

ORIGINAL

STATEMENT OF QUALIFICATIONS

ROUTE 7 CORRIDOR IMPROVEMENTS

A DESIGN-BUILD PROJECT

FROM: RESTON AVENUE
TO: JARRET VALLEY DRIVE

FAIRFAX COUNTY, VIRGINIA

STATE PROJECT NOS.: 0007-029-942 AND 0007-029-225
FEDERAL PROJECT NOS.: STP-5A01(745) AND STP-5A01(790)
CONTRACT ID NUMBER: C00099478DB98

SEPTEMBER 21, 2017

PREPARED FOR:



SUBMITTED BY:



LANE-Wagman, A Joint Venture

September 21, 2017

Mr. John Daoulas, P.E.
Alternative Project Delivery Division
Virginia Department of Transportation
1401 East Broad Street
Richmond, Virginia 23219

RE: Route 7 Corridor Improvements

State Project No.: 0007-029-942 and 0007-029-225
Federal Project No.: STP-5A01(745) and STP-5A01(790)
Contract ID Number: C00099478DB98

Dear Mr. Daoulas:

LANE-Wagman, A Joint-Venture (**LANE-Wagman**) is comprised of **The Lane Construction Corporation (LANE)** and **Wagman Heavy Civil, Inc. (Wagman)** is pleased to submit this Statement of Qualifications for the above referenced project to the Virginia Department of Transportation (VDOT).

LANE will serve as the Managing Joint Venture (JV) Partner and is nationally ranked as the #1 Highway Contractor by *Engineering News-Record (ENR)* for the 4th year in a row and specializes in high quality roadway and bridge construction. As a leader in the Design-Build method (nationally ranked as the 43rd Top Design-Build Firm by *ENR*) LANE has constructed more than 80 Design-Build projects worth more than \$3.5B during the last decade. LANE has a successful history of project completion in Virginia having completed nearly 160 projects in the Commonwealth worth over \$2.8B. Wagman is an experienced Design-Build contractor who has partnered to complete the design and construction of over \$1.5B of DB transportation projects in the Mid-Atlantic Region over the past 10 years.

LANE-Wagman is the Offeror and will be the overall authority on the project as well as the Lead Contractor. We have teamed with **Rummel, Klepper & Kahl, LLP (RK&K)** as the Lead Designer. Together, the LANE-Wagman Team provides VDOT with a reputable team that has completed projects of this size and scope on time and on budget as evidenced in our collective project experiences. RK&K has provided transportation planning and engineering design services to VDOT for over 20 years.

LANE-Wagman and RK&K, in conjunction with Rinker Design Associates (RDA) and additional hand-selected design and construction specialty firms, are experienced with VDOT processes and procedures and will provide design and construction for the Route 7 Corridor Improvements project. We are confident in our team structure and experience, and have elaborated on our distinctive qualifications in the subsequent sections. The LANE-Wagman Team has assembled committed personnel, with proven delivery of VDOT's requirements to meet the similar requirements, safety, and schedule demands of this project.

3.2.2 Offeror's Point of Contact Information: Mr. Richard McDonough is the authorized representative and Point of Contact for the LANE-Wagman Team for all matters associated with this qualifications submittal.

Richard McDonough, Senior District Manager
14500 Avion Parkway, Suite 200
Chantilly, VA 20151
Tel: (703) 222-5670 Fax: (703) 222-5960
Email: RAMcdonough@laneconstruct.com

3.2.3 Offeror's Principal Officer Information: Mr. David J. Rankin, PE is a Principal Officer of LANE-Wagman.

David J. Rankin, PE, Senior Vice President
6125 Tyvola Centre Drive
Charlotte, NC 28217
Tel: (704) 553-6500 Fax: (704) 553-6598
Email: DJRankin@laneconstruct.com

3.2.4 Offeror's Corporate Structure: The Offeror for this submission is LANE-Wagman, structured as a joint venture. The Lane Construction Corporation and Wagman Heavy Civil, Inc. (the joint venture partners) will share financial responsibility for the Project, have no known liability limitations, and will be jointly and severally liable for the performance of the work required for the Project. The joint venture will provide a single 100% performance bond and a single 100% payment bond.

3.2.5 Lead Contractor and Lead Designer: The full legal name of the Offeror is: LANE-Wagman. LANE-Wagman will serve as the prime/general contractor responsible for overall construction of the project and will serve as the legal entity who will execute the contract with VDOT. The full legal name of the Lead Designer is: Rummel, Klepper, & Kahl, LLP (RK&K). RK&K will serve as the lead design firm responsible for the overall design of this Project under contract to LANE-Wagman.

3.2.6 Affiliated/Subsidiary Companies: A complete list of our respective companies' affiliates and subsidiary companies may be found in the Appendix.

3.2.7 Debarment Forms: Certifications for Debarment for both Primary and Lower Tier Covered Transactions have been completed and executed for the Offeror and all subconsultants, subcontractors, and other entities as identified as members of the LANE-Wagman Team and may be found in the Appendix.

3.2.8 Offeror's VDOT Prequalification Evidence: A Joint Venture Bidding Agreement was submitted and approved by VDOT. The prequalification number for this Joint Venture is: **JV088**. The respective prequalification numbers for our respective firms are: LANE (L002) and Wagman (W002). Evidence of such is provided in the Appendix.

3.2.9 Letter of Surety: A single surety letter from the bonding companies is included in the Appendix, confirming their willingness to provide any and all bonds for this Project on behalf of the joint venture.

3.2.10 SCC/DPOR Information and Evidence: The matrix in the Appendix delineates the respective state registrations and licensures of the LANE Team. The Offeror and all team members are eligible at the time of the SOQ submittal, under the law and relevant regulations, to offer and to provide any services proposed or related to the project. Respective copies of licenses may be found in the Appendix.

3.2.11 DBE Statement: LANE-Wagman Team supports the Disadvantaged Business Enterprise (DBE) program and is committed to meeting the **12%** goal for the design and construction of this project utilizing Virginia certified DBE companies.

As evidenced by our proven performance, our Team will deliver this project safely, on time, and within budget. We appreciate the opportunity to present our qualifications and look forward to working with VDOT on this important project.

Respectfully submitted,



Richard McDonough
Senior District Manager
The Lane Construction Corporation

3.3 OFFEROR'S TEAM STRUCTURE

3.3 | OFFEROR'S TEAM STRUCTURE

LANE-Wagman, A Joint Venture (LANE-Wagman), comprised of LANE and Wagman, will serve as the Lead Contractor of the Design-Build (D-B) team for the Route 7 Corridor Improvements (Route 7) Project and will be responsible for managing the project, supervising construction, and self-performing the major work elements. Both firms have main or regional offices in the local vicinity, allowing our Team to best serve the needs of this Project and the local community.



The Lane Construction Corporation (LANE) will serve as Managing Partner of the JV. LANE was named the 2016 Top Contractors by *ENR Mid-Atlantic* and is nationally ranked 43rd in Top Design-Build Firms by *ENR*. LANE is currently ranked as the nation's #1 Highway Contractor by *Engineering News-Record (ENR)* for the 4th year in a row. Our proven heavy civil experience in paving, bridge and roadway construction and more than 80 D-B projects ranging in scope and value from \$13M to \$3.5B demonstrates LANE's ability to tackle the region's most challenging infrastructure projects.



Wagman Heavy Civil, Inc. (Wagman), a Member of the JV, is a heavy civil contractor specializing in transportation infrastructure since 1902 and has grown to become a nationally recognized leader within the industry. Wagman is an experienced D-B contractor and have partnered to complete over \$1.5B of D-B transportation projects in the Mid-Atlantic region over the last 10 years.

LANE-Wagman bring nearly 250 years of combined experience and has the right approach to successfully deliver this Project for the community, VDOT, and other stakeholders. LANE-Wagman's approach to organizing the joint venture is to fully integrate employees of these two companies across the Project, while relying on each company's individual strengths and specialties. The LANE-Wagman Team has the experience and local resources to self-perform all aspects of the roadway, bridges/structures, retaining walls, noise barriers, survey, ITS, and utility relocations.



Rummel, Klepper, & Kahl, LLP (RK&K), as the Lead Designer, will provide overall project management for all design activities. RK&K is ranked 76th on the 2017 Engineering News Record's listing of the "Top 500 Design Firms".s. RK&K's specific experience with VDOT includes well over 500 projects. In addition, RK&K held the initial contracts with VDOT's Innovative Project Delivery Office assisting in the development of technical requirements and bridging documents on the earliest D-B and P3 projects administered in Virginia. This, combined with the delivery of more than \$2.3 Billion of D-B projects for VDOT and other DOTs gives RK&K a unique and in-depth experience in the delivery of D-B projects.

Major Design Subconsultant



Rinker Design Associates, PC (RDA), as the major subconsultant, will provide utility Coordination, Right of Way (ROW) Acquisition, and Survey services project-wide. Additionally, RDA will provide design support services to RK&K. RDA is a Virginia-based firm with over 115 employees with offices in Manassas, Fredericksburg, and Richmond. They are an award-winning, Virginia-certified, small business (DSBSD Certification #652784) and has provided design services as lead designer and major consultant on twenty (20) Virginia D-B projects in the past ten (10) years.

Additional Design Subconsultants

Additionally, under subcontract to the RK&K are the following highly qualified subconsultants:

- DMY (Geotechnical) DBE
- Rhodeside and Harwell (Landscape) (DBE)

Construction Subcontractors

Additionally, under subcontract to LANE-Wagman are the following highly qualified subcontractors:

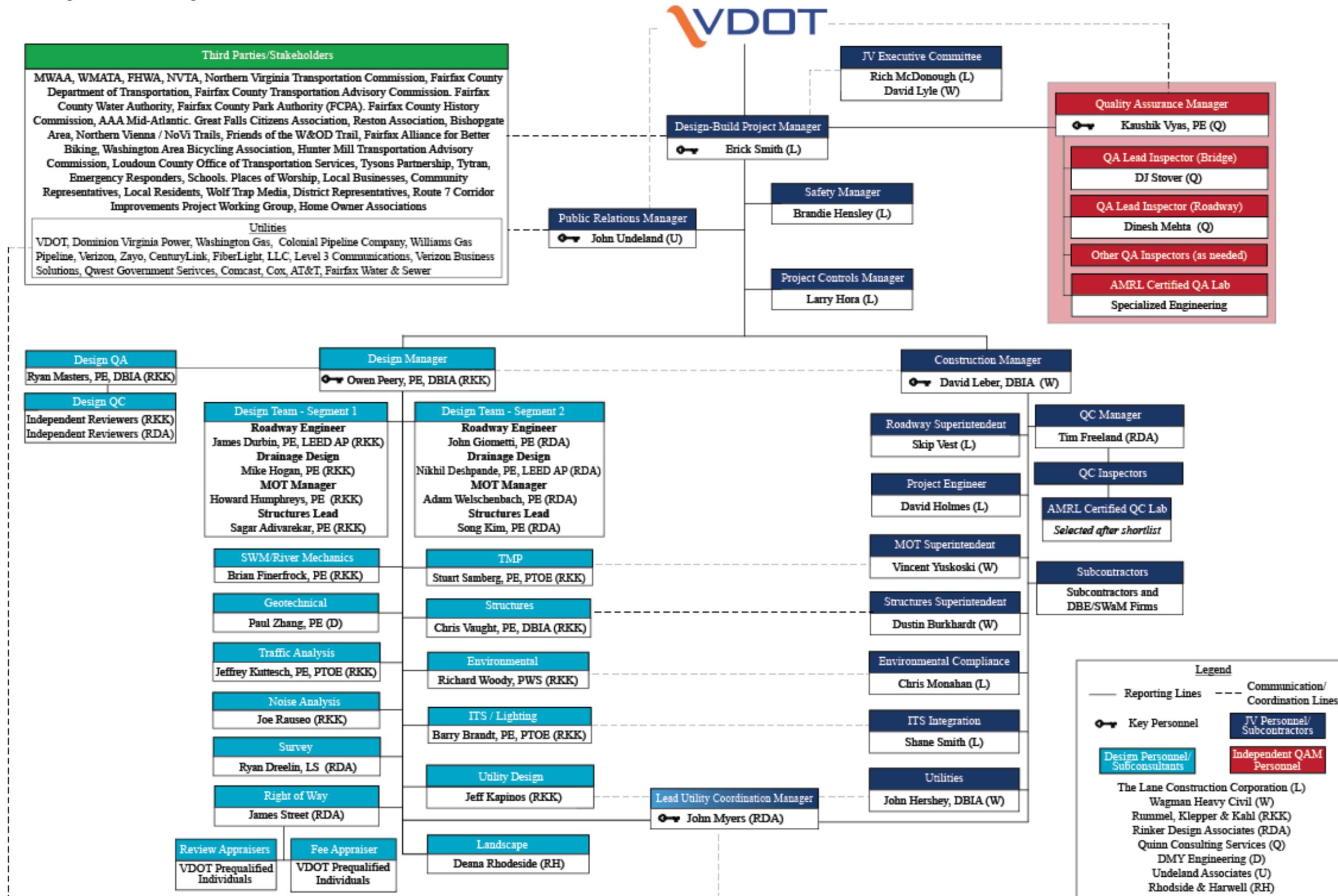
- Quinn Consulting Services (Quality Assurance Manager) (DBE)
- DIW Group, Inc. t/a Specialized Engineering (QA Lab)
- Undeland Associates (Public Relations)

3.3.1 Qualifications of Key Personnel

All proposed Key Personnel have noteworthy experience on transportation projects similar to the roles they will serve on the Route 7 Corridor Improvements project. Information regarding their experience can be found in Attachment 3.3.1 in the Appendix.

3.3.2 Organizational Chart

The LANE-Wagman Team organization has a straight-forward chain of command, with individual tasks, responsibilities, and functional relationships clearly identified. The following Organizational Chart depicts VDOT, third party stakeholders, key personnel, and their respective relationships and functions.



Reporting Relationships of Key Personnel

Design Build Project Manager (DBPM), Mr. Erick Smith (LANE) will report to VDOT and serves as the Project's central point of contact. He will facilitate communication among VDOT, team partners and adjacent Washington Gas projects; monitor design efforts to proactively eliminate potential constructability issues prior to breaking ground, and delegate resources to deliver the project on time. It will be his responsibility to work with the Team to ensure that the design complies with the owner's specifications. Mr. Smith's management from design through construction will include weekly design and construction meetings to coordinate how the Team will construct the project. Additionally, he is responsible for the coordination of public outreach and public meetings, construction quality management, and contract administration,

☑ Added Value: Mr. Smith brings over 20 years of experience in the construction industry. Mr. Smith has extensive experience on a wide variety of highway projects, both greenfield and reconstructs. He has managed design coordination, constructability, project management, utility relocation, stakeholder coordination, acquiring ROW and owner coordination as Project Manager. Additionally, Mr. Smith recently achieved the ARTBA Safety Certified Transportation Project Professional Certification

Quality Assurance Manager (QAM), Mr. Kaushik Vyas, PE, (QCS) will report directly to the DBPM on all quality issues. Any item of work failing to meet minimum standards will be rejected and corrected immediately. Construction personnel have no authority over QA inspection staff, and issues raised by construction personnel will be resolved by Mr. Vyas and the DBPM. Mr. Vyas will keep VDOT informed on the status of quality of construction and issues/solutions through weekly reports and progress meetings. As QAM, Mr. Vyas holds the authority to suspend work if quality issues warrant. **Quality Assurance Inspectors, Mr. DJ Stover, (Bridge Element) and Mr. Dinesh Mehta, (Roadway Element),** will report directly to the QAM, and will be assigned to the project on a full-time basis for the duration of the project. Specialized Engineering will report to Mr. Vyas and will perform QA testing.

☑ Added Value: Mr. Vyas has 27 years of heavy civil construction experience that encompasses all aspects of a project. From program and project management, QA/QC, construction management to implementation of strategic planning and administration in construction project management, quality control, and project controls, his comprehensive experience is invaluable.

Design Manager, Mr. Owen Peery, PE (RK&K) will report directly to the DBPM. Mr. Peery will maintain close communication with the DBPM and ensure the Project is designed in accordance with the requirements of the contract documents. He is responsible for coordinating all design disciplines and ensuring the overall project design conforms to the specifications; all design disciplines report directly to Mr. Peery. He will provide VDOT with design plans for review and approval to confirm that the design work is constructible and complies with the requirements of the Contract Documents. Mr. Peery is also responsible for establishing oversight of the QA/QC program for each design discipline of the project. He will be assisted by Mr. Ryan Masters, PE, DBIA who will provide an independent design QA audit. Design QC will be performed by qualified independent staff for each discipline as the design is being performed and under the supervision of Mr. Masters.

☑ Added Value: Mr. Peery has approximately 30 years of design and project management experience on transportation projects. He has been Design Manager for the I-64 Short Pump Widening D-B project and was the overall Design Manager of the Route 29 Solutions D-B project, overseeing the design of all project elements. On the Route 29 project, he led a team that was structured similarly to the way our organization chart has been structured for this project, with discipline leads having project-wide responsibilities and project segments being designed by teams comprised of roadway and supporting disciplines. Like that project, Mr. Peery worked with our Major Design Subconsultant, RDA and we carry those working relationships forward onto the Route 7 Corridor Improvement project.

Construction Manager, Mr. David Leber, DBIA (Wagman) will report directly to the DBPM. His daily duties include: safety, coordination of all project personnel including subcontractors, and QC. He holds ultimate responsibility for managing the project's construction schedule and will coordinate with the adjacent projects. He will hold routine meetings with the QA Lead Inspector to discuss all ongoing construction activities. He will

also review all QC reports and lab results. Any item that is not conforming to the specifications will be addressed immediately with corrective actions mandated that same day. Mr. Leber is currently working on the Route 7 Widening & Bridge Replacement over Dulles Toll Road & Airport Access Highway project and will be available prior to the start of the Route 7 Corridor Improvements construction. Mr. Leber holds a Virginia Department of Environmental Quality (DEQ) Responsible Land Disturber (RLD) Certification and a VDOT Erosion and Sediment Control Contractor Certification (ESCCC).

☑ Added Value: Mr. Leber has more than 15 years of experience in the construction industry. He is very familiar with VDOT requirements, specifically Design-Build as he is currently working as CM on the Route 7 Bridge Rehabilitation over DTR Project. He has extensive experience with high volume maintenance of traffic, utility relocations (Washington gas), roadway reconstruction, bridge rehabilitation and construction, erosion and sediment control, excavation and grading and Public Outreach.

Utility Coordination Manager, Mr. John Myers (RDA) will report directly to the DBPM. Mr. Myers coordinates all utility relocations. He verifies conflicts; determines cost responsibilities; conducts utility field inspections; coordinates utility relocation design; reviews and recommends approval of utility relocation plans and estimates, and ensures inspection of utility relocation construction. Additionally, Mr. Myers reviews utility relocation designs for in plan contract utility relocations, and verifies and recommends modifications, as needed. He ensures continuity of service as applicable.

☑ Added Value: Mr. Myers is currently leading the completion of utility work on the Route 7 Bridge Rehabilitation over the DTR D-B project which abuts this project at the eastern terminus. As part of that project, he performed identical services with the same utility owners in a very congested, urban environment. Mr. Myers has worked on approximately 10 D-B projects in the Commonwealth including the Route 29 Solutions working directly with Mr. Peery our DM. Other similar projects include the I-66/Route 15 DDI, I-64 Segment II, and Military Highway CFI.

Public Relations Specialist, Mr. John Undeland (UA) will report directly to the DBPM. Mr. Undeland will be fully dedicated to this Project during design and construction and will be responsible for developing and executing a public relations plan in accordance with the RFP Technical Requirements. He will be responsible for managing all external Project communications with Project stakeholders, the media, and the general public during each phase of the Project and will coordinate closely with the NOVA District Communications Office.

☑ Added Value: Mr. Undeland has served in the same capacity as proposed for the Route 7 D-B project on at least six major Northern Virginia transportation projects and more than a dozen throughout the D.C. metropolitan area. Mr. Undeland has extensive previous experience with public outreach on similarly high-profile, highly-sensitive transportation projects, which includes the current Transform I-66 inside and outside the Beltway projects, the latter of which is concluding at the end of 2017.

Narrative of other Functional Relationships

The LANE-Wagman Team also includes the following recognized specialists whom we deem critical to this Project, albeit non-key personnel as defined by the RFQ; their qualifications are provided below.

Following our successful model on the Route 29 Solutions project, we have strategically teamed with our Major Subconsultant RDA, again on this route 7 Corridor Improvements project.

RK&K will manage all design activities and perform a majority of the design work in-house. RDA will provide specific project-wide leaders as well as redundant capabilities in roadway design to RK&K. This is important to the success of the project and our ability to meet any design schedule. Our design team has been specifically set up to meet the challenges for this project.

First, RK&K and RDA are extremely capable and fully staffed to provide the roadway and supporting design services for this project. That is why each firm will design portions of the overall project. For the purposes of the organization chart, we have identified these as Design Team – Segment 1 and Design Team – Segment 2. The Design Manager,

as he has done previously, will coordinate these groups and their design efforts, having continual discussions between the teams so design direction gets carried through all segments of the project.

Second, there are project-wide responsibilities that discipline leaders from either RK&K or RDA will lead. This is to ensure that these highly important areas of the project run through one discipline leader and are managed by that leader throughout. For example, it would not make sense and would be extremely inefficient to have multiple traffic studies taking place concurrently, multiple permitting and environmental leaders, multiple people in charge of utility coordination or multiple noise studies taking place in the corridor. Therefore, project-wide positions have been identified and their discipline leaders shown on the organization chart.

Design and Construction Team Interaction

The LANE-Wagman Team ascribes to the DBIA paradigm that “integrated development of the design and construction program is the cornerstone of D-B delivery and this methodology optimizes opportunities for collective excellence.” Put into practice, our design and construction teams will interface throughout the life of the contract.

The DBPM will be involved in all project development and construction processes to ensure overall quality management, adherence to the contract, and to allocate appropriate resources to meet the project schedule. The Team’s extensive D-B experience has shown that regularly scheduled discipline coordination meetings throughout design and construction are critical to ensuring a successful project. Led by the DBPM, these focused meetings will serve as a conduit for disseminating project-critical information and are the central point of decision-making and communication among all involved in the project. As an added benefit, VDOT will be invited to attend these open forums of discussion among team members (design and construction) to facilitate resolution of issues, clearly define project criteria, address corridor-wide safety and constructability issues, and provide consistency in design before impacting schedule or budget.

Through this approach, we create strong relationships and truly integrated D-B functions that set the foundation to interact and partner with VDOT and third-party stakeholders, streamline reviews, eliminate potential construction field issues, and deliver the project safely, as early as possible.

