



With Lead Designer



**Virginia Department of Transportation**  
**Skiffes Creek Connector Design-Build**  
**Statement of Qualifications**

May 30, 2019

## 3.2 | Letter of Submittal

May 30, 2019

Sudha Mudgade, PE, PMP, DBIA  
Alternative Project Delivery Division  
Virginia Department of Transportation  
1401 East Broad Street  
Richmond, VA 23219

Letter of Submittal /Statement of Qualifications  
Skiffes Creek Connector  
Contract ID Number: C00100200DB104

**3.2.1 Offeror** Skanska USA Civil Southeast Inc. (herein after referred to as Skanska) is the legal entity that will execute the contract with VDOT

**3.2.2 Point of Contact**

Curtis Rowden, Design-Build Manager  
Skanska USA Civil Southeast Inc.  
295 Bendix Road, Suite 400  
Virginia Beach, VA 23452  
P: 757.578.4144 F: 757.420.3551  
Email: curtis.rowden@skanska.com

**3.2.3 Principal Officer Information**

Brian Stieritz, PE, Executive Vice President  
Skanska USA Civil Southeast Inc.  
295 Bendix Road, Suite 400  
Virginia Beach, VA 23452  
P: 757.420.4140 F: 757.420.3551  
Email: brian.stieritz@skanska.com

**3.2.4 Offeror's Corporate Structure.** Skanska is a Virginia corporation. Skanska is financially responsible for the referenced project and does not have any liability limitations. A single 100 percent performance bond and single 100% payment bond will be provided for Skanska by our surety.

**3.2.5 Identity of Lead Contractor and Lead Designer.** Skanska is the Offeror and Lead Contractor responsible for the overall contract execution and construction and will serve as the legal entity who will execute a contract with VDOT. Volkert, Inc. (herein after referred to as Volkert) is the Lead Designer responsible for the overall design of the Project.

**3.2.6 Affiliated/Subsidiary Companies.** Please refer to the Attachment 3.2.6 to review the list of Skanska' s Affiliated/Subsidiary Companies.

**3.2.7 Debarment Forms.** Skanska has provided an executed Certification Regarding Debarment Form in Attachment 3.2.7(a) - Primary Covered Transactions and subcontractors have provided executed forms in Attachment 3.2.7 (b) - Lower Tier Covered Transactions.

**3.2.8 Offeror's VDOT Prequalification Evidence.** Skanska's prequalification number is T009 and is active and in good standing; prequalification and certifications are in Appendix.

**3.2.9 Evidence of Obtaining Bonding.** Skanska's surety letter located in the Appendix attests to our ability to obtain Payment and Performance Bonds.

**3.2.10 SCC and DPOR Registration Documentation.** Current SCC Certifications, DPOR licenses, and staff licenses are included in the Appendix.

**3.2.11 DBE Statement.** Skanska is committed to achieving the 13 percent DBE participation goal for the entire value of the Contract.

Sincerely,

**Skanska USA Civil Southeast Inc.**



Brian Stieritz, PE  
Executive Vice President



## 3.3 Offeror's Team Structure

### 3.3 Offeror's Team Structure

The Skiffes Creek Connector Design-Build Project (Project) will provide an immediate positive impact to traffic in this community when completed and our **Skanska Team** wants to build this Project!

**Skanska's** purpose is simple - we build for a better society. **Skanska** delivers on our purpose through a great variety of projects by developing innovative, sustainable solutions for our customers.

Our culture entrusts all of us to be leaders in safety, quality, ethics and sustainability in the communities where we live, work and play! **Volkert's** mission is to serve their clients with quality, innovation, and honest value – whether serving the public sector or private industry, **Volkert's** focus is on quality. **Volkert** has integrated the discipline of quality into its organizational culture through the deliberate application of quality management principles in everything they do.

With these shared values, the **Skanska Team** brings successful, relevant experience delivering design-build projects in the Hampton Roads region containing scope similar to that of the Project, with its design and construction of bridges, roadway, maintenance of traffic (MOT) and storm drains, while coordinating the work with right of way (ROW) acquisition, utility relocations, and railroad operations. **The Skanska Team has successfully delivered numerous design-build projects on both local and national levels, including the highly successful Martin Luther King Expressway Extension (MLK Extension)** as part of the Elizabeth River Crossings (design-build) P3 project in Portsmouth, that won the ENR Project of the Year. **Skanska** was the managing majority partner of SKW Constructors, the joint venture formed to design and build the \$1.48 billion project. **Volkert** was a member of the design team, managing engineering and design of the MLK Extension portion of the project. We are joining forces once again as the locally experienced and readily available team to deliver the Project with the same success as the MLK Extension. We bring the best resources to meet the specific needs and requirements of the Project to deliver Skiffes Creek Connector for VDOT to improve the movement of people and goods, as well as provide for greater safety in James City County.

**Design Build Team - Regional Presence.** **Skanska** strategically chose highly skilled team members with vast experience in the Hampton Roads region, creating an organizational structure that fully integrates the design-build and quality assurance process and capitalizes on the strongest attributes of each team member's respective capabilities.

**Skanska** is headquartered in Virginia Beach and is a leading heavy civil and marine construction contractor with an extensive portfolio of providing innovative and award-winning design-build solutions in highways, bridges, rail, and marine construction. Our breadth of experience allows us to address the unique aspects of this Project and apply our expertise and best practices gleaned from numerous design-build projects in Virginia and the Southeastern United States. Our corporate offices have been in Hampton Roads since 1932, and **Skanska** has self-performed construction on many of the tunnels, bridges, highways, and marine facilities in the area over the years, working as a trusted partner with VDOT for over 87 years in the Hampton Roads area. **Skanska's work on significant design-build projects in Hampton Roads has included the MLK Extension and the APM (Maersk) Terminal Roadway Improvements (APM) in Portsmouth, VA.**

Our Lead Designer, **Volkert**, will be responsible for providing the Design and Independent Quality Assurance program for the Project. **Volkert** is a multidisciplinary transportation engineering firm with a Virginia Beach office that has a national reputation as a leading provider of design-build best practices for complex transportation

infrastructure while applying their local knowledge of conditions and requirements unique to the Tidewater area. **Volkert** works closely with design-build contractors to develop design plans on accelerated schedules. Projects of note that have included our Design Manager as lead are the **I-264 Pavement Rehabilitation design-build in Virginia Beach; I-66 Pavement Rehabilitation design-build and the I-495 Northern Section Shoulder Lane Use design-build projects.** In addition, **Volkert's** work on significant design-build projects

“The innovation of the Elizabeth River Tunnels project benefits the environment and the community while providing significant operational savings. I know your work will inspire others to exhibit the same leadership qualities that have enabled you to be so successful.”  
Senator Mark Warner, Virginia

Volkert is a trusted partner on two of the largest mega projects, High Rise Bridge and I-64/I-264 Interchange, in the region.

in Hampton Roads includes providing quality assurance (QA) management services for **Middle Ground Boulevard in Newport News and Phase I of I-64 Southside Widening and High Rise Bridge in Chesapeake**. Volkert has 36 years of experience delivering transportation engineering services to VDOT, including a wide range of roadway, interchange, interstate, and bridge design projects throughout the Commonwealth and beyond with constraints typical to urban and semi-urban areas such as high traffic volumes and limited ROW similar to those presented on this Project.

### 3.3.1 Identification & Qualifications of Key Personnel

**Skanska** has assembled a team of highly-qualified and locally experienced individuals (some of whom have previous experience working on the Skiffes Creek site), and structured our team for optimal performance. These key staff and key design firms operate in the Hampton Roads region and provide a proven history of success on similar projects. Each is accustomed to outperforming on design-build projects, and ready to begin immediately. Our Key Personnel offer extensive roadway and bridge design and construction expertise in delivering projects to VDOT standards throughout the region. The **Skanska Team**, particularly Key Personnel, will remain intact for the duration of the contract providing consistent leadership through successful delivery of the elements of this contract. Our Key Personnel have noteworthy experience on transportation projects similar to their roles on this Project. Our local transportation experience proves that we know VDOT's design-build process (approvals, standards, specifications, criteria, etc), we have relationships with local stakeholders and we have local resources to address any issues if they arise. **We will start at full speed with no learning curve.** Each team member is very familiar with the reporting structure of the leadership team of a VDOT design-build project as outlined below; their detailed qualifications and experience can be found in their resumes in Attachment 3.3.1.

Key Personnel	Reporting Relationships
Brent Hunt, PE Design-Build Project Manager (DBPM)	<ul style="list-style-type: none"> <li>• Reports to VDOT</li> <li>• Manages DM, CM, QAM, Safety Manager</li> </ul>
Matt Liffick, PE Quality Assurance Manager (QAM)	<ul style="list-style-type: none"> <li>• Reports to the DBPM</li> <li>• Lines of communication to VDOT, CM, QC Manager</li> </ul>
Mark Burris, PE Design Manager (DM)	<ul style="list-style-type: none"> <li>• Reports to the DBPM</li> <li>• Lines of communication to VDOT, CM, Design QA/QC</li> <li>• Manages Design Team, Design Discipline Leads, Design QA/QC</li> </ul>
Bill Eskins Construction Manager (CM)	<ul style="list-style-type: none"> <li>• Reports to the DBPM</li> <li>• Lines of communication to VDOT, DM, QC Manager, QAM</li> <li>• Manages all craft employees, subcontractors and suppliers</li> </ul>

### 3.3.2 Organizational Chart and Narrative

Our organizational chart shows the “chain of command” which identifies major functions and defines the reporting relationships of personnel responsible for the integrated management of design, construction, and QA/QC activities. The chart illustrates the interconnective and collaborative relationships among the design team and shared supporting disciplines cohesively bound through the Design Manager and the construction team. Solid lines identify the direct lines of reporting relationships of our team members from the DBPM to the Design, Construction, QC staff and independent QA team. Dashed lines represent indirect reporting relationships for upholding obligations with communication lines between team members.

“From the very start of the project and continuing through the end of the construction and delivery phase, it was critical to keep all key stakeholders involved in, and committed to, the project goals and objectives. To achieve this, SKW Constructors [led by Skanska] worked with external consultants to plan, conduct, evaluate, and continually improve routine partnering sessions involving management/team members from the owners’ group...the construction joint venture partners...and the construction subcontractors. These partnering sessions served to facilitate communication and develop team concepts among the various stakeholders, align the various stakeholders to the goals and objectives of the project, and develop a platform for the identification and resolution of project issues, concerns, and risks.”

Bradley Weidenhammer, VDOT's Project Manager

**Design-Build Project Manager (DBPM) Brent Hunt, PE**, with experience as Design-Build Project Manager on MLK Extension and as Design-Build Coordinator on VDOT's first roadway design-build APM project in Portsmouth, will be responsible for the overall success of the Project. Brent will hold weekly progress meetings with VDOT and will have primary responsibility for execution of design, project management, safety, quality, environmental considerations, and customer/stakeholder relations. Brent has been working on design-build projects since 2005. He is currently the Design-Build Project Manager at the Pensacola Bay Bridge design-build project in Florida.

The **Quality Assurance Manager (QAM), Matt Liffick, PE**, has experience that includes some of the most high profile projects in the Hampton Roads region: I-64/I-264 Interchange project in Norfolk/Virginia Beach, Elizabeth River Tunnels project in Portsmouth, and Gilmerton Bridge Replacement project in Chesapeake. Matt will be responsible for the overall QA program and will be supported by QA inspectors assigned to respective project elements. A clear and independent separation of QA and QC staffing for construction activities will be maintained with separate AMRL-certified QA and QC labs utilized. Our quality staff's responsibilities go beyond keeping records and testing materials, taking on the role of the traditional VDOT inspector and providing definitive direction to address non-compliance/non-conformance. **The Skanska Team's QA/QC goal is to eliminate non-compliance issues prior to occurrence.** Furthermore, the reporting structure for Matt's QA team shows a clear separation from the construction operations, the construction quality control and field/laboratory testing duties.

**Design Manager (DM), Mark Burris, PE**, who served in this same role for the I-264 Pavement Rehabilitation design-build in Virginia Beach, will report to the DBPM. The design discipline leads and design subconsultants will report to Mark. He will ensure the overall Project design is in conformance with the Contract Documents. Mark will oversee the coordination between the design elements from both a design and construction perspective. The DM will ensure compliance with VDOT policies and procedures and the contract requirements. He is responsible for establishing consistency in detailing and plan development. As the DM, Mark ensures that resources within respective disciplines are assigned appropriately and adjusted, as necessary, to meet the required Project schedule.

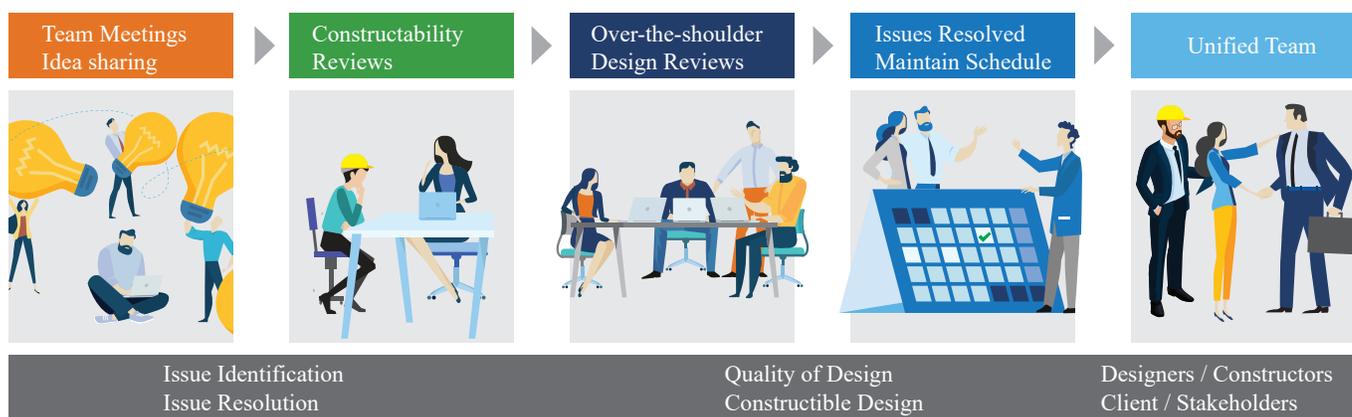
**Construction Manager (CM) Bill Eskins, Jr.**, who served in this same role for VDOT's Huguenot Bridge Replacement near Richmond, a project of similar scope and size (bridge over water, CSX railroad, utilities, stakeholders, environmentally sensitive area), will report to the DBPM. As the Project's daily on-site presence, Bill will be responsible for managing the construction process, including work plans, safe work practices, QC activities and subcontractor coordination, overseeing Skanska's "Plan-Do-Check-Act" management process for continuous improvement and subcontractor coordination. This process of continuously cycling through these four key aspects of working maintains constant focus on safety and quality.



“The company’s well developed and implemented programs should be bench marks for other companies... (Skanska) understands the importance of safety procedures and that employees are investments in the future of the company and the real value of keeping them safe and healthy.”  
Stephen J. Laniewicw,  
Senior Safety Compliance Officer, Commonwealth of Virginia Dept. of Labor & Industry

The organizational chart also includes VDOT, third party stakeholders, permitting agencies and utilities – all integral partners in the successful delivery of the Project. We recognize the importance of inclusivity of specialty discipline team members throughout development of the Project. As such, the **Skanska Team** includes Permitting and Utility Coordination Managers. The existing relationships that our team has with many of the third party stakeholders, permitting agencies and numerous utility companies involved will contribute to an expeditious delivery.

**Design & Construction Team Interaction.** The **Skanska Team** structure ensures the integration of design, construction, ROW, utility, permitting, and third party coordination disciplines into a united, cohesive team effort from the onset of contract award through delivery.



