d. Contract	e. Contract	f. Contract Value (in thousands)		g. Dollar Value of Work
	consulting firm responsible for	and their Project Manager who can verify	Completion	Completion	Original Contract	Final or Estimated	Performed by the Firm identified
	the overall project design.	Firm's responsibilities.	Date	Date (Actual	Value	Contract Value	as the Lead Contractor for this
			(Original)	or Estimated)			procurement.(in thousands)
Name: Relocated WV9	Name: West Virginia	Name of Client/ Owner: West Virginia					
	Department of	Department of Transportation					
Location:	Transportation	Phone: 304-289-3521	08/2010	08/2010	\$50,097	\$51,786	\$51,786
Berkeley/Jefferson County,		Project Manager: Gary Long	00/2010	00/2010	\$30,097	\$31,700	\$31,760
WV		Phone: 304-289-2251					
		Email: Gary.S.Long@wv.gov					

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.

Relevance to the US 15/17/29 Interchange

- ✓ Roadway
- ✓ Bridge
- ✓ Geotechnical
- ✓ Environmental
- ✓ MOT & TMP
- ✓ Public Outreach

PROJECT NARRATIVE: Orders served as general contractor for this \$50 million relocation/re-alignment of WV Route 9 between Martinsburg and Charles Town, WV. This 4.6 mile long segment of new 4 lane highway through an environmentally sensitive area included: nine new bridge structures, 1.9 million cubic yards of excavation, retaining walls, roadway drainage, and both concrete and asphalt paving. Being in both an environmentally sensitive area and a very historic region of WV's Eastern Panhandle, Orders utilized extreme care to ensure BMP's were installed, maintained, and monitored. The proximity of the project to residential areas demanded care be exercised in both traffic control and earth moving operations. Orders partnered with WVDOH to ensure residents could traverse the construction project with minimal interruptions and to the highest safety standards. The single span bridges required MSE walls at all abutments, both structural steel girders and prestressed concrete beams were designed into the structure work. The project also included nearly 1,880 linear feet of precast box culverts, 17,000 linear feet of 15" to 84" drainage pipe, and new water and sanitary sewer lines. Orders worked with

a local concrete supplier to obtain permits and install a portable concrete batch plant on-site to facilitate construction and minimize traffic impacts. This installation required close coordination with the Division of Highways Environmental Section and the WV Department of Environmental Protection to make certain the new plant had no ill effects on the residential community and the environmentally sensitive surroundings. The high volume of earthwork necessitated careful considerations for public travel and protection of the adjoining residential property.

Sequencing of bridge construction to meet the needs of the local communities had to be considered and public involvement and feedback was important to the project schedule. With increasing growth in the panhandle region of West Virginia, the Department of Highways set an aggressive schedule for completion of this segment of Rte. 9 and Orders met the schedule and the mandate to keep traffic flowing. The project was completed on time and within budget. A real working relationship with and among WVDOH, local residents and businesses and Orders was established and the result was a success for all.

EVIDENCE OF GOOD PERFORMANCE: Orders completed this project on-time and with-in budget, had an outstanding safety record, and saw no traffic mishaps. The local area was enhanced by the construction of this project and the local community voiced approval and appreciation for the work that was performed.

LESSONS LEARNED: Community involvement and partnering with the WVDOH permitted this project to be brought to a successful conclusion. Working with major suppliers to overcome difficulties in logistics and shipping proved to be a path to success. Flexibility in planning to meet the needs of residents with temporary connectors to assist their commutes and temporary utility construction that afforded them un-interrupted lifestyles proved to be an excellent vehicle to eliminate problems and issues that are often encountered during the highway construction process. Having the residents and businesses on our team made difficult work and decisions much more palatable. Often going the extra mile adds value to a project and helps develop a relationship that has rewards for all parties.

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





ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design	c. Contact information of the Client or Owner	d. Contract	e. Contract	f. Contract Value (in thousands)		g. Dollar Value of Work
	consulting firm responsible for	and their Project Manager who can verify	Completion	Completion	Original Contract	Final or Estimated	Performed by the Firm identified
	the overall project design.	Firm's responsibilities.	Date	Date (Actual	Value	Contract Value	as the Lead Contractor for this
			(Original)	or Estimated)			procurement.(in thousands)
Name: I-81 Over Maury	Name: Whitman, Requardt &	Name of Client/ Owner: Virginia					
River	Associates, LLP	Department of Transportation					
		P.O. Box 2249					
Location: Rockbridge		Staunton, VA 24402				\$18,991	\$18,991
County, VA		Phone: 540-332-9074	12/2006	12/2006	\$17,736	(including	
		Project Manager: Randy Kiser				incentive	
		Phone: 540-332-9075				payment)	
		Email: Randy.Kiser@VDOT.Virginia.gov					

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.