3.4 | EXPERIENCE OF OFFEROR’S TEAM

The LANE-Wagman Team is comprised of leading D-B contractors and designers from LANE, Wagman, RK&K, and RDA- all are among Virginia’s top-ranked firms in their respective disciplines. Together and individually, we have designed, built and maintained some of the Commonwealth’s most important infrastructure. Each firm has achieved a widely recognized level of success by paying specific attention to detail in controlling, managing, and executing their work. Bringing this team together for the Route 7 Project unifies the abilities of each to perform in a complimentary manner based on our past performance together. Each team member, including our specialized subconsultants, was specifically selected due to their previous experience delivering projects of similar complexity and confirms our qualifications to successfully deliver all elements of the Route 7 Corridor Improvements Project.

Experience Working Together

LANE, Wagman, RK&K, and RDA have worked together on complex interstate projects throughout the East Coast. As a team, we have received numerous accommodations and awards that further demonstrate the benefits our Team can bring to VDOT.

Route 29 Solutions, Charlottesville, VA (LANE, RK&K, RDA)

“We do some pretty complex projects in Virginia, and this one is right up there. You had 103-day window to shut down the intersection. People said we couldn’t get it done in 103 days and they were right. We did it in 57 days. The Lane-Corman team did everything we asked and more to deliver this project.” – *VDOT Commissioner Charles Kilpatrick*

“This project brought something that you cannot pay for: Good will... This should become the default model for community engagement.” -*Liz Palmer, Chair, Albemarle County, Board of Supervisors*

“The speed and professionalism of Lane-Corman and the VDOT team was impressive... It’s really amazing how good of a job they did – no question about it.” - *Member, PDAP*

“We have found [the Rio project team] to be working exceedingly well together and significantly positively impacting the challenging business environment due to the roadway construction ... We have been impressed with the level of detail, safety and professionalism of the contractor.” - *President, Free Enterprise Forum*



Route 7 Widening Bridge Replacement over DTR and AAH (Wagman & RDA)

Wagman’s relationship with RDA began over 10 years ago on the US Route 15 Widening PPTA project in Prince William County. RDA was the lead engineer and Wagman was a major subcontractor on the project.

Wagman and RDA are currently constructing the Route 7 Widening and Bridge Rehabilitation over Dulles Toll Road and Airport Access Highway Project. This project includes ROW acquisition, extensive traffic control, utility relocation, knowledge of Route 7 corridor,

pedestrian walkways and robust public outreach with 3rd party stakeholders.

3.4.1 Work History Forms

Work History Forms (Attachments 3.4.1(a) and (b)) as required for LANE-Wagman (Lead Contractor) and RK&K (Lead Designer) are included in the Appendix.

3.5 | PROJECT RISKS

The LANE-Wagman Team has carefully considered the critical elements of work for the Route 7 Widening project to determine the three most relevant and critical project risks. During our evaluation of potential risks, we considered numerous risks to the project including: geotechnical, utilities, bridge/structures, existing pavement condition, maintenance of traffic (MOT), agency/stakeholder coordination, public relations, environmental, and Stormwater Management and associated ROW acquisitions. We concluded that **Stakeholder Impacts, Utilities, and Right of Way** are the three most critical risks that must be mitigated to ensure the success of the project.

Risk No. 1 – Stakeholder Impacts

Risk Identification: VDOT’s relationship with stakeholders is rightly called out in the RFQ as a critical project risk. If not managed adroitly, members of the public and their elected officials may come to oppose the project, which could manifest in legal challenge, political controversy, negative publicity and harm to VDOT’s public reputation. Such adverse outcomes could delay the project and increase its cost.

Why Stakeholder Impacts is Critical and the Impacts to the Project: VDOT’s extensive cultivation of stakeholders to date sets the stage for a productive future relationship. Carried out of the prior five years through the Route 7 Corridor Improvements Project Working Group, public meetings, HOA briefings, elected official outreach, the website and other mechanisms, the fundamentals are in place to maintain positive relations with stakeholders.

Route 7 Users: While the four lanes of Route 7 will be maintained during commuting periods, project construction will exacerbate already-significant congestion accessing Northern Virginia’s major economic engine, Tysons Corner. Many commuters who use Route 7 do not have appealing alternatives, as there is limited mass transit in the corridor and alternative routes (Routes 193, 267, Lewinsville Road, Hunter Mill Road) won’t work for many people. First responders who use the corridor, including the Wolf Trap and Tysons fire stations and the McLean police station, are among the users with whom we must be communicate. Construction resulting in extreme traffic congestion would reflect poorly on VDOT and generate negative media coverage, which could weaken support for this and future projects.

Direct-Impact Neighborhoods: The project corridor includes neighborhoods spanning more than 50 civic/home owner associations spread across Fairfax County’s Dranesville and Hunter Mill districts who will ultimately benefit greatly from this project, yet face the prospect of years of construction noise, delays, and other impacts. Involving and informing HOAs early and often is essential.

The I-495 Express Lanes project team received the VDOT and Megaprojects, Commonwealth of Virginia Award of Excellence, Integrated Communications award for their continuous efforts to ensure the public was involved and informed throughout the duration of the project.

Large Entities (Businesses, Schools, Places of Worship, Fire Stations Etc.): The project corridor includes many small businesses that will be impacted by right-of-way purchase and/or changed access to their properties, including several service stations, construction companies and landscaping outfits that rely on commercial vehicle access. Additionally, the corridor includes more than a dozen schools and places of worship, to include two elementary schools (Colvin Run and Forestville) and McLean Bible Church, which draws approximately 10,000 attendees every weekend for services. Wolf Trap, owned by the National Park Service, is one of the region’s most-highly attended entertainment venues. Reliable, efficient access to their properties is critical to these entities. The schools and churches have sizeable constituencies that can generate negative public and/or political pressure if their transportation needs aren’t adequately met.

LANE and Wagman (formerly DW Lyle) have successfully coordinated with many of the same stakeholders on our I-495 Express Lane project located in the Tyson Area. Furthermore, Wagman successfully coordinated with many of the same stakeholders on our existing Route 7 Bridge Project over DTR.

Risk Mitigation Strategy: With the project evolving from planning to design, a revised approach to stakeholder relations is recommended. Specifically, we advise altering the function of the working group into a design stakeholder advisory group, in which members meet with project design leads over a period of a few months during the initial phase of the design process. Per the SOQ, we will manage all external project communications with stakeholders the media and the general public. We will be the facilitators of the advisory group, establishing meeting schedules, agendas, preparing materials and facilitating the meetings. All information will be coordinated with the VDOT project manager before providing this information to the public.

One example of our success of this approach was the closure of South Bound I-495 Bridge at Chain Bridge Road, Tysons Corner. The team blanketed the area with early notification of the weekend closure/detour options using the project website, media announcements, email, telephone calls, postcards, and door-to-door outreach. When the work was completed, not a single complaint was received from businesses, motorists, or area residents.

Engaging stakeholders intensively early on in a properly defined and disciplined process can:

- Empower stakeholders to have a genuine impact on matters such as the appearance of noise barriers, landscaping and potentially more significant design elements.
- Identify improvements to the project that are desired by the community and can be achieved with minimal to no cost and schedule impact.
- Generate public good will and establish a “favorability bank” that can be drawn against during particularly impactful construction
- Involved stakeholders can become third-party advocates

Undeland Associates has performed such mitigation strategies on projects including: **Wilson Bridge, I-395 Seminary Road ramps, Transform 66 Outside the Beltway, and Transform 66 Inside the Beltway.**

In short, a well-executed stakeholder process gives supporters additional reasons to back the project, it can win over fence-sitters and reasonable opponents and it can leave those remaining in opposition are fewer in number and isolated.

Successful design stakeholder processes require transparency, the setting of realistic expectations and a clear definition of the process. The following elements are key to a successful stakeholder involvement process:

- Defining scope – Clearly explaining what is on and off the table is critical to ensuring the process stays on point and does not produce recommendations that are out of scope and budget.
- Defining membership – The transition of the project is a natural time to evaluate the membership of the stakeholder advisory group to ensure the right constituencies are represented.
- Defining calendar – It’s essential to communicate that the period in which the stakeholder panel can have input is necessarily brief and finite so that the design can solidify to keep the project on schedule.
- Defining how input will be considered – In exchange for volunteering their time and effort, stakeholders want and deserve to know how their input will be considered, so explicitly explaining how the project Team and VDOT will evaluate recommendations is essential.

Once the design matures to the point at which major changes are not possible, we advise continuing the working group but having it operate on more an informational rather than participatory basis and for it to meet less frequently. The group would serve as a primary conduit to the community on progress milestones, and provide advance notice about upcoming construction work and other project updates.

Additionally, the aforementioned items (e.g., community briefings, website, etc.) should be continued but tweaked to reflect the evolution of the project into design and then construction. We also recommend cultivating positive media coverage of the project, which is regionally significant and newsworthy.

The team has extensive experience in managing public outreach/stakeholder relations on other sensitive VDOT projects, including the Route 29 Solutions Project, Transform 66 and the Woodrow Wilson Bridge Project.

Role of VDOT and Other Agencies: We envision our role as facilitating the advisory group and managing the other outreach initiatives on behalf of VDOT. VDOT’s role will include review of materials and message. Additionally, while our D-B Team will lead this outreach effort, we cannot speak to policy, authorize changes to the project budget or perform actions that are required by VDOT. Therefore, the VDOT Project Manager and / or other key personnel will attend stakeholder advisory group meetings and other stakeholder meetings when necessary and will coordinate and review information before it is released to the public.

Risk No. 2 – Utilities

Risk Identification: Utility relocations are routinely on the critical path of a schedule on any given D-B project. With the majority of the relocation design work being performed by outside entities that the D-B team has no control over, our Team must rely on the utility companies to perform their work in a timely manner, within the budget available. The Route 7 Corridor Improvement will require major utility relocations and adjustments throughout the project. Encompassed in this congested utility corridor, there are multiple joint use communications ducts, large transmission gas lines (including a major gas relocation/betterment design), major overhead power distribution lines, a 54” water transmission line, and water and sewer distribution/collection lines.

Why Utilities are Critical and the Impacts to the Project: Utility relocations are especially critical on this project. In addition to the cost and schedule risk, they could also lead to issues and complications with public relations and right of way negotiations.

Given that private utility relocations are controlled by each utility owner, the risk becomes exponentially greater due to the shear magnitude of utilities potentially impacted on the project. The schedule challenges and the compounding effect of each utility relocating in series is significant.



Utility Relocation. LANE recently completed a \$112M Dulles Metrorail Utility Relocation project. LANE’s familiarity and close coordination with the local utility companies (over 30) made this project a huge success.

RDA & Wagman Route 7 @ Dulles Toll Road Success

Wagman and RDA are currently completing a successful utility relocation effort for a project in the same corridor. Each of the utility companies they worked with on that project will also be involved in this Route 7 project. In depth coordination between the utilities and construction team were needed to successfully provide a new bridge crossing to avoid the massive cost of large bores underneath Dulles Toll Road. Weekly meetings during the heaviest of relocation work helped garner relationships and respect between the utility companies and Wagman, while keeping the project moving forward. These working relationships will help keep utilities involved and moving forward on this next section of Route 7.

An individual utility alone may present a problem but the extensive number of utilities on this project, and the challenges that each holds irrespective of the others present a significant risk as the true impact of the risk is a sum of its parts. Our discussion below identifies specifics about various major utilities and how their combined issues may result in a huge risk to the project’s schedule and cost.

Relocation of Dominion Energy’s overhead power lines will be problematic to find an acceptable alignment as they compete for horizontal availability in the corridor. The proposed soundwalls which span the vast majority of the project length in combination with the existing 54” water transmission line will force the aerial relocation

to encroach further into adjacent residential properties and HOA’s. Our direct experience in the corridor on the Route 7 Bridge Rehabilitation over DTR/AAH Design-Build project provides us with a few lessons of these challenges as we worked, in good faith, with an HOA to find a relocation alignment that minimized impacts to their community. The result was more extensive relocations were provided with an understanding that the HOA would provide a VDOT-friendly negotiation on the ROW required. However, the HOA rejected the fair-market offer and requested additional compensation disregarding previous efforts.

Fairfax Water has a large 54” waterline along with a 30” waterline running parallel to the roadway for a large portion of this project. These trunklines appears to be in conflict with noise barrier as well as large drainage structures along the eastbound lanes of Route 7. Relocation will be 100% project cost and poses concerns related to time of year restrictions (schedule) for a waterline of this size as well as room (ROW or easement) needed to perform the work.

RDA recently worked with Williams-Transco to adjust proposed roadway design on PWC Vint Hill Road project to limit the adjustment to encasement extensions saving an estimate \$2M in relocations

Washington Gas’s current betterment project to their existing 16” line through the project limits presents a significant threat to the project schedule and lengthens impacts to the traveling public through the corridor. The pathway required for this betterment will significantly impact the available room to relocate other utilities without major encroachment onto adjacent property owners. Furthermore, constructability and cost considerations will likely put the gas line design in direct conflict with major construction elements or features of this project such as large cross culverts and noise barrier foundations. In addition, both Williams-Transco Gas and Columbia Gas have pipeline facilities identified within the project limits. These petroleum transmission lines require extensive coordination and long lead times to resolve even the slightest conflict.

Verizon of Virginia is the local phone company through this area, and historically needs the most time to relocate their lines. The facilities that run through this corridor are major lines in their system, and the system itself in some places dates back to the 1970s. Verizon relocations pose a risk to schedule and it amplified due the size of the project. The speed at which this work is done is further complicated by Verizon’s diminished staff resources.

On the Route 7 DTR project, RDA worked closely with VZN Construction contacts to identify an unknown cable and mitigate the full relocation of the line, saving 60 days in the relocation schedule.

Of the 17 utility companies listed on this project, our team has a long working relationship with each and every one of them Through various DB and traditional projects in this area, RDA has established extensive relationships and a history of cooperation with the companies involved here

Along with Verizon, almost all of the fiber optic carriers doing business in this region of the state utilize this corridor as a major run for their facilities. These include, but are not limited to: Fiberlight, XO, Level 3, AT&T (Long Distance and Local), Zayo, Verizon Business, and CenturyLink. Fiberlight possesses a joint ductbank that most of the other companies utilize for the majority of their facilities. The Route 7 corridor is also one of the main trunkline routes out of the Drainesville’s AT&T Long Distance office. Knowing some of their facilities are still active and most likely include above ground access huts and amplifier points. Much of this fiber work will have to be completed in a start-finish relationship due to proximity to each other and limited available splicing crews, which opens the schedule up to significant risk from the cumulative/domino effect.

Risk Mitigation Strategy and Team Experience that will Ensure Successful Delivery of the Project:

As an overall mitigation strategy, our team implements early and continual communication with the utility companies to stay ahead of and avoid unforeseen delays and costs. By integrating them into the project early and establishing a partnership with them, they are more responsive and collaborative in developing solutions. In addition to this overarching approach, our Team has many lessons learned on strategies that have mitigated similar situations.

Between his time at VDOT and RDA, John Myers has over 18 years working with utilities in this area. While at VDOT he managed coordination’s for the 29/Gallows Intersection project known as one of the most congested utility relocations in the region.

On the 29 Widening Project RDA worked closely with Dominion Energy to limit an almost 2-mile project to a handful of inline adjustments reducing ROW impacts and schedule implications

To facilitate resolution of Dominion Energy’s concerns over reduced available space and constraints associated with features such as noise barriers, our utility lead, RDA, has a certified electric utility designer on staff that will work with the roadway designers and **develop initial layouts of viable pole routes for relocation**. Based on past experience, Dominion appreciates and utilizes our preliminary efforts to advance their relocation engineering. His experience in design of aerial power facilities will help our team identify issues sooner, and, in turn, **provide solutions faster to mitigate schedule and cost impacts**. Additionally, if aerial relocation is not feasible and an underground ductbank is needed, RDA, who holds an on-call contract with Dominion Energy for underground conduit design, will expedite a design that will ensure that the ductbank design is fully integrated with the roadway plans to minimize revisions to a minimum.

For the Washington Gas betterment project, we will obtain the design files from Washington Gas and reference it in our roadway plans as they are developed to provide work arounds or facilitate a dialogue with the Washington Gas designer, EN Engineering, so that they can make reasonable adjustments. Our utility team has a long history of working with EN Engineering, including recent experience on the Purple Line project in Maryland consisting of an 18-mile corridor of relocation of distribution and transmission lines. Our CM, Dave Leber, has relevant experience with Washington Gas Relocations from his time as the Utility Assistant CM in the InterCounty Connector and Route 7 Bridge Rehabilitation over DTR project.

Relocations being integrated into the plans and project schedule give us the opportunity to look ahead and ensure our goals and milestones meet the project needs

The Columbia Gas pumping station will be a priority for our utility test pit program. Once we’ve identified their locations, we will meet with Columbia onsite to discuss the facilities, ensure all facilities are shown on the plans, and obtain limitations on work that can be performed in the vicinity of their pumping station. RDA has a long history of working with Columbia Gas and their consultant designer on numerous projects throughout Northern Virginia and have built a history of successful projects of working together.

In order to mitigate Verizon’s inherent challenges, RDA hired a retired Verizon Engineer that previously serviced this area. His historical knowledge of the facilities in the region greatly exceeds that of the current Verizon consultant designers and will be a key factor in facilitating the Verizon relocation designs that will have the least impact on the project. Additionally, his contacts inside Verizon are still exceptionally strong, and have been instrumental in ensuring that the other disciplines within Verizon (i.e. construction, inspection, etc) **allocate resources to the job as early as possible and continue to pursue the work until complete**. His presence greatly reduces the time needed for information to work its way through the Verizon sections and back to the project staff which greatly reduces the response time to issues that arise in the field.

RDA’s Bill Suter will be handling the Verizon coordination. With over 22 years of experience as the area’s Verizon engineer his knowledge of VZNs’ facilities and internal contacts will minimize their relocation work and help ensure they keep moving during field operations

Our utility team, led by RDA, has provided recent design services for all of the fiber optic companies located within the corridor. They are experienced in their requirements and design standards and will **analyze the feasibility of joint utility ductbank(s)**. Implementation of ductbank systems will consolidate the room needed for each facility. Having our team develop the design will also allow better integration with the design to ensure that these relocations are not designed into additional conflict. RDA has recent experience designing joint ductbank systems on several projects including but not limited to the Route 29 Solutions project in Charlottesville as well as the Route 7 Bridge Rehabilitation over DTR project that involved many of the same utilities.

Role of VDOT and Other Agencies: VDOT’s role will remain as it always is on our Team’s Design-Build project. VDOT will maintain oversight responsibilities and will review each Plan & Estimates package received. We will, of course, seek the Department’s input and guidance in complicated situations or when required by

third party agreement. We understand through this contract the utilities are our responsibility, but at the same time value their opinion and input when issues arise.

Risk No. 3 – Right of Way

Risk Identification: Right of Way acquisition, in a time frame to allow unimpeded construction to proceed, is of vital importance on any Design-Build Project. The size of the project (over 200 anticipated parcels impacted) and the various types of ownership (HOAs, Church/Non-Profits, diplomatic embassy, utility owned parcels, corporation owned parcels, jurisdiction owned parcels, cemeteries) make Right of Way (ROW) acquisition extremely complex.

Why ROW is Critical and the Impacts to the Project: Although much of the background data gathered by our ROW team will be used on multiple appraisals, the sheer number of parcels will take extensive resources to appraise and negotiate. That process is further complicated by the types of parcels that will be impacted. One such challenge is dealing with HOAs. Many HOAs require approval from a quorum of their membership, which can be difficult based on the size of the HOA, not to mention that they often engage their local politicians into the discussions when they don't get what they want. At the other extreme, our experience with Churches and non-profits, depending on the severity of the impact, has been reasonable. However, unless they are incorporated, they cannot make a final commitment without a court judge signing off on the terms and conditions. Add in a property owned by a diplomatic embassy which is not subject the same laws as other ownerships, cemeteries whose relatives can be difficult to track down, and things just got more complex.

Although the types of ROW ownership and extensive nature of the acquisition is complex, the impact to the project is not. All of these challenges add up to two things: schedule and cost.

The potential for many, if not most, of these parcels to end up in condemnation is high. The challenge is that most will want to prolong the discussion in hopes of getting more compensation. These iterative discussions, often without conclusion or agreement, drastically extend the timeline to condemnation. Even when agreement can be met, the delays in obtaining access to the property for construction can be extensive.

These same parcel owners that impact the timeline also impact VDOT's exposure to added costs. Although the Department has certain thresholds to accommodate settlements in excess of fair market value, the number of potential parcels, which we believe will be higher than normal, that will negotiate additional compensation will have a significant impact on the overall cost of ROW. Those that do not come to agreement and go to condemnation (also anticipated to be a large number), will have an even more significant impact on the ROW costs due to the condemnation process.

Risk Mitigation Strategy and Team Experience that will Ensure Successful Delivery of the Project: Our ROW team is one of the largest in the Commonwealth with more than 15 full-time dedicated ROW staff. We have experience securing rights of way on multiple projects with compressed simultaneous schedules. We have completed on time and on budget for the concurrent acquisitions on the Rte. 28 Widening, Minnieville Rd. Widening, and Purcell Rd. Improvement Projects in Prince William County having a combined total of 169 acquisition Parcels while also completing acquisitions on Garrisonville Rd. and Truslow Rd. in Stafford County having a combined total of 64 acquisition Parcels. Understanding the urgency to clear properties for the project, our team has engaged several VDOT approved appraisers in the region to line up the resources to expedite the acquisition. A prioritization of impacts will be developed based on time and criticality to construction. Our team (design, construction, ROW) will work together to develop this list of parcels. They will then develop avoidance strategies (i.e. alignment adjustments, retaining walls, typical section refinement, etc.). Our ROW team will then work with our Public Relations team to reach out, engage, and open a positive dialog with homeowners, HOAs, businesses, churches, and other owners. The goal is to present a consistent message and to sell the virtues of the project.

HOAs – The ROW team will obtain each of the by-laws of the HOAs at the beginning of the project to facilitate a better understanding and develop a strategic game plan. We will build upon the information already gathered by VDOT's public outreach as well as check the available public records to determine the proper parties with

authority to represent the HOA's to avoid delays in making meaningful contacts. The goal of this action is to **accelerate** the process. We will communicate the project schedule to the HOA's from the initial contact so that they can assess their ability to act under their by-laws in a timely manner. In cases where they cannot we will secure their concurrence that the filing of a Certificate while their internal process continues. This has been an effective approach in many previous HOA acquisitions.