By applying a system of open and frequent communication early in the project, we will work as a unified team who is informed of the design-build issues, works to resolve them keeping construction in accordance with the design, minimizing time required for approvals, keeping the project on schedule and a success.

**Value-Added Team Members for the Skiffes Creek Connector Design-Build Project.** The **Skanska Team** includes additional value-added personnel who provide further depth and expertise to our team critical to the accomplishment of schedule and delivery certainty. Skanska's geographic location to this Project allows us to provide value-added personnel as needed to assist the DBPM in efficient reviews as well as reviewing permit applications. The goal is to meet final design development economically and efficiently and to meet VDOT design approval dates so the vital procurement and construction start dates are maintained. VDOT will be invited to engage in proactive task force meetings so the formal review process is essentially affirming the task force decisions for efficient, expedited owner approval. The **Skanska Team** will monitor design performance to meet schedule, quantity and cost assumptions used in our proposal, resulting in a higher quality process with fewer issues during this critical stage of the Project. **Ty Lee, PE (Volkert), our Lead Roadway Design Engineer,** brings more than 30 years of experience in the design and delivery of municipal and VDOT projects throughout Hampton Roads. He possesses valuable regional knowledge attained as the VDOT Assistant District L&D Engineer for Hampton Roads District and as Senior Project Manager on the Denbigh Boulevard (Route 173) Bridge Replacement over I-64 and CSX railroad in Newport News. The specialty services of the following firms and specific personnel benefit our team and enhance the timely performance of this Project:

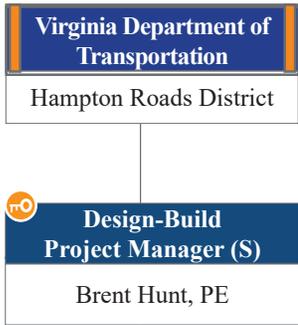
**Environmental Coordination.** **ATCS** will lead this effort with their extensive experience working on 30 VDOT design-build projects at all levels of project development and delivery plus their direct relevant experience with the Project. **Brennan Collier, AICP, Environmental Manager,** led (under previous employment) the initial studies and the Purpose and Need for the Environmental Assessment (EA) for the Skiffes Creek Connector and led the I-64 Peninsula Study Environmental Impact Statement (EIS) and **Josh Wilson, Noise Analyst,** conducted the initial noise analysis (under previous employment) for the Skiffes Creek Connector EA and the noise analysis for the I-64 Peninsula Study EIS. **Scott Shifflett, Permit Specialist,** was the Environmental Manager for the I-64 Segment I design-build team. Their combined experience on this Project and adjacent projects, as both VDOT representatives and on design-build teams, provides the **Skanska Team** the singular understanding of the complexities of this Project to expediently mitigate environmental issues and promote successful project delivery.

**Utility Coordination.** The Project will involve significant coordination with existing utility agencies in order to ensure conflicts between our design and existing utilities are identified, avoided or mitigated. **ATCS** has extensive experience with utility providers in the Hampton Roads region, furthering seamless project delivery. **Lead Utility Coordinator Kevin Siegel, PE,** brings the value of his experience and relationships with the utility owners to expedite utility approvals, a critical path element of this Project. Kevin has led VDOT Locally Administered Projects (LAPs) and additionally has worked on numerous projects involving CSX in the region.

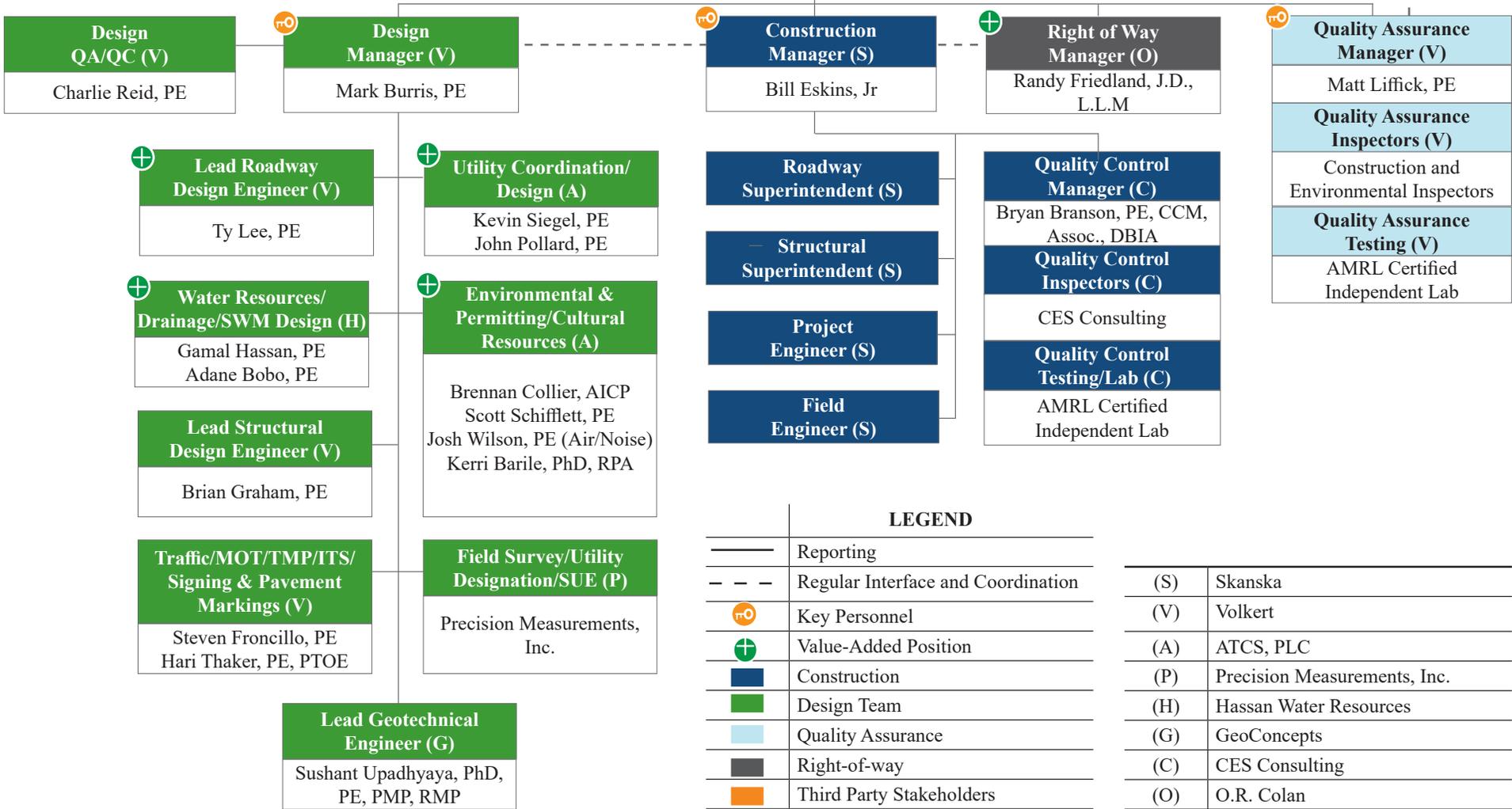
**Water Resources.** To meet the significant water resources challenges on this Project, we will leverage **Hassan Water Resources (HWR)** to provide technical expertise in the fields of hydrology, hydraulic analysis, and river mechanics with emphasis on foundation stability of waterway crossings. **Gamal Hassan, PE** is the project hydraulic and river mechanics engineer for the \$32 million Route 172 Wythes Creek Roadway Widening project. **HWR** used a combination of high efficiency water quality and BMP units along the proposed sidewalk, and water quality grass swales and rain gardens along the vegetated buffers throughout the project to satisfy the water quality requirements in accordance with the Runoff Reduction Method. This innovative approach reduced the size of the proposed SWM basin and the project's impact on surrounding properties. Gamal will apply similar innovative ideas to improve performance and reduce impacts for this Project.

Skanska USA Civil Southeast Inc. with Lead Designer Volkert, Inc.

Third Party Stakeholders		
<ul style="list-style-type: none"> <li>Cox Communications</li> <li>Dominion Energy</li> <li>Virginia Natural Gas</li> <li>Verizon</li> <li>James City County</li> <li>City of Newport News</li> <li>CSX Railroad</li> <li>Amtrak</li> <li>Walmart Distribution Center</li> </ul>	<ul style="list-style-type: none"> <li>Haynes Furniture Distribution Center</li> <li>Branscome (Lee Hall Plant)</li> <li>Carter Machinery Co</li> <li>Climatrol Self-Storage</li> <li>Merrimac Juvenile Detention Center</li> <li>Virginia Peninsula Regional Jail</li> </ul>	<ul style="list-style-type: none"> <li>Morning Star Church</li> <li>WATA Buses</li> <li>Traveling Public</li> <li>Department of Environmental Quality</li> <li>U.S. Army Corps of Engineers</li> <li>Skiffes Creek, LLC</li> </ul>



Skanska Southeast Regional Office (Locally-Based Technical and Commercial Support)	
<ul style="list-style-type: none"> <li>Scheduler</li> <li>Project Controls</li> <li>Safety Manager</li> <li>DBE Compliance Officer</li> </ul>	<ul style="list-style-type: none"> <li>Construction Engineering</li> <li>Procurement</li> <li>Subcontracts</li> </ul>

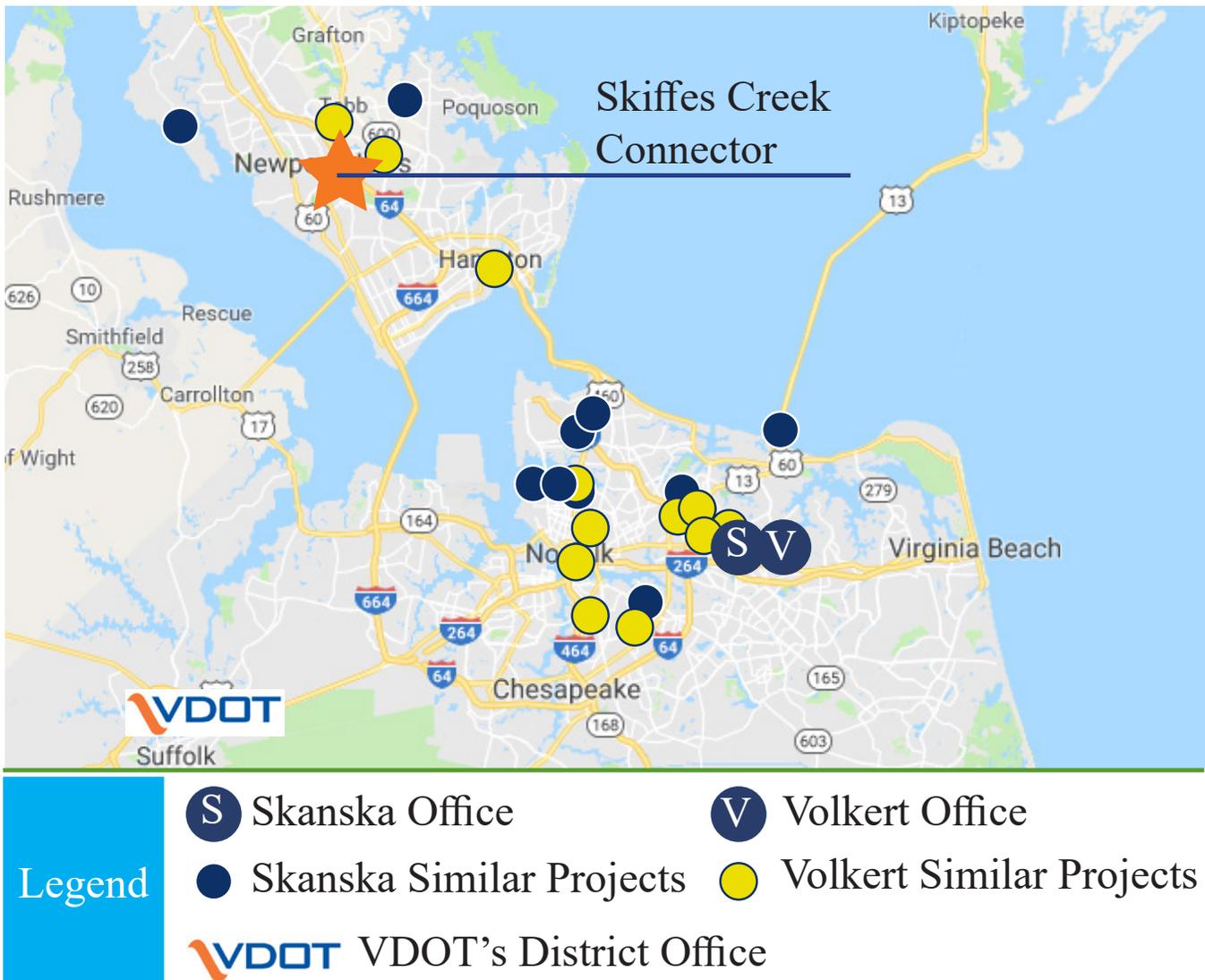


LEGEND	
—	Reporting
- - -	Regular Interface and Coordination
Ⓜ	Key Personnel
+	Value-Added Position
■ (Blue)	Construction
■ (Green)	Design Team
■ (Light Blue)	Quality Assurance
■ (Grey)	Right-of-way
■ (Orange)	Third Party Stakeholders
(S)	Skanska
(V)	Volkert
(A)	ATCS, PLC
(P)	Precision Measurements, Inc.
(H)	Hassan Water Resources
(G)	GeoConcepts
(C)	CES Consulting
(O)	O.R. Colan

## 3.4 | Experience of the Offeror's Team

### 3.4 Experience of Offeror's Team

The **Skanska Team** offers significant experience and capabilities to deliver this challenging Project. Our team has a proven working relationship; our approach to business and ethics are aligned; and our skills and experience are complementary; providing VDOT with a very deep, locally knowledgeable team with the capacity to get the work done on time and within budget. Each firm is accustomed to working in integrated teams in which the cohesion is based on the strengths of individuals, not company association. The map of VDOT's Hampton Roads District shows local **Skanska, Volkert** and other team members projects completed. This demonstrates a highly effective project team ready to begin work in familiar territory with existing relationships and verifiable proven success. The **Skanska Team** members have established relationships with many of the third parties and stakeholders already, including the utility owners mentioned previously as well as City of Newport News and Skiffes Creek, LLC. Further, **Skanska has worked with CSX on numerous previous projects**; notable projects include Bridge 802.1 in Alexandria and the replacement of the superstructure of the CSX bridge over Ware Bottom Road in Chester, VA.



### Relevant Projects and Team Member Experience

## 3.5 | Project Risks

### 3.5 Project Risks

After evaluating the Project and all inherent risks through a comprehensive Risk Analysis Workshop, the **Skanska Team** has identified the following three risks as critical to the Skiffes Creek Connector Design-Build Project (Project). **The bridge construction over the CSX railroad is not a unique risk for us – most of our projects involve CSX!** We are very familiar with their regulations and processes in order to satisfy their agreements, safety requirements, and approvals process. Due to our existing relationships with the numerous stakeholders, we do not anticipate any challenging stakeholder interaction problems.



Risk Analysis Workshop

#### Risk #1—Geotechnical Conditions and Design

**Risk Identification.** We have evaluated the Project against various geotechnical risk factors that could potentially negatively impact Project scope, schedule, and budget. The critical geotechnical risks are identified based on the Project segments and geologic conditions, **specifically the presence of unconsolidated soils.** The roadway alignment is underlain by a series of unconsolidated sedimentary units consisting of marine and estuarine silts and sands deposited during the Quaternary geological period.