Relevance to the US 15/17/29 Interchange

- ✓ Roadway
- ✓ Bridge
- ✓ Geotechnical
- ✓ Environmental ✓ MOT & TMP
- ✓ Public Outreach

PROJECT NARRATIVE: Orders served as general contractor on this project for the replacement and widening of twin bridges over the Maury River on a heavily traveled section of I-81 in Rockbridge County, VA. This project included significant roadway work, including approach roadways being widened to accommodate maintenance of traffic and future widening of I-81. Multiple traffic shifts were required to adjust the approach alignment to accommodate the wider bridges. The 800' long bridge structures totaled more than 100,000 square feet of deck area and included innovative and complex expansion devices at each end known as the Virginia Abutment. Other facets were significant rock excavation, roadway drainage, asphalt paving, signing, guardrail, and a new traffic management system.

INNOVATIONS: Additionally, a full-time "Safety Service Patrol" was used due to the high traffic volumes to ensure the TMP was not interrupted. This relatively simple accommodation reduced incident clearance times significantly during the construction duration.

EVIDENCE OF GOOD PERFORMANCE: Orders partnered with VDOT and strived continually to improve upon the aggressive construction schedule and earned an early completion incentive of more than \$400,000. This project also won the 2006 Award for Excellence in Construction from the VDOT Staunton District.

LESSONS LEARNED: Include the unique goals and priorities toward which VDOT strives on major bridge projects, and how to meet and exceed VDOT's standards. In addition, Orders gained valuable experience working in and adjacent to a heavily traveled road and development of TMP for the safety of their workers and the traveling public. This experience with traffic control and MOT will carry over to the US 15/17/29 Interchange Project. Partnering was significant to this project because everyone understood the value of finishing on time. Orders' partnered with VDOT and WRA to compress the project schedule and to resolve design/construction issues quickly. This experience will apply as Orders keeps the project at hand on schedule. Orders was attentive to environmental concerns related to the







installation of cofferdams for bridge piers. Regulators were pleased the river was spanned with a temporary bridge. Orders will continue this practice of partnering and being attentive to the risks at the US 15/17/29 Interchange Project. Additionally, while working with VDOT on the construction of piers and abutments foundations, Orders learned much about the karst substrata in the area and how to mitigate design and construction issues. Many key staff from Orders including Charlie Stokes and Kevin Conner will apply these lessons learned to the US 15/17/29 Interchange Project.

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

ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general	c. Contact information of the Client and	d. Construction	e. Construction	f. Contract Value (in thousands)		g. Design Fee for the Work
	contractor responsible for overall	their Project Manager who can verify	Contract Start	Contract	Construction	Construction	Performed by the Firm identified
	construction of the project.	Firm's responsibilities.	Date	Completion	Contract Value	Contract Value	as the Lead Designer for this
				Date (Actual	(Original)	(Actual or	procurement.(in thousands)
				or Estimated)		Estimated)	
Name: East Tevis Street	Name: Project not yet bid	Name of Client: Department of Public					
over I-81 Grade Separated		Works, County of Frederick					
Overpass		Phone: 540-665-5643	11/2017	1/2019	\$15,120	\$15,120	\$285
		Project Manager: Joe Wilder	(Anticipated)	(Anticipated)	(Estimated)	(Estimated)	φ203
Location: Frederick County		Phone: 540-665-5643					
near Front Royal Pike, VA		Email:					

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOO may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.

PROJECT NARRATIVE: The project is a roadway upgrade connecting the east and west halves of the southern part of the City of Winchester; these halves are currently divided by the I-81. Tevis Street is on the western half of the city and has an east to west alignment. This road will be extended to the east half of the city, bridging the interstate creating a grade separated overpass. Additionally, three other roadways will be enhanced and connected to Tevis Street with a roundabout as the focal point of the unification. For this project, Clark Nexsen (CN) was the bridge designer with the project now at 100% design. Upon completion of the project construction, ownership of the bridge will be transferred to VDOT. As such, the bridge was designed per VDOT specifications and guidelines and all interim submittals have been provided to the Staunton District for review. The plans are anticipated to go to bid within the next several months.