Church/Non-Profits – Our team includes a practicing attorney (previously with VDOT) that has a career of experience in providing assistance to Church and Non-Profit Organizations in preparing and submitting the required documents to obtain Court approval of these transactions. His experience and expertise will facilitate early discussions to expedite their acquisition where avoidance cannot be achieved.

Cemeteries – If avoidance cannot be achieved, a survey to determine if graves are present will be required. The names of any of the interred will be determined early in design so that surviving family members can be contacted and the process of reinternment can begin ASAP.

Perhaps the best strategy to minimize schedule and to manage the potential for cost impacts associated with ROW is to develop set/defined timeframes for each step of the ROW process. Although general guidance is given for how long each aspect of ROW should take, the Department is hesitant to set limits which we fully understand given the dynamic nature of ROW acquisitions. However, given the overall size and potential impact ROW will have on the success of this project, we recommend that some reasonable time limits be established. Deviation from these timeframes can be accommodated but should be the exception not the rule. Below are our recommendations that we believe will allow the schedule risk to be significantly minimized and allow the cost aspects to be better managed by the schedule expectations.

- Appraisals (LANE Team) – 60 days
- Appraisal Approval (VDOT) – 5 days
- Negotiations (LANE Team) – 90 days
- Review of Negotiation Package / funding for closing (VDOT) – 30 days

Role of VDOT and Other Agencies: Although VDOT's role in the success of ROW Acquisition will be no different on this project, there are elements of that role that are critical to its success. For instance, VDOT will perform separate reviews as the plans are developed and grant multiple, parcel specific, Notices to Commence Acquisition to facilitate our ROW action plan. In addition to VDOT's typical role, jurisdictions can help to provide a positive message regarding the benefits of the project to facilitate community buy-in. Finally, the court systems will be involved to rule on impacts to churches, non-profits, and cemeteries, as well as, process condemnation cases.

ATTACHMENT 3.1.2
SOQ CHECKLIST

ATTACHMENT 3.1.2

Project Nos.: 0007-029-942 and 0007-029-225

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

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 Attachment 3.1.2
Acknowledgement of RFQ, Revision and/or Addenda	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	Appendix Attachment 2.10
Letter of Submittal (on Offeror's letterhead)				
Authorized Representative's signature	NA	Section 3.2.1	yes	Page 2
Offeror's point of contact information	NA	Section 3.2.2	yes	Page 1
Principal officer information	NA	Section 3.2.3	yes	Page 2
Offeror's Corporate Structure	NA	Section 3.2.4	yes	Page 2
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	Page 2
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	Page 2 & Appendix Attachment 3.2.6
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	Appendix Attachment 3.2.7(a) & 3.2.7(b)

ATTACHMENT 3.1.2

Project Nos.: 0007-029-942 and 0007-029-225

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	Appendix
Evidence of obtaining bonding	NA	Section 3.2.9	no	Appendix
SCC and DPOR Registration Documentation (Appendix)	Attachment 3.2.10	Section 3.2.10	no	Appendix Attachment 3.2.10
Full size copies of SCC Registration	NA	Section 3.2.10.1	no	Appendix
Full size copies of DPOR Registration (Offices)	NA	Section 3.2.10.2	no	Appendix
Full size copies of DPOR Registration (Key Personnel)	NA	Section 3.2.10.3	no	Appendix
Full size copies of DPOR Registration (Non-APELSCIDLA)	NA	Section 3.2.10.4	no	N/A
DBE statement within Letter of Submittal confirming Offeror is committed to achieving the required DBE goal	NA	Section 3.2.11	yes	Page 2
Offeror's Team Structure				Page 3
Identity of and qualifications of Key Personnel	NA	Section 3.3.1	yes	Page 3
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	Appendix Attachment 3.3.1
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.2	no	Appendix Attachment 3.3.1
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.3	no	Appendix Attachment 3.3.1

ATTACHMENT 3.1.2

Project Nos.: 0007-029-942 and 0007-029-225

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.4	no	Appendix Attachment 3.3.1
Key Personnel Resume – Utility Coordination Manager	Attachment 3.3.1	Section 3.3.1.5	no	Appendix Attachment 3.3.1
Key Personnel Resume – Public Relations Specialist	Attachment 3.3.1	Section 3.3.1.6	no	Appendix Attachment 3.3.1
Organizational chart	NA	Section 3.3.2	yes	Page 4
Organizational chart narrative	NA	Section 3.3.2	yes	Pages 5-7
Experience of Offeror’s Team				Page 8
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	Appendix Attachment 3.4.1(a)
Lead Designer Work History Form	Attachment 3.4.1(b)	Section 3.4	no	Appendix Attachment 3.4.1(b)
Project Risks				Pages 9-15
Address Project Risk 1 included in RFQ, and identify and discuss two additional project risks (Project Risk 2 and 3)	NA	Section 3.5.1	yes	Pages 9-15

ATTACHMENT 2.10
FORM C-78-RFQ

ATTACHMENT 2.10

**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION**

RFQ NO. C00099478DB98
PROJECT NOs.: 0007-029-942 and 0007-029-225

ACKNOWLEDGEMENT OF RFQ, REVISION AND/OR ADDENDA

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

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

1. Cover letter of RFQ – August 15, 2017
(Date)
2. Cover letter of RFQ Addendum No. 1 – September 6, 2017
(Date)
3. Cover letter of _____
(Date)



SIGNATURE

09/21/2017

DATE

Richard A. McDonough

PRINTED NAME

Senior District Manager

TITLE

**ATTACHMENT 3.2.6
AFFILIATED AND SUBSIDIARY COMPANIES
OF THE OFFEROR**

ATTACHMENT 3.2.6

State Project Nos. 0007-029-942 and 0007-029-225

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.

<input type="checkbox"/> The Offeror does not have any affiliated or subsidiary companies.
<input checked="" type="checkbox"/> Affiliated and/ or subsidiary companies of the Offeror are listed below.

Relationship with Offeror (Affiliate or Subsidiary)	Full Legal Name	Address
ULTIMATE PARENT	Salini Impregilo, S.p.A.	Via dei Missaglia, 97 – 20142 Milan, Italy
GRANDPARENT (LII PARENT)	Salini-Impregilo US Holdings, Inc.	2711 Centerville, Suite 400 Wilmington, DE 19808
PARENT	Lane Industries Incorporated ("LII")	90 Fieldstone Court Cheshire CT 06410 -1212
LII CHILD	Lane Infrastructure, Inc.	90 Fieldstone Court Cheshire CT 06410 -1212
LII CHILD	Lane Worldwide Infrastructure, Inc. ("LWI")	90 Fieldstone Court Cheshire, CT 06410-1212
LII CHILD	Lane Power & Energy Solutions, Inc.	16000 Park Ten Place, Suite 703 Houston, TX 77084
LWI CHILD	Lane International, B.V.	Prins Bernhardplein 200, 1907 JB Amsterdam, The Netherlands

LWI CHILD	Lane Mid-East Contracting, LLC	c/o Makateb Business Center Makeen Tower Corner of 9th & 10th Streets P.O. Box 35243. Abu Dhabi, UAE
LWI CHILD	Lane Mid-East Qatar, LLC	P.O. Box 13300 Doha, Qatar
LII CHILD/PARENT	The Lane Construction Corporation	90 Fieldstone Court Cheshire, CT 06410-1212
SUBSIDIARY	S.A. Healy Company	901 N. Green Valley Parkway, Suite 260, Henderson, NV 89074
SUBSIDIARY	Lanecon Corporation	90 Fieldstone Court Cheshire, CT 06410-1212
SUBSIDIARY	Wardwell Family Realty, LLC	90 Fieldstone Court Cheshire, CT 06410-1212
BROTHER/SISTER**	Civil Wall Solutions, A Division of The Lane Construction Corporation	90 Fieldstone Court Cheshire, CT 06410-1212
BROTHER/SISTER**	Cold River Materials, A Division of The Lane Construction Corporation	90 Fieldstone Court Cheshire, CT 06410-1212
BROTHER/SISTER**	Lane Concrete Frames, A Division of The Lane Construction Corporation	90 Fieldstone Court Cheshire, CT 06410-1212
BROTHER/SISTER**	Prestress of the Carolinas a Division of The Lane Construction Corporation	90 Fieldstone Court Cheshire, CT 06410-1212
BROTHER/SISTER**	Senate Asphalt, A Division of The Lane Construction Corporation	90 Fieldstone Court Cheshire, CT 06410-1212
BROTHER/SISTER**	Virginia Paving Company, A Division of The Lane Construction Corporation	90 Fieldstone Court Cheshire, CT 06410-1212
BROTHER/SISTER**	Virginia Sign & Lighting Company a Division of The Lane Construction Corporation	90 Fieldstone Court Cheshire, CT 06410-1212

AFFILIATE (PARENT)	Wagman, Inc.	3290 North Susquehanna Trail York, PA 17406
AFFILIATE	Wagman Construction, Inc.	3290 North Susquehanna Trail York, PA 17406
AFFILIATE	Wagman Investments, Ltd.	3290 North Susquehanna Trail York, PA 17406
AFFILIATE	Route 52 Constructors	3290 North Susquehanna Trail York, PA 17406
AFFILIATE	404 Corridor Safety Constructors	3290 North Susquehanna Trail York, PA 17406
AFFILIATE	Corman – Wagman, A Joint Venture	12001 Guilford Road Annapolis Junction, MD 20701
AFFILIATE	Nova Express Lanes Constructors	3290 North Susquehanna Trail York, PA 17406
AFFILIATE	Wagman/Cianbro, A Joint Venture	3290 North Susquehanna Trail York, PA 17406
AFFILIATE	Intercounty Constructors	120 White Plains Road, Suite 310 Tarrytown, NY 10591

** All affiliates listed as "BROTHER/SISTER" are other DBA names under which The Lane Construction Corporation operates.

ATTACHMENT 3.2.7(a)
DEBARMENT FORM- PRIMARY COVERED
TRANSACTIONS

ATTACHMENT 3.2.7(a)

CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS

Project Nos.: 0007-029-942 and 0007-029-225

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

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

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

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

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

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

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


Signature

September 21, 2017
Date

Senior District Manager
Title

The Lane Construction Corporation

Name of Firm

ATTACHMENT 3.2.7(a)

**CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS**

Project Nos.: 0007-029-942 and 0007-029-225

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

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

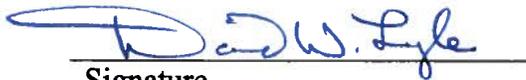
b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under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

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

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

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

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


Signature

September 21, 2017
Date

Vice President - Design-Build / Major Pursuits
Title

Wagman Heavy Civil, Inc.

Name of Firm

ATTACHMENT 3.2.7(b)
DEBARMENT FORM- LOWER TIER COVERED
TRANSACTIONS

ATTACHMENT 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project Nos.: 0007-029-942 and 0007-029-225

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

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

	September 21, 2017	Director, Transportation
Signature	Date	Title

Rummel, Klepper & Kahl, LLP (RK&K)

Name of Firm

ATTACHMENT 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project Nos.: 0007-029-942 and 0007-029-225

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

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



Signature

September 21, 2017

Date

Director of Engineering/Principal

Title

Rinker Design Associates, P.C.

Name of Firm

ATTACHMENT 3.2.7(b)

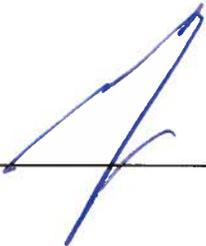
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project Nos.: 0007-029-942 and 0007-029-225

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

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

	September 21, 2017	VP of Business Development
Signature	Date	Title



DIW Group, Inc. t/a Specialized Engineering

Name of Firm

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project Nos.: 0007-029-942 and 0007-029-225

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

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

 _____ Signature	September 21, 2017 _____ Date	Vice President _____ Title
---	-------------------------------------	----------------------------------

DMY Engineering Consultants Inc.

Name of Firm

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project Nos.: 0007-029-942 and 0007-029-225

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

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


Signature

September 21, 2017
Date

President
Title

Quinn Consulting Services, Inc.
Name of Firm

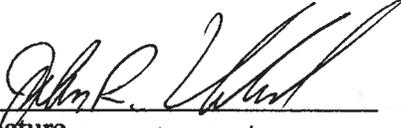
ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project Nos.: 0007-029-942 and 0007-029-225

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

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

 _____ Signature	<u>9/13/17</u> _____ Date	<u>COO</u> _____ Title
<u>Undeland Associates</u> _____ Name of Firm		

**OFFEROR'S VDOT
PREQUALIFICATION CERTIFICATE**

From: McDonough, Richard A.
Sent: Tuesday, September 19, 2017 12:36 PM
To: Shoemaker, Mary E. <MEShoemaker@laneconstruct.com>; Minier, Stephanie L. <SLMinier@laneconstruct.com>
Subject: FW: CORRECTION: Your assigned Joint Venture # is JV088

For the record.



Richard McDonough | Senior District Manager
The Lane Construction Corporation

T 703-225-7597 M 703-898-3811

From: Prequalification (VDOT)
Sent: Tuesday, September 19, 2017 12:28 PM
To: McDonough, Rich
Subject: Your assigned Joint Venture # is JV088
Importance: High

The Lane Construction Corporation,
Wagman Heavy Civil, Inc.,

Thank you for submitting the Joint Venture agreement to the Prequalification Office.
We have processed the paperwork and the
Joint Venture: LANE-Wagman, A Joint Venture is assigned the # **JV088**

Please forward this email to Wagman Heavy Civil, Inc.

Please feel free to contact me if there are any concerns.

Thank-you

Suzanne Lucas, CAPM

State Prequalification Supervisor
Construction Division
Virginia Department of Transportation
1401 East Broad Street
Richmond, Virginia 23219
(804) - 786-2941

Email: Prequalification@VDOT.Virginia.gov



Department's List of Prequalified Vendors
Includes All Qualified Levels As Of 9/8/2017

- L -

Vendor ID: L002

Vendor Name: THE LANE CONSTRUCTION CORPORATION

Prequal Level: Prequalified

Prequal Exp: 06/30/2018

-- PREQ Address --

90 FIELDSTONE COURT
CHESHIRE, CT 06410-1212
Phone: (203)235-3351
Fax: (203)237-4260

Work Classes (Listed But Not Limited To)

002 - GRADING
003 - MAJOR STRUCTURES
004 - ASPHALT CONCRETE PAVING
006 - PORTLAND CEMENT CONCRETE PAVING
007 - MINOR STRUCTURES
045 - UNDERGROUND UTILITIES

Bus. Contact: CAIOLA, VINCENT JAMES

Email: VAPREQUAL@LANECONSTRUCT.COM

-- DBE Information --

DBE Type: N/A

DBE Contact: N/A



COMMONWEALTH OF VIRGINIA



CERTIFICATE OF QUALIFICATION

WAGMAN HEAVY CIVIL, INC.

Vendor Number: **W002**

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

PREQUALIFIED

Your firm specializes in the noted Classification(s):

**MAJOR STRUCTURES; MINOR STRUCTURES; CLEARING AND GRUBBING;
DEMOLITION OF STRUCTURES; EXCAVATING**

Issue Date: October 31, 2016

This Rating and Classification will Expire: October 31, 2017

Suzanne FR Lucas, State Prequalification Officer

Don E. Silies, Director of Contracts

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

SURETY LETTER

LIBERTY MUTUAL INSURANCE COMPANY BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND
NATIONAL UNION FIRE INSURANCE COMPANY OF PITTSBURGH, PA
CONTINENTAL CASUALTY COMPANY

September 13, 2017

John Daulas, P.E.
Alternate Project Delivery Division
Virginia Department of Transportation
1401 East Broad Street
Richmond, VA 23219

RE: LANE-Wagman, A Joint Venture
Request for Qualifications - A DESIGN-BUILD PROJECT
ROUTE 7 CORRIDOR IMPROVEMENTS; From: Reston Avenue To: Jarret Valley Drive
Fairfax County, Virginia; State Project Nos.: 0007-029-942 and 0007-029-225
Federal Project Nos.: STP-5A01(745) and STP-5A01(790); Contract ID Number: C00099478DB98
Estimated Contract Price: \$178,000,000.00

To Whom It May Concern:

This letter will serve to confirm that LANE-Wagman, A Joint Venture is a highly regarded and valued client of the sureties, Liberty Mutual Insurance Company (A.M. Best Financial Strength Rating of A/Excellent and Financial Size Category XV), Berkshire Hathaway Specialty Insurance Company (A.M. Best Financial Strength Rating of A++/Superior and Financial Size Category XV), Fidelity and Deposit Company of Maryland (A.M. Best Financial Strength Rating of A+/Superior and Financial Size Category XV), National Union Fire Insurance Company of Pittsburgh, PA (A.M. Best Financial Strength Rating of A/Excellent and Financial Size Category XV), and Continental Casualty Company (A.M. Best Financial Strength Rating of A/Excellent and Financial Size Category XV), the 'co-sureties'. Each surety company is licensed to conduct surety business in the Commonwealth of Virginia, and each surety company holds a Certificate of Authority as listed in the Department of the Treasury's Listing of Approved Sureties (Department Circular 570) dated July 1, 2017.

As the sureties for LANE-Wagman, A Joint Venture, we advise that LANE-Wagman, A Joint Venture is capable of obtaining 100% Performance Bond and 100% Labor and Materials Payment Bond in the amount of the anticipated cost of construction, and said bonds will cover the Project and any warranty periods as provided for in the Contract Documents on behalf of the Contractor, in the event that such firm be the successful bidder and enter into a contract for this Project.

Naturally, as is customary within the surety industry, the issuance of any bonds is contingent upon a favorable underwriting review of project specifics including, but not limited to, the contract terms, conditions, documents, bond forms and confirmation of complete project financing by both LANE-Wagman, A Joint Venture and its co-sureties at the time a request for bonds is made. We assume no liability to third parties or to you by issuance of this letter, should bid or final bonds not be issued.

Should you need additional assurance regarding the technical ability or bonding capacity of LANE-Wagman, A Joint Venture, please do not hesitate to contact this office.

Sincerely,

Liberty Mutual Insurance Company
Berkshire Hathaway Specialty Insurance Company
Fidelity and Deposit Company of Maryland
National Union Fire Insurance Company of Pittsburgh, PA
Continental Casualty Company



Theresan E. Rowedder
Attorney-in-Fact

THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 7774582

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company West American Insurance Company

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Brian Driscoll; Bryan Huff; Gregory J. Steele; Jane Gilson; Jean Correia; Kevin A. White; Maria Chaves; Mark P. Herendeen; Theresan E. Rowedder

all of the city of Boston, state of MA each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 22nd day of May, 2017.



The Ohio Casualty Insurance Company
Liberty Mutual Insurance Company
West American Insurance Company

By: David M. Carey
David M. Carey, Assistant Secretary

STATE OF PENNSYLVANIA ss
COUNTY OF MONTGOMERY

On this 22nd day of May, 2017, before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Teresa Pastella, Notary Public
Upper Merion Twp., Montgomery County
My Commission Expires March 28, 2021
Member, Pennsylvania Association of Notaries

By: Teresa Pastella
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS – Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII – Execution of Contracts – SECTION 5. Surety Bonds and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 13th day of SEPTEMBER, 20 17



By: Renee C. Llewellyn
Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.



Power Of Attorney

BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY NATIONAL INDEMNITY COMPANY / NATIONAL LIABILITY & FIRE INSURANCE COMPANY

Know all men by these presents, that **BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY**, a corporation existing under and by virtue of the laws of the State of Nebraska and having an office at 100 Federal Street, 20th Floor, Boston, Massachusetts 02110, **NATIONAL INDEMNITY COMPANY**, a corporation existing under and by virtue of the laws of the State of Nebraska and **NATIONAL LIABILITY & FIRE INSURANCE COMPANY**, a corporation existing under and by virtue of the laws of the State of Connecticut (hereinafter collectively the "Companies"), pursuant to and by the authority granted as set forth herein, do hereby name, constitute and appoint: **Maria Chaves, Theresan E. Rowedder, Jane Gilson, Jean Correla, Mark P. Herendeen, One Federal Street, 20th Floor of the city of Boston State of Massachusetts**, their true and lawful attorney(s)-in-fact to make, execute, seal, acknowledge, and deliver, for and on their behalf as surety and as their act and deed, any and all undertakings, bonds, or other such writings obligatory in the nature thereof, in pursuance of these presents, the execution of which shall be as binding upon the Companies as if it has been duly signed and executed by their regularly elected officers in their own proper persons. This authority for the Attorney-in-Fact shall be limited to the execution of the attached bond(s) or other such writings obligatory in the nature thereof.

In witness whereof, this Power of Attorney has been subscribed by an authorized officer of the Companies, and the corporate seals of the Companies have been affixed hereto this date of November 18, 2014. This Power of Attorney is made and executed pursuant to and by authority of the Bylaws, Resolutions of the Board of Directors, and other Authorizations of **BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY, NATIONAL INDEMNITY COMPANY and NATIONAL LIABILITY & FIRE INSURANCE COMPANY**, which are in full force and effect, each reading as appears on the back page of this Power of Attorney, respectively.

BERKSHIRE HATHAWAY SPECIALTY
INSURANCE COMPANY,

By: _____
David Fields, Executive Vice President



NATIONAL INDEMNITY COMPANY,
NATIONAL LIABILITY & FIRE INSURANCE COMPANY,

By: _____
David Fields, Vice President



NOTARY

State of Massachusetts, County of Suffolk, ss:

On this 18th day of November, 2014 before me appeared David Fields, Executive Vice President of BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY and Vice President of NATIONAL INDEMNITY COMPANY and NATIONAL LIABILITY & FIRE INSURANCE COMPANY, who being duly sworn, says that his capacity is as designated above for such Companies; that he knows the corporate seals of the Companies; that the seals affixed to the foregoing instrument are such corporate seals; that they were affixed by order of the board of directors or other governing body of said Companies pursuant to its Bylaws, Resolutions and other Authorizations, and that he signed said instrument in that capacity of said Companies.

[Notary Seal]



Notary Public

I, Brennan Neville, the undersigned, Assistant Secretary of **BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY, NATIONAL INDEMNITY COMPANY and NATIONAL LIABILITY & FIRE INSURANCE COMPANY**, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies which is in full force and effect and has not been revoked. IN TESTIMONY WHEREOF, I have hereunto affixed the seals of said companies this date of September 13, 2017.



Assistant Secretary



FOR CLAIM NOTIFICATION please send via email at claimsnotice@bhspecialty.com, via fax to (617) 507-8259, contact our 24 hour number at (855) 453-9675 or mail Berkshire Hathaway Specialty Insurance, 500 Northpark Town Center, 1100 Abernathy Road, N.E., Suite 1200, Atlanta, GA 30328.

BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY (BYLAWS)

ARTICLE V.

CORPORATE ACTIONS

....

EXECUTION OF DOCUMENTS:

....

Section 6.(b) The President, any Vice President or the Secretary, shall have the power and authority:

- (1) To appoint Attorneys-in-fact, and to authorize them to execute on behalf of the Company bonds and other undertakings, and
- (2) To remove at any time any such Attorney-in-fact and revoke the authority given him.

NATIONAL INDEMNITY COMPANY (BY-LAWS)

Section 4. Officers, Agents, and Employees:

A. The officers shall be a President, one or more Vice Presidents, a Secretary, one or more Assistant Secretaries, a Treasurer, and one or more Assistant Treasurers none of whom shall be required to be shareholders or Directors and each of whom shall be elected annually by the Board of Directors at each annual meeting to serve a term of office of one year or until a successor has been elected and qualified, may serve successive terms of office, may be removed from office at any time for or without cause by a vote of a majority of the Board of Directors, and shall have such powers and rights and be charged with such duties and obligations as usually are vested in and pertain to such office or as may be directed from time to time by the Board of Directors; and the Board of Directors or the officers may from time to time appoint, discharge, engage, or remove such agents and employees as may be appropriate, convenient, or necessary to the affairs and business of the corporation.

NATIONAL INDEMNITY COMPANY (BOARD RESOLUTION ADOPTED AUGUST 6, 2014)

RESOLVED, That the President, any Vice President or the Secretary, shall have the power and authority to (1) appoint Attorneys-in-fact, and to authorize them to execute on behalf of this Company bonds and other undertakings and (2) remove at any time any such Attorney-in-fact and revoke the authority given.

NATIONAL LIABILITY & FIRE INSURANCE COMPANY (BY-LAWS)

ARTICLE IV

Officers

Section 1. Officers, Agents and Employees:

A. The officers shall be a president, one or more vice presidents, one or more assistant vice presidents, a secretary, one or more assistant secretaries, a treasurer, and one or more assistant treasurers, none of whom shall be required to be shareholders or directors, and each of whom shall be elected annually by the board of directors at each annual meeting to serve a term of office of one year or until a successor has been elected and qualified, may serve successive terms of office, may be removed from office at any time for or without cause by a vote of a majority of the board of directors. The president and secretary shall be different individuals. Election or appointment of an officer or agent shall not create contract rights. The officers of the Corporation shall have such powers and rights and be charged with such duties and obligations as usually are vested in and pertain to such office or as may be directed from time to time by the board of directors; and the board of directors or the officers may from time to time appoint, discharge, engage, or remove such agents and employees as may be appropriate, convenient, or necessary to the affairs and business of the Corporation.

NATIONAL LIABILITY & FIRE INSURANCE COMPANY (BOARD RESOLUTION ADOPTED AUGUST 6, 2014)

RESOLVED, That the President, any Vice President or the Secretary, shall have the power and authority to (1) appoint Attorneys-in-fact, and to authorize them to execute on behalf of this Company bonds and other undertakings and (2) remove at any time any such Attorney-in-fact and revoke the authority given.

**ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND
POWER OF ATTORNEY**

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Maryland, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Maryland (herein collectively called the "Companies"), by **GERALD F. HALEY, Vice President**, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint **Kevin A. WHITE, Mark P. HERENDEEN, Jean CORREIA, Maria CHAVES, Theresan E. ROWEDDER, Bryan HUFT and Jane GILSON**, all of Boston, Massachusetts, EACH its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: **any and all bonds and undertakings**, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said **ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND**, this 21st day of July, A.D. 2016.

ATTEST:

**ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND**



By: *Eric D. Barnes*
Eric D. Barnes
Secretary
Eric D. Barnes

Gerald F. Haley
Gerald F. Haley
Vice President
Gerald F. Haley

State of Maryland
County of Baltimore

On this 21st day of July, A.D. 2016, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **GERALD F. HALEY, Vice President, and ERIC D. BARNES, Secretary**, of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, deposeth and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.

Maria D. Adamski

Maria D. Adamski, Notary Public
My Commission Expires: July 8, 2019



EXTRACT FROM BY-LAWS OF THE COMPANIES

"Article V, Section 8, Attorneys-in-Fact. The Chief Executive Officer, the President, or any Executive Vice President or Vice President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Company, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify or revoke any such appointment or authority at any time."

CERTIFICATE

I, the undersigned, Vice President of the ZURICH AMERICAN INSURANCE COMPANY, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that Article V, Section 8, of the By-Laws of the Companies is still in force.

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the ZURICH AMERICAN INSURANCE COMPANY at a meeting duly called and held on the 15th day of December 1998.

RESOLVED: "That the signature of the President or a Vice President and the attesting signature of a Secretary or an Assistant Secretary and the Seal of the Company may be affixed by facsimile on any Power of Attorney...Any such Power or any certificate thereof bearing such facsimile signature and seal shall be valid and binding on the Company."

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at a meeting duly called and held on the 5th day of May, 1994, and the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990.

RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this 13th day of SEPTEMBER, 2017.



Michael Bond, Vice President

TO REPORT A CLAIM WITH REGARD TO A SURETY BOND, PLEASE SUBMIT ALL REQUIRED INFORMATION TO:

Zurich American Insurance Co.
Attn: Surety Claims
1299 Zurich Way
Schaumburg, IL 60196-1056

POWER OF ATTORNEY

American Home Assurance Company
National Union Fire Insurance Company of Pittsburgh, PA.
Principal Bond Office: 175 Water Street, New York, NY 10038

Power No. 1761

No. 01-B-103378

KNOW ALL MEN BY THESE PRESENTS:

That American Home Assurance Company, a New York corporation, and National Union Fire Insurance Company of Pittsburgh, PA., a Pennsylvania corporation, does each hereby appoint

Mark P. Herendeen, Jean Correia, Maria Chaves, Jane Gilson, Theresan E. Rowedder of Boston, Massachusetts

its true and lawful Attorney(s)-in-Fact, with full authority to execute on its behalf bonds, undertakings, recognizances and other contracts of indemnity and writings obligatory in the nature thereof, issued in the course of its business, and to bind the respective company thereby.

IN WITNESS WHEREOF, American Home Assurance Company and National Union Fire Insurance Company of Pittsburgh, PA. have each executed these presents

this 20th day of April, 2017



Handwritten signature of Michael Yang

Michael Yang, Vice President

STATE OF NEW YORK
COUNTY OF NEW YORK } ss.

On this 20th day of April, 2017 before me came the above named officer of American Home Assurance Company and National Union Fire Insurance Company of Pittsburgh, PA. to me personally known to be the individual and officer described herein, and acknowledged that he executed the foregoing instrument and affixed the seals of said corporations thereto by authority of his office.

Handwritten signature of Juliana Hallenbeck

JULIANA HALLENBECK
Notary Public - State of New York
No. 0144612571
Qualified in Broome County
By Commission Expires April 19, 2021

CERTIFICATE

Exerpts of Resolutions adopted by the Boards of Directors of American Home Assurance Company and National Union Fire Insurance Company of Pittsburgh, PA. on May 18, 1976:

"RESOLVED, that the Chairman of the Board, the President, or any Vice President be, and hereby is, authorized to appoint Attorneys-in-Fact to represent and act for and on behalf of the Company to execute bonds, undertakings, recognizances and other contracts of indemnity and writings obligatory in the nature thereof, and to attach thereto the corporate seal of the Company, in the transaction of its surety business;

"RESOLVED, that the signatures and attestations of such officers and the seal of the Company may be affixed to any such Power of Attorney or to any certificate relating thereto by facsimile, and any such Power of Attorney or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the Company when so affixed with respect to any bond, undertaking, recognizance and other contract of indemnity and writing obligatory in the nature thereof;

"RESOLVED, that any such Attorney-in-Fact delivering a secretarial certification that the foregoing resolutions still be in effect may insert in such certification the date thereof, said date to be not later than the date of delivery thereof by such Attorney-in-Fact."

I, Martin Bogue, Assistant Secretary of American Home Assurance Company and of National Union Fire Insurance Company of Pittsburgh, PA. do hereby certify that the foregoing exerpts of Resolutions adopted by the Boards of Directors of these corporations, and the Powers of Attorney issued pursuant thereto, are true and correct, and that both the Resolutions and the Powers of Attorney are in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the facsimile seal of each corporation

this 15th day of September, 2017



Handwritten signature of Martin Bogue

Martin Bogue, Assistant Secretary

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That Continental Casualty Company, an Illinois insurance company, National Fire Insurance Company of Hartford, an Illinois insurance company, and American Casualty Company of Reading, Pennsylvania, a Pennsylvania insurance company (herein called "the CNA Companies"), are duly organized and existing insurance companies having their principal offices in the City of Chicago, and State of Illinois, and that they do by virtue of the signatures and seals herein affixed hereby make, constitute and appoint

Kevin A White, Mark P Herendeen, Maria Chaves, Brian R Driscoll, Jean Correia, Bryan Huft, Jane Gilson, Theresan E Rowedder, Individually

of Boston, MA, their true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on their behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind them thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of their insurance companies and all the acts of said Attorney, pursuant to the authority hereby given is hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law and Resolutions, printed on the reverse hereof, duly adopted, as indicated, by the Boards of Directors of the insurance companies.

In Witness Whereof, the CNA Companies have caused these presents to be signed by their Vice President and their corporate seals to be hereto affixed on this 2nd day of July, 2015.

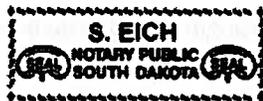


Continental Casualty Company
National Fire Insurance Company of Hartford
American Casualty Company of Reading, Pennsylvania

Paul T. Bruflat
Paul T. Bruflat Vice President

State of South Dakota, County of Minnehaha, ss:

On this 2nd day of July, 2015, before me personally came Paul T. Bruflat to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is a Vice President of Continental Casualty Company, an Illinois insurance company, National Fire Insurance Company of Hartford, an Illinois insurance company, and American Casualty Company of Reading, Pennsylvania, a Pennsylvania insurance company described in and which executed the above instrument; that he knows the seals of said insurance companies; that the seals affixed to the said instrument are such corporate seals; that they were so affixed pursuant to authority given by the Boards of Directors of said insurance companies and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said insurance companies.



My Commission Expires February 12, 2021

S. Eich
S. Eich Notary Public

CERTIFICATE

I, D. Bult, Assistant Secretary of Continental Casualty Company, an Illinois insurance company, National Fire Insurance Company of Hartford, an Illinois insurance company, and American Casualty Company of Reading, Pennsylvania, a Pennsylvania insurance company do hereby certify that the Power of Attorney herein above set forth is still in force, and further certify that the By-Law and Resolution of the Board of Directors of the insurance companies printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said insurance companies this 13th day of SEPTEMBER, 2017.



Continental Casualty Company
National Fire Insurance Company of Hartford
American Casualty Company of Reading, Pennsylvania

D. Bult
D. Bult Assistant Secretary

Authorizing By-Laws and Resolutions

ADOPTED BY THE BOARD OF DIRECTORS OF CONTINENTAL CASUALTY COMPANY:

This Power of Attorney is made and executed pursuant to and by authority of the following resolution duly adopted by the Board of Directors of the Company at a meeting held on May 12, 1995:

"RESOLVED: That any Senior or Group Vice President may authorize an officer to sign specific documents, agreements and instruments on behalf of the Company provided that the name of such authorized officer and a description of the documents, agreements or instruments that such officer may sign will be provided in writing by the Senior or Group Vice President to the Secretary of the Company prior to such execution becoming effective."

This Power of Attorney is signed by Paul T. Bruflat, Vice President, who has been authorized pursuant to the above resolution to execute power of attorneys on behalf of Continental Casualty Company.

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company by unanimous written consent dated the 25th day of April, 2012:

"Whereas, the bylaws of the Company or specific resolution of the Board of Directors has authorized various officers (the "Authorized Officers") to execute various policies, bonds, undertakings and other obligatory instruments of like nature; and

Whereas, from time to time, the signature of the Authorized Officers, in addition to being provided in original, hard copy format, may be provided via facsimile or otherwise in an electronic format (collectively, "Electronic Signatures"); Now therefore be it resolved: that the Electronic Signature of any Authorized Officer shall be valid and binding on the Company."

ADOPTED BY THE BOARD OF DIRECTORS OF NATIONAL FIRE INSURANCE COMPANY OF HARTFORD:

This Power of Attorney is made and executed pursuant to and by authority of the following resolution duly adopted by the Board of Directors of the Company by unanimous written consent dated May 10, 1995:

"RESOLVED: That any Senior or Group Vice President may authorize an officer to sign specific documents, agreements and instruments on behalf of the Company provided that the name of such authorized officer and a description of the documents, agreements or instruments that such officer may sign will be provided in writing by the Senior or Group Vice President to the Secretary of the Company prior to such execution becoming effective."

This Power of Attorney is signed by Paul T. Bruflat, Vice President, who has been authorized pursuant to the above resolution to execute power of attorneys on behalf of National fire Insurance Company of Hartford.

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company by unanimous written consent dated the 25th day of April, 2012:

"Whereas, the bylaws of the Company or specific resolution of the Board of Directors has authorized various officers (the "Authorized Officers") to execute various policies, bonds, undertakings and other obligatory instruments of like nature; and

Whereas, from time to time, the signature of the Authorized Officers, in addition to being provided in original, hard copy format, may be provided via facsimile or otherwise in an electronic format (collectively, "Electronic Signatures"); Now therefore be it resolved: that the Electronic Signature of any Authorized Officer shall be valid and binding on the Company."

ADOPTED BY THE BOARD OF DIRECTORS OF AMERICAN CASUALTY COMPANY OF READING, PENNSYLVANIA:

This Power of Attorney is made and executed pursuant to and by authority of the following resolution duly adopted by the Board of Directors of the Company by unanimous written consent dated May 10, 1995:

"RESOLVED: That any Senior or Group Vice President may authorize an officer to sign specific documents, agreements and instruments on behalf of the Company provided that the name of such authorized officer and a description of the documents, agreements or instruments that such officer may sign will be provided in writing by the Senior or Group Vice President to the Secretary of the Company prior to such execution becoming effective."

This Power of Attorney is signed by Paul T. Bruflat, Vice President, who has been authorized pursuant to the above resolution to execute power of attorneys on behalf of American Casualty Company of Reading, Pennsylvania.

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company by unanimous written consent dated the 25th day of April, 2012:

"Whereas, the bylaws of the Company or specific resolution of the Board of Directors has authorized various officers (the "Authorized Officers") to execute various policies, bonds, undertakings and other obligatory instruments of like nature; and

Whereas, from time to time, the signature of the Authorized Officers, in addition to being provided in original, hard copy format, may be provided via facsimile or otherwise in an electronic format (collectively, "Electronic Signatures"); Now therefore be it resolved: that the Electronic Signature of any Authorized Officer shall be valid and binding on the Company."

ATTACHMENT 3.2.10
SCC AND DPOR INFORMATION TABLES

ATTACHMENT 3.2.10

State Project Nos. 0007-029-942 and 0007-029-225

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.

SCC & DPOR INFORMATION FOR BUSINESSES (RFQ Sections 3.2.10.1 and 3.2.10.2)

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
The Lane Construction Corporation	F0254476	Foreign Corporation	Active	90 Fieldstone Court Cheshire, CT 06410	Contractor Class A	2701011871	01-31-2018
The Lane Construction Corporation	F0254476	Foreign Corporation	Active	90 Fieldstone Court Cheshire, CT 06410	Business Entity Registration	0407002174	12-31-2017
The Lane Construction Corporation	F0254476	Foreign Corporation	Active	14500 Avion Parkway, Suite 200 Chantilly, VA 20151	Business Entity Branch Office Registration	0411000988	02-28-2018
Wagman Heavy Civil, Inc.	F0198988	Foreign Corporation	Active	3290 North Susquehanna Trail, York, PA 17406	Contractor Class A	2701015887	01-31-2019
Rummel, Klepper & Kahl, LLP (RK&K)	K0004178	LLP	Active	2901 S. Lynnhaven Rd Suite 300 Virginia Beach, VA 23452	Business Entity Branch Office Registration	0411000667	02-28-2018
				2100 East Cary Street, Suite 309 Richmond, VA 23223	Business Entity Branch Office Registration	0411000271	02-28-2018
				721 Lakefront Commons Suite 203 Newport News, VA 23606	Business Entity Branch Office Registration	0411000443	02-28-2018
				12600 Fair Lakes Cir, Suite 300 Fairfax, VA 22030	Business Entity Branch Office Registration	0411000577	02-28-2018
				81 Mosher Street Baltimore, MD 21217	Business Entity Registration	0407002860	12-31-2017

ATTACHMENT 3.2.10

State Project Nos. 0007-029-942 and 0007-029-225

SCC and DPOR Information

Rinker Design Associates, P.C. (RDA)	0227062-7	S-Corporation	Active	9385 Discovery Blvd., Suite 200, Manassas, VA 20109	Professional Corporation Registration	0405000502	12-31-2017
					Appraisal Business Registration	4008001684	02-28-2019
				927 Maple Grove Dr., Suite 105, Fredericksburg, VA 22407	Professional Corporation Branch Office Registration	0410000156	02-28-2018
					Appraisal Business Registration	4008001739	04-30-2018
				4301 Dominion Blvd., Suite 100, Glen Allen, VA 23060	Professional Corporation Branch Office Registration	0410000220	02-28-2018
					Appraisal Business Registration	4008001801	04-30-2018
DIW Group, Inc. Specialized Engineering (DBA Name)	F1281908	Foreign Corporation	Active	4845 International Blvd Suite 104 Frederick, MD 21703	Business Entity Registration	0407004748	12-31-2017
DMY Engineering Consultants, Inc.	07688955	Corporation	Active	45662 Terminal Drive, Suite 110 Dulles, VA 20166	Business Entity Registration	0407005631	12-31-2017
Quinn Consulting Services Incorporated	04925517	Corporation	Active	14160 Newbrook Drive Suite 220 Chantilly, VA 20151	Business Entity Registration	0407003733	12-31-2017
Rhodeside & Harwell Incorporated	02783561	Corporation	Active	510 King Street Suite 300 Alexandria, VA 22314	Business Entity Registration	0407004045	12-31-2017
Undeland Associates Inc.	07962731	Corporation	Active	N/A	N/A	N/A	N/A

ATTACHMENT 3.2.10

State Project Nos. 0007-029-942 and 0007-029-225

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
Rummel, Klepper & Kahl, LLP (RK&K)	Peery, Owen Lee, P.E.	Richmond, VA	2100 East Cary Street Suite 309 Richmond, VA 23223	Professional Engineer License	0402046882	10-31-2017
Quinn Consulting Services Incorporated	Vyas, Kaushikkumar Bhupendraprasad, P.E., DBIA.	Chantilly, VA	10170 Spring Drive Gordonsville, VA 22942	Professional Engineer License	0402039004	06-30-2018

**FULL SIZE SCC
SUPPORTING DOCUMENTATION**



THE LANE CONSTRUCTION CORPORATION

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

General

SCC ID: F0254476
Entity Type: Foreign Corporation
Jurisdiction of Formation: CT
Date of Formation/Registration: 7/24/1972
Status: Active
Shares Authorized: 11700

Principal Office

90 FIELDSTONE COURT
CHESHIRE CT06410



Wagman Heavy Civil, Inc.

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

General

SCC ID: F0198988
Entity Type: Foreign Corporation
Jurisdiction of Formation: PA
Date of Formation/Registration: 9/20/1967
Status: Active
Shares Authorized: 4000000

Principal Office

3290 NORTH SUSQUEHANNA TRAIL
YORK PA17406

Commonwealth of Virginia



State Corporation Commission

CERTIFICATE OF FACT

I Certify the Following from the Records of the Commission:

On September 25, 2001, a statement of registration as a foreign registered limited liability partnership was filed in the Clerk's Office of the Commission by Rummel, Klepper & Kahl, LLP, a Maryland limited liability partnership.

As of the date below, this statement of registration is in effect.

Nothing more is hereby certified.



*Signed and Sealed at Richmond on this Date:
January 12, 2016*

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



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

Rinker Design Associates, P.C.

General

SCC ID: 02270627
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 2/24/1982
Status: Active
Shares Authorized: 20000



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

DIW GROUP, INC.

General

SCC ID: F1281908
Entity Type: Foreign Corporation
Jurisdiction of Formation: MD
Date of Formation/Registration: 1/30/1997
Status: Active
Shares Authorized: 2000000



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

DMY ENGINEERING CONSULTANTS INC.

General

SCC ID: 07688955
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 9/6/2013
Status: Active
Shares Authorized: 10000

Principal Office

45662 TERMINAL DRIVE
SUITE 110
DULLES VA20166



QUINN CONSULTING SERVICES INCORPORATED

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

General

SCC ID: 04925517
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 10/24/1997
Status: Active
Shares Authorized: 5000

Principal Office

14160 NEWBROOK DRIVE
SUITE 220
CHANTILLY VA20151



RHODESIDE & HARWELL, INCORPORATED

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

General

SCC ID: 02783561
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 11/14/1985
Status: Active
Shares Authorized: 10000

Principal Office

510 KING STREET SUITE 300
ALEXANDRIA VA22314



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

Undeland Associates Inc.