**Why this Risk is Critical and an Impact on the Project.** The soft marine and estuarine silts and sands of the Windsor Formation are considered a critical risk due to the silt's unconsolidated and highly compressible nature. Road and bridge construction over soft and compressible soils and soils with high-water content, high compressibility, and low shear strength are critical. However, the underlying Yorktown Formation soils are suitable for support of deep foundations.

Our exclusive subconsultant for Geotechnical Design, **GeoConcepts**, has thorough understanding of the anticipated subsurface conditions at the Project site based on their extensive experience with nearby design build projects (I-64 Segment I and Segment III) and their review of other in-house geotechnical reports, historical aerials, topographic maps, soil survey maps, and USGS geologic maps.

**Risk Mitigation Strategies. Bridge Embankments and Foundations.** Two new bridges will be constructed as part of this Project; an approximately 275-foot-long two-span bridge over Skiffes Creek, and a 222-foot-long two-span bridge over the CSX right of way (ROW) and Route 143. Fill approach embankments up to 27 feet high will be constructed to raise the grade to provide adequate clearance for the bridge over the railroad track. Several existing utilities, including telephone, electric, fiber optic, and a 16-inch diameter gas line are shown to pass below the approach embankments to the proposed CSX bridge.

The placement of embankment fills on top of soft and compressible layers will result in design issues such as negative skin resistance, excessive settlements and lateral deformations, lateral squeeze of foundation soils, and pile heave. We also anticipate that the pile driving for the bridges may cause vibration and additional settlement, on the foundations of nearby existing structures and utilities. To mitigate these concerns, the **Skanska Team** will:

- Perform an enhanced site exploration program to collect additional information for analysis and modeling
- Evaluate alternatives to reduce axial and lateral surcharge loads and their impacts
- Perform pre-construction condition assessments, and instrumentation and vibration monitoring

In addition to the Standard Penetration Testing, we will perform in-situ testing such as Cone Penetrometer Testing, Dilatometer Testing, and Pressuremeter Testing. We plan to have an extensive soil laboratory testing program to include consolidation and triaxial testing to determine the compressibility and shear strength characteristics of the underlying soils. We will also evaluate the axial resistance of various pile types based on the soil set-up and relaxation in the cohesive and cohesionless soils, respectively. Vibrating piezometers will be installed with the influence zone to monitor the pore water pressure dissipation over time.

Pre-augering of the piles may be used to reduce the vertical down-drag loads on foundation piles and control pile driving vibrations. Approaches to control post-construction settlement include pre-loading of compressible soil layers with prefabricated vertical drains (PVDs), using lightweight fills, and ground improvement technologies. The selection of the appropriate method will be based on site constraints and specific design needs. Unbalanced

fill loads behind the abutments will also displace the soil laterally, which may cause excessive lateral movement of the abutment. **Lightweight fill or flowable fill may be used behind the abutment to reduce the driving forces, similar to the Route 27/244 design build project, in Arlington, Virginia, upon which the Geotechnical design was completed by GeoConcepts.**

A pre-construction condition survey of nearby structures will be performed to document conditions of existing structures prior to installing piles and constructing embankments. Threshold level and action level vibration and deformation limits will be determined as part of the Geotechnical Instrumentation and Monitoring Plan based on the conditions of the existing structures.

Based on our site exploration program results, the **Skanska Team** will install inclinometers, piezometers, settlement plates, settlement points, and strain gauges as appropriate to monitor the movement of abutment slopes and existing structures during construction. This approach was successfully implemented by **GeoConcepts** on VDOT's I-64 Segment I and the Route 606 Bridge Replacement Project over I-95. For both of these projects, vibrating wire piezometers and settlement plates were installed to monitor the settlements and dissipation of pore water pressures during construction. Likewise, the slope stability using inclinometer was monitored along WMATA red line tracks in Capitol Heights, Maryland. We will monitor vibration by installing temporary instrumentation such as geophones and seismographs in the vicinity of pile driving. **GeoConcepts** will coordinate with the lead structural design engineer to evaluate the design approach to minimize impacts to existing structures. Any existing utilities located under the approach embankments may need to be retrofitted with pile supports, re-routed through a duct bank, or encased to prevent excessive deformation or damage.

**Site Access for Geotechnical Investigations and Construction.** Access to work zones must be considered when planning the field investigation costs and schedule. The proposed route crosses areas of dense forest and wetlands, a railroad corridor, and an electrical transmission line corridor. Where possible, we will seek to access the boring locations using existing paths and private access roads with landowner permission to minimize the disturbance to the site and inconvenience to others; we may need VDOT's assistance to obtain the necessary permissions to gain entry on private land.

Without having to wait for clearing operations smaller drill rigs, such as the one depicted, are more capable of maneuvering between trees than typical ATV drill rigs and may serve as an alternative to clearing trees in some locations. This specialty small drill rig was successfully used on a recent project in Williamsburg, Virginia and allowed for easy navigation through and minimal disturbance of wetlands. Slopes shown at the abutments of the bridge over Skiffes Creek, some benching may be required to create a level working platform. Work within the CSX ROW requires additional training, badging, site logistics including restricted hours, flaggers, and CSX oversight of field activities and design work. The **Skanska Team** is experienced with interacting with CSX on projects.

The route crosses a Dominion Energy electrical transmission line corridor that ties into a substation. When the lines are energized, we will maintain the minimum safe distance from energized wires and use special



**PVD for pre-consolidation, and pipe piles for slope stability and to reduce negative skin friction - I-64 Segment I.**

This approach was successfully implemented by **GeoConcepts** on VDOT's I-64 Segment I and the Route 606 Bridge Replacement Project over I-95.



**Smaller drill rig used in wetland area to reduce site disturbance.**

operational controls to ensure worker safety. If the work cannot be offset to a safe distance, lines will need to be de-energized and additional safety equipment required.

**Unsuitable Soils at Pavement Subgrade Elevation and Pavement Design.** Based on our knowledge of regional soils and the presence of Skiffes Creek and a stormwater pond, we anticipate that areas of wet and cohesive soils will be encountered. These areas will require additional consideration and treatment to avoid long-term settlement and subsequent pavement distress. The **Skanska Team** will perform an extensive sampling and testing program to aid in the delineation of unsuitable soils.

Where final pavement subgrades consist of unsuitable soil, our initial plan will be chemical-stabilization (soil-cement) of the existing subgrade. We have used this approach on a recent design-build project in the area and other parts of the Commonwealth. The amount of lime or cement to be mixed to achieve the desired results depends on the soil type and moisture content. A laboratory testing program will be performed during the design phase to determine the optimum type and amount of soil admixture to be used during construction and the minimum curing time. This will reduce the amount of undercut that will be required along the proposed alignment, which will reduce traffic congestion in the area during construction due to fewer loaded trucks traversing in and out of the site. Where proposed subgrades will be very soft, the unsuitable materials should be undercut up to three feet below subgrade or until the unsuitable material is no longer present, whichever is less, and backfilled with suitable compacted fill material.

The **Skanska Team** will investigate the potential use of geosynthetics such as geogrids and/or geotextiles to mechanically stabilize and reinforce pavement subbase or base. This may allow the overall pavement section thickness to be reduced conserving material resources, and cost while still achieving the same service life and performance goals. **GeoConcepts** designs reinforced pavement sections for many commercial and industrial businesses to help their pavement withstand the heavy truck traffic, including most Old Dominion Freight yards, Loves Travel Stops, Egger Wood lumber facilities, Thomas Built Bus facilities, as well as various sections on I-84 in Idaho and US-91 in Utah. To measure the resilient modulus and long-term performance of the reinforced pavement section, an Automatic Plate Load Test machine will be used to perform a fully automated static and cycling plate load test.

**Role of VDOT and Other Agencies.** The **Skanska Team's** experience and knowledge gained working on design build and other projects in this geological region will predominantly reduce VDOT's role to Owner Independent Assurance testing only. We will engage our team's geotechnical engineers and materials engineers early in the design process to collaborate and reach agreement on geotechnical recommendations. The detailed geotechnical field investigation plan including a site-specific safety plan will be submitted to VDOT for review; any variance from the field investigation plan will be reported to VDOT for concurrence and approval. We will invite VDOT to design meetings to ensure VDOT has the benefit of regular inputs throughout the design, which may positively affect and expedite the review process.

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## Risk #2—Stormwater Management Compliance

**Risk Identification.** The design, construction means and method, and approach to stormwater management is key to the success of this Project and presents a critical risk.

**Why this Risk is Critical and an Impact on the Project.** Stormwater management is a critical component to all projects, however there are several characteristics of this Project which elevate stormwater management to a critical risk that can threaten the Project schedule and overall budget.

- This Project falls within the Skiffes Creek Reservoir watershed, a drinking water reservoir for James City County among other nearby localities. Drinking water reservoirs require additional protection during construction and post-construction require increased nutrient removal efficiencies than what are typically required on VDOT projects. The more stringent requirements often mean that additional Best Management Practices (BMPs) will be required to overtreat the post-construction nutrient load in the watershed. These BMPs may require additional ROW or pose additional impacts to wetlands/streams causing a delay in Project schedule.
- This area of Virginia has a high water table, which often requires that larger Stormwater Management BMPs/facilities will be required and may have to include a clay liner to prevent infiltration of groundwater into the proposed BMPs. These conditions may increase the Project cost and require additional ROW which could threaten the Project schedule.

**Risk Mitigation Strategy and Team Experience that will Ensure Successful Delivery of the Project.** The **Skanska Team** members have worked on projects such as Wythe's Creek Road and Swift Creek that have been situated within watersheds of drinking water reservoirs; we know the coordination requirements needed to work with the stakeholders.

As the first step in analyzing Stormwater Management for this Project, we will analyze the possibility of complete avoidance of SWM ponds/basins in an effort to minimize the Project's ROW footprint stipulations. This approach provides multiple benefits to the Project:

- Reduces ROW impacts and the elimination of clay linings on SWM basins will significantly reduce construction costs as well as contribute positively to the construction delivery schedule.
- Eliminates future basin maintenance costs and efforts to VDOT.
- Provides innovative solutions that can be replicated on future projects further benefiting VDOT.
- Utilizes the Nutrient Credit Purchase to satisfy a portion of the water quality requirements. Our team has already identified the location of available Nutrient Credit Banks within the same HUC at the Project site.
- Applies the 1 percent Rule as appropriate to satisfy all or portion of Project-wide water quantity control requirements.
- Utilizes additional available methods shown in the Virginia Department of Environmental Quality (DEQ) Stormwater Design Specification manual to satisfy the water quantity and quality control requirements in accordance with the Runoff Reduction and Energy Balance Method.
- Our team will employ BMP's such as super silt fence, turbidity curtain, oil booms, in addition to other standard erosion and sediment control measures (E&SC) at Skiffes Creek to ensure compliance with E&SC regulations by VDOT and DEQ.

Should it be determined that SWM BMPs are needed and wetland impacts are realized for the placement of SWM BMPs, we recognize that an integrated approach from all disciplines is required to achieve the most effective mitigation measures. The **Skanska Team** with our subconsultant, ATCS, have managed many complex SWM measures on similar design build projects throughout the Commonwealth. We find that engaging the proper internal and external stakeholders early in the design process is a critical element of our strategy for success.

We understand that the Army Corps of Engineers (USACE) has been very engaged in the NEPA decision-making process for this Project as it related to the adjacent Route 60 relocation project. Likewise, current ATCS staff's first-hand experience with inter-agency coordination during the Skiffes Creek Connector early NEPA process as well as the adjacent Route 60 relocation project reduces schedule risk during the permitting stage.

ATCS has experienced the value of inter-agency coordination first hand on I-64 Segment I; they were able to significantly reduce questions on avoidance and minimization and identify issues that needed to be addressed during final design early enough in the process to effectively neutralize the schedule risk during permitting.

**Our team has already begun assessing impacts and design opportunities to minimize such in order to both maintain context sensitivity and expedite the permitting process.** We anticipate that this Project can qualify for a State Programmatic General Permit for impacts to wetlands and streams. Our cognizance at this early stage of the permitting requirements provides us with the ability to advance a design that avoids and/or minimizes the impacts to wetlands and streams in the Project footprint. Our team will pursue USACE and DEQ consensus, agreement, and approval on the proposed impacts early in the Project timeline to avoid delays in obtaining the necessary permits.

Locally experienced team member, **Hassan Water Resources (HWR)**, will develop a detailed HEC-RAS hydraulic model at the earliest stage of the Project to ensure compliance with hydraulic opening and stream restoration function requirements. Examples of the **Skanska Team's** potential mitigation measures include: Protection of the reservoir during and post-construction is primarily a long-term water quality issue for runoff flows from the proposed Project's limits. Use of sediment traps and/or basins can also be incorporated in the post-construction water quality control facilities which will reduce construction cost and minimize or eliminate future maintenance to VDOT. **HWR** applies innovative drainage/SWM/BMP measures that combine the short (during construction) and long-term (post-construction) stormwater and water quality controls that:

- Minimize the project’s LOD by working closely with the design team to ensure the project-wide phosphorous load removal requirement is less than 10 lb./yr. This is most advantageous to VDOT because the project’s water quality requirement can be satisfied through Nutrient Credit Purchase. **HWR** completed several Projects where it purchased 100 percent of the water quality requirements. On the US Route 360 Roadway Widening (1.2 miles of roadway widening) located along the Swift Creek Reservoir in Chesterfield County, **HWR’s** designed zero SWM/BMP ponds and utilized nutrient credit purchase of 6.2 lb./yr. that left VDOT with zero SWM/BMP maintenance, and
- Maximize the utilization of the available floodplain and connecting wetlands areas (RPA and SPA areas) to eliminate the use of SWM/BMP basins altogether. **HWR** accomplished this application through the use of innovative treatment drains that included grass swales, dry swales, and level spreaders to produce sheet flows to filtered/open spaces. Along with the application of the 1 percent rule, these non-basin facilities minimize future maintenance, while the level spreaders completely eliminate the need for SWM/BMP basins. **HWR** implemented these innovative measures on several VDOT projects including the Wythe Creek Roadway Widening where **HWR’s** drainage/SWM/BMP design for the 2.3-mile-long project included zero basins and purchase of 7.3 lb./yr. nutrient credits. The **Skanska Team** is confident that VDOT will have zero SWM and BMP future maintenance for this Project.

**Role of VDOT and Other Agencies.** The **Skanska Team** anticipates VDOT will be an engaged proponent of the Project when coordinating with outside agencies, specifically the USACE , DEQ, and James City County as well as additional local jurisdictions served with this water source. We will also encourage VDOT Environmental to be an active participant and partner in advancing our innovative SWM approaches. VDOT’s shared knowledge of the negotiations that took place during the NEPA Merger Process (including any hazmat issues) that reached subsequent agreements will positively influence rapid, innovative design and thereby set the stage for informed plan reviews.

Based on ATCS’ experiences on the I-64 Segment I project, we understand the importance of holding a field pre-application meeting with the USACE and DEQ prior to permit submittal.

### Risk #3—Utilities

**Risk Identification.** Coordination and management of existing and proposed utility relocations is a critical risk on the Project and will be one of the first priorities in the design and construction process. The utilities are vital to the public and service must be maintained throughout the construction process and beyond. The utilities identified within the Project area include: Dominion Energy (DE), Newport News Water Works (NNWW), Hampton Roads Sanitary District (HRSD), Virginia Natural Gas (VNG), Colonial Pipeline, and all of the communications utility providers (Verizon, Cox, Level 3, Century Link, and AT&T).