DESIGN OPTIMIZATION: Clark Nexsen evaluated several bridge alternatives for Frederick County. We made distinct efforts to ensure the new bridge would accommodate possible future widening of I-81. This consideration drove our overall analysis by setting the needed span lengths. However, we remained committed to focusing on the traditional bridge design hallmark of optimizing the economics of the bridge with special attention to efficiency of material, constructability issues, and future maintenance costs.

CONSTRUCTABILITY CONSIDERATIONS: The construction site constraints were evaluated with consideration for viable locations to position cranes with respect to anticipated weight of the bridge girders. Future maintenance costs are approached with the awareness that concrete is more durable than steel, but the higher steel life-cycle cost is overcome by savings during erection of much lighter weight steel girders as compared to concrete beams. Ultimately, the County approved our recommendation for a two span (161'-161') continuous steel plate girder jointless bridge supported on semi-integral abutments and multi-column pier with crash wall. The bridge section consists of four traffic lanes, two 6' sidewalks, and a 4' median. With the bridge over the interstate, we worked closely with the roadway engineers to ensure adequate clearances and geometric alignments were achieved.



CHALLENGES OVERCOME: One challenging aspect of this project was achieving adequate vertical clearance over I-81, to include possible future widening. The roundabout is relatively close to the bridge abutment and as such, the approach roadway would have a significant slope. Clark Nexsen was able to identify this issue early on by taking a big-picture view of the project. We fine-tuned our bridge design through various iterations to minimize the structure depth, thereby softening the slope and still maintaining an efficient design. Further, we worked closely with the roadway designer to properly lay out the roadway geometry to even further lessen the slope. The result was a reduced slope of 5% between the bridge and the roundabout with proper and adequate clearance over the interstate.

Another challenge we faced on this project was the Karst Geology common to this region. The term Karst refers to a generally rocky terrain typically composed of limestone; as the limestone is eroded by water, randomly located voids are formed. These voids can remain empty or may fill with unsuitable material such as high plasticity clays. This geology can be a challenge for design teams unacquainted with the unpredictable nature of the terrain. Clark Nexsen coordinated our design decisions with the geotechnical experts, advising them to extend borings to adequate depth through rock coring. We further advised to take an increased number of borings, which validated our expectation of various voids and clay seams. By hand-graphing the layout of the geology through advanced interpolation of boring logs along the project site lines, our engineers were able to develop a model of the rock and soils to apply to the foundation design to greatly reduces the overall cost of the project by selection of a spread footing on rock base, minimizing rock excavation, and minimizing over-excavation. Through the interpolation and additional borings, we expect to reduce the probability of construction change orders by decreasing uncertainty of subsurface soil conditions.

RELEVANCE: As discussed in the challenges portion above, the overpass bridge elevation was set to ensure minimum clearance over I-81, which is similar to the clearance necessary over Route 17/15/29. To achieve the necessary clearance and tie the roundabout to the bridge, a 5% slope was necessary; the slope will be realized by fill placement. There is a similar challenge at the Warrenton Interchange with anticipated slope currently as high as 6.5% and significant fill needed for the roundabout. Lastly, MSE walls were considered but eliminated in favor of soil placed on 2:1 slopes to reduce costs to the overall project.

ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general	c. Contact information of the Client and	d. Construction	e. Construction	f. Contract Value (in thousands)		g. Design Fee for the Work
	contractor responsible for overall	their Project Manager who can verify	Contract Start	Contract	Construction	Construction	Performed by the Firm identified
	construction of the project.	Firm's responsibilities.	Date	Completion	Contract Value	Contract Value	as the Lead Designer for this
		-		Date (Actual	(Original)	(Actual or	procurement.(in thousands)
				or Estimated)	_	Estimated)	
Name: Volvo Parkway /	Name: Higgerson-Buchanan	Name of Client.: City of Chesapeake					
Independence Parkway		Phone: 757.382.6101					
Roundabout Design		Project Manager: Mr. Scott Frechem	05/2013	07/2013	\$1,073	\$915	\$167
		Phone: 757.382.6319	05/2015	0772013	Ψ1,073	ΨΣΙΣ	ΨΙΟ
Location: Chesapeake, VA		Email: sfrechem@cityofchesapeake.net					

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.