General

SCC ID: 07962731
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 9/24/2015
Status: Active
Shares Authorized: 100

Principal Office

6605 JILL COURT
MCLEAN VA22101

**FULL SIZE
DPOR SUPPORTING DOCUMENTATION
FOR EACH OFFICE**

DPOR License Lookup License Number 2701011871

License Details

Name	THE LANE CONSTRUCTION CORPORATION / SENATE ASPHALT
DBA Name	VA PAVING COMPANY / VA SIGN AND LIGHTING COMPANY
License Number	2701011871
License Description	Contractor
Firm Type	Corporation
Rank ¹	Class A
Address	90 FIELDSTONE COURT, CHESHIRE, CT 06410
Specialties²	Commercial Building (CBC) Highway / Heavy (H/H) Residential Building (RBC)
Initial Certification Date	1972-10-12
Expiration Date	2018-01-31

DPOR License Lookup License Number 0407002174

License Details

Name	THE LANE CONSTRUCTION CORPORATION / SENATE ASPHALT
License Number	0407002174
License Description	Business Entity Registration
Firm Type	Corporation
Rank	Business Entity
Address	90 FIELDSTONE COURT, CHESHIRE, CT 06410
Initial Certification Date	1985-09-30
Expiration Date	2017-12-31

DPOR License Lookup License Number 0411000988

License Details

Name	THE LANE CONSTRUCTION CORPORATION / SENATE ASPHALT
License Number	0411000988
License Description	Business Entity Branch Office Registration
Business Type	Corporation
Rank	Business Entity Branch Office
Address	14500 AVION PKWY SUITE 200, CHANTILLY, VA 20151
Initial Certification Date	2013-04-18
Expiration Date	2018-02-28

DPOR License Lookup License Number 2701015887

License Details

Name	WAGMAN HEAVY CIVIL INC
License Number	2701015887
License Description	Contractor
Firm Type	Corporation
Rank¹	Class A
Address	3290 NORTH SUSQUEHANNA TRAIL, YORK, PA 17406
Specialties²	Highway / Heavy (H/H)
Initial Certification Date	1976-10-29
Expiration Date	2019-01-31

DPOR License Lookup License Number 0411000667

License Details

Name	RUMMEL KLEPPER & KAHL LLP
License Number	0411000667
License Description	Business Entity Branch Office Registration
Rank	Business Entity Branch Office
Address	2901 S. LYNNHAVEN ROAD SUITE 300, VIRGINIA BEACH, VA 23452
Initial Certification Date	2009-09-24
Expiration Date	2018-02-28

DPOR License Lookup License Number 0411000271

License Details

Name	RUMMEL KLEPPER & KAHL LLP
DBA Name	RK&K
License Number	0411000271
License Description	Business Entity Branch Office Registration
Rank	Business Entity Branch Office
Address	2100 EAST CARY ST SUITE 309, RICHMOND, VA 23223
Initial Certification Date	2001-10-19
Expiration Date	2018-02-28

DPOR License Lookup License Number 0411000443

License Details

Name	RUMMEL KLEPPER & KAHL LLP
DBA Name	RK & K
License Number	0411000443
License Description	Business Entity Branch Office Registration
Rank	Business Entity Branch Office
Address	721 LAKEFRONT COMMONS SUITE 203, NEWPORT NEWS, VA 23606
Initial Certification Date	2006-07-07
Expiration Date	2018-02-28

DPOR License Lookup License Number 0411000577

License Details

Name	RUMMEL KLEPPER & KAHL LLP
DBA Name	RK&K
License Number	0411000577
License Description	Business Entity Branch Office Registration
Rank	Business Entity Branch Office
Address	12600 FAIR LAKES CIR, STE 300, FAIRFAX, VA 22030
Initial Certification Date	2009-03-26
Expiration Date	2018-02-28

DPOR License Lookup License Number 0407002860

License Details

Name	RUMMEL KLEPPER & KAHL LLP
License Number	0407002860
License Description	Business Entity Registration
Rank	Business Entity
Address	81 MOSHER ST, BALTIMORE, MD 21217
Initial Certification Date	1988-03-29
Expiration Date	2017-12-31

DPOR License Lookup License Number 0405000502

License Details

Name	RINKER DESIGN ASSOCIATES PC
License Number	0405000502
License Description	Professional Corporation Registration
Firm Type	PC - Professional Corporation
Rank	Professional Corporation
Address	9385 DISCOVERY BOULEVARD, STE 200, MANASSAS, VA 20109
Initial Certification Date	1986-07-16
Expiration Date	2017-12-31

DPOR License Lookup License Number 4008001684

License Details

Name	RINKER DESIGN ASSOCIATES PC
License Number	4008001684
License Description	Appraisal Business Registration
Firm Type	Corporation
Rank	Business Entity
Address	9385 DISCOVERY BOULEVARD SUITE 200, MANASSAS, VA 20109
Initial Certification Date	2011-02-10
Expiration Date	2019-02-28

DPOR License Lookup License Number 0410000156

License Details

Name	RINKER DESIGN ASSOCIATES PC
License Number	0410000156
License Description	Professional Corporation Branch Office Registration
Rank	Professional Corporation Branch Office
Address	927 MAPLE GROVE DR STE 105, FREDERICKSBURG, VA 22407
Initial Certification Date	2005-12-27
Expiration Date	2018-02-28

DPOR License Lookup License Number 4008001739

License Details

Name	RINKER DESIGN ASSOCIATES PC
License Number	4008001739
License Description	Appraisal Business Registration
Firm Type	Corporation
Rank	Business Entity
Address	927 MAPLE GROVE DR STE 105, FREDERICKSBURG, VA 22407
Initial Certification Date	2012-04-30
Expiration Date	2018-04-30

DPOR License Lookup License Number 0410000220

License Details

Name	RINKER DESIGN ASSOCIATES PC
License Number	0410000220
License Description	Professional Corporation Branch Office Registration
Firm Type	PC - Professional Corporation
Rank	Professional Corporation Branch Office
Address	4301 DOMINION BOULEVARD, SUITE 100, GLEN ALLEN, VA 23060
Initial Certification Date	2011-03-17
Expiration Date	2018-02-28

DPOR License Lookup License Number 4008001801

License Details

Name	RINKER DESIGN ASSOCIATES P C
License Number	4008001801
License Description	Appraisal Business Registration
Firm Type	Corporation
Rank	Business Entity
Address	4301 DOMINION BOULEVARD SUITE 100, GLEN ALLEN, VA 23060
Initial Certification Date	2014-04-10
Expiration Date	2018-04-30

DPOR License Lookup License Number 0407004748

License Details

Name	DIW GROUP INC
DBA Name	SPECIALIZED ENGINEERING
License Number	0407004748
License Description	Business Entity Registration
Firm Type	Corporation
Rank	Business Entity
Address	4845 INTERNATIONAL BLVD #104, FREDERICK, MD 21703
Initial Certification Date	2005-11-01
Expiration Date	2017-12-31

DPOR License Lookup License Number 0407005631

License Details

Name	DMY ENGINEERING CONSULTANTS INC
License Number	0407005631
License Description	Business Entity Registration
Firm Type	Corporation
Rank	Business Entity
Address	45662 TERMINAL DRIVE SUITE 110, DULLES, VA 20166
Initial Certification Date	2010-03-10
Expiration Date	2017-12-31

DPOR License Lookup License Number 0407003733

License Details

Name	QUINN CONSULTING SERVICES INCORPORATED
License Number	0407003733
License Description	Business Entity Registration
Firm Type	Corporation
Rank	Business Entity
Address	14160 NEWBROOK DR STE 220, CHANTILLY, VA 20151
Initial Certification Date	1998-03-05
Expiration Date	2017-12-31

DPOR License Lookup License Number 0407004045

License Details

Name	RHODESIDE & HARWELL, INCORPORATED
License Number	0407004045
License Description	Business Entity Registration
Firm Type	Corporation
Rank	Business Entity
Address	510 KING STREET STE # 300, ALEXANDRIA, VA 22314
Initial Certification Date	2000-12-21
Expiration Date	2017-12-31

Undeland Associates Inc.

N/A

**FULL SIZE
DPOR SUPPORTING DOCUMENTATION
FOR KEY PERSONNEL**

KEY PERSONNEL DPOR

Peery, Owen Lee, P.E.

DPOR License Lookup License Number 0402046882

License Details

Name	PEERY, OWEN LEE
License Number	0402046882
License Description	Professional Engineer License
Rank	Professional Engineer
Address	RICHMOND, VA 23223
Initial Certification Date	2009-10-21
Expiration Date	2017-10-31

Vyas, Kaushikkumar B., P.E.

DPOR License Lookup License Number 0402039004

License Details

Name	VYAS, KAUSHIKKUMAR BHUPENDRAPRASAD
License Number	0402039004
License Description	Professional Engineer License
Rank	Professional Engineer
Address	GORDONSVILLE, VA 22942-7581
Initial Certification Date	2004-06-14
Expiration Date	2018-06-30

ATTACHMENT 3.3.1
KEY PERSONNEL RESUMES

ATTACHMENT 3.3.1(a)

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

- a. Name & Title: **ERICK SMITH, PROJECT MANAGER**
- b. Project Assignment: **DESIGN BUILD PROJECT MANAGER**
- c. Name of all Firms with which you are employed at the time of submitting SOQ's. In addition, please denote the type of employment (Full time/Part time): **THE LANE CONSTRUCTION CORPORATION (Full Time)**
- d. Employment History: With this Firm 2 Years with Other Firms 21 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):
The Lane Construction Corporation, Project Manager – 2015 – Present: Mr. Smith is a Project Manager (PM) with over 20 years of experience in the construction industry, concentrated in the Midwest United States. He has extensive experience on wide assortment of highway reconstruction projects, involving utility coordination, as well as environmental permitting and compliance, ranging in value from several thousand to over \$200M. The scopes of his projects have included bridge replacement, roadway widening and rehabilitation, dirt and rock excavation, blasting, excavation support, micro-piles, caissons, underground utilities, storm drainage, reinforced structural concrete, architectural concrete, concrete pavement, asphalt pavement, milling, traffic control, site electrical, and precast concrete. As a Project Manager Mr. Smith ensures all contract obligations are met and avoids and/or resolves disputes in accordance with contract documents. He is responsible for overseeing the construction and field personnel as well as permitting, erosion control, lighting, signing and pavement marking, traffic control, right-of-way and utility relocation. Mr. Smith also coordinates public outreach and public meetings.
FH Paschen SN Neilson(FHP), Senior Project Manager – 2014 – 2015: As the Senior Project Manager for FHP, Mr. Smith was involved with the Illiana Corridor pursuit on both the Illinois (IDOT) and Indiana (INDOT) sections. FHP was a member of the ACS team along with Dragados and William Charles Construction. Mr. Smith supervised and managed the design, construction, quality management, contract administration and other services required by the contract, including the procurement and timely delivery of all materials, equipment, services and labor.
TJ Lambrecht Construction, Foreman to Senior Project Manager – 2002 – 2013: Throughout his career with TJ Lambrecht Construction, Mr. Smith's roles included starting as a Foreman and becoming Project Manager and then Sr. Project Manager. His responsibilities have included the management of office & field personnel, adherence to corporate safety policies, contract administration, submittals, requests for information, payment requisitions, project scheduling, procurement, change order negotiations, management of resources and costs, and subcontractor coordination. During 2010-2013 Mr. Smith was in charge of all SW Indiana operations, which consisted of multiple design-build contracts working on 20 miles of new interstate highway.
- e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
Pennsylvania College of Technology, Williamsport, PA/ B.S. Construction Management/ 1996
- f. Active Registration: Year First Registered/ Discipline/VA Registration #: **n/a**
Safety Certified Transportation Project Professional through ARTBA
- 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.)
- * On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.

INDOT I-69 Section 3 Segment 10 & 11, Daviess County, IN (DESIGN-BUILD)

Name of Firm: TJ Lambrecht	Project Role: Design Build Senior Project Manager
Beginning Date: 9/2010	End Date: 11/2012

Specific Responsibilities: As Senior Project Manager, Mr. Smith was responsible for the final design and construction of the project, coordination with design engineers generating roadway, bridge, utility relocation, erosion control permitting, and geo-technical design from start to finish; communication with the Owner, oversight of equipment and manpower projections. Key similarities and experiences as Senior Project Manager on this I-69 project include: coordination with community groups, utility owners, and environmental regulatory agencies; coordination with concurrent construction projects in the vicinity undertaken by other parties; site preparation, including dynamic compaction performed in challenging soil conditions.

Project Relevance: This \$59 million D-B joint-venture built 8.2 miles of new highway on I-69 (Sections 10 and 11). Major work items on this project included 1.8 Million CY of excavation, 15 multi-span bridges, several county road improvements, utility coordination, box culverts installation with sizes ranging from 8' to 16' wide, multiple stream crossings; Geotechnical Improvements using Dynamic Compaction, Wick Drains and Stone Columns. Environmental commitments included over 1,300 acres of preservation and mitigation for forested and wetland areas. Like the Route 7 Corridor Improvements project, this project involved utility relocation coordination, community involvement, owner relations, Design-Build, stakeholder coordination, and project management.

ISTHA Grand Avenue Reconstruction, Lake County, IL

Name of Firm: FH Paschen	Project Role: Senior Project Manager
Beginning Date: 6/2014	End Date: 1/2015

Specific Responsibilities: As the Sr. Project Manager, Mr. Smith was responsible for overall construction of the interchange and various mainline repairs, quality and safety programs, ensured all requirements and specifications were delivered, contract administration, directed and managed project development and constructability reviews with the designers, defining project scope, goals and deliverables, collaborated with senior management and stakeholders. Additionally, due to multiple issues there were numerous design changes that impacted the project to coordinate as well while allowing the 18,000 + daily vehicles to travel through the project safely.

Project Relevance: Some relevant aspects to the Route 7 Corridor Improvement include, project management, stakeholder coordination, Owner Coordination, procurement and furnishing of all materials, utility relocation, MOT, design coordination, equipment, services and labor necessary for project completion, coordination of project schedule, timelines and milestones, team supervision, development of best practices and tools for project execution and management.

ISTHA I-355 South Extension, Will County, IL

Name of Firm: TJ Lambrecht	Project Role: Project Manager
Beginning Date: 3/2005	End Date: 11/2008

Specific Responsibilities: As the Project Manager Mr. Smith oversaw the daily operations for 6 of 12 total project contracts for a new 12-mile extension of I-355 for the Illinois State Toll Highway Administration. The project included more than 3 million CY of excavation/embankment and 100,000 TN of aggregate. He also prepared budgets and schedules, coordinated daily with subcontractors and suppliers, provided on-site quality and safety control, assisted in cost control and coding, scheduled equipment and manpower projections, participated in project meetings, facilitated daily safety meetings, and conducted new employee training.

Project Relevance: This project comprised a 12-mile extension to I-355, similar to the Route 7 Corridor Improvements project the I-355 Extension included Stakeholder coordination, Owner coordination, project management, project coordination, safety, erosion control and MOT.

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. N/A

ATTACHMENT 3.3.1(a)

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**

c. Name of all Firms with which you are employed at the time of submitting SOQ's. In addition, please denote the type of employment (Full time/Part time): **QUINN CONSULTING SERVICES, INC. (Full Time)**

d. Employment History: With this Firm 7 Years With Other Firms 31 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):

Quinn Consulting Services, Inc., Quality Assurance Manager – March 2010 to Present: Mr. Vyas 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. 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; determines and certifies to VDOT whether the materials and work complies with the Contract Documents; conducts preparatory inspection meetings prior to the start of any new work; provides oversight and directs the independent quality assurance testing and inspections; and reviews 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 2002 to March 2010: As Transportation Engineer Mr. Vyas has worked on various Transportation Projects throughout the Northern Virginia area. 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 the 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.

e. 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 / 0402039004

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.)

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

VDOT, I-66 Route 15 Diverging Diamond Interchange, Haymarket, VA		(DESIGN-BUILD)	
Name of Firm:	Quinn Consulting Services, Inc	Project Role:	Quality Assurance Manager
Beginning Date:	03/2015	End Date:	08/2017

Specific Responsibilities: Mr. Vyas was the Quality Assurance Manager (QAM) for this project, 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.

Project Relevance: This \$36M D-B project consisted of building 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 included 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.

VDOT, Belmont Ridge Road, Loudoun County, VA (DESIGN-BUILD)

Name of Firm: Quinn Consulting Services, Inc	Project Role: Quality Assurance Manager
Beginning Date: 09/2016	End Date: 12/2018

Specific Responsibilities: Mr. Vyas serves as Quality Assurance Manager (QAM) for this project, his responsibilities include 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 oversees the QA inspection staff and monitors the QC staff for compliance with the project specific QA/QC Plan.

Project Relevance: This \$45M project is 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.

VDOT, Gloucester Parkway Extension, Loudoun County, VA (DESIGN-BUILD)

Name of Firm: Quinn Consulting Services, Inc	Project Role: Quality Assurance Manager
Beginning Date: 11/2014	End Date: 09/2016

Specific Responsibilities: As the Quality Assurance Manager (QAM), Mr. Vyas 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. Among other duties he 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, Mr. Vyas worked closely with both VDOT and D-B Contractor to resolve Non-Compliance issues and to prevent repeat occurrences.

Project Relevance: This \$26M D-B 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.

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. **Current Assignment:** VDOT, Belmont Ridge Road **Role:** Quality Assurance Manager. **Duration of Assignment:** Substantial completion anticipated for December 2018. Mr. Vyas will be available on-site full time at the start of construction for the Route 7 Corridor Improvements Project.

ATTACHMENT 3.3.1(a)

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: **OWEN L. PEERY, PE – DIRECTOR, TRANSPORTATION**

b. Project Assignment: **DESIGN MANAGER**

c. Name of all Firms with which you are employed at the time of submitting SOQ's. In addition, please denote the type of employment (Full time/Part time): **RK&K (Full Time)**

d. Employment History: With this Firm **>30** Years With Other Firms **4** 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):
RK&K, Director, Transportation, 2002 – Present: Mr. Peery leads RK&K's transportation efforts throughout Virginia. He has 34 years of combined experience in civil design and project management where he has been the Project Manager, Design Manager and/or Lead Project Engineer on a wide range of transportation and civil engineering projects for VDOT, local transportation agencies, and private sector clients. His responsibilities include management of in-house engineering staff, client and owner/agency coordination, the direction of design by in-house discipline staff and subconsultant personnel, establishing and overseeing quality control programs, public interaction including public hearings and workshops, and the management of budgets and schedules. Mr. Peery's specific design experience includes the layout and design of urban and rural interstates, roadways, streets, interchanges, at-grade intersections, civil-site plan coordination and design, drainage and stormwater design, erosion and sediment control quantities, estimates and specifications. His specialized experience is in the design of urban and freeway, interstate facilities and the extensive inter-agency, stakeholder, utility and owner coordination required with urban improvements. He has also been RK&K's Design Manager on several design-build projects and assisted VDOT preparing Design-Build and P3 contract documents. The majority of his work has been widening and rehabilitation of existing facilities. Mr. Peery has managed approximately 150 VDOT projects or assignments over the past 15 years. Additionally, he is a current member of the VTCA Design-Build Committee and has formerly served as a member of the VTCA Engineering Consultant Leadership Committee (ECLC). His extensive experience assures VDOT that he is more than capable of leading the design management of the Route 7 Corridor Improvements project a successful conclusion.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
Virginia Military Institute, Lexington, VA/BS/1983/Civil Engineering

f. Active Registration: Year First Registered/ Discipline/VA Registration #:
2009/Professional Engineer/VA (#0402 046882);1994/Professional Engineer/MD/(#20474)

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.)

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

VDOT, Route 29 Solutions, Albemarle County, VA (DESIGN-BUILD)

Name of Firm: RK&K	Project Role: Design Manager
Beginning Date: 1/2015	End Date: 7/2017

Specific Responsibilities: Mr. Peery was the Design Manager (DM) responsible for leading and overseeing the design and construction engineering for a bundle of three project elements included in one design build project. As DM, he led and coordinated the individual design disciplines including the coordination of bridge and roadway designs, drainage, utilities, right-of-way, maintenance of traffic and environmental permitting and compliance which reported directly to him. He worked closely with the project's DBPM to ensure the project design was completed in accordance with the contract documents. He coordinated between the various project elements to ensure that each element of work stayed within budget and on schedule. In addition to being the DM on this project, Mr. Peery also served as Design Quality Manager establishing and overseeing the Quality Assurance/Quality Control (QA/QC) Program for design, including design review, VDOT review coordination, specifications and constructability.

Project Relevance: This \$126M D-B project included three distinct 'elements' bundled into a single design-build (D-B) contract. The trio of project elements included: Route 29 and Rio Road GSI; Route 29 Widening from four lanes to six lanes for approximately 1.8 miles from Polo Grounds Road to Towncenter Drive; and Berkmar Drive, an extension of 2.3 miles on new alignment from Hilton Heights Road to Towncenter Drive. RK&K, who oversaw the simultaneous designs for all project elements, was the lead designer for the Rio Road GSI. This was a very complex project with numerous design subconsultants and specialists. Making this project additionally complex was the fact that each project had very different project elements that were the key to the success of that portion of the contract. The Rio Road project element consisted of a complex grade separated intersection which allowed traffic to move efficiently through one of the most congested intersections on the Route 29 corridor and the construction of four through lanes (two each direction) underneath Rio Road to carry traffic with destinations north or south of Rio Road. Local

lanes were built outside of the through lanes so traffic with local destinations could leave Route 29 onto Rio Road or access the businesses near the intersection. RK&K performed the structural engineering for the Rio project. The superstructure functions as a compression strut, allowing the bridge abutments to be an integral part of the retaining walls below the bridge, and reducing the overall length of the bridge. For the Rio Road element, the contract required the depressed travel lanes and associated bridge be constructed within one summer in a period of 103 days... and it was accomplished in 58 days. This configuration, developed by RK&K, was an integral part of our team's ability to complete construction ahead of schedule earning a \$7.3 million early completion incentive. The experience gained on this fast paced, complex and high-profile project benefit the D-B Team on this project.

VDOT, I-64 Widening & Route 623 Interchange, Henrico and Goochland Counties, VA (DESIGN-BUILD)

Name of Firm: RK&K	Project Role: Design Manager
Beginning Date: 10/2013	End Date: 11/2015

Specific Responsibilities: Mr. Peery served as the DM responsible for leading and coordinating the individual design disciplines including the coordination of bridge and roadway designs, drainage, utilities, right-of-way, maintenance of traffic and environmental permitting and compliance which reported directly to him. He worked closely with the project's DBPM to ensure the project design was completed in accordance with the contract documents. He also provided VDOT with design plans for review and approval. In addition to being the DM on this project, Mr. Peery also served as Design Quality Manager establishing and overseeing the Quality Assurance/Quality Control (QA/QC) Program for design, including design review, VDOT review coordination, specifications and constructability. He also organized and participated in community meetings and public hearings. Public outreach was critical to the process and under Mr. Peery's direction, RK&K maintained a project website that contained all project information and that was linked to the City and VDOT websites providing the community with real-time project updates. This project was completed on-time and within budget.

Project Relevance: This \$33M D-B project consisted of the widening of Interstate 64 from a four-lane divided freeway, to a six-lane divided freeway and improvements to the I-64/Route 623 Interchange. The project extended from approximately 1 mile west of Route 623 to the I-64/I-295 Interchange, over 4.5 miles and impacting three interchanges. The additional through lanes were constructed to the inside (median widening) of I-64 in both directions and the outside shoulders were reconstructed with a deeper pavement section. The widening also required replacing the existing bridges over Little Tuckahoe Creek with new 125' long bridges. The interchange improvements included upgrading the existing traffic signal, widening the I-64 westbound ramp to Route 623 to provide an additional turn lane, adding a left turn lane on Route 623 to I-64 eastbound, and widening the I-64 eastbound off ramp to Route 623 to provide an additional turn lane. This experience relates directly to the proposed improvements to the Route 7 Corridor Improvements project.