**Why this Risk is Critical and an Impact on the Project.** Impacts to existing utilities along the Project alignment are considered critical because of the discovery of previously unknown and/or new utilities as well as recent utility rehabilitations/improvements; probable delays in utility owner approvals of these as well as known existing utilities are inherent.– meaning that these issues and/or conflicts will have to be priority elements of coordination and construction that are dealt with at the beginning of the Project in order to prevent major impacts to schedule and design. Impacts to existing utilities both during construction and after construction will need to be addressed with each respective utility owner. Access for future maintenance will also need to be considered and accommodated for all of these utilities. As an example, utilities that run beneath the proposed Skiffes Creek Connector may need to be encased such that the lines can be removed and replaced without disturbing traffic, should the need arise. The Skanska Team have identified the following specific utilities risks that are of particular concern for this Project:

- The **HRSD interceptor is a 24-inch Pre-stressed Concrete Cylinder Pipe** that was constructed in 1976. This line has experienced failures in close proximity to this Project. The pipe is at its 50-year design life and its material provides a higher level of difficulty to make repairs. The line is located beneath the approaching turn lane on the east side of Route 60 and crosses beneath the proposed connector road. It is likely that HRSD will require this line be replaced, with an encasement crossing of the connector road. The line may need to be moved outside of the paved turn lane requiring additional easement. Our Project schedule will consider the design, review and approval, material availability and possible seasonal restrictions on construction (due to higher flows in the line).

- The **NNWW 42-inch source water line** is shown within the toe of the east end embankment for the bridge that crosses the CSX ROW and Route 143. This line was constructed in 1961 and has outlived its 50-year design life. While we are not aware of any failures in this line, it is a source water line providing for the transfer of raw water from multiple reservoir feeder sources to the Lee Hall Reservoir, where water is withdrawn for treatment; the Lee Hall Reservoir is the terminal reservoir in the area's water-supply system, maintaining near-full water levels to serve 400,000 people on the Virginia Peninsula. As the Lee Reservoir Dam Rehabilitation project recently completed in 2018 has demonstrated, even temporary shutdown of the Dam is not feasible and we would need to investigate the feasibility of various temporary waterline relocations or impact improvements that do not affect NNWW and its services, specifically as they supply hospitals, businesses, industrial, military and of course, residential users. An option to mitigate this risk includes innovative bridge foundations such that the abutment is not putting additional burden on the existing waterline. We will coordinate and work through the design review process with NNWW to determine the best solution that will meet their needs on this Project and minimize any impacts.
- The **16-inch VNG gas line** is shown within the toe of the west end embankment for the bridge that crosses the CSX ROW and Route 143, similar to the 42-inch source water line discussed above. The line will need to be relocated, or encased, if it will remain beneath the embankment. Encasing the line will allow for future access to maintain (or replace) the line, as needed. VNG uses internal assets for design and construction of their system, so our part will be to facilitate communication between VNG and the roadway design team, help evaluate options, and oversee the timing of these efforts. This line is a major transfer line for the Peninsula and its operation is critical to the overall system. Seasonal demands, however, may allow for select periods when relocation tie-ins can be made. An option to mitigate this risk includes extending the bridge such that the abutment is not putting additional burden on the line or encase the line in place with a split steel casing, allowing the line to stay in service without disruption.

While the underground telecommunication lines pose some risk to the Project, we do not see these utilities as great of a risk to the schedule or impact to the Project as those listed above. However, our experience says intensive engagement and close coordination will be necessary to keeping the telecommunication utility companies informed of any impacts from the Project and ahead of any necessary design and construction for any necessary relocations. The **Skanska Team** may engage in early up-front investigations, such as Ground Penetrating Radar (GPR) and/or test pitting (soft dig with vacuum truck) of certain select telecommunication lines, during the bid phase in order capture the most accurate information on existing utility locations and to reduce risks associated with the unknown. Telecommunication conduits and traffic control lines are at less risk, so long as the existing lines are deep enough not to be unearthed.

**ATCS** professionals will provide utility coordination and relocation design efforts on this Project. **ATCS** staff has many years of dealing with the local utility owners associated with this Project. They have previous experience working with NNWW, HRSD, VNG, and all of the communications utility providers (see the table on the following page); and have already made first contact with these utility owners to investigate the assets they have in the Project corridor and discuss alternatives that may be considered. One of **ATCS'** utility engineers has experience with the replacement of a section of the same 24-inch HRSD interceptor, just three miles from this Project. That project required coordination with the Colonial Pipeline as well as the majority of the telecommunication owners that are impacted by the Project. Additionally, **ATCS** is providing construction services on the Jefferson Avenue Utility Relocation project which required close coordination with NNWW on the relocation of multiple waterlines. The same engineers will be working with NNWW staff to coordinate on the Project, building upon the trust that has been established in the past, thereby expediting the process without a learning curve as we already have a clear understanding of what will be expected of us from the utility owners. Early and ongoing coordination with each of the utility owners is critical to getting the design and any necessary permitting completed as soon as possible. The **Skanska Team** will continue our diligent communication with the utility owners; we will delve deeper into the utility owners' expectations as we go through the bid phase and set up coordination meetings with each of them as soon as notice to proceed is given. Respective meetings will be held with the majority of utility owners in order to focus on their particular concerns and to demonstrate our genuine interest in their protection. Meetings with multiple communication line owners may be held jointly, as there is overlap in the approach and resolution to protecting these utilities (listed on the next page).

Utility Owner	Pipe or Conduit Characteristics	Notes
Newport News Waterworks	30" Potable Water Ductile Iron (1970)	The potable water line is located in the roadway (Rt 60) where the only work is Mill and Overlay. Minimal risk.
	39" Source Water Concrete (1942)	The source water line is located in the roadway (Rt 143) where the only work is Mill and Overlay. Minimal risk.
	42" Source Water Concrete (1961)	The 42-inch source line is located at the base of the bridge abutment. Higher risk here may be mitigated by extending the bridge or modifying construction techniques.
HRSD: Sanitary Sewer Force Mains	24" Sanitary Sewer PCCP (1976)	This is located in the turn lane to the proposed connector road. It is an older line that has experienced local breaks. HRSD will likely require that this line be replaced, relocating it outside the roadway with a steel encasement where it crossed beneath the new connector road.
JCSA: Sanitary Sewer Force Mains	4" Sanitary Sewer Material and Age Unknown	This line is located in Green Mount Pkwy and will primarily be impacted by the proposed sidewalk construction. Minimal risk. We do not anticipate any need to relocate this line.
Virginia Natural Gas	16" Natural Gas (Rt 60) Material Unknown (Pre-1971)	This line is located in Route 60, beneath the mill and overlay section. Minimal risk; however, there may be an impressed current on this line that could have an impact on other adjacent relocations, such as the HRSD line.
	16" Natural Gas (CSX ROW): Steel, Age Unknown	This line is located beside the CSX easement (west side) underneath the proposed abutment. This line will likely need to be encased to provide access for maintenance or be relocated outside of the abutment area.
	4" Natural Gas Route 60 ROW Steel, Age Unknown	This line is located along the north / east side of Route 60. This line will likely need to be encased / protected depending upon the age and/or depth of the line.
Colonial Pipeline	Unknown Size, Material and Age (likely Steel)	This line runs along the west side of the Dominion Energy (DE) easement, beneath the abutment ramp. The line will likely need to be encased or relocated to provide future access.
Dominion Energy	Overhead Electricity	VDOT has taken on the responsibility of negotiating any required adjustments of the power lines with DE.
Verizon	Unknown Size, Material and Age (likely HDPE)	There are several Verizon conduits within the project corridor. More investigation is required to determine depth and risk to these lines.
Cox	Unknown Size, Material and Age (likely HDPE)	There are several COX Cable TV conduits within the project corridor. More investigation is required to determine depth and risk to these lines.
VDOT (Traffic Control)	Unknown Size, Material and Age (likely HDPE)	There are several VDOT Traffic Control lines within the project corridor. Several of these lines will need to be relocated (pole and control cabinet at Route 60).
CSX (Com Lines)	Unknown Size, Material and Age (likely HDPE)	This conduit runs along the east side of the CSX ROW. The line is located beneath the bridge and should not be impacted.
Level 3	Unknown Size, Material and Age (likely HDPE)	This conduit runs along Route 60. More investigation is required to determine depth and risk to this lines.
Century Link (Sprint)	Unknown Size, Material and Age (likely HDPE)	This conduit runs along the CSX easement. More investigation is required to determine depth and risk to these lines.
AT&T	Unknown Size, Material and Age (likely HDPE)	This conduit runs along the CSX easement. More investigation is required to determine depth and risk to these lines.

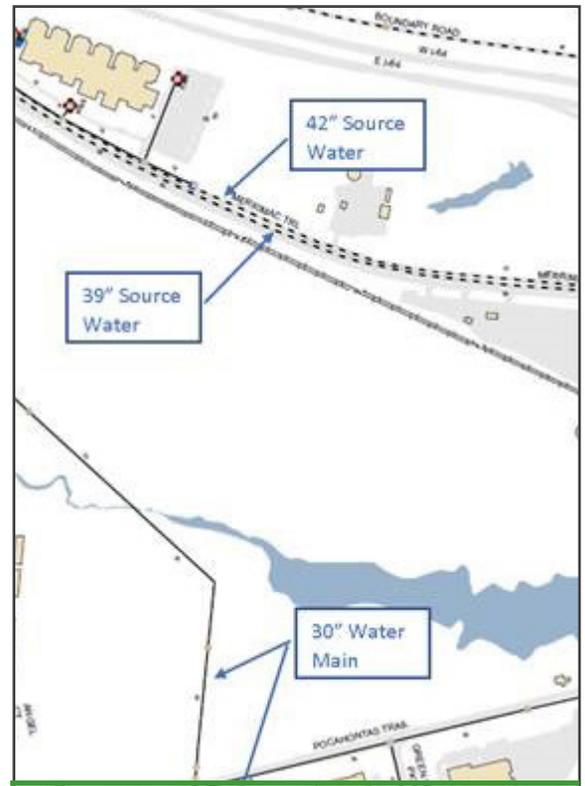
**Risk Mitigation Strategy and Team Experience that will Ensure Successful Delivery of the Project.**

In order to mitigate risk to the Project, options will include relocation of the utilities where they will be located longitudinally to the roadway, encasements where the utilities cross perpendicularly, or even modifications to the proposed roadway profile to avoid conflicts all-together. As an example, the east abutment for the bridge over CSX and Route 143 is shown in conflict with the 42-inch source water main. Moving the abutment back a few feet could eliminate any impacts to this line. Further investigation into innovative foundation design and construction will be analyzed in order to minimize impacts to the existing utility as well as maintain an aggressive, but realistic overall schedule. We will communicate with NNWW early to bring them into the decision-making process so all parties have a complete understanding of each other's needs and expectations.

**Role of VDOT and Other Agencies.** ATCS' professionals will provide utility coordination and relocation services throughout both the design and construction to support the **Skanska Team** on this Project; we will work with VDOT to ensure that the utility coordination is fully in accordance with VDOT's procedures and utility manual. Following notice to proceed, respective utility coordination meetings will be scheduled with each of the utility owners to coordinate potential utility impacts and expectations of the utility coordination efforts; the VDOT Regional Utilities Manager will be invited to these meetings. While it will be the design-build team's responsibility to coordinate directly with impacted utility owners, we will ensure appropriate documentation is prepared, such as the UT-9, and approvals from VDOT Regional Utilities Manager are obtained at each appropriate step in the process.

The existing overhead Dominion Energy lines will need to be raised and poles relocated to allow for the construction of the Project. However, we understand VDOT will be managing this aspect of Dominion Energy relocations, our team would appreciate being apprised of these activities and durations of all associated activities so that we may delineate these in our overall design-build schedule.

The Skanska Team has the most experience and a strong relationship with these owners which is key to mitigating risk of delays in owner approvals.



**NNNW existing waterlines will be relocated to accommodate new bridge foundations as well as avoid the railroad lines.**

# Appendices

## 3.1.2 SOQ Checklist

**ATTACHMENT 3.1.2**

**Project: 0060-047-627**

**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.

<b>Statement of Qualifications Component</b>	<b>Form (if any)</b>	<b>RFQ Cross reference</b>	<b>Included within 15-page limit?</b>	<b>SOQ Page Reference</b>
<b>Statement of Qualifications Checklist and Contents</b>	Attachment 3.1.2	Section 3.1.2	no	16-18
<b>Acknowledgement of RFQ, Revision and/or Addenda</b>	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	19
<b>Letter of Submittal (on Offeror's letterhead)</b>				1
Authorized Representative's signature	NA	Section 3.2.1	yes	1
Offeror's point of contact information	NA	Section 3.2.2	yes	1
Principal officer information	NA	Section 3.2.3	yes	1
Offeror's Corporate Structure	NA	Section 3.2.4	yes	1
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	1
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	20
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	21-29
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	30
Evidence of obtaining bonding	NA	Section 3.2.9	no	31-37

**ATTACHMENT 3.1.2**

**Project: 0060-047-627**

**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15- page limit?	SOQ Page Reference
<b>SCC and DPOR registration documentation (Appendix)</b>	Attachment 3.2.10	Section 3.2.10	no	38-39
Full size copies of SCC Registration	NA	Section 3.2.10.1	no	40-49
Full size copies of DPOR Registration (Offices)	NA	Section 3.2.10.2	no	50-52
Full size copies of DPOR Registration (Key Personnel)	NA	Section 3.2.10.3	no	53
Full size copies of DPOR Registration (Non-APELSCIDLA)	NA	Section 3.2.10.4	no	N/A
<b>DBE statement within Letter of Submittal</b> confirming Offeror is committed to achieving the required DBE goal	NA	Section 3.2.11	yes	1
<b>Offeror's Team Structure</b>				2-3
Identity of and qualifications of Key Personnel	NA	Section 3.3.1	yes	3
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	54-55
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.2	no	56-57
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.3	no	58-59
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.4	no	60-61
Organizational chart	NA	Section 3.3.2	yes	6
Organizational chart narrative	NA	Section 3.3.2	yes	3-5

**ATTACHMENT 3.1.2**

**Project: 0060-047-627**

**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

<b>Statement of Qualifications Component</b>	<b>Form (if any)</b>	<b>RFQ Cross reference</b>	<b>Included within 15- page limit?</b>	<b>SOQ Page Reference</b>
<b>Experience of Offeror's Team</b>				7
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	62-64
Lead Designer Work History Form	Attachment 3.4.1(b)	Section 3.4	no	65-67
<b>Project Risk</b>				8
Identify and discuss three critical risks for the Project	NA	Section 3.5.1	yes	8-15

## 2.10 Form C-78-RFQ

**ATTACHMENT 2.10**

**COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF TRANSPORTATION**

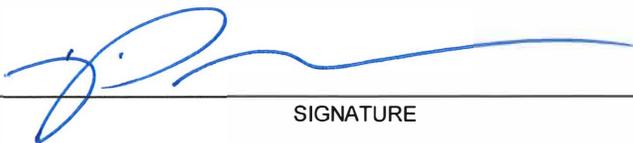
RFQ NO. C00100200DB104  
PROJECT NO.: 0060-047-627

**ACKNOWLEDGEMENT OF RFQ, REVISION AND/OR ADDENDA**

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

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

1. Cover letter of RFQ – February 27, 2019  
(Date)
2. Cover letter of RFQ Addendum #1 – April 2, 2019  
(Date)
3. Cover letter of RFQ Addendum #2 – April 19, 2019  
(Date)

  
\_\_\_\_\_  
SIGNATURE

05/07/19  
\_\_\_\_\_  
DATE

Philip McClemens  
\_\_\_\_\_  
PRINTED NAME

Vice President  
\_\_\_\_\_  
TITLE

## 3.2.6 List of Affiliated & Subsidiary Companies

**ATTACHMENT 3.2.6**

**State Project No. 0060-047-627**

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

<b>Relationship with Offeror (Affiliate or Subsidiary)</b>	<b>Full Legal Name</b>	<b>Address</b>
Parent	Skanska USA Civil Inc.	75-20 Astoria Boulevard, Queens, NY 11370
Affiliate	Skanska USA Civil Northeast Inc.	75-20 Astoria Boulevard, Queens, NY 11370
Affiliate	Skanska USA Civil Midwest Inc.	75-20 Astoria Boulevard, Queens, NY 11370
Affiliate	Skanska USA Civil West Inc.	1995 Agua Mansa Road, Riverside, CA 95209
Affiliate	Skanska Koch Inc.	400 Roosevelt Avenue, Carteret, NJ 07008
Subsidiary	Bayshore Concrete Products Corp.	1134 Bayshore Road, Cape Charles, VA 23310
Subsidiary	TEC Skanska, Inc.	295 Bendix Road, Suite 400, Virginia Beach, VA 23452
Subsidiary	CDK Skanska Inc.	295 Bendix Road, Suite 400, Virginia Beach, VA 23452
Subsidiary	I-4 Leasing, LLC	295 Bendix Road, Suite 400, Virginia Beach, VA 23452

## 3.2.7 Debarment Forms

## 3.2.7(a) Primary Covered Transactions

**ATTACHMENT 3.2.7(a)**

**CERTIFICATION REGARDING DEBARMENT**  
**PRIMARY COVERED TRANSACTIONS**

**Project No.: 0060-047-627**

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

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

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

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

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

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

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

  
\_\_\_\_\_  
Signature

3/12/19  
\_\_\_\_\_  
Date

Vice President  
\_\_\_\_\_  
Title

Skanska USA Civil Southeast Inc.