PROJECT NARRATIVE: In an effort to improve safety, Clark Nexsen was the prime designer for the City of Chesapeake's first roundabout and median improvements at intersections along Volvo Parkway in the City of Chesapeake, Virginia. Volvo Parkway is a four-lane divided roadway and had an existing signalized intersection at the intersection with Independence Parkway (also four-lane divided). Volvo Parkway, along with Independence Parkway and Tintern Street provide access to Commercial properties including a Lowe's and Home Depot as well as a large office park, residential neighborhoods, and light industrial including trucking centers and repair shops. With this large number of trucks utilizing this intersection, Sidra analysis was used to verify that a roundabout would work effectively at this intersection. Based on the analysis, it was recommended that the existing signalized intersection of Volvo Parkway and Independence Parkway be replaced with a "Turbo" roundabout designed to accommodate a high percentage of WB-67 trucks. A "Turbo" roundabout has a combination of single and dual-lane approaches and circulating lanes which spiral outwards. This spiral design eliminates the weaving maneuvers within the roundabout, increasing safety. Another benefit to a turbo roundabout design is that the roundabout can be converted to a full two lane roundabout with modifications to pavement markings rather than costly changes to the roundabouts infrastructure. In addition to the roundabout, a high crash intersection was located just east of the intersection with Independence Parkway at the existing intersection of Volvo Parkway at Tintern Street. This intersection was unsignalized with stop control on the minor streets and allowed full turning movements. To address the existing crash patterns, median modifications were designed to restrict left-turn movements from the minor approaches and thus, pushed more traffic, including large trucks, into the roundabout for improved and safer mobility.



DESIGN CHALLENGES

Multimodal Traffic: With this project included accommodating a large volume of pedestrian traffic as well as truck traffic within the roundabout and improving the existing drainage system. The entrance radii of the roundabout and the design of the splitter islands were closely examined with relation to the pedestrian crossings.

Maintenance of traffic: Was also a challenge given the large amount of diverse users and vehicles that use this intersection. A detailed MOT/ SOC plan was developed to keep all four lanes of traffic open during construction to accommodate the adjacent commercial, residential, and business users. The MOT plan was developed with key stakeholder input to ensure that all movements were being accommodated as well as access to the adjacent properties.

Public Involvement: Since this project was the first roundabout constructed in the City of Chesapeake, an extensive public involvement campaign was conducted to not only make sure the users and property owners were aware of the proposed construction, but also to provide educational information on how to use roundabouts.

Public and Franchise Utility Coordination and Relocation: Close coordination was required with the franchise utility companies including Verizon, Cox, Virginia Natural Gas, and Dominion Virginia Power to first determine prior rights and then to relocate their facilities to accommodate the roundabout design. Easements were obtained for the utilities that were in conflict and moved to outside of the proposed right-of-way. The project also included relocation of city water and sewer facilities including main lines and service connections.



RELEVANCE: The Warrenton Interchange includes a roundabout necessitating a complex MOT plan, public involvement and utility coordination and relocations which match services provided by Clark Nexsen for the City of Chesapeake on this project.

ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general	c. Contact information of the Client and	d. Construction	e. Construction	f. Contract Value (in thousands)		g. Design Fee for the Work
	contractor responsible for overall	their Project Manager who can verify	Contract Start	Contract	Construction	Construction	Performed by the Firm identified
	construction of the project.	Firm's responsibilities.	Date	Completion	Contract Value	Contract Value	as the Lead Designer for this
				Date (Actual	(Original)	(Actual or	procurement.(in thousands)
				or Estimated)		Estimated)	
Name: Lesner Bridge	Name: McClean Contracting	Name of Client: City of Virginia Beach					
Replacement	Company	Department of Public Works					
		Phone: 757-385-5785	4/2014	12/2017	\$78,645	\$78,645	\$10,005
Location: Virginia Beach,		Project Manager: Chris J. Wojtowicz	4/2014	(Estimated)	\$70,045	\$70,045	\$10,005
VA		Phone: 757-385-5785					
		Email: CWojtowi@vbgov.com					

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOO may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.