VDOT, Route 250 Bypass Interchange at McIntire Road, City of Charlottesville, VA

Name of Firm: RK&K	Project Role: Design Project Manager
Beginning Date: 3/2006	End Date: 11/2012

Specific Responsibilities: Mr. Peery served as Project Manager responsible for planning, environmental documentation, preliminary engineering, final engineering public outreach and coordination between federal, state and local agencies to complete this \$25M project that included roadway design; interchange layout and design; bridge design; environmental studies; traffic data collection and analysis; drainage design, stormwater management and hydraulics, and landscape/hardscape design. Mr. Peery, in conjunction with the City's project manager, led a City Council-selected Steering Committee through this process which included the analysis of 15 interchange options during the planning stage. Mr. Peery led an outreach program that included administering a City Council-appointed Steering Committee and over 40 public meetings and outreach opportunities for public input into the design. Public outreach was so critical to this project that, under Mr. Peery's direction, RK&K maintained a project web site that contained all project information, that was linked to the City and VDOT web sites, and that was updated nearly real-time providing information and updates to the community.

Project Relevance: The vision of the Route 250 Bypass Interchange at McIntire Road was to eliminate an existing T-intersection, improve connectivity, and ease congestion by developing a new interchange for this urban area of the City of Charlottesville. Major features of this design include complete roadway reconfiguration and reconstruction, new roadway construction, a single span-semi-integral abutment bridge, two box culverts including stream diversions and multiple retaining walls. Included in the design were nearly a half mile of 30" sewer replacement, 1.25 miles of high- and mid-pressure natural gas line relocation, the design and relocation of a gas regulator station, and the relocation of water mains and service lines. Maintenance of traffic was complex and critical as the interchange had to be constructed in the middle of an existing at-grade intersection while maintaining existing traffic capacity and lanes on the intersecting roadways, coordinating and maintaining access to the regional rescue squad whose access drive entered into the middle of the project and maintain access to an adjacent community that had no other access points except into the construction area. The RK&K Team prepared landscaping planting plans and cultural resource mitigation commitments. The roadway design was optimized to limit right-of-way requirements, avoid parkland and historic property acquisition, to best-fit the roadway profiles to the existing topography and provide a grade separation at this urban intersection. This multi-phased project is one of the largest projects undertaken to date as part of the Virginia Department of Transportation (VDOT) First Cities Initiative / Locally Administered Project (LAP). The RK&K Team helped the City to plan, design and construct one of the largest infrastructure and public works projects it had performed in many years. Opening ahead of schedule, the Route 250 Interchange has changed the commutes for residents. The new diamond-shaped, grade-separated interchange provides a direct connection to the northern leg of McIntire Road, now named the John W. Warner Parkway, solving serious travel issues and shaving valuable times off morning and evening drive times. The project helped to alleviate traffic congestion on the Route 250 Bypass by providing a free-flowing traffic pattern through this bustling area.

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. N/A

ATTACHMENT 3.3.1(a)

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title: DAVID LEBER, DBIA, PMP, CONSTRUCTION MANAGER
b. Project Assignment: CONSTRUCTION MANAGER
c. Name of all Firms with which you are employed at the time of submitting SOQ's. In addition, please denote the type of employment (Full time/Part time): WAGMAN HEAVY CIVIL, INC. (Full Time)
d. Employment History: With this Firm <u>12</u> Years With Other Firms <u>0</u> 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): Wagman Heavy Civil, Inc., Construction Manager - 2011 - Present: Mr. Leber has more than 15 years of experience in the construction industry. He has served in variety of roles with responsibility focusing on high profile transportation projects. He has primarily served at the project execution phase of each job and has a proven track record of successfully delivering construction on time and to the satisfaction of the project stakeholders. He is very familiar with VDOT requirements, specifically Design-Build as he is currently working as CM on the RT7 / DTR Interchange Project. He has extensive experience with high volume maintenance of traffic, utility relocations, roadway reconstruction, bridge rehabilitation and construction, erosion and sediment control, excavation and grading. He is well versed in CPM Scheduling, Work Plan Development, Productivity Planning, Cost and Budget Control, Change Order Protocol, Safety, Public Relations and DBE Compliance. He also supervises and coordinates all subcontract activities; ensures work is performed per contract requirements and to a high degree of quality; and performs buyout and contract negotiations for all subcontractors and suppliers. Wagman Heavy Civil, Inc., Assistant Construction Manager - 2007 - 2011: Mr. Leber worked for 5 years as Assistant Construction Manager on Contract A of the Intercounty Connector Project in which he held numerous roles from Erosion and Sediment Control Assistant Construction Manager to Utility Assistant Construction Manager. He was assigned to the project from startup to closeout and worked closely with the Engineer to coordinate geotechnical investigation prior to design and perform constructability reviews during the evolution of the design packages. As ESCM, he ensured construction was being performed per the environmental requirements and worked closely with the crews and subcontractors to install Erosion and Sediment Control, Stream Relocations, and SWM Facilities. As Utility Assistant Construction Manager, he coordinated numerous utility relocations (design coordination & construction) on the project, including gas, electric, communication, sewer and water. He understood each of the utility requirements and worked to meet the aggressive schedules required to keep the project from being delayed. He also worked with Pepco to design over 30 power drops for the electrical needs on the project for lighting and ITS infrastructure. Wagman Heavy Civil, Inc., Project Coordinator / Project Engineer - 2005 - 2007: Mr. Leber worked 2 years as Project Engineer on a Bridge Rehabilitation Project on highly traveled section of I-95 in Baltimore, MD. He performed project scheduling, quantity and production reporting, and coordinated subcontractor activities.
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Mount St. Mary's University, Emmitsburg, MD/MBA & Graduate Certificate/2015/ Project Management West Virginia University, Morgantown, WV/BS/2004/ Economics, Minor in Communication Frederick Community College, Frederick, MD/AS/2008/Construction Management
f. Active Registration: Year First Registered/ Discipline/VA Registration #: VDOT Erosion & Sedimentation 3-00480, VA Registered Land Disturber RLD03157, VDOT Work Zone Intermediate 011416004, MSHA Traffic Manager, OSHA 10 & 40 hour, CPR & First Aid Training, MD E&S Yellow & Designer Registration, MDE Green Card
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> (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.) * On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.
Virginia Department of Transportation, Route 7 Widening & Bridge Replacement over DTR & AAH, Fairfax County, Va. (DESIGN-BUILD)

Name of Firm:	Wagman Heavy Civil, Inc.	Project Role:	Construction Manager
Beginning Date:	7/2015	End Date:	5/2018
<p>Specific Responsibilities: Mr. Leber is the Construction Manager for this complex, utility intense and heavily traveled (180,000 ADT) project replacing the Route 7 Bridge over the DTR & AAH. He is responsible for resource allocation for construction; workforce & equipment, subcontractor coordination, material delivery, quality assurance and quality control. He coordinates with VDOT, third party stakeholders inclusive of WMATA, MWAA, Fairfax County, multiple utility companies and others; to ensure compliance with contract requirements and to act as a good neighbor. Wagman utilized his extensive field experience for constructability reviews during design development.</p> <p>Project Relevance: The \$42M DB project includes a major vehicular highway bridge spanning the conjoined Dulles Toll Road (DTR) and Airport Access Highway (AAH), two pre-fabricated structural truss pedestrian bridge and a complex cast in place elevated pedestrian structure, three precast pedestrian underpasses below vehicular highway ramps. Similar to the Route 7 Corridor Improvements project this project consists of a complex network of shared use pathways, utility coordination and relocation, ROW acquisition, maintenance of traffic, Noise Wall installation and roadway construction in a very heavily congested urbanized region of Northern Virginia. Implementation of non-traditional foundation construction utilizing micro-piles due to space constraints under the existing bridge and between the DTR & AAH, as well as non-traditional methods of construction for communication utility relocations were key to the success of this project. David worked day and night to execute an MOT phasing plan which reduced the number of construction phases from seven to four; thereby reducing the overall project schedule by approximately seven months and significantly reducing costs and impacts to the traveling public and stakeholders. This project is on the Route 7 corridor and many of the stakeholders will be the same and he has worked with all of the utility companies in the Route 7 corridor near Tyson's Corner.</p>			
Maryland Transportation Authority, I-95 Bridge Rehabilitation and Joint Modification, Baltimore, Md.			
Name of Firm:	Wagman Heavy Civil, Inc.	Project Role:	Construction Manager
Beginning Date:	10/2013	End Date:	10/2015
<p>Specific Responsibilities: Mr. Leber was the Construction Manager for this heavily traveled (180,000 ADT) project on I-95 in Baltimore MD. He was responsible for developing schedules and work plans for project specific requirements. He supervised and coordinated all subcontract activities; ensured work was performed per contract requirements; communicated and ensured compliance of safety plans; and performed buyout and contract negotiations for all subcontractors and suppliers. As the Construction Manager on this urban project, he was responsible for all quality control and contract compliance. In addition, he performed MBE/DBE Compliance, cost and revenue forecasting and reporting and negotiated all contract administration with the owner. David had direct responsibility for compliance with stringent environmental regulations regarding the control of the runoff from the hydro-demolition activities. In addition to project oversight, he was also responsible for coordination with MDTA, the Stadium Authority, the motoring public and other stakeholders to ensure that lane closures and other activities impacting the motoring public were properly planned and executed.</p> <p>Project Relevance: This \$55M project required intensive planning due to high traffic volumes and multiple construction phases. The bridge deck and highway had to be reconstructed in multiple phases while maintaining traffic on this heavily traveled section of I-95 in Baltimore just south of the Ft. McHenry Tunnel, which included joint replacement and removal of an existing concrete bridge deck on 28 structures. The work was completed in 45 phases with multiple work zones in each phase. Hydro-demolition removed a portion of the deck and a Latex Modified Concrete overlay repaired the bridge surface. Similar to the Route 7 Corridor project this project included third party coordination with multiple entities and stakeholders; providing schedules and work plans to minimize impacts to the stakeholders.</p>			
Intercounty Connector Contract A, Montgomery County, Md. (DESIGN-BUILD)			
Name of Firm:	Wagman Heavy Civil, Inc.	Project Role:	Assistant Construction Manager
Beginning Date:	4/2007	End Date:	7/2011
<p>Specific Responsibilities: Mr. Leber served as Assistant Construction Manager for this DB project: E&S Assistant Construction Manager & Utility Assistant Construction Manager. As Assistant Construction Manager, he assisted the DB team to identify cost and time savings and resolve constructability issues. As E&S Construction Manager he achieved environmental compliance over the entire duration of the project; supervised erosion and sediment control installation; oversaw construction of numerous stream and culvert crossings; stream reconstruction and managed final stormwater management facilities. As Utility Assistant Construction Manager, he coordinated the relocations of gas, (Washington Gas in particular) power, and communication lines; worked with Pepco to design and construct more than 30 power drops; and managed the installation of six traffic signals, project lighting and electrical systems. David was employed on a DB team from project startup to closeout and held positions from E&S Assistant Construction Manager to Utility Assistant Construction Manager.</p> <p>Project Relevance: This \$464M project consisted of construction of eight miles of a divided highway with open-road toll facilities from I-370 to MD Route 97, including a 4.5-mile-long shared use path with multiple underpasses below the new roadway. This project included the acquisition of additional right-of-way and a contractor led Quality Control Program. One mile of the project was the total reconstruction of existing I-370 while maintaining traffic in an urban area, coordination with rail & utilities. Major utility relocations were required as the new highway impacted cross roads & neighborhoods: Power, Gas, Fiber, Communications, Sewer and Water; many designed and constructed by the design-builder.</p>			
<p>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. Current Assignment: VDOT, Route 7 Widening & Bridge Replacement over DTR & AAH, Fairfax County, VA Role: Construction Manager. Duration of Assignment: Substantial completion anticipated for May 2018. Mr. Leber will be available on-site full time at the start of construction for the Route 7 Corridor Improvements Project.</p>			

ATTACHMENT 3.3.1(a)

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title: JOHN MYERS, UTILITY COORDINATOR
b. Project Assignment: UTILITY COORDINATION MANAGER
c. Name of all Firms with which you are employed at the time of submitting SOQ's. In addition, please denote the type of employment (Full time/Part time): RINKER DESIGN ASSOCIATES, P.C. (RDA) – FULL TIME
d. Employment History: With this Firm <u>4</u> Years With Other Firms <u>13</u> 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): <u>Rinker Design Associates, P.C. (RDA), Utility Coordinator (2013-Present):</u> As Utility Coordinator, Mr. Myers is responsible for the coordination of all utility relocations throughout the design phase for each project on which utility coordination is included in the scope of work. He is familiar with plan review and the identification and resolution of roadway/utility conflicts. He is responsible for handling multiple projects on tight schedules and is successfully devises creative solutions to resolve utility conflicts. His tasks include reviewing initial project areas and acquiring utility records to account for/mitigate major utility issues in coordination with roadway engineers. He develops underground utility investigations to be performed and analyzes the results. As projects progress, Mr. Myers develops preliminary relocation alignments to aid the utility companies during the relocation stage to meet the schedule needs as well as preliminary easements for public hearing plans. He also performs conflict analysis of all utility companies on the project site and is responsible for the calculation of relocation costs using VDOT form UT-9. Mr. Myers conducts Utility Field Inspection (UFI) meetings per VDOT's Utility Manual to discuss the project with the utility companies involved and begin their design of relocations. Mr. Myers coordinates final easements with the utility companies and determines their nomenclature based on the rights of the utility company involved. His responsibilities also include reviewing submitted P&E packages from the utility companies for completeness (per VDOT's Utility Manual), ensuring the designed relocation is clear of conflicts with the proposed roadway work, and recommending the package for authorization. Mr. Myers' years of experience at VDOT in different facets of utility relocation (roadway in plan, field relocations, and relocation design) enables him the ability to identify conflicts and construction problems early in the process and provide more options for mitigation/avoidance of potential issues. <u>VDOT, Regional Utility Coordinator (2007-2013):</u> As Regional Utility Coordinator for VDOT NOVA District's R/W & Utilities section, Mr. Myers was responsible for the implementation of all aspects of the utility relocation coordination process for projects throughout the region as specified by the VDOT Utilities Manual. He worked with projects in highly complex or congested utility relocation corridors and utilized 3D mapping with CAD to coordinate utility relocations and conflicts with the proposed roadway features. <u>VDOT, Utility Construction Manager, 2005-2007:</u> As Utility Construction Manager for VDOT NOVA District's Utility Inspection section (formerly named C.U.R.E.), Mr. Myers managed multiple utility inspectors covering multiple projects throughout the district. He was responsible for reviewing and approving the daily utility inspection reports (UT-7) per the VDOT Utility Manual, creation of the digital as-builts for all relocation projects and problem-solving issues that arise during construction of utility relocation construction and as liaison with public relations, traffic sections or other needed areas to coordinate project needs during relocations. While in this position, Mr. Myers was nominated for a Governor's Award for Excellence for creating the digital as-built system through the use of CAD to accurately record relocated utility locations for use during roadway construction projects. <u>VDOT, Construction/Utility Field Inspector (2002-2005):</u> As Construction/Utility Field Inspector for VDOT NOVA District, Mr. Myers was responsible for ensuring that daily activities of roadway contractors and utility companies met state plans and standards and documented work performed. During his tenure, he was exposed to the full gambit of roadway construction activities as well as all utility relocation methods and practices.
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Shepherd University, Shepherdstown, WV / No Degree / 1993-1995 / Engineering and Computer Programming
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. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i>

(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.)

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

VDOT, Route 7 Bridge Rehabilitation over DTR/AAH , Fairfax County , VA (DESIGN-BUILD)

Name of Firm: Rinker Design Associates, P.C. (RDA)	Project Role: Utility Coordinator
Beginning Date: 07/2015	End Date: Present

Specific Responsibilities: As utility Coordinator Mr. Myers is responsible for utility relocations on this utility-congested Design-Build project. Utilities include: Dominion, Fiberlight, MCI, AT&T, Level 3, Zayo, Quest (Business and Government), Washington Gas, Verizon, Fairfax County Public Works, Fairfax Water, Cox, and XO. Many of these companies had shared facilities with Verizon and Zayo in ducts across the existing bridge. Mr. Myers coordinates closely with all of the utility companies as well as the Design-Builder to develop a hanging ductbank system built on the new bridge. He ensures that each utility stages their move to avoid further conflicts in relocating into the new duct system. Mr. Myers assists the contractor in staging relocations as the new bridge was constructed. Additionally, Mr. Myers works closely with VDOT, Fairfax County and an area HOA to develop an overhead electric relocation that minimized impacts to the HOA property while still allowing the proposed features of the project to be built. This resulted in extending the intended relocation outside of the proposed project limits.

Project Relevance: This \$42M project includes coordination with many of the companies that will be heavily involved in the Route 7 Corridor Improvement project, many of them will be along the entire 6.8-mile limit. Mr. Myers' close working relationships with all of these companies, which is built on mutual respect, was reinforced by the collaborative nature of the Route 7 Bridge Rehabilitation over DTR/AAH Project. These strong relationships will be invaluable in managing the coordination efforts, relocation plans and risks associated with utilities along the Route 7 Corridor Project.

VDOT, Route 29 Solutions, Albemarle County, VA (DESIGN-BUILD)

Name of Firm: Rinker Design Associates, P.C. (RDA)	Project Role: Utility Manager
Beginning Date: 02/2015	End Date: 07/2017

Specific Responsibilities: Mr. Myers was the utility manager for this highly political, multi-faceted, \$116M D-B roadway improvement project. He was responsible for coordinating with and managing utility relocations for three design projects composing the contract under a highly condensed schedule. He was also responsible for conflict analysis, testhole review, all utility estimating for the project and overall management of all utility designs and relocation plan and estimate processing. Coordinated with the roadway designers to implement minor shifts in alignments that resulted in large runs of saved Dominion poles. Worked with the drainage engineers to revise conflicts associated with stormdrainage design. Coordinated the development of two Design-Builder built joint ductbank systems. One for Dominion, CenturyLink, and Comcast. The second one for everyone else (MCI, Fiberlight, etc.). Worked with the Fire Department to coordinate development of a fire suppression system in the depressed portion of the Rio Road interchange to allow Fire and Rescue to address potential car fires. Worked with the Public Relations Manager to overcome early poor perceptions regarding the project by minimizing when and where the relocations were placed.

Project Relevance: The similarities between these two projects are extensive. The political and public pressures are and will be similar. The strategies to accommodate and expedite relocations while minimizing their footprint (i.e. joint ductbanks) will be implemented on the Route 7 Corridor Improvements project. Finally, the design elements surrounding the Baron Cameron partial interchange present the same utility challenges as the Rio Road interchange to ensure that Fire and Rescue can address issues within the depress portion of the interchange.

VDOT, Stringfellow Road (Route 645) Widening, Fairfax County, VA (DESIGN-BID-BUILD)

Name of Firm: Rinker Design Associates, P.C. (RDA)	Project Role: Utility Coordinator
Beginning Date: 01/2013	End Date: 11/2015

Specific Responsibilities: As utility coordinator Mr. Myers was responsible for \$23M+ in utility relocations along this two-mile widening project. He performed in depth coordination with a petroleum pipeline company that ran through the majority of the project to show three-dimensional positioning of the line in relationship to proposed roadway construction in order to pinpoint areas of adjustment needed and limit the relocations and cost involved. Mr. Myers coordinated with roadway team to make adjustments to the plans to avoid impacts to a major sanitary sewer line owned by UOSA. He coordinated work between multiple utility companies co-located on a pole line through the project that carried major overhead utilities (i.e. Dominion Energy, Verizon heavy copper Systems, cable television and fiber optic cables) to minimize lag time in between each relocate to keep the project schedule, as each relocation was done in series from top to bottom. He performed in depth coordination with one of the gas pipeline companies to develop an MOT plan which allowed their pipe crossing to be relocated out of conflict with the project without detours or traffic delays.

Project Relevance: The use of 3-dimensional design, designing around conflicts, and coordination of sequential relocations on a new pole line (or in a proposed ductbank) are all tools that we anticipate using on the Route 7 Corridor Improvements 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. N/A

ATTACHMENT 3.3.1(a)

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title: JOHN UNDELAND, CHIEF OPERATING OFFICER	
b. Project Assignment: PUBLIC RELATIONS SPECIALIST	
c. Name of all Firms with which you are employed at the time of submitting SOQ's. In addition, please denote the type of employment (Full time/Part time): UNDELAND ASSOCIATES (Full Time)	
d. Employment History: With this Firm <u>≥3</u> Years With Other Firms <u>31</u> 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): Undeland Associates, Chief Operating Officer, 2014-present: Mr. Undeland has an established track record in the private and public sectors with a reputation for professional excellence. He offers more than 34 years of experience in the development and implementation of strategic communication programs. He possesses a thorough knowledge of public and stakeholder activities supporting transportation planning and design-build projects. He provides a wide spectrum of strategic communications and public outreach services to a variety of clients, including VDOT, seeking to engage the public and other external stakeholders regarding large and sensitive transportation projects. His responsibilities include the preparation of strategic communication plans and management of external communication with stakeholders, media, and public during the design and construction. Mr. Undeland oversees development of public opinion research to hone outreach plans. He has served as a lead project spokesperson, appearing or being quoted in hundreds of news stories, newscasts and public affairs shows. He oversees development of paid media campaigns to urge traffic diversion during major construction operations. Mr. Undeland also has briefed numerous HOA/community groups and has appeared at many festivals and fairs representing his clients' projects. Stratacomm, LLC, Vice President and Partner, 2002-2014: Mr. Undeland provided strategic communications and public outreach services to the public and other external stakeholders for large and sensitive infrastructure projects. He worked diligently with clients, stakeholders in the development of public relations plans and management of external communication during the design and construction phases of projects. Mr. Undeland was intimately involved in the firm's talent acquisition and retention, and led business development in the transportation sector.	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Ohio Wesleyan University, Delaware, OH / BA / 1985 / Politics and Government	
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.	
VDOT, Transform 66, Arlington-Falls Church-Fairfax-Prince William, VA (DESIGN-BUILD)	
Name of Firm: Undeland Associates	Project Role: Public Outreach Manager
Beginning Date: 9/2015	End Date: Ongoing
Specific Responsibilities: Mr. Undeland is responsible for public, stakeholder and media outreach. He prepares and executes multi-faceted communications plans, oversees earned and paid media campaigns, prepares presentations and website contents, handles community briefings and appearances, and helps manage the communications team. Project Relevance: This VDOT \$2.3B project is similar to the Route 7 Corridor Improvements Project in many ways. Both are building major improvements in highly constrained areas. Both share many of the same elected officials, media and other stakeholders and Mr. Undeland's experience with these stakeholders is a major asset. Both projects require adroit, high-touch outreach. When complete, the I-66 multimodal projects will enhance connectivity and provide new travel options on nearly 32 miles of I-66 from University Blvd. in Gainesville to U.S. Route 29 in Rosslyn.	
VDOT-MSHA-DDOT-FHWA, Wilson Bridge Project, Fairfax-Alexandria, VA-District of Columbia-Prince George's, MD	
Name of Firm: Stratacomm, LLC	Project Role: Public Outreach Manager
Beginning Date: 6/1998	End Date: 6/2013
Specific Responsibilities: Mr. Undeland was the Public Outreach Manager. He provided communications and public affairs outreach for bridge replacement and landside improvements. His responsibilities included managing elected official outreach, stakeholder relations, media relations to inform community about upcoming and current project activities, construction milestones and related traffic impacts. He conducted event planning, drafted website and newsletter content, met with stakeholder groups to provide project status updates and tours, and provided media interviews and information sessions. Project Relevance: This \$2.5B project, also included VDOT as a client, was very highly sensitive, sharing some of the same elected officials, media and other stakeholders. Like the Route 7 Corridor Improvements project, this project required the acquisition of private property and construction in a highly-constrained corridor. Through media relations generating stories that totaled many million media impressions and working with the hundreds of residents directly impacted by construction, Mr. Undeland was instrumental in VDOT and the other sponsoring agencies' efforts to involve and inform the public in advance of impacts.	