\_\_\_\_\_  
Name of Firm

## 3.2.7(b) Lower Tier Covered Transactions

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS

**Project No.: 0060-047-627**

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

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



Signature

March 13, 2019

Date

Vice President, Mid-Atlantic Region

Title

Volkert, Inc.

\_\_\_\_\_  
Name of Firm

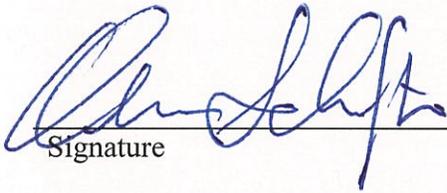
ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS

**Project No.: 0060-047-627**

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

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



Signature

March 14, 2019  
Date

General Counsel  
Title

ATCS, P.L.C.  
Name of Firm

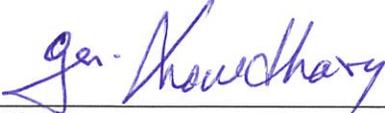
ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS

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

  
\_\_\_\_\_  
Signature

April 23, 2019  
\_\_\_\_\_  
Date

Principal and Executive Vice-President  
\_\_\_\_\_  
Title

CES Consulting LLC

\_\_\_\_\_  
Name of Firm

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS

**Project No.: 0060-047-627**

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

	March 11, 2019	President
_____ Signature	_____ Date	_____ Title

Dovetail Cultural Resource Group

\_\_\_\_\_  
Name of Firm

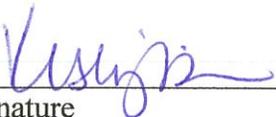
**ATTACHMENT 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT**  
**LOWER TIER COVERED TRANSACTIONS**

**Project No.: 0060-047-627**

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

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

 _____ Signature	<u>03-14-2019</u> Date	<u>Principal / Office Manager</u> Title
--	---------------------------	--

GeoConcepts Engineering, Inc.  
Name of Firm

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS

Project No.: 0060-047-627

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

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

  
Signature

3/12/2019

Date

President

Title

Hassan Water Resources, PLC

Name of Firm

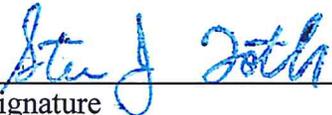
**ATTACHMENT 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT**  
**LOWER TIER COVERED TRANSACTIONS**

**Project No.: 0060-047-627**

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

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

	March 11, 2019	President
Signature	Date	Title

O. R. Colan Associates, LLC  
Name of Firm

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS

**Project No.: 0060-047-627**

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

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

 _____ Signature	03/12/2019 _____ Date	President _____ Title
--	-----------------------------	-----------------------------

Precision Measurements, Inc.

\_\_\_\_\_  
Name of Firm

## 3.2.8 VDOT Prequalification



Department's List of Prequalified Vendors  
Includes All Qualified Levels As Of 11/16/2018

- S -

Vendor ID: T009

Vendor Name: SKANSKA USA CIVIL SOUTHEAST INC.

Prequal Level: Prequalified

Prequal Exp: 09/30/2019

-- PREQ Address --

295 BENDIX RD., STE. 400  
VIRGINIA BEACH, VA 23452-0000  
Phone: (757)420-4140  
Fax: (757)420-3551

Work Classes (Listed But Not Limited To)

003 - MAJOR STRUCTURES  
007 - MINOR STRUCTURES  
043 - TUNNELING  
080 - DEMOLITION OF STRUCTURES

Bus. Contact: DAVIS, STEPHEN ASHLEY

Email: SOUTHEAST.ESTIMATING@SKANSKA.COM

-- DBE Information --

DBE Type: N/A

DBE Contact: N/A

Vendor ID: S026

Vendor Name: SLURRY PAVERS, INC.

Prequal Level: Prequalified

Prequal Exp: 09/30/2019

-- PREQ Address --

3617 NINE MILE RD  
RICHMOND, VA 23223  
Phone: (804)264-0707  
Fax: (804)716-7913

Work Classes (Listed But Not Limited To)

004 - ASPHALT CONCRETE PAVING  
068 - SLURRY SEAL OF PAVEMENT

Bus. Contact: TARSOVICH, PHILLIP PAUL

Email: PHILTARSOV@SLURRYPAVERS.COM

-- DBE Information --

DBE Type: N/A

DBE Contact: N/A

## 3.2.9 Letter of Surety

ZURICH AMERICAN INSURANCE COMPANY  
FEDERAL INSURANCE COMPANY  
LIBERTY MUTUAL INSURANCE COMPANY  
THE CONTINENTAL INSURANCE COMPANY  
BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY

March 12, 2019

Ms. Sudha Mudgade  
Virginia Department of Transportation  
1401 East Broad Street  
Richmond, VA 23219

**Re: Skanska USA Civil Southeast Inc.  
Request for Qualifications  
A Design Build Project – Skiffes Creek Connector From: Route 60 (Pocahontas Trail) To: Route 143 (Merrimac Trail)  
James City County, Virginia; State Project No.: 0060-047-627, P101, R201, C501, B619, B620; Federal Project No.:  
STP-5A03(455); Contract ID Number: C00100200DB104  
Estimated Contract Value: \$28,000,000 +/-**

Dear Ms. Mudgade,

This letter confirms that Skanska USA Civil Southeast Inc. ("Skanska") a subsidiary of Skanska USA, Inc. is a highly regarded and valued client of Alliant Insurance Services, Inc. ("Alliant") and Zurich American Insurance Company, Liberty Mutual Insurance Company, Federal Insurance Company (Chubb), The Continental Insurance Company (CNA) and Berkshire Hathaway Specialty Insurance Company ("co-surety"). As Skanska's bonding agent and authorized representative of the co-surety, we have always been impressed by our client's diverse capabilities, past project experience, track record of performance and depth of the company's professional staff.

Throughout their relationship, the co-surety has provided all of the surety bonds that Skanska's clients have requested. With respect to Skanska's current bonding requirements, at the present time, the co-surety is pleased to consider bonds for Skanska USA, Inc. and its subsidiaries with an aggregate program of \$10,000,000,000. Skanska USA Civil Southeast Inc. has accessibility to all or part of the bond line provided to of Skanska USA, Inc. with consideration given to single project up to \$350,000,000+. Currently, Skanska has \$3,780,000,000 of capacity available. Skanska USA Civil Southeast Inc. 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 Skanska, in the event that such firm be the successful bidder and enter into a contract for this Project.

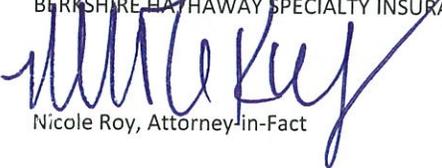
As is customary within the surety industry, the execution of any bonds would be subject to, but not necessarily limited to receipt and favorable review of all contract terms and conditions, bond forms, confirmation of project financing and all current underwriting information needed at the time of the request for bonds is made by Skanska to its co-surety. Please understand that any arrangement for surety bonds is a matter strictly between Skanska and its co-surety. As such, we assume no liability to you or any third party by the issuance of this letter.

Each of the surety companies are fully licensed and authorized to conduct surety business in the Commonwealth of Virginia and each is listed in the US Department of Treasury's listing of Approved Sureties (Department Circular 570). Each surety company has a Company Policyholder rating of 'A' or better by A.M. Best Company, all with a Financial Size Category 'XV' or greater.

Alliant and the co-surety strongly recommend Skanska to you. Please feel free to contact this office should you have any questions regarding the bonding capacity or technical ability of Skanska USA Civil Southeast Inc.

Sincerely,

ZURICH AMERICAN INSURANCE COMPANY  
FEDERAL INSURANCE COMPANY  
LIBERTY MUTUAL INSURANCE COMPANY  
THE CONTINENTAL INSURANCE COMPANY  
BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY

  
Nicole Roy, Attorney-in-Fact

**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 **BRIAN M. HODGES, 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 Michael J. CUSACK, John J. GAMBINO, Sandra C. LOPES, Nicole ROY, Natalie CONEYS, Jean M. FEENEY, Nicholas LABBE, Laurie ROTHWELL and Eric J. CANTERBURY, 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 12th day of December, A.D. 2018.

ATTEST:

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



By:

*Dawn E. Brown*

*Assistant Secretary  
Dawn E. Brown*

*Brian M. Hodges*

*Vice President  
Brian M. Hodges*

State of Maryland  
County of Baltimore

On this 12th day of December, A.D. 2018, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **BRIAN M. HODGES, Vice President, and DAWN E. BROWN, Assistant 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.

*Constance A. Dunn*

*Constance A. Dunn, Notary Public  
My Commission Expires: July 9, 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 \_\_\_ day of MAR 12 2019, 20\_\_\_.



*David McVicker*

David McVicker, 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

CHUBB

Power of Attorney

Federal Insurance Company | Vigilant Insurance Company | Pacific Indemnity Company

Know All by These Presents, That FEDERAL INSURANCE COMPANY, an Indiana corporation, VIGILANT INSURANCE COMPANY, a New York corporation, and PACIFIC INDEMNITY COMPANY, a Wisconsin corporation, do each hereby constitute and appoint Kathleen M. Flanagan and Richard A. Leveroni of Farmington, Connecticut; Natalie Coneys, Michael J. Cusack, Jean M. Feeney, John J. Gambino, Sylvanna Geha, Nicholas Labbe, Sandra C. Lopes, Laurie Rothwell and Nicole Roy of Boston, Massachusetts; Eric J. Canterbury of Ballston Lake, New York; Donald L. Goodrich of Cranston, Rhode Island

each as their true and lawful Attorney-in-Fact to execute under such designation in their names and to affix their corporate seals to and deliver for and on their behalf as surety thereon or otherwise, bonds and undertakings and other writings obligatory in the nature thereof (other than bail bonds) given or executed in the course of business, and any instruments amending or altering the same, and consents to the modification or alteration of any instrument referred to in said bonds or obligations.

In Witness Whereof, said FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY have each executed and attested these presents and affixed their corporate seals on this 3rd day of August, 2018.

*Dawn M. Chloros*

Dawn M. Chloros, Assistant Secretary

*Stephen M. Haney*

Stephen M. Haney, Vice President



STATE OF NEW JERSEY

County of Hunterdon

ss.

On this 3rd day of August, 2018, before me, a Notary Public of New Jersey, personally came Dawn M. Chloros, to me known to be Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY, the companies which executed the foregoing Power of Attorney, and the said Dawn M. Chloros, being by me duly sworn, did depose and say that she is Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY and knows the corporate seals thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seals and were thereto affixed by authority of said Companies; and that she signed said Power of Attorney as Assistant Secretary of said Companies by like authority; and that she is acquainted with Stephen M. Haney, and knows him to be Vice President of said Companies; and that the signature of Stephen M. Haney, subscribed to said Power of Attorney is in the genuine handwriting of Stephen M. Haney, and was thereto subscribed by authority of said Companies and in deponent's presence.

Notarial Seal



KATHERINE J. ADELAAR  
NOTARY PUBLIC OF NEW JERSEY  
No. 231885  
Commission Expires July 16, 2019

*Katherine J. Adelaar*  
Notary Public

CERTIFICATION

Resolutions adopted by the Boards of Directors of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY on August 30, 2016:

"RESOLVED, that the following authorizations relate to the execution, for and on behalf of the Company, of bonds, undertakings, recognizances, contracts and other written commitments of the Company entered into in the ordinary course of business (each a "Written Commitment"):

- (1) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise.
- (2) Each duly appointed attorney-in-fact of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise, to the extent that such action is authorized by the grant of powers provided for in such person's written appointment as such attorney-in-fact.
- (3) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to appoint in writing any person the attorney-in-fact of the Company with full power and authority to execute, for and on behalf of the Company, under the seal of the Company or otherwise, such Written Commitments of the Company as may be specified in such written appointment, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.
- (4) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to delegate in writing to any other officer of the Company the authority to execute, for and on behalf of the Company, under the Company's seal or otherwise, such Written Commitments of the Company as are specified in such written delegation, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.
- (5) The signature of any officer or other person executing any Written Commitment or appointment or delegation pursuant to this Resolution, and the seal of the Company, may be affixed by facsimile on such Written Commitment or written appointment or delegation.

FURTHER RESOLVED, that the foregoing Resolution shall not be deemed to be an exclusive statement of the powers and authority of officers, employees and other persons to act for and on behalf of the Company, and such Resolution shall not limit or otherwise affect the exercise of any such power or authority otherwise validly granted or vested."

I, Dawn M. Chloros, Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY (the "Companies") do hereby certify that

- (i) the foregoing Resolutions adopted by the Board of Directors of the Companies are true, correct and in full force and effect,
- (ii) the foregoing Power of Attorney is true, correct and in full force and effect.

Given under my hand and seals of said Companies at Whitehouse Station, NJ, this 12th day of March, 2019



*Dawn M. Chloros*

Dawn M. Chloros, Assistant Secretary

IN THE EVENT YOU WISH TO VERIFY THE AUTHENTICITY OF THIS BOND OR NOTIFY US OF ANY OTHER MATTER, PLEASE CONTACT US AT:  
Telephone (908) 903-3493 Fax (908) 903-3656 e-mail: surety@chubb.com



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.

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

Certificate No: 8200232-977466

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, Nicholas Labbe; Laurie Rothwell; Eric J. Canterbury; Natalie Coneys; Michael J. Cusack; Jean M. Feeney; Kathleen M. Flanagan; John J. Gambino; Donald L. Goodrich; Richard A. Leveroni; Sandra C. Lopes; Nicole Roy

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 7th day of January, 2019.



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

By: David M. Carey, 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.

State of PENNSYLVANIA ss
County of MONTGOMERY

On this 7th day of January, 2019 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, 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 12th day of March, 2019.



By: Renee C. Llewellyn, Assistant Secretary

**POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT**

Know All Men By These Presents, That The Continental Insurance Company, a Pennsylvania insurance company, is a duly organized and existing insurance company having its principal office in the City of Chicago, and State of Illinois, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

**Jean M Feeney, Michael J Cusack, John J Gambino, Nicole Roy, Eric J Canterbury, Natalie Coneys, Sandra C Lopes, Nicholas Labbe, Laurie Rothwell, Individually**

of Boston, MA, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its 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 the insurance company 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 Board of Directors of the insurance company.

In Witness Whereof, The Continental Insurance Company has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 11th day of December, 2018.