PROJECT NARRATIVE: This project was a federally funded Locally Administered Project (LAP) in the northern section of the City of Virginia Beach. Clark Nexsen was the prime contract holder and performed the work out of their Virginia Beach office. The project was the design of a four lane signature bridge facility on the NHS (Route 60) leading to the resort area of the City. A critical part of the project was the realignment of the approach roads and intersections adjacent to the bridge. Other key elements of the project included large scale grading, MSE wall design, wick drain design, drainage design, storm water management, public and franchise utilities design and relocation, traffic engineering/ signal design, landscape design, lighting, bike/ pedestrian accommodations, and environmental permitting. Since the project was federally funded, the project included NEPA documentation including noise/ air analysis as well as the approval of an Environmental Assessment (EA).

DESIGN OPTIMIZATION: The location of the proposed alignment of the proposed bridge and roadway approaches was critical in the highly developed and environmentally sensitive roadway corridor. Clark Nexsen evaluated multiple location alternatives for the approach roadway and bridge. Considerations for the proposed alignment selection were the overhead high voltage Dominion Energy lines just south of the existing roadway, impacts to the adjacent existing commercial developments on the south side, a proposed large scale residential development on the north side of the existing alignment, and the environmentally sensitive areas surrounding the project. Through extensive meetings, coordination, and negotiations with the adjacent developments, environmentally agencies, and Dominion Energy the project team was able to develop an optimized alignment that was shifted slightly north of the existing roadway that was the preferred alternative for all of the project stakeholders.

CONSTRUCTABILITY CONSIDERATIONS: One of the most complex constructability considerations on this project was keeping the existing four lanes of traffic open during the entire duration of construction. Route 60 traffic volumes exceeded 43,000 VPD and also experience in a high level of bicycle/pedestrian traffic. The project corridor was narrow as it had a high voltage Dominion Energy overhead line located 50' to the south of the existing roadway and bridge as well as existing and proposed residential and commercial developments within 50' of the existing roadway on the north and south sides. Clark Nexsen developed a five phase maintenance of traffic (MOT)/ sequence of construction (SOC) plan for the project and was able to keep all four lanes open for the entire duration with minimal impacts to adjacent properties. Each of the five phases was evaluated from a traffic operational standpoint to ensure that an acceptable level of service was maintained on the roadway and intersections. Some of the key elements that were incorporated into the MOT/SOC plan were pedestrian and bike accommodations, design of temporary turn lanes, design of temporary traffic signals, traffic barriers and attenuators, temporary drainage and trench drains, temporary sheet pile walls to accommodate existing traffic adjacent to large fill areas, message boards, and the design of temporary pavement.

CHALLENGES OVERCOME: One of the biggest challenges of this project was providing a road and bridge design that would work for a variety of well-established, well-funded, and vocal stakeholder groups. Some of the major stakeholders included the Shore Drive Community Coalition, the Bayfront Advisory Committee, Ocean Park Civic League, Resort Advisory Committee, US Navy, Franchise Utility Owners, and State and Federal Environmental Agencies. Clark Nexsen worked with the Owner to develop a unique plan to engage the project stakeholders all while complying with VDOT and FHWA initiative for context sensitive solutions. The plan started at the 0% design stage with listening tours where all of the stakeholders were interviewed prior to design to discuss their concerns and goals for the project. The second phase of stakeholder involvement was a design charrette. Over 100 stakeholders gathered for a one day workshop with the team to provide valuable input on elements of the design including alignment, aesthetics, bridge type, pedestrian experience, landscaping, and lighting. The team took the information from the listening tours and design charrette and developed the design documents and had multiple follow up meetings with each stakeholder group during the design to keep them updated with the progress. The final phase of stakeholder involvement was the VDOT Design Public Hearing where the road and bridge plans were presented that reflected the information gathered in previous stages of involvement. The result of the stakeholder involvement process was a design that was supported by the Owner and fully embraced by all of the stakeholder groups.

RELEVANCE: Key elements of the Lesner Bridge Replacement Project that are relevant to this project are large scale grading, bridge construction, extensive public and franchise utility coordination and relocation, retaining wall design, complex maintenance of traffic sequence of construction design to maintain high volume or vehicular and bicycle/pedestrian traffic at all times, and extensive stakeholder involvement.