New York State Thruway Authority, Tappan Zee Bridge Replacement Project, Westchester & Rockland Counties, NY

Name of Firm: Undeland Associates	Project Role: Senior Writer/Editor
Beginning Date: 7/2014	End Date: 5/2016
<p>Specific Responsibilities: Mr. Undeland was the Senior Writer and Editor for all externally-facing written materials for \$3.9B project, the largest active bridge and highway project in the nation. He was responsible for creating and/or editing in-depth weekly website stories, news releases, monthly newsletters and quarterly magazine, op-eds and other specialty pieces.</p> <p>Project Relevance: Similar to the Route 7 Corridor Improvement project, this project was equally highly sensitive, required compelling, persuasive messaging to reach and motivate the public and other stakeholders. Additionally, both projects are building major infrastructure through already-established communities and involve extensive outreach, including public meeting/hearings, HOA/elected official briefings and media relations.</p>	
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. N/A	

ATTACHMENT 3.4.1(a)
LEAD CONTRACTOR WORK HISTORY FORMS

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

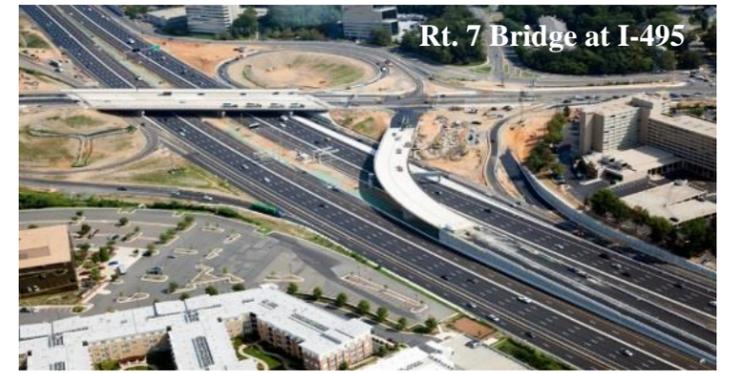
a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: I-495 EXPRESS LANES Location: Fairfax County, VA DESIGN-BUILD	Name: HNTB	Name of Client./ Owner: VDOT Phone: 540.829.7500 Project Manager: John Lynch, PE Phone: 540.829.7512 Email: john.lynch@VDOT.Virginia.gov	12/2012	11/2012	\$1,346,560	\$1,481,670	\$642,000

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/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form. If the Offeror chooses to submit work performed as a Joint Venture or Partnership, identify how the Joint Venture or Partnership was structured and provide a description of the portion of the work performed only by the Offeror's firm.

Similar Scope of Work:
<ul style="list-style-type: none"> • Design-Build • Roadways • Bridges and Structures • Environmental • Geotechnical • Right-of-Way • Hydraulics • Intelligent Transportation Systems • Transportation Management Plan • Utilities • Stakeholder Coordination • Public Involvement/Relations • QA/QC • Survey • Construction Engineering and Inspection • Overall Project Management
Personnel on Project:
Chris Monahan (LANE) Skip Vest (LANE) David Holmes (LANE) David Lyle (Wagman)

PROJECT SCOPE
Construction of four new managed/HOV traffic lanes (two in each direction) in the median of the existing lanes on the Capital Beltway. Work included the reconstruction of ramps, heavy maintenance of traffic effort, shoulder reconstructions, interchanges, frontage roads, bridge over and underpasses and bridge widening's, and pedestrian crossings. The Project encompassed the replacement of more than \$260M of aging infrastructure, including 12 interchanges and 58 bridges. Construction of the Project required close coordination with VDOT, MWAA, WMATA, local jurisdictions, businesses, community associations, and the traveling public. As a 35% member of the Fluor-Lane LLC CJV, LANE provided nearly all of the project supervision and workforce, plus all asphalt paving as a subcontractor to the CJV. *Only LANE of Fluor-Lane LLC will be a team member on the Route 7 Corridor Improvements project.*

RELEVANT PROJECT ELEMENTS TO ROUTE 7 CORRIDOR IMPROVEMENTS
Roadway Widening: The I-495 Express Lanes project is one of the largest roadway projects constructed in the Commonwealth. Similar to the Route 7 project, the I-495 Express Lanes project widened the existing roadway to the median and involved replacement and widening of numerous structures. The Express Lanes project has similar scope elements including, roadway widening, box culvert extensions, ITS, incident response management, ramp extensions, public outreach, shoulder strengthening, work in high volume ADT's, sound barriers, complex MOT schemes and bridge widenings. The team constructed three new access points and upgraded 12 key interchanges that increased capacity and mobility, improved driver safety and removed operational deficiencies, with minimal impact to the traveling public, residences, and businesses. The I-495 Express Lanes project widened the existing roadway by constructing two new lanes in each direction on a 14-mile stretch from the Springfield Interchange to just north of the Dulles Toll Road (approximately 56 lane miles). Construction of four new managed/HOV traffic lanes (two in each direction) in the median of the existing lanes on the Capital Beltway.
Bridges and Structures: Our Team widened and/or replaced 58 bridges on this project adjacent to high ADT count/live traffic. Wagman (formerly DW Lyle) was a dedicated subcontractor responsible for 16 bridges, approx. 160,000SF of MSE Wall and performed earthwork and storm drainage.
Utility Coordination: There were significant utility coordination effort, both in relocation of existing utilities and installation of new services for lighting and toll facilities. Two high voltage transmission lines ran in a corridor parallel to the main alignment of the project, crossing several arterial roads that were associated with the project. At one arterial, there was insufficient clearance between the transmission line sag and the road surface. The line had to be raised by installing an insert in one supporting tower. In total, over 175 utility conflicts were resolved requiring coordination with 13 different utility owners.
Right of Way: ROW acquisition services were performed for 65 properties, including 26 business related partial acquisitions. 108 easements were acquired, 35 of which were business owned.
MOT: Similar to the Route 7 project, a key challenge on the I-495 Express Lanes project was accommodating extreme volumes of commuter, residential and commercial vehicular traffic. The contract required the project to maintain the existing traffic and pedestrian access during construction; affecting every phase of the planning, design and construction of the Express lanes, feeder roads and shared use paths. By conducting extensive traffic studies and through close coordination with VDOT and the local jurisdictions, our team produced a number of innovative designs, carefully planned lane shifts, and construction phasing sequences that helped to minimize disruption during construction. To reduce the impacts on the public, much of the work was performed at night. An aggressive five day work schedule was implemented with Saturday make-up days incorporated in case of inclement weather.



Community Relations: Our team conducted more than 600 public outreach meetings and, in coordination with VDOT, kept the public involved through various media methods: project website, routine newsletters, and brochure mailings to residents and business. One example of the success of this approach was the closure of South Bound I-495 Bridge at Chain Bridge Road, Tysons Corner. The planned demolition and reconstruction of the new bridge had the potential to disrupt traffic for more than 100,000 residents and business employees in the area. The team devised a demolition plan that completely removed the old bridge in one weekend with a total closure of Rte 123. They blanketed the area with early notification of the weekend closure/detour options using the project website, media announcements, email, telephone calls, postcards, and door-to-door outreach. When the work was completed as planned and promised, **not a single complaint** was received from businesses, motorists, or area residents.
Shared Use Paths: **Every new non-interstate bridge provided shared use paths for bicycles and pedestrian access.** The shared use paths were constructed to expand access for pedestrians to the entire metro region; provide easy access to a vast array of shopping and entertainment venues; encourage high-density, transit-oriented development around metro stations in keeping with local land use plans; offers a viable, dependable alternative to automobile travel; and promotes walking, biking and healthy lifestyles.
SWM/Drainage: LANE installed a total of 143,358 LF of drainage pipe, 15 SWM structures, and a total of 1,444 drainage structures along the entire project.
Safety: The I-495 Express Lanes project has been the recipient of numerous awards including a safety award for more than 5,000,000 manhours without a lost time incident in September 2012. Despite working alongside traffic in a limited area, with many key activities like bridge demolition and steel erection occurring at night, the construction team achieved a Total Recordable Incident Rate (TRIR) of 0.69, which ranks the project among the best heavy civil projects in the nation.

EVIDENCE OF PERFORMANCE
 "A solid experienced company that has built to standard and worked well under difficult traffic and space constraints to minimize impact on travel." - *Garrett Moore, P.E., VDOT Chief Engineer*
 "Project was built over four years under traffic as high as 200,000 vpd and achieved 5 million safe work hours as of September 2012 without a lost time incident, making it among the safest heavy civil projects ever built in the U.S." - *Public Works Financing Newsletter, 12/2012*
 "As the primary self-perform entity in the Flour-Lane Joint Venture, Lane has demonstrated outstanding ability to complete construction on time under these heavy traffic conditions," wrote Tim Steinhilber (General Manager, Capital Beltway Express, LLC) .

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 consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: Route 29 Solutions (Route 29 Widening) Location: Albemarle County, VA (DESIGN-BUILD)	RK&K (RDA- Major Subconsultant for 29 Widening Element)	Name of Client./ Owner: VDOT Phone: 434.305.0348 Project Manager: Dave Covington Phone: VDOT Email: Dave.Covington@vdot.virginia.gov	10/2017	7/2017	\$116,746 (Contract) \$43,162 (Route 29 Widening)	\$129,181* (Contract) \$44,975* (Route 29 Widening)	\$77,508 (60% of Final Value, Lane is 60% & Managing Partner of the JV) \$26, 985 (Route 29 Widening)

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/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form. If the Offeror chooses to submit work performed as a Joint Venture or Partnership, identify how the Joint Venture or Partnership was structured and provide a description of the portion of the work performed only by the Offeror's firm.

Similar Scope of Work:	PROJECT SCOPE														
<ul style="list-style-type: none"> Design-Build Roadways Environmental Geotechnical Right-of-Way Extensive MOT/Phasing Traffic Signals and IT Intelligent Transportation Systems Transportation Management Plan Extensive Utility Relocation Multiple Stakeholder Coordination Public Involvement/Relations QA/QC Survey Construction Engineering and Inspection Overall Project Management 	<p>The Route 29 Solutions Contract contained three project elements designed to improve safety and increase mobility along the Route 29 corridor in Charlottesville and Albemarle County. The Route 29 Widening Project Element was one of three elements and involved the total reconstruction of 1.8 miles of Route 29 from a 4-lane to a 6-lane divided highway between Rio Mills Road to Town Center Drive. The scope of work included: design (RDA and RK&K), right of way acquisitions, utility relocations, stormwater management, open cut storm drainage, excavation (earth and rock), jack & bore storm pipe systems, new ductile iron water main, retaining structures (permanent and temporary), new stone and asphalt road bed, and demolition of the existing ITS and new traffic signals with a fiber communication interface. The Element (and Project) also provided multi-use trails the length of the project. Extensive MOT was required to maintain service to four major residential and commercial intersections plus high volumes of through traffic with no loss of capacity during construction. The Contract was held by the Joint Venture Company LANE/Corman JV. LANE held a 60% share of the team and was the Managing Partner. The JV was integrated meaning both LANE and Corman performed all self-perform facets of the work based on the team percentages. Only LANE of the LANE/Corman JV will be a team member on the Route 7 Corridor Improvements project.</p>														
Personnel on Project:	RELEVANT PROJECT ELEMENTS TO ROUTE 7 CORRIDOR IMPROVEMENTS (ROUTE 29 WIDENING)														
<table border="0" style="width: 100%;"> <tr> <td>Larry Hora (LANE)</td> <td>David Holmes (LANE)</td> </tr> <tr> <td>Chris Monahan (LANE)</td> <td>Shane Smith (LANE)</td> </tr> <tr> <td>Owen Peery (RK&K)</td> <td>Barry Brandt (RK&K)</td> </tr> <tr> <td>Chris Vaught (RK&K)</td> <td>Ricky Woody (RK&K)</td> </tr> <tr> <td>John Giometti (RDA)</td> <td>John Myers (RDA)</td> </tr> <tr> <td>James Street (RDA)</td> <td>Ryan Dreelin (RDA)</td> </tr> <tr> <td>Nikhil Deshpande (RDA)</td> <td></td> </tr> </table>	Larry Hora (LANE)	David Holmes (LANE)	Chris Monahan (LANE)	Shane Smith (LANE)	Owen Peery (RK&K)	Barry Brandt (RK&K)	Chris Vaught (RK&K)	Ricky Woody (RK&K)	John Giometti (RDA)	John Myers (RDA)	James Street (RDA)	Ryan Dreelin (RDA)	Nikhil Deshpande (RDA)		<p>LANE/RK&K/RDA Partnering: The design team, led by Lead Designer RK&K with major subconsultant RDA, provided innovative designs that eliminated the relocation of a Dominion Power distribution line the entire length of the project. MOT and traffic phasing was reduced by utilizing more of the existing pavement during construction and building more of the new pavement in each phase than considered in the PE concepts. We see opportunities to utilize the same innovations on Rte 7, we have the same design team in place and a strong history collaborative working experiences.</p> <p>Roadway: The Route 29 Widening roadway required total reconstruction primarily due to the substandard condition of the existing roadway - rolling profile, minimal to no shoulders and poor site distances. Route 7 has areas that require total reconstruction due to terrain features but will be able to accommodate a widening to the three lane section for both the north and southbound lanes. Drainage improvements included both open cut and jack and bore operations. Cut to fill grading operations were self performed, areas of rock were resolved by hoeram and controlled blasting. On Route 29, we subcontracted the asphalt paving; on Route 7 we have our own asphalt facilities nearby and will be able to self-perform all paving operations. Traffic signals and IT, were part of Route 29 and were self-performed- they will also be self-performed on Route 7 allowing us the flexibility to control our own progress.</p> <p>Public Involvement: The Project's Public Relations Manager worked alongside VDOT's Public Outreach Manager, providing support to the Project Development Advisory Panel and providing updates to VDOT from the D-B team. The Public Relations Manager handled hotline calls, met with citizens, business owners, homeowners associations and others to brief on project developments and upcoming events. Many visits were performed both well in advance and just ahead of when construction activities were about to impact a property or facility so all parties were well aware of the plans to be employed and how best to work together.</p> <p>Utilities: The team coordinated with seven major utilities. Due to the outreach effort with the various utilities, timely coordination and direct involvement with each company, the team managed a seamless process to keep the utility issues from impacting the construction. Several of the utility conflicts were resolved by modifications to the design to accommodate their in place facilities. The major Dominion Power line was avoided by attention to detail, on sight coordination and planning. We have the same utility coordination team in place for the Route 7 project and we are confident our tried and practiced processes will be a success here as well.</p> <p>ROW: The Route 29 team employed its own ROW agents. The ROW issues were not near as significant a number and proximity as Route 7, but were able to avoid issues and conflicts due to our team's due diligence. Our teams ROW agents for Route 7 are the same as on Route 29 and are employed and managed internally by our team.</p> <p>MOT: LANE developed a MOT plan to maintain traffic on Route 29 that utilized more of the existing pavement to maintain traffic and eliminate a phase from the original concept plans. This process facilitated an early completion to the project. The public enjoyed no level of service drop during construction. Multiple major intersections feeding housing developments and businesses were maintained without issue. Numerous direct access entrances were also maintained with strong planning and notification of the property owners and HOAs; all similar in nature to the work on Route 7, and all to designed implemented and managed by the same team as Route 29.</p> <p>Environmental: Environmental design and permitting included: wetland delineations and stream assessments; determination of wetlands and stream compensatory mitigation requirements; secured rare, threatened and endangered species clearances; and secured numerous other clearances and permits.</p> <p>Shared Use Paths: A multi-purpose trail was installed the entire length of Route 29 providing citizens safe access along the corridor.</p>
Larry Hora (LANE)	David Holmes (LANE)														
Chris Monahan (LANE)	Shane Smith (LANE)														
Owen Peery (RK&K)	Barry Brandt (RK&K)														
Chris Vaught (RK&K)	Ricky Woody (RK&K)														
John Giometti (RDA)	John Myers (RDA)														
James Street (RDA)	Ryan Dreelin (RDA)														
Nikhil Deshpande (RDA)															
EVIDENCE OF PERFORMANCE															
<p>Route 29 Widening project was completed almost three and a half months ahead of schedule and under budget. The JV received a \$1,085,124 incentive for early completion of the Route 29 Widening project (and the Berkmar Drive Extension project element). "These projects represent a new way of doing business for VDOT. We are already implementing some of the successful strategies developed by the Route 29 Solutions team on other projects across Virginia," said VDOT Commissioner Charles Kilpatrick. "One in particular, the early engagement and continued involvement of the local community and stakeholders, resulted in projects that addressed their concerns and reflect the desires of the community. The benefits of those strategies, including savings in time and money as well as projects completed more quickly, will be realized by all the citizens of the Commonwealth."</p> <p align="right"><i>*Final contract amount includes the incentive bonus for early completion. The JV was under budget.</i></p>															



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 consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: Intercounty Connector (ICC MD 200) I-270/I-370 to MD 97 Contract A (D-B) Location: Montgomery County, MD	Name: Parsons Transportation Group-Jacobs - JV	Name of Client./ Owner: MD SHA Phone: 410.838-7788 Project Manager: Mark Coblentz (Maryland State Highway Administration) Phone: 443.572.5222 Email: mocoblentz@sha.state.md.us	08/2010	12/2010 (Actual)	\$464,000	\$464,000 (Final)	\$102,107 *

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/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form. If the Offeror chooses to submit work performed as a Joint Venture or Partnership, identify how the Joint Venture or Partnership was structured and provide a description of the portion of the work performed only by the Offeror's firm.

Similar Scope of Work:	PROJECT SCOPE	
<ul style="list-style-type: none"> Design-Build Roadway - Urban Right of Way Structures/Bridges/ Noise walls/ Retaining wall Survey, Environmental Compliance Geotechnical Extensive MOT/Phasing Stream Relocation & Maintenance of stream flow Traffic Control Phasing & Maintenance Intelligent Transportation Systems Transportation Management Plan Extensive Utility Relocation (Washington Gas) Multiple Stakeholder Coordination Public Involvement/Relations QA/QC Safety Shared use path with under highway pedestrian tunnels Overall Project Management 	<p>ICC Contract A was the first of five contracts planned to create the \$1.5 Billion 18.8 mile ICC that ultimately connected the I-270 corridor in Montgomery County, MD to the I-95/ U.S.1 corridor in Prince George's County, MD. Wagman Heavy Civil, Inc. was an equity member of a fully-integrated construction joint venture known as the Intercounty Constructors, and as such, was joint and severable with each partner and financially responsible for the project. Contract A was 7.3 miles long with 18 structures, 350,000 SF of noise walls, utility relocations, ROW acquisition, environmental permitting and monitoring, drainage, over 3 million CY of roadway excavation, and construction of four interchanges. As a JV Partner, Wagman was responsible for the design and construction of the entire project.</p> <p style="background-color: #004a87; color: white; padding: 2px;">RELEVANT PROJECT ELEMENTS TO ROUTE 7 CORRIDOR IMPROVEMENTS PROJECT</p> <p>Roadway Widening: Existing I-370 was widened to the median to create an additional lane and eight existing structures were widened with interchange reconstruction.</p> <p>Bridges/Structures: 18 new bridges were constructed and four structures were reconstructed to accommodate new widening.</p> <p>Grade Separated Interchange: Wagman utilized the ATC Process to redesign a three level interchange into a two level trumpet interchange reducing cost, and reducing long-term maintenance costs. A Complete TMP was developed for the project that included all phases of construction and project completion. This TMP included three new grade separated interchanges and impacts to major cross roads & local neighborhoods; including a major underpass with retaining walls was constructed</p> <p>Public Involvement: Wagman worked closely with MDSHA on a comprehensive, Third Party coordination effort including organizing meetings, generating newsletters, providing website content, and addressing daily concerns. We developed and implemented an MBE program that identified and utilized 25 individual firms to achieve the Owner's overall project goal of 15% as well as the 20% goal for professional services. This project required significant outreach and coordination programs which successfully relocated and improved numerous public and private utilities with minimal service interruptions.</p> <p>Utilities: This project required the design and relocation of multiple Utilities. During design development, construction personnel and designers worked together to avoid and minimize utility impacts, but when the utility had to be relocated we were responsible for design, construction, subcontractors and coordination with the utility owners. The Construction JV subcontracted directly with Utility Owner approved subcontractors to relocate Gas, Power & communication utilities. Water and sewer relocation was self-performed by the JV (Wagman Equity Partner) on the western end of the project.</p> <p>ROW: Through partnering, risk was shared, and Wagman assisted SHA with the required ROW acquisition associated with an ATC.</p> <p>MOT: Contract A tied into existing I-370 (ADT=100,300), along with the eastern portion of the project being primarily new alignment construction through multiple neighborhoods., With significant volume along I-370, all work in that area was exposed to high speed high volume traffic. It was imperative to provide well planned traffic operations to adequately inform the traveling public and to minimize impacts. Additionally, along the I-370 corridor much of the work included multi-stage operations in the area with direct access to the Shady Grove Metro Station and facility</p> <p>ITS: This project required the furnishing and installation of a complex ITS and Electronic Toll Collection (ETC) system. Wagman also interacted with impacted third party stakeholders along the ICC corridor on a daily basis to ensure proper coordination during construction activities.</p> <p>Shared Use Paths: Another key challenge was the need to traverse through various high profile neighborhoods and communities where pedestrian and child safety, noise impact, and dust control were all highly sensitive issues but were handled efficiently through an open and transparent communication effort. This included numerous temporary cross road "run-arounds" where traffic was relocated to facilitate construction of bridges that carried local roads over the final ICC alignment. For one neighborhood, we constructed a depressed cut & cover underpass with extensive retaining walls leading into and out of the underpass with a park on the roof.</p>	
Proposed Personnel on Project:	David Leber (Wagman)	

Safety: The project safety results were exceptional, garnering an industry safety award, and included a non-loss manhour streak that exceeded 1 million manhours.