The Continental Insurance Company

*Paul T. Bruflat*  
Paul T. Bruflat Vice President

State of South Dakota, County of Minnehaha, ss:

On this 11th day of December, 2018, 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 The Continental Insurance Company, a Pennsylvania insurance company, described in and which executed the above instrument; that he knows the seal of said insurance company; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said insurance company and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said insurance company.



My Commission Expires June 23, 2021

*J. Mohr*  
J. Mohr Notary Public

**CERTIFICATE**

I, D. Johnson, Assistant Secretary of The Continental Insurance Company, 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 company 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 company this \_\_\_\_\_ day of MAR 12 2019.



The Continental Insurance Company

*D. Johnson*  
D. Johnson Assistant Secretary

Form F6850-4/2012

Go to [www.cnasurety.com](http://www.cnasurety.com) > Owner / Oblige Services > Validate Bond Coverage, if you want to verify bond authenticity.

## Authorizing Resolutions

ADOPTED BY THE BOARD OF DIRECTORS OF THE CONTINENTAL INSURANCE COMPANY:

This Power of Attorney is made and executed pursuant to and by authority of the following By-Law duly adopted by the Board of Directors of the Company at a meeting held on May 10, 1995.

“RESOLVED: That any 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 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 execution power of attorneys on behalf of The Continental Insurance 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 25<sup>th</sup> 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.”



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 One Lincoln Street, 23rd Floor, Boston, Massachusetts 02111, NATIONAL INDEMNITY COMPANY, a corporation existing under and by virtue of the laws of the State of Nebraska and having an office at 3024 Harney Street, Omaha, Nebraska 68131 and NATIONAL LIABILITY & FIRE INSURANCE COMPANY, a corporation existing under and by virtue of the laws of the State of Connecticut and having an office at 100 First Stamford Place, Stamford, Connecticut 06902 (hereinafter collectively the "Companies"), pursuant to and by the authority granted as set forth herein, do hereby name, constitute and appoint: Michael J. Cusack, Nicole Roy, Nicholas Labbe, Sandra C. Lopes, Laurie Rothwell, Jean M. Feeney, John J. Gambino, 131 Oliver Street, 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 December 20, 2018. 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,

[Signature of David Fields]

By:

David Fields, Executive Vice President



NATIONAL INDEMNITY COMPANY, NATIONAL LIABILITY & FIRE INSURANCE COMPANY,

[Signature of David Fields]

By:

David Fields, Vice President

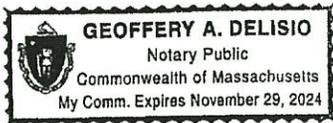


NOTARY

State of Massachusetts, County of Suffolk, ss:

On this 20th day of December, 2018, 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]



[Signature of Geoffrey A. Delisio]

Notary Public

I, Ralph Tortorella, the undersigned, Officer 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, see hereunto affixed the seals of said Companies this March 12, 2019.



[Signature of Ralph Tortorella]

Officer

To verify the authenticity of this Power of Attorney please contact us at: BHSI Surety Department, Berkshire Hathaway Specialty Insurance Company, One Lincoln Street, 23rd Floor Boston, MA 02111 | (770) 625-2516 or by email at Jennifer.Porter@bhspecialty.com THIS POWER OF ATTORNEY IS VOID IF ALTERED To notify us of a claim please contact us on our 24-hour toll free number at (855) 453-9675, via email at claimsnotice@bhspecialty.com, via fax to (617) 507-8259, or via mail.

**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.

## 3.2.10 SCC & DPOR Information Tables

**ATTACHMENT 3.2.10**

**State Project No. 0060-047-627**

**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.

<b>SCC &amp; DPOR INFORMATION FOR BUSINESSES (RFQ Sections 3.2.10.1 and 3.2.10.2)</b>							
<b>Business Name</b>	<b>SCC Information (3.2.10.1)</b>			<b>DPOR Information (3.2.10.2)</b>			
	<b>SCC Number</b>	<b>SCC Type of Corporation</b>	<b>SCC Status</b>	<b>DPOR Registered Address</b>	<b>DPOR Registration Type</b>	<b>DPOR Registration Number</b>	<b>DPOR Expiration Date</b>
<b>Primary Contractor</b>							
Skanska USA Civil Southeast Inc.	0038275-4	Corporation	Active	295 Bendix Rd. Suite 400, Virginia Beach, VA 23452	Class A Contractor	2701000041	2020-10-31
<b>Lead Designer &amp; Quality Assurance Manager</b>							
Volkert, Inc.	F1366592	Foreign Corporation	Active	283 Constitution Dr. Suite 303, Virginia Beach, VA 23462	ENG	0411001275	2020-02-29
				6225 Brandon Ave. Suite 540 Springfield, VA 22150	ENG, LA	0407002610	2019-12-31
<b>Subconsultants</b>							
ATCS, P.L.C.	S0048720	Limited Liability Company	Active	13861 Sunrise Valley Dr., Suite 200 Herndon, VA 20171	ENG, LS	0413000006	2019-12-31
CES Consulting LLC	S3416007	S Corporation	Active, Good Standing	23475 Rock Haven Way, Suite 255 Dulles, VA 20166	ENG	0407005783	2019-12-31
Dovetail Cultural Resource Group	CIS0436	Corporation	Active, In Good Standing	N/A	N/A	N/A	N/A
GeoConcepts Engineering, Inc.	0516767-1	C-Corporation	Active, Good Standing	19955 Highland Vista Dr., Suite 170 Ashburn, VA 20147	ENG	0407004404	2019-12-31
Hassan Water Resources, PLC	S2293282	Limited Liability Company	Active	2255 Parkers Hill Dr. Maidens VA 23102	ENG	0413000299	2019-12-31

**ATTACHMENT 3.2.10**

**State Project No. 0060-047-627**

**SCC and DPOR Information**

O.R. Colan Associates, LLC	T0653610	Foreign Limited Liability Company	Active	11121 Carmel Commons Blvd. Suite 200 Charlotte, NC 28226	Appraisal Business	4008001545	2017-07-31
Precision Measurements, Inc.	0450436-1	S Corporation	Active, In Good Standing	11835 Canon Blvd., Suite B-103, Newport News, VA 23606	LS	0411000292	2020-02-29

**DPOR INFORMATION FOR INDIVIDUALS (RFQ Sections 3.2.10.3 and 3.2.10.4)**

<b>Business Name</b>	<b>Individual's Name</b>	<b>Office Location Where Professional Services will be Provided (City/State)</b>	<b>Individual's DPOR Address</b>	<b>DPOR Type</b>	<b>DPOR Registration Number</b>	<b>DPOR Expiration Date</b>
Skanska	Brent Hunt, PE	295 Bendix Rd, Suite 400, Virginia Beach, VA 23452	Yorktown, VA	Professional Engineer	0402038999	2020-06-30
Volkert, Inc.	Matt Liffick, PE	283 Constitution Drive, Suite 303, Virginia Beach, VA 23462	6 River Point Circle, Newport News, VA 23602	Professional Engineer	0402053935	2020-09-30
Volkert, Inc.	Mark Burris, PE	283 Constitution Drive, Suite 303, Virginia Beach, VA 23462	11013 Ridgebrook Drive, Mechanicsville, VA 23116	Professional Engineer	0402021215	2020-07-31

### 3.2.10.1 Firm SCC Registration



## SCC eFile

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## Business Entities

## UCC or Tax Liens

## Court Services

## Additional Services

## Skanska USA Civil Southeast Inc.

### General

SCC ID: 00382754  
Entity Type: Corporation  
Jurisdiction of Formation: VA  
Date of Formation/Registration: 5/9/1932  
Status: Active  
Shares Authorized: 1000000

### Principal Office

295 BENDIX RD STE 400  
VIRGINIA BEACH VA23452

### Registered Agent/Registered Office

CORPORATION SERVICE COMPANY  
100 Shockoe Slip Fl 2  
Richmond VA 23219  
RICHMOND CITY 216  
Status: Active  
Effective Date: 1/1/2018



## SCC eFile

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## Business Entities

## UCC or Tax Liens

## Court Services

## Additional Services

## Volkert, Inc.

### General

SCC ID: F1366592  
Entity Type: Foreign Corporation  
Jurisdiction of Formation: AL  
Date of Formation/Registration: 1/21/1999  
Status: Active  
Shares Authorized: 2250

### Principal Office

P.O. BOX 7434  
MOBILE AL36670

### Registered Agent/Registered Office

CORPORATION SERVICE COMPANY  
100 Shockoe Slip Fl 2  
Richmond VA 23219  
RICHMOND CITY 216  
Status: Active  
Effective Date: 1/1/2018



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**Business Entities**

**UCC or Tax Liens**

**Court Services**

**Additional Services**

### ATCS, P.L.C.

#### General

SCC ID: S0048720  
 Entity Type: Limited Liability Company  
 Jurisdiction of Formation: VA  
 Date of Formation/Registration: 6/30/1994  
 Status: Active

#### Principal Office

13861 SUNRISE VALLEY DR  
 SUITE 200  
 HERNDON VA20171

#### Registered Agent/Registered Office

YOUNG HO CHANG  
 13861 SUNRISE VALLEY DR  
 SUITE 200  
 HERNDON VA 20171  
 FAIRFAX COUNTY 129  
 Status: Active  
 Effective Date: 11/19/2018



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### Business Entities

### UCC or Tax Liens

### Court Services

### Additional Services

## CES Consulting, LLC

### General

SCC ID: S3416007  
Entity Type: Limited Liability Company  
Jurisdiction of Formation: VA  
Date of Formation/Registration: 10/14/2010  
Status: Active

### Principal Office

23475 ROCK HAVEN WAY  
SUITE 255  
DULLES VA20166

### Registered Agent/Registered Office

AVTAR SINGH  
6773 LEOPOLDS TRAIL  
HAYMARKET VA 20169  
PRINCE WILLIAM COUNTY 176  
Status: Active  
Effective Date: 5/18/2016

**COMMONWEALTH OF VIRGINIA  
STATE CORPORATION COMMISSION**

AT RICHMOND, OCTOBER 26, 2010

The State Corporation Commission has found the accompanying articles submitted on behalf of

**CES Consulting, LLC**  
(formerly known as Construction Engineering & Scheduling Consulting  
Engineers, PLC)

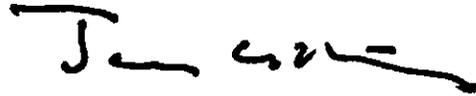
to comply with the requirements of law, and confirms payment of all required fees. Therefore, it  
is ORDERED that this

**CERTIFICATE OF AMENDMENT**

be issued and admitted to record with the articles of amendment in the Office of the Clerk of the  
Commission, effective October 26, 2010.

STATE CORPORATION COMMISSION

By



James C. Dimitri  
Commissioner



### SCC eFile

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### Business Entities

### UCC or Tax Liens

### Court Services

### Additional Services

## Dovetail Cultural Resource Group I, Inc.

### General

SCC ID: 06685531  
Entity Type: Corporation  
Jurisdiction of Formation: VA  
Date of Formation/Registration: 11/30/2006  
Status: Active  
Shares Authorized: 1000

### Principal Office

11905 BOWMAN DRIVE  
SUITE 502  
FREDERICKSBURG VA22408

### Registered Agent/Registered Office

CHARLES W PAYNE JR  
725 JACKSON ST STE 200  
FREDERICKSBURG VA 22401  
FREDERICKSBURG CITY 206  
Status: Active  
Effective Date: 11/30/2006



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### Business Entities

### UCC or Tax Liens

### Court Services

### Additional Services

## GeoConcepts Engineering, Inc.

### General

SCC ID: 05167671  
Entity Type: Corporation  
Jurisdiction of Formation: VA  
Date of Formation/Registration: 2/25/1999  
Status: Active  
Shares Authorized: 5000

### Principal Office

19955 HIGHLAND VISTA DRIVE  
SUITE 170  
ASHBURN VA20147

### Registered Agent/Registered Office

CORPORATION SERVICE COMPANY  
100 Shockoe Slip Fl 2  
Richmond VA 23219  
RICHMOND CITY 216  
Status: Active  
Effective Date: 1/31/2018



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**Business Entities**

**UCC or Tax Liens**

**Court Services**

**Additional Services**

### Hassan Water Resources, PLC

#### General

SCC ID: S2293282  
 Entity Type: Limited Liability Company  
 Jurisdiction of Formation: VA  
 Date of Formation/Registration: 7/16/2007  
 Status: Active

#### Principal Office

2255 PARKERS HILL DR  
 MAIDENS VA23102

#### Registered Agent/Registered Office

GAMAL E HASSAN  
 2255 PARKERS HILL DR  
 MAIDENS VA 23102  
 GOOCHLAND COUNTY      137  
 Status: Active  
 Effective Date: 5/4/2010



### SCC eFile

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### Business Entities

### UCC or Tax Liens

### Court Services

### Additional Services

## O.R. COLAN ASSOCIATES, LLC

### General

SCC ID: T0653610  
Entity Type: Foreign Limited Liability Company  
Jurisdiction of Formation: FL  
Date of Formation/Registration: 5/9/2016  
Status: Active

### Principal Office

7005 SHANNON WILLOW RD STE 100  
CHARLOTTE NC28226

### Registered Agent/Registered Office

CORPORATION SERVICE COMPANY  
100 Shockoe Slip Fl 2  
Richmond VA 23219  
RICHMOND CITY 216  
Status: Active  
Effective Date: 1/1/2018



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## PRECISION MEASUREMENTS, INC.

### General

SCC ID: 04504361  
 Entity Type: Corporation  
 Jurisdiction of Formation: VA  
 Date of Formation/Registration: 7/24/1995  
 Status: Active  
 Shares Authorized: 5000

### Principal Office

629 PHOENIX DRIVE  
 SUITE 100  
 VIRGINIA BEACH VA23452

### Registered Agent/Registered Office

DOUGLAS W DAVIS  
 WYNNGATE BUSINESS PARK  
 516 BAYLOR CT  
 CHESAPEAKE VA 23320  
 CHESAPEAKE CITY 236  
 Status: Active  
 Effective Date: 6/4/2002

## 3.2.10.2 Firm DPOR Registration

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

**EXPIRES ON**  
10-31-2020

**NUMBER**  
2701000041

**BOARD FOR CONTRACTORS  
 CLASS A CONTRACTOR  
 \*CLASSIFICATIONS\* CBC EMC H/H**



**SKANSKA USA CIVIL SOUTHEAST INC**  
 295 BENDIX ROAD  
 STE 400  
 VIRGINIA BEACH, VA 23452



  
Jay W. DeBoer, Director

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

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

**EXPIRES ON**  
02-29-2020

**NUMBER**  
0411001275

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

PROFESSIONS: ENG



**VOLKERT INC**  
 283 CONSTITUTION DR STE 303  
 VIRGINIA BEACH, VA 23462



  
Jay W. DeBoer, Director

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

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

**EXPIRES ON**  
12-31-2019

**NUMBER**  
0407002610

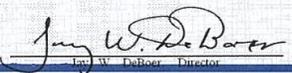
**BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS  
 AND LANDSCAPE ARCHITECTS  
 BUSINESS ENTITY REGISTRATION**

PROFESSIONS: LA, ENG



**VOLKERT INC**  
 6225 BRANDON AVE STE 540  
 SPRINGFIELD, VA 22150



  
Jay W. DeBoer, Director

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

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

**EXPIRES ON**  
12-31-2019

**NUMBER**  
0413000006

BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS  
 AND LANDSCAPE ARCHITECTS  
 PROFESSIONAL LIMITED LIABILITY COMPANY

PROFESSIONS: ENG, LS



ATCS P L C  
 13861 SUNRISE VALLEY DR STE 200  
 HERNDON, VA 20171



*Jay W. DeBoer*  
 Jay W. DeBoer, Director

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

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

**EXPIRES ON**  
12-31-2019

**NUMBER**  
0407005783

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

PROFESSIONS: ENG



CES CONSULTING LLC  
 23475 ROCK HAVEN WAY  
 SUITE 255  
 DULLES, VA 20166



*Jay W. DeBoer*  
 Jay W. DeBoer, Director

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

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

**EXPIRES ON**  
12-31-2019

**NUMBER**  
0407004404

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

PROFESSIONS: ENG



GEOCONCEPTS ENGINEERING INC  
 19955 HIGHLAND VISTA DRIVE  
 SUITE 170  
 ASHBURN, VA 20147



*Jay W. DeBoer*  
 Jay W. DeBoer, Director

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

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

**EXPIRES ON**

12-31-2019

**NUMBER**

0413000299

BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS  
 AND LANDSCAPE ARCHITECTS  
 PROFESSIONAL LIMITED LIABILITY COMPANY

PROFESSIONS: ENG



**HASSAN WATER RESOURCES PLC**  
 HWR  
 2255 PARKERS HILL DRIVE  
 MAIDENS, VA 23102-2244



  
Jay W. DeBoer, Director

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

License Details



<b>Name</b>	O R COLAN ASSOCIATES OF FLORIDA LLC
<b>License Number</b>	4008001545
<b>License Description</b>	Appraisal Business Registration
<b>Firm Type</b>	LLC - Limited Liability Company
<b>Rank</b>	Business Entity
<b>Address</b>	11121 CARMEL COMMONS BOULEVARD SUITE 200, CHARLOTTE, NC 28226
<b>Initial Certification Date</b>	2009-07-22
<b>Expiration Date</b>	2017-07-31

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

**EXPIRES ON**

02-29-2020

**NUMBER**

0411000292

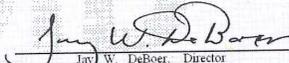
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS  
 AND LANDSCAPE ARCHITECTS  
 BUSINESS ENTITY BRANCH OFFICE REGISTRATION

PROFESSIONS: LS



**PRECISION MEASUREMENTS INC**  
 11835 CANON BLVD STE B-103  
 NEWPORT NEWS, VA 23606



  
Jay W. DeBoer, Director

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

### 3.2.10.3 Key Personnel DPOR Registration

# License Details

**Name** HUNT, WILLIAM BRENT  
**License Number** 0402038999  
**License Description** Professional Engineer License  
**Rank** Professional Engineer  
**Address** YORKTOWN, VA 23692  
**Initial Certification Date** 2004-06-14  
**Expiration Date** 2020-06-30

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

EXPIRES ON  
07-31-2020

NUMBER  
0402021215

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



MARK CHRISTOPHER BURRIS  
11013 RIDGEBROOK DRIVE  
MECHANICSVILLE, VA 23116



*Jan W. DeBoer*  
Jan W. DeBoer, Director

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

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

EXPIRES ON  
09-30-2020

NUMBER  
0402053935

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



MATTHEW KENT LIFFICK  
6 RIVER POINT CIRCLE  
NEWPORT NEWS, VA 23602



*Jan W. DeBoer*  
Jan W. DeBoer, Director

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

### 3.3.1 Key Personnel Resume Forms

# ATTACHMENT 3.3.1

## KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: **Brent Hunt, PE, Project Executive**

b. Project Assignment: **Design-Build Project Manager**

c. Name of all Firms with which you are employed at the time of submitting SOQ. In addition, please denote the type of employment (Full time/Part Time) : **Skanska USA Civil Southeast Inc., Full Time**

d. Employment History: With this Firm 22 Years With Other Firms 0 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):

**Skanska USA Civil Southeast Inc., January 1997 to Present.** Mr. Brent Hunt has 22+ years of experience in the local heavy civil market all with Skanska, leading teams on high-profile, complex, technically-challenging projects, most of them for VDOT. Mr. Hunt is tasked by Skanska to provide our clients with a high level of trust, teamwork, and technical know-how in order to produce world-class results on our most challenging local projects. Since working as Skanska's Design-Build Coordinator on VDOT's first design-build roadway project, the APM Terminal Interchange, Mr. Hunt has built his career working alongside VDOT alongside VDOT to improve best practices in construction, most recently exhibited at the MLK Extension design-build project.

Mr. Hunt's experience on VDOT design-build projects will allow the Skanska team to quickly start the Skiffes Creek Connector project with no learning curve required. Mr. Hunt will draw upon his experience with environmentally-sensitive marine and railroad bridges and design-build contracting along with utility coordination, right of way acquisition and heavy 3rd party stakeholder involvement. Mr. Hunt fully understands that his leadership role must establish a culture of safety and quality with our entire team, including our subcontractors and material suppliers to ensure the successful delivery of Skiffes Creek Connector.

As **Design-Build Project Executive** for FDOT's 3-mile long Pensacola Bay Bridge project, Skanska called on Mr. Hunt's leadership to improve the safety and quality of the project over the past 9 months. Under Mr. Hunt's leadership the Recordable Incident Rate (RIR) for the project dropped to less than half of what it was prior to his arrival, and quality has continued to improve during his tenure.

As the **Design-Build Project Manager** for **VDOT's MLK Extension portion of the Elizabeth River Tunnels project, Mr. Hunt managed approximately 288 DBE/SWaM firms with contract values totaling over \$125 million.** He led a focused effort to challenge these vital local subcontractors and vendors to elevate their level of safety and quality performance through careful planning and support from Skanska, which made a notable culture improvement, in many cases, within their own operations, a benefit that will be felt throughout the local marketplace for years to come. This portion of the work was well within the public eye as ROW acquisition took place. Mr. Hunt coordinated with VDOT and the City of Portsmouth to ensure stakeholders fully understood the plan and execution of the work.

As the **Project Manager** for VDOT's Huguenot Bridge Replacement, Mr. Hunt was instrumental in developing and implementing a safety program that underwent a VOSH comprehensive safety compliance inspection. On this project, Mr. Hunt worked directly with Mr. Bill Eskins, Jr., our proposed Construction Manager for Skiffes Creek.

As the **Project Manager** for FDOT's Bridge of Lions Rehabilitation, Mr. Hunt maintained a positive public image on the reconstruction of this high-profile historic bridge using proactive stakeholder engagement. Mr. Hunt led a successful agreement with environmental agencies to contribute to an artificial reef that benefited the sea life and became a meaningful contribution to the local area.

As the **Project Manager** of VDOT's Judith Dresser Memorial Bridge (Rt. 5) over the Chickahominy River, Mr. Hunt was responsible for developing a plan to mitigate potential utility conflicts as well as meet water-related environmental commitments relating to the work across the river.

Being the **Design-Build Coordinator** on VDOT's first design-build roadway project at APM Terminals, Mr. Hunt was able to develop the design-build process alongside VDOT as they partnered to establish execute best practices in design-build.

It was during his tenure as **Assistant Project Manager** on VDOT's Pinner's Point Interchange, Mr. Hunt was mentored directly by Mr. Bill Eskins, Jr., our proposed Construction Manager for Skiffes Creek. Working with Mr. Eskins, Mr. Hunt gained deep knowledge in project management.

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

**Virginia Polytechnic Institute, Blacksburg, VA / B.S. / 1996 / Civil Engineering**

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

**2004 / Professional Engineer / 0402038999**

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.)**

### **Martin Luther King Expressway Extension, Elizabeth River Crossings/Midtown Tunnel (Design-Build) P3 - Project Manager.**

The Martin Luther King (MLK) Expressway Extension added an additional 2.5 miles of roadway in Portsmouth, VA. Over one mile of the MLK Extension is elevated as it travels through developed area near downtown Portsmouth over railroads, interstate highways, city streets and neighborhoods. The project included a tie-in at the north end to the existing freeway, and two interchanges, one at High Street and one at I-264 at the south end of the project. **Responsibilities:** Mr.

Hunt managed on-site project progress to ensure that design, schedule, budget, and quality expectations were met. His daily activities included customer relations; supervision of staff; quality, safety, and environmental oversight; subcontractor oversight; materials procurement; scheduling and budget. **Challenges & Resolutions:** Mr. Hunt was responsible for managing the public's perception of this project. He attended public outreach meetings and even met with concerned citizens on a one-on-one basis when needed. Due to political conflicts, the MLK Extension project was delayed almost a year; however, the project was successfully completed one month ahead of schedule. The schedule delay was mitigated by utilizing best practices for planning and execution. Mr. Hunt was also responsible for managing the DBE/SWaM subcontractors with contracts totaling \$125 million. The firms needed to be trained to comply with Skanska's safety policy and work planning procedures. **Reference:** Bradley Weidenhammer, 757.374.9809, Bradley.Weidenhammer@VDOT.Virginia.gov | Firm: Skanska USA Civil Southeast Inc. | Date: 2012-2017

Due to political conflicts, the MLK Extension project was delayed almost a year; however, the project was successfully completed one month ahead of schedule.

### **Huguenot Bridge Replacement, Richmond, VA - Project Manager.**

The bridge reconstruction project involved replacing the existing structure with a new structure in approximately the same location. The new structure has one 12-foot lane and one 10-foot shoulder in each direction. The 10-foot shoulder functions as both an emergency lane and a lane to allow bicyclists to safely use the bridge. The bridge decks also include a five-foot wide sidewalk on each side for pedestrians. The approach roadways were also improved as necessary to accommodate the bridge replacement. **Responsibilities:** Mr. Hunt

was responsible for all aspects of operations on this \$40 million project to replace the Huguenot Bridge in Richmond, VA. His daily activities included customer relations; supervision of staff; quality, safety, and environmental oversight; subcontractor oversight; materials procurement; scheduling and budget. Mr. Hunt provided solutions for the project team when flooding of the James River occurred and the team overcame schedule delay. Mr. Hunt gained experience in managing a project with limited access around the project perimeter. The bridge was opened three months ahead of schedule. **Challenges & Resolutions:** This project was particularly challenging because the structure crossed over wetlands, a state park, the James River, an archaeological site, CSX railroad, and the Kanawha Canal (which provides the drinking water for the City of Richmond). A 36-inch water line ran parallel to the east side of the new bridge which limited crane access on that side. Mr. Hunt led the team and overcame these challenges to provide successful delivery of the Huguenot Bridge project. Another utility conflict that needed resolution was a 48-inch sanitary force main that was shown on the original plans in the wrong location. Mr. Hunt worked with VDOT, utilizing design-build types of methods, to redesign and temporarily bypass the main in order to install the new one. **Reference:** Ray Johnston, 804.786.8207, Ray.Johnston@VDOT.Virginia.gov | Firm: Skanska USA Civil Southeast Inc. | Date: 2010-2012

A utility conflict that needed resolution was a 48-inch sanitary force main that was shown on the original plans in the wrong location. Mr. Hunt worked with VDOT, utilizing design-build types methods, to redesign and temporarily bypass the force main in order to install the new one.

### **Roadway Improvement to Support APM Terminal, Portsmouth, VA - Design-Build Coordinator.**

The project consisted of design and construction of a modified diamond interchange to provide access to a new shipping terminal. The \$22 million project included constructing a new highway interchange with two overpass bridges; constructing 2.1 miles of new roadway; relocating segments of existing roadway and drainage; approximately 130,000 CY of earthwork; utility relocation and protection; and wetlands mitigation and protection requirements. **Responsibilities:** Mr. Hunt was responsible for all aspects of operations on VDOT's first design-build contract. His daily activities included customer relations; supervision of staff; quality, safety, and environmental oversight; subcontractor oversight; materials procurement; scheduling and budget. He ensured compliance with design, safety, quality and environmental policies, and overall execution of site quality, safety and environmental plans. **Challenges & Resolutions:** Being VDOT's first design-build roadway project, Mr. Hunt worked alongside VDOT to develop best practices in design-build. He partnered with VDOT to establish the processes needed to deliver a successful project. He worked with VDOT to create the process to deliver a successful project. | Firm: Skanska USA Civil Southeast Inc. | Date: 2005-2007

Being VDOT's first design-build roadway project, Mr. Hunt worked alongside VDOT to develop best practices in design-build. He partnered with VDOT to establish the processes needed to deliver a successful project.

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

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

# ATTACHMENT 3.3.1

## KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: **Matthew K. Liffick, PE, Construction Management & Inspection**

b. Project Assignment: **Quality Assurance Manager**

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

d. Employment History: With this Firm ≥1 Years With Other Firms 22 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):

**Mr. Liffick** has 13 years of experience leading construction management and engineering services for transportation infrastructure improvement projects statewide including extensive experience throughout Hampton Roads. He has worked on regionally significant projects such as the Elizabeth River Tunnels D-B/P3 and the Gilmerton Bridge Replacement and is currently serving as Construction Manager on the local I-64/I-264 Ramp Improvements project.

**Name of Firm:** Volkert, Inc.                      **Start Date:** 2018                      **End Date:** present  
**Position:** Assistant Vice President, Construction Management & Inspection – Responsible for management of the construction services group and oversight of design-build and design-bid-build projects in the Eastern Virginia region.

**Name of Firm:** Haley & Aldrich, Inc.    **Start Date:** 2015                      **End Date:** 2018  
**Position:** Senior Construction Project Manager, Hampton Roads, VA – Responsible for the development of Construction Services in Virginia including serving as Construction Manager on the I-64/I-264 Interchange project.

**Name of Firm:** Parsons Brinckerhoff    **Start Date:** 2010                      **End Date:** 2015  
**Position:** Deputy Project Manager, Hampton Roads, VA – Served as Deputy Project Manager on Gilmerton Bridge Project. Managed on-call inspection task order teams in the Hampton Roads District. He also served as Design Construction Engineer on the Elizabeth River Tunnels project, monitoring submittal and RFI responses.

**Name of Firm:** KBS, Inc.                      **Start Date:** 2006                      **End Date:** 2010  
**Position:** Assistant Project Manager, Superintendent – Responsible for all on-site operations. Duties included estimating, contract administration including negotiating subcontracts and change orders, scheduling, budgeting, document control, maintaining the quality control program, coordination with the Engineer of Record, and overseeing worker safety.

**Name of Firm:** Town of Blacksburg    **Start Date:** 2005                      **End Date:** 2006  
**Position:** **Field** Engineer – Lead troubleshooter to correct a storm water and wastewater data collection system. Successfully designed and implemented a program to maintain and collect flow data.

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

**Virginia Military Institute, Lexington, VA / Bachelor of Science / 2004 / Civil Engineering**

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

**2014 / Professional Engineer / VA #0402053935**

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

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

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

**I-64/I-264 Ramp Improvements, Norfolk/Virginia Beach, VA, VDOT – Project Construction Manager.**

The \$117 million interchange at I-64 and I-264 is being improved to help relieve congestion and improve operational efficiency for the 75,000 motorists who travel through the interchange each day. The project involves the addition of a second exit lane on westbound I-64, the widening of the ramp from westbound I-64 to eastbound I-264, a new two-lane collector-distributor roadway (C-D road), and a new two-lane flyover ramp. **Responsibilities:**

Managing construction management and inspection services which includes construction inspection; risk, schedule, cost, materials, safety, and document management; utility coordination; environmental compliance; and engineering support. Verifying that the construction conforms to plans and specifications. **Challenges & Resolutions:** A notable challenge that was successfully managed and mitigated was the installation of a total of 21,000 LF of uncased drilled shafts at a depth of 150 feet. Embankment settlement was identified as a risk for the project, but fills were placed early in the construction sequence with an action plan if needed. The relocation of a stream, 3,000 feet long and 20 feet wide, required substantial coordination with VDEQ and USACE to ensure compliance with the Virginia Water Protection environmental permit documents.

**Reference:** James Klotz, PE, 757.274.2552, james.klotz@vdot.virginia.gov | Firm: Volkert, Inc. | Date: 2016 – 2019

**Elizabeth River Tunnels Project, Portsmouth, VA, Elizabeth River Crossing LLC & VDOT – Design Construction Engineer.**

The Elizabeth River Tunnels Project is a series of transportation related projects, including the rehabilitation of the Downtown and existing Midtown Tunnels, the construction of the new parallel Midtown Tunnel, and the extension of the MLK Expressway/US 58 to I-264. The project is being administered by Elizabeth River Crossings (ERC) along with VDOT as part of a 58-year public-private partnership concession that will cost approximately \$2.1 billion to complete. **Responsibilities:** Resolved issues in the field, providing guidance to ensure VDOT’s protocols and processes were followed and VDOT’s standards were met. **Challenges & Resolutions:** By ensuring that there was quick resolution of RFIs and field issues, Mr. Liffick was able to contribute to the on-time completion of the project. **Reference:** Julie Perkoski, 757.478.2435, JPerkoski@ces-consultingllc.com | Firm: Parsons Brinckerhoff | Date: 2014 – 2015

**Gilmerton Bridge Replacement Project, Chesapeake, VA, VDOT – Construction Manager/Deputy Project Manager.**

This \$170M million project entailed the bridge replacement and subsequent demolitions of the original double-leaf bascule bridge. The state-of-the-art vertical lift bridge project features 1,908-foot-long approach bridges; towers that are 207 feet tall; a 250-foot, 5.2 million-pound lift-span bridge; and among the largest drilled shafts – 12 feet in diameter – ever constructed in the U.S. using the temporary casing method with an oscillator. **Responsibilities:** Managed construction of the complex movable bridge, coordinating inspections and material testing. Developed the risk management program for bridge construction and assisted with claim analysis. **Challenges & Resolutions:** As mentioned previously, Mr. Liffick developed the risk management program which was key to reducing claims, allowing the project to be completed with no claims. **Reference:** Ricardo Correa, PE, 757.494.2476, Ricardo.Correa@vdot.virginia.gov | Firm: Parsons Brinckerhoff | Date: 2010 – 2015

Similar extenuating elements to the Skiffes Creek project have been experienced on I-64/I-264 Ramp Improvements project: stream restoration and power transmission lines. Mr. Liffick continues to coordinate and verify with VDEQ and USACE that construction is in compliance with Virginia Water Protection environmental considerations and permits.

Mr. Liffick participated in the Risk Analysis that was conducted on this project; this measure contributed to the swift resolution of RFIs and field issues.

Mr. Liffick’s involvement in the risk management process utilized on this bridge replacement project contributed to its successful project delivery with no claims.

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

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

**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: **Mark Burris, PE, Deputy Director of Municipal & Highway Engineering, Mid-Atlantic Region**

b. Project Assignment: **Design Manager**

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

d. Employment History: With this Firm <1 Years With Other Firms 35 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):

**Mr. Burris** has served as Design Manager for numerous Design-Build and P3 projects involving extensive multi-disciplinary coordination. He specializes in the design of major roadway, drainage, and structural projects involving environmental permitting, utility relocations, right-of-way (ROW) acquisition, and maintenance-of-traffic (MOT). Likewise, he has served as the project manager on numerous on-call task order contracts managing simultaneous tasks for VDOT, Statewide, NOVA District, Fredericksburg District, as well as municipalities (Hanover County, Henrico County, Chesterfield County, City of Richmond, City of Virginia Beach, City of Chesterfield, City of Norfolk and City of Portsmouth). Mr. Burris' expertise includes developing innovative solutions to mitigate project challenges and impacts, and extensive public engagement activities. He has experience coordinating with federal, state, and local municipal stakeholders and construction engineering support personnel. Mr. Burris also brings in-depth knowledge of VDOT processes and Common Sense Engineering (CSE).

**Name of Firm:** Volkert, Inc.                      **Start Date:** 2018                      **End Date:** present  
**Position:** Deputy Director of Municipal & Highway Engineering, Mid-Atlantic Region – Responsible for management of the roadway design group and oversight of design-build and design-bid-build projects in the District of Columbia, Virginia, and Maryland.

**Name of Firm:** GAI Consultants                      **Start Date:** 2012                      **End Date:** 2018  
**Position:** Director of Transportation Engineering, Richmond Office – Responsible for oversight of development and design of projects through on-call contracts (for example, Dominion Energy and Columbia Gas), and individual transportation projects statewide.

**Name of Firm:** AECOM                      **Start Date:** 2007                      **End Date:** 2012  
**Position:** Director of Transportation – Responsible for the transportation operations and served as the design manager for design-build transportation projects statewide.

**Name of Firm:** VDOT                      **Start Date:** 2005                      **End Date:** 2007  
**Position:** Design Section Manager (Location & Design) – Served as program manager for the L&D Division for numerous on-call design task order teams and individual transportation projects. He also served as project manager on roadway and bridge improvement projects throughout the state.

**Name of Firm:** Wilbur Smith Associates                      **Start Date:** 2000                      **End Date:** 2005  
**Position:** Associate-in-Charge – Responsibilities included serving as the office leader for five multi-disciplinary divisions, and as the design manager for design-build transportation projects

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:  
**Old Dominion University, Norfolk, VA / Bachelor of Science / 1983 / Civil Engineering**

f. Active Registration: Year First Registered/ Discipline/VA Registration #:  
**1990 / Professional Engineer / VA #021215**

g. Document the extent and depth of your experience and qualifications relevant to the Project.  
1. Note your role, responsibility, and specific job duties for each project, not those of the firm.  
2. Note whether experience is with current firm or with other firm.  
3. Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.  
**(List only three (3) relevant projects\* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.**

**I-264 Pavement Rehabilitation D-B, Virginia Beach, VA, VDOT– Design Manager.**

Managed the \$72 million design and construction of a 10-mile section of I-264, from the I-64/I-264 interchange to Parks Avenue. This major urban roadway project connects Norfolk to Virginia Beach’s ocean front and involved extensive public and stakeholder coordination to successfully and safely construct the improvements. Stakeholders included Virginia Beach; VDOT; FHWA; Federal and State agencies; multiple churches, businesses, neighborhoods, emergency response departments, and environmentally sensitive properties. **Responsibilities:** Managed the environmental and cultural resources services; traffic management services during construction; and public involvement throughout. Coordinated with regulatory agencies to obtain and comply with construction permitting requirements and monitoring construction activities to address water quality measures. The project elements included concrete pavement patching; shoulder widening; safety hardware upgrades; modifications to barriers, guardrails, curbs and signage; and adjustments to drainage structures and upgrades in substandard locations. **Challenges & Resolutions:** MOT and safety was a challenge on this project. Overhead message signs, VMS devices, social media, and project updates at public meetings were routinely utilized to communicate significant construction activities such as lane closures and traffic detours to the impacted public. The project was completed on-schedule and on-budget and had no fatalities or serious injuries. **Reference:** Frank Fabian, PE, 757.494.5483, Frank.Fabian@vdot.virginia.gov | Firm: GAI Consultants | Date: 2015

In addition to managing the overall design of this design-build project, Mr. Burris worked in concert with the contractor to address and adapt challenging MOT through a very congested corridor that included two other ongoing adjacent D-B projects.

**Jamestown Corridor Improvements PPTA, Jamestown, VA, VDOT & Jamestown 2007 Corridor Constructors – Design Manager.**

Responsible for the design and construction of part of this \$32 million initiative to build needed transportation improvements in the Williamsburg-Jamestown area in preparation for the 400th anniversary of the founding of Jamestown. Route 199 improvements included widening two existing two-lane sections to four divided lanes consistent with the rest of the corridor; intersection improvements at Routes 199 and 31; and realignment of Route 359 on a new location outside the Jamestown Visitor Center’s parking areas to connect Route 31 with the Colonial Parkway. **Responsibilities:** Managed the roadway design; geotechnical engineering; signals and signs; MOT design; project scheduling; QA/QC; sound barrier design; ROW acquisition; utility relocation; and construction engineering inspection oversight. **Challenges & Resolutions:** Mr. Burris was instrumental in developing an innovative approach to the challenging geotechnical conditions – in lieu of excavation along the entire length of the project, utilized geogrids and wick drains for monitoring. This solution significantly reduced the overall construction cost, saving the project \$15 million. The project was completed on-budget and ahead of schedule. **Reference:** David Black, 757.253.5069, David.Black@vdot.virginia.gov | Firm: Wilbur Smith Associates | Date: 2003-2006

Mr. Burris was instrumental in developing an innovative approach to the challenging geotechnical conditions – in lieu of excavation along the entire length of the project, he recommended using geogrids and wick drains for monitoring. This solution significantly reduced the overall construction cost, saving the project \$15M.

**North Gayton Road Extension PPTA, Henrico, VA, Henrico County & English Construction – Design Manager.**

Responsible for the design and construction of a \$38 million project involving the widening of the existing two-lane roadway to four lanes; a new six-lane divided roadway; a new bridge spanning I-64; two precast concrete culverts over small streams; and driveway improvements. Stakeholders included Henrico County, VDOT, FHWA, Federal and state agencies, multiple churches, businesses, neighborhoods, a recreational park, and environmentally sensitive properties. **Responsibilities:** Managed the 2.1-mile roadway design that included a bridge; 1.5-miles of a new roadway location; water lines extension along the project corridor; ROW acquisition; environmental and cultural resources support; traffic management during construction; grading diagram; utility design and relocation; public involvement; traffic signals; and a complex MOT sequence to minimize interruptions on the existing facility. **Challenges & Resolutions:** This major urban roadway project connects Henrico County’s major commercial Short Pump area with northern residential neighborhoods. The project’s new facility provides significant traffic relief for the most congested intersection in Henrico County at Broad Street and Pouncey Tract Road. **Reference:** Rob Tieman, PE, 804.786.5869, Robert.Tieman@vdot.virginia.gov | Firm: AECOM | Date: 2007-2012

Mr. Burris provided adaptive MOT alternatives to accommodate the necessary complex sequence of construction in this highly congested mixed-use area of Henrico County travelled by both commercial delivery trucks and shoppers, local residents, and commuters.

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

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

# ATTACHMENT 3.3.1

## KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title: <b>Bill Eskins, Jr., Construction Manager</b>
b. Project Assignment: <b>Construction Manager</b>
c. Name of all Firms with which you are employed at the time of submitting SOQ. In addition, please denote the type of employment (Full time/Part Time) : <b>Skanska USA Civil Southeast Inc., Full Time</b>
d. Employment History: With this Firm <u>42</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): <b>Skanska USA Civil Southeast Inc., 1977 to Present.</b> Bill Eskins, Jr. has 42 years of experience in construction, including 30 years of experience in managing the direction and final outcome of complex construction projects. Mr. Eskins has worked in almost every field position from field engineer, to project manager; he is also the second in a line of three generations of Eskins who have worked with Skanska in the Southeast. He applies his vast knowledge of all aspects of heavy civil construction to lead strong teams to success in safety, quality, schedule and budget. As construction manager, he provides leadership to ensure the materials used and work performed meet the contract requirements. His responsibilities have included planning and scheduling, field supervision, cost control, owner/client relations, subcontractor/material procurement and design-build contracting. Since 2014, as the <b>Construction Manager</b> for FDOT's I-4 Ultimate Design-Build P3 Project in the heart of the congested downtown area of Orlando, Skanska entrusts Mr. Eskins to provide overall leadership for the construction, compliance with contract documents and approved plans and specifications, safety, quality and environmental oversight, and subcontractor coordination. As <b>Construction Manager</b> for NAVFAC's Explosives Handling Wharf, Mr. Eskins was brought on to the project due to his extensive experience driving piles in environmentally sensitive marine environments. Mr. Eskins developed innovative installation plans in order to achieve production with strict environmental, safety and schedule constraints. Under his leadership, the team exceeded the overall pile driving production goal bolstering the certainty of the project schedule and mitigating risk of delay. As the <b>Construction Manager</b> for VDOT's Huguenot Bridge, Mr. Eskins worked extensively with our proposed DBPM, Brent Hunt This bridge spanned the James River along with the same CSX Railroad line as will be spanned by Skiffes Creek Connector. Marine operations in the James River could be jeopardized by rising floodwaters from upstream rain events. Mr. Eskins and his team implemented an innovative communication plan to monitor stations north of the project to ensure equipment and personnel were removed from the river and floodplain prior to the water rising. As <b>Construction Manager</b> for DDOT's 11th Street Corridor Design-Build project, Mr. Eskins was responsible for the overall pile driving operations. Mr. Eskins developed and implemented an innovative approach to driving piles in the Anacostia River, which included communication and coordination with DDOT, permitting agencies and stakeholders in order to deliver the project ahead of schedule. As <b>Construction Manager</b> for FDOT's SR60/Tampa Airport Interchange, Mr. Eskins was responsible for the pile driving operations and bridge construction for the three level interchange. Mr. Eskins contributed to the team by implementing a detailed plan to pre-assemble bridge girders off site, coordinate lane closures and set pre-assembled girders in order to save time on the schedule and minimize impacts to the traveling public. As <b>Construction Manager</b> on FDOT's I-10 Bridges over Escambia Bay, Mr. Eskins participated in a major design effort on this design-build project to change the bridges tie-in point on the Pensacola side. The revised design helped to reduce the schedule by three months. As the <b>Construction Manager</b> for VDOT's Pinners Point Interchange, Mr. Eskins coordinated extensively with the Virginia Port Authority, to ensure that construction truck movements and delivery schedules were met without interfering with the Port's operations. On this project, Mr. Eskins mentored our proposed DBPM, Brent Hunt.
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: <b>High School</b>
f. Active Registration: Year First Registered/ Discipline/VA Registration #: <b>Bill Eksins will hold a Virginia Department of Environmental Quality (DEQ) Responsible Land Disturber (RLD) Certification and a VDOT Erosion and Sediment Control Contractor Certification (ESCCC) prior to the commencement of construction.</b>
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. <b>(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.)</b>

**Huguenot Bridge Replacement, Richmond, VA - Construction**

**Manager.** The bridge reconstruction project involved replacing the existing structure with a new structure in approximately the same location as the current bridge. The new structure has one 12-foot lane and one 10-foot shoulder in each direction. The 10-foot shoulder functions as both an emergency lane and a lane to allow bicyclists to safely use the bridge. In addition, there is a five-foot wide sidewalk on each side for pedestrians. The approach roadways on each end was improved as necessary to accommodate the bridge replacement.

**Responsibilities:** Mr. Eskins' duties included overall management for the construction including quality control activities. He also coordinated with utility owners, environmental agencies, stakeholders, and subcontractors. His duties also included compliance with contract documents and approved plans and specifications, safety, quality and environmental oversight and subcontractor coordination. He ensured project controls were in place and executed, managed cost and schedule, provided direction for superintendents, assessed and managed risk, ensured adequate staffing and materials acquisition, and documented contractual issues. **Challenges & Resolutions:** Mr. Eskins worked Brent Hunt, our proposed design-build project manager to install portable dams. This proved challenging due to the James River constantly flooding. The stations north of the project had to be monitored closely to ensure equipment and personnel were removed from the portable dam prior to the water levels rising. He also developed and implemented the work plan to build the foundations on the rock bottom of the river. Firm: Skanska USA Civil Southeast Inc. | Date: 2010-2011

Mr. Eskins worked directly with Brent Hunt, our proposed DBPM on the Huguenot Bridge Replacement project.

**Pinners Point Connector, Portsmouth, VA - Construction Manager.**

The Pinners Point Connector provided a new four-lane road and interchange from the Western Freeway (VA-164) to the Portsmouth Marine Terminal, Martin Luther King Expressway (VA-58) and the Midtown Tunnel. The project included six bridges traversing residential and industrial areas covering both water and land. A new Midtown Tunnel building complex with six structures was also constructed and roadwork consisting of excavation, clearing, grading, paving, utilities, wick drains, fence/guardrails, sound