Quality: The key strategy for a tremendously successful project in terms of Quality was the utilization of an experienced contractor employees who served as liaisons between the QC team, the construction team and the SHA QA team. This proactive effort reduced rework, expedited complete and accurate documentation, and facilitated the flow of construction in regard to schedule by timely review and release of hold points as well as work plans and preparatory meetings to resolve concerns before physical work commenced.

EVIDENCE OF PERFORMANCE

2012 National Design-Build Award – Design-Build Institute of America (DBIA) | **2012 Exemplary Ecosystem Initiatives Award** – Federal Highway Administration (FHWA) | **2012 America's Transportation Awards Top 10 Finalist** – American Association of State Highway Transportation Officials (ASSHTO) | **2012 Globe Award for Environmental Excellence** – American Transportation Builders Association (ARTBA) | **2011 Northeast's Region Best Overall Transportation Project** – Engineering News Record (ENR) | 2011 President's Award for Highways – American Association of State Highway and Transportation Officials (AASHTO).

*Even though Wagman was a 22% equity construction JV partner we provided 50% of the workforce and equipment. In addition, we provided Management personnel such as: Assistant DBPM, Assistant CM Roadway, Assistant CM Structures, Assistant CM E&S, Assistant CM Utility Relocation, Design Coordinators; plus we provided multiple construction engineers, superintendents and foremen throughout the JV organization.

ATTACHMENT 3.4.1(b)
LEAD DESIGNER WORK HISTORY FORMS

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 contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: Route 29 Solutions (Rio Road) Location: Albemarle, VA DESIGN-BUILD	Name: LANE/Corman	Name of Client: VDOT Phone: 434.422.9373 Project Manager: David Covington, PE Phone: 434.422.9373 Email: Dave.covington@vdot.virginia.gov	03/2015	07/2017	\$116,700 (Contract) \$40,000 (Rio Road)	\$128,700* (Contract) \$48,000* (Rio Road)	\$10,444 (Contract) \$2,900 (Rio Road)

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/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form.

Similar Scope of Work:	PROJECT SCOPE
<ul style="list-style-type: none"> • Design-Build • Roadways • Interchange • Survey • Structures and Bridges • Environmental • Geotechnical • Hydraulics • Traffic Control Devices • Transportation Management Plan • Maintenance of Traffic • QA/QC • Right-of-Way • Utilities • Landscaping • Guardrail • Public Involvement/Relations • ITS • Pedestrian Facilities • Signs, Signals, Lighting 	<p>RK&K was the Lead Engineer and design manager for the entire Route 29 Solutions Design-Build project, which consists of three distinct 'elements' bundled into a single D-B contract. The three elements were: Route 29 and Rio Road Grade Separated Intersection; Route 29 Widening from four lanes to six lanes from Polo Grounds Rd. to Towncenter Dr.; and Berkmar Dr. Extension of 2.3 miles on new alignment from Hilton Heights Rd. to Towncenter Dr. This work History Form focuses on the Rio Road element. The contract required that the depressed travel lanes and associated bridge along Route 29 in the center of the Rio Road intersection be constructed within one summer in a period of 103 days. The Rio Road project element is complete, while the Route 29 Widening and Berkmar project elements are nearing completion and are scheduled to be complete approximately three months ahead of the fixed completion date. Work was performed in RK&K's Richmond and Fairfax offices.</p> <p>RELEVANT PROJECT ELEMENTS TO ROUTE 7 CORRIDOR IMPROVEMENTS</p> <p>Roadway: RK&K was the lead engineer for the Rio Road grade separated intersection project element.. The project required significant roadway design for several different roadway types and typical sections with a mix of roadway rehabilitation, widening, and new construction.</p> <p>Grade Separated Interchange: RK&K performed the structural engineering of the Rio Road Grade Separated Intersection using an innovative design method that had never been constructed in Virginia. The abutments were integrally placed on top of the soldier pile retaining wall to minimize the footprint of the bridge and allow traffic on Route 29 to remain open throughout the construction process. The bridge superstructure was designed to act as a strut to support the retaining walls horizontally while also supporting truck and roadway traffic vertically. This design concept was chosen because of the limited amount of space in the intersection and the requirement to keep traffic open at all times during the project. The bridge and retaining walls were built in the congested intersection without acquiring additional right-of-way in an extremely tight schedule.</p> <p>Limiting Impacts to the Traveling Public/Businesses/Communities/Safety: The innovations discussed above significantly contributed to the Team's ability to deliver the project in advance of the required completion date. In such a tight, urban environment, this reduction in construction duration effectively limited permanent and temporary impacts to the traveling public, businesses and the surrounding communities. Through the collaboration and the partnership between VDOT and our team, the project was successfully delivered ahead of the fixed completion date. In addition , the extremely aggressive interim requirement to complete the grade separation in 103 days was completely surpassed by the this D-B Team's ingenuity, allowing that phase of the work to be completed in 58 days.</p> <p>Maintenance of Traffic: RK&K provided traffic engineering, the regional transportation management plan (TMP), and maintenance of traffic (MOT) for the Rio project element. MOT on the Rio project was critical because the contract required all existing lanes to be maintained during the day except for a 103 days in the summer. RK&K used the WZTIA to predict the impacts associated with detouring Rio's left turn and through movements in this interim period and included two temporary U-turns on US 29 to improve operations. The TMP included re-timing and phasing of Route 29 corridor signals to facilitate the modified traffic patterns, development of queue lengths at the U-turn locations and the use of detours to reduce the number of U-turning vehicles. The TMP included outreach in conjunction with VDOT to publicize the detours and re-timed signals. RK&K monitored traffic impacts after implementing each traffic change and made adjustments to optimize the plan to fit actual conditions.</p> <p>Environmental: RK&K provided full service environmental design and permitting including: wetland delineations and stream assessments; determination of wetlands and stream compensatory mitigation requirements; secured rare, threatened and endangered species clearances; and secured numerous other clearances and permits.</p> <p>Public Outreach/Involvement: Our Team provided a Public Relations Manager to work alongside VDOT's Public Outreach Manager, providing support to the Project Development Advisory Panel and providing updates to VDOT from the D-B team. The Public Relations Manager handled Hot Line calls, met with citizens, business owners, homeowners associations and others to brief on project developments and upcoming events. Many visits were performed just ahead of when construction activities were about to impact a property or facility. The results of this outreach can be seen in the Evidence of Performance listed below.</p> <p>Safety: The project included design and construction of bike lanes and multi-use paths, increasing safety for these users. On Rio Road, separating the local and through traffic at this intersection, which had a history of high crash rates, improved safety.</p> <p><i>* Contract value increased as a result of owner initiated changes to the project scope and the incentive bonus.</i></p>
Proposed Personnel on Project:	
Owen Peery (RK&K) Ryan Masters (RK&K) Chris Vaught (RK&K) Mike Hogan (RK&K) Richard Woody (RK&K) Barry Brandt (RK&K) Joe Rauseo (RK&K)	



EVIDENCE OF PERFORMANCE

“LANE/CORMAN and RK&K did an excellent job of selecting the right design for a unique need, designing the bridge quickly to meet the needs of an aggressive schedule, working closely with VDOT to provide solutions for long-term maintenance and providing high quality design and construction.” —David Covington, PE, Regional Manager, VDOT

“This project brought something that you cannot pay for: Good will ... This should become the default model for community engagement.” —Liz Palmer, Chair, Albemarle County Board of Supervisors

“The partnership between VDOT and LANE/CORMAN, as well as the cooperation of Albemarle County, the nearby businesses and neighborhoods and the community at large, were instrumental in the success of this project. Without the involvement of the businesses and the community – and their understanding for the inconveniences they experienced – we would not have attained this successful outcome.” — Charles Kilpatrick, VDOT Commissioner

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 contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: I-64 Widening and Route 623 Interchange Improvements (Short Pump) Location: Goochland and Henrico Counties, VA DESIGN-BUILD	Name: Corman Construction	Name of Client: VDOT Phone: 804.524.6433 Project Manager: Shane Mann Phone: 804.524.6433 Email: shane.mann@vdot.virginia.gov	10/2013	11/2015	\$33,238	\$34,862	\$2,500

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/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form.

Similar Scope of Work:	PROJECT SCOPE
<ul style="list-style-type: none"> Design-Build Roadways Survey Structures and Bridges Environmental Geotechnical Hydraulics Traffic Control Devices Transportation Management Plan Maintenance of Traffic QA/QCQA/QC Public Involvement/Relations 	<p>RK&K's Richmond office served as the Lead Designer for this D-B project involving the inside widening of 4.5 miles of I-64 from a four-lane divided freeway to a six-lane divided freeway. The project began west of the interchange with Route 623 and extended to Route 295 (Pouncy Tract Road), and included two replacement bridges and improvements to the I-64/Route 623 interchange. The I-64 interchange with Route 288 is also located within the project limits. This segment of I-64 provides a critical link between downtown Richmond and the Richmond's "West End," with traffic volumes in this area at nearly 50,000 vehicles per day. I-64 also serves as the primary connection between the cities of Richmond and Charlottesville.</p>
Proposed Personnel on Project:	RELEVANT PROJECT ELEMENTS TO ROUTE 7 CORRIDOR IMPROVEMENTS PROJECT
Owen Peery (RK&K) Ryan Masters (RK&K) Stuart Samberg (RK&K) Michael Hogan (RK&K) Richard Woody (RK&K) Jeff Kapinos (RK&K) James Durbin (RK&K)	<p>Interstate Widening: Design and construction of this freeway, with a 75-mph design speed, included the following roadway improvements: widening of the existing I-64 to provide one 12-foot wide lane in each direction of I-64 median; addition of a 12-foot-wide paved shoulder in each direction; median guardrail installation; and outside shoulder guardrail replacement. Upgrades to the existing outside shoulder included full depth reconstruction for a portion of the project length, as well as 2" mill and overlay of the existing travel lanes and remaining shoulder. Improvements to the I-64/Route 623 interchange included widening both off ramps from I-64 to Route 623 to provide additional turn lanes, the addition of a left turn lane on Route 623 to access I-64 eastbound, and upgrading the existing traffic signal.</p> <p>Limiting Impacts to the Traveling Public/Businesses/Communities/Safety: RK&K developed a comprehensive Transportation Management Plan (TMP) and Maintenance of Traffic (MOT) plan to manage traffic during construction, which included a traffic operations plan, temporary traffic control plan and public communications plan. Access to entrance and exit ramps at all three interchanges were maintained while completing the improvements. Other innovations, including the use of MSE walls in lieu of culvert extensions resulted in reduced construction durations, limiting impacts to the traveling public.</p> <p>Innovative Design/Construction Techniques: The bridges over Little Tuckahoe Creek utilized an innovative abutment design of rock-socketed steel H-piles with MSE-type straps carrying a portion of the lateral loads, reducing the number of augured piles required for lateral stability of the abutments. Another innovative design and construction technique was the use of five MSE retaining walls at existing culvert locations which reduced the cost of the project, review times, and construction durations.</p> <p>Implementing/Maintaining QA/QC Plan: Our design quality management plan, developed specifically for this project, resulted in quality design submittals that were easily reviewed by VDOT. Efficient reviews allowed the design and construction to proceed on schedule. Because of our ability to maintain an effective Quality Assurance and Quality Control Plan, this project earned the second highest CQIP score for a design-build project.</p> <p>Structures and Bridges: Structures design included 130' simple span prestressed concrete girder bridges for I-64 over Little Tuckahoe Creek to replace the existing three-span steel girder bridges. Design included foundations, substructure, and superstructure. Special considerations included significant skew, extreme scour conditions, and staged construction to support maintenance of traffic during bridge replacement. The two replacement bridges provided VDOT with new structures with a longer life and fewer maintenance issues than rehabilitating and maintaining the existing bridges, at a lower cost than repair and rehabilitation. Structural design tasks on this project also included design of foundations for signal and sign structures, upgrades to pier protection barriers to meet current standards at existing overpasses.</p> <p>MOT/TMP: The sequence of construction was designed so that construction could be accomplished in two phases, with two lanes of traffic in each direction maintained throughout construction. Access to entrance and exit ramps at all three interchanges were maintained while completing the improvements. The TMP was designed in accordance with the allowable work hours and holiday and weekend restrictions implemented by VDOT for this project. The WZTIA was used to evaluate traffic impacts associated with construction activities and refine the MOT to minimize congestion during construction.</p> <p>Environmental: RK&K provided full service environmental design and permitting for this project, including: wetland delineations and stream assessments; determination of wetlands/stream mitigation requirements; securing rare, threatened and endangered species clearances; securing cultural resource clearances from the Virginia Department of Historic Resources; acquiring water quality permit authorizations/ modifications; securing Clean Water Act Individual Permit, State Programmatic General Permit, Water Protection General Permit, and Virginia Stormwater Management Permit from the VDEQ; and compliance with environmental commitments contained in the NEPA document.</p> <p>Geotechnical: Full geotechnical services were provided that included: subsurface explorations; laboratory testing & soil classification, strength, and consolidation parameters; pavement design; assessment and mitigation for unsuitable soils; foundation design for overhead sign/signal structures; and analysis of MSE retaining walls at culvert locations. ECS also provided foundation design for the replacement bridges and associated wingwalls.</p> <p>Hydraulics/Drainage: RK&K performed a full Hydrologic and Hydraulic Analysis (H&HA) for the bridge crossings over Little Tuckahoe Creek, including HEC-RAS modeling and scour analysis. RK&K determined that a replacement bridge with a smaller hydraulic opening than the original bridge was feasible, resulting in significant cost savings related to the bridges. Drainage design included design of stormwater management facilities, erosion and sediment control measures, bridge deck drainage, adequate outfall analysis, underdrains, storm sewer systems, and design of temporary drainage needs for MOT sequencing.</p>



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 contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: Route 250 Bypass Interchange at McIntire Road Location: Charlottesville, VA DESIGN-BUILD	Name: General Excavation, Inc.	Name of Client: City of Charlottesville Phone: 434.970.3182 Project Manager: Jeannette Janiczek Phone: 804.558.9721 Email: janiczek@charlottesville.org	06/2015	06/2015	\$20,377	\$24,459	\$5,900

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 subcontractant. The Work History Form shall include only one singular project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form.

Similar Scope of Work:	PROJECT SCOPE
<ul style="list-style-type: none"> • Roadways • Grade Separations (Interchange) • Survey • Bridge, Retaining Walls and Structures • Environmental • Geotechnical • Hydraulics • Stormdrain and SWM • Milling and Overlaying Existing Pavement • Traffic Control Devices • Signs, Sign Structures, and Foundations • Transportation Management Plan • Maintenance of Traffic, TMP • Right-of-Way • Utilities • Stakeholder Coordination • Extensive Public Outreach • QA/QC • Construction Engineering and Inspection 	<p>The Route 250 Bypass project is one of the largest projects undertaken to date as part of the VDOT First Cities Initiative / Locally Administered Project (LAP). As prime consultant, RK&K provided complete planning, engineering, and construction management services on a new grade separated interchange on the Route 250 Bypass at the intersection of McIntire Road. The design was led by RK&K as the prime consultant. Phase I services included development of Conceptual Alternatives, Detailed Alternatives and a Preferred Alternative through Public Hearing and completion of the Environmental Documents. Phase II services included final design and assisting the City with bidding and procurement of the project. Phase III services continue and consist of construction management and inspection as well as construction engineering working in coordination with the contractor. Project elements have included environmental/NEPA documentation, Public Involvement, Traffic Data Collection and Analysis, Roadway Design, Structural Design, Traffic Engineering Design, Hydraulic and Hydrologic Analysis and Design, Graphic/Computer Renderings, and Project Website Hosting. Under the First Cities Initiative / LAP, all was performed for the City of Charlottesville and closely coordinated with VDOT and the FHWA.</p>
Proposed Personnel on Project:	RELEVANT PROJECT ELEMENTS TO ROUTE 7 CORRIDOR IMPROVEMENTS PROJECT
Owen Peery, Ryan Masters, Jeff Kuttesch, Stuart Samberg, Brian Finerfrock, Mike Hogan, James Durbin (All RK&K Personnel)	<p>Interchange Design: Major features of this design included complete roadway reconfiguration and reconstruction, new roadway construction, a single span–semi-integral abutment bridge, two box culverts including stream diversions, extensive utility relocations, and multiple retaining walls. In addition, the RK&K Team prepared landscaping planting plans and cultural resource mitigation commitments. The roadway design was optimized to limit right-of-way requirements, avoid parkland and historic property acquisition, to best-fit the roadway profiles to the existing topography and provide a grade separation at this urban intersection.</p> <p>Traffic: A key element in the development of the interchange concepts was the incorporation of context sensitive solutions to the safety, congestion, and connectivity. Several of the interchange concepts that were developed incorporated modern roundabouts instead of traffic signals at the ramp termini along McIntire Road. RK&K performed traffic engineering analyses using SIM Traffic and SIDRA based on projected 2035 design year traffic volumes as well as several interim years to determine the most appropriate configuration for the interchange.</p> <p>Hydraulics and Hydrologics: Hydrology calculations were conducted for a 2.8 acres lake that was incorporated into the road plans. The final report included an independent hydrologic analysis of the 425-acre watershed, storm event routing of the proposed lake, and HEC-2 analysis of the lake outfall at Schenks Branch. Final results were then incorporated with the plans including modification of lake parameters and outfall structure to attain the proper lake performance desired during storm events. A Hydrologic and Hydraulic Analysis and scour analysis was conducted for a new bridge over Schenks Branch and for replacement of a double 8'x8' box culvert beneath Route 250. Urban stormwater management practices were implemented using a combination of measures to minimize impacts to right-of-way and historic features. These included a combination of manufacturers filtering devices along with a stormwater management pond. E&S plans were also developed in multiple phases in conjunction with the TMP. This included the bridge construction and complex narratives addressing installation of temporary and permanent drainage and erosion control measures during all stages of roadway construction.</p> <p>Structures: The Route 250 Bridge Bypass Structure over McIntire Road was examined for various span lengths and superstructure styles to lower project costs. The final solution was a single-span bridge utilizing steel plate girders to provide a lighter, thinner and more transparent structure which serves as the gateway to downtown Charlottesville. The design for a bridge type weighed the cost estimates with the overall requirements for aesthetics and durability. The abutments were aligned with McIntire Road and were set parallel to each other to simplify the framing of the bridge. While they were skewed with respect to the superstructure, the fact that they were parallel to each other facilitated the design and construction of the structure. Every effort was made to eliminate or minimize the use of joints on the structure; semi-integral abutments were selected and designed.</p> <p>Limiting Impacts to the Traveling Public/Businesses/Communities/Safety: This project had to minimize impacts and footprint due to many constraints. Most significantly, a portion of the project directly impacted a City park that was found to be eligible for the historic register so minimizing impacts to the park and surrounding neighborhoods were a major part of the Purpose and Need for the project. Additionally, other historic features existed in all other quadrants of the project, thereby enforcing the need to have minimal impacts and footprint from the project. This grade separation was constructed where there was previously an urban intersection; the design that was developed required the displacement of only one private residence and no businesses.</p> <p>MOT: Maintenance of traffic was complex and multi-phased allowing for the construction of a grade separation in the middle of an urban intersection. Additionally, all four lanes of the Route 250 Bypass were required to remain open with short term lane closures at night or during off-peak hours. Our MOT and TMP plan accounted for the traveling public to move through and around the work on the bridge while allowing for adequate room to perform the construction of the project. This required many phases of work as box culverts and bridge elements had to be built in small phases, allowing traffic to be relocated or shifted. Our design took into account support for excavation and contractor equipment and materials so the project could be constructed in this limited right of way.</p> <p>Public Outreach Program: RK&K managed and oversaw a tremendous outreach program for this project. This included administering a Steering Committee that was hand-appointed by City Council and provided over 40 opportunities for public input into the design. The Steering Committee proponents as well as opponents of the project. This project would fail and not move forward if clear direction had not been reached from the steering committee and a recommendation provided to City Council on the preferred alternative. In the face of significant public opposition to this project, RK&K's Project Manager, Owen Peery, along with the City's Project Manager led the Steering Committee through the evaluation of 15 interchange alternatives to the point where two very similar interchanges were recommended to City Council for a final decision. RK&K's ability to effectively lead this committee led to a final consensus and avoided a negative outcome which would have derailed this project and was key to the successful completion.</p> <p>Utilities: To facilitate the construction of this project, an extensive amount of utility relocations were required. This included: Natural Gas – 6,300 feet of high- and medium pressure gas transmission mains including the complete relocation and reconstruction of a gas regulator station; City Sewer – relocation of 1,200 feet of sewer mains and laterals; Regional Sewer – replacement of 1,300 feet of 21" concrete and clay sewer main with a 30" gravity interceptor sewer including crossing of Schenks Branch and boring 400 feet under the existing Route 250 Bypass; and Water – relocation of 4,600 feet of water mains. An innovative design concept for this project was incorporated into the water line replacement. Conventional construction pile driving would have resulted in unacceptable levels of vibrations being put on the existing water line. And the owner desired no piles in the easement. To solve this issue a grade beam coupled with pre-drilling the adjacent piles was utilized. This allowed us to span the entire easement while pre-drilling the top 15 feet of the piles lowered the pile driving vibrations to below the elevation of the utility.</p>
EVIDENCE OF PERFORMANCE	
The City of Charlottesville demonstrated RK&K's exceptional performance on this project by extending our contract through all phases of planning, design and construction management. Further exemplifying RK&K's performance, the project was delivered on budget and ahead of schedule. "RK&K has raised the bar as to the quality of work the City expects from its consultants," said Jeanette Janiczek, the City of Charlottesville's Project Manager.	



LANE

**14500 AVION PARKWAY
SUITE 200
CHANTILLY, VA 20151
703.222.5670**

www.laneconstruct.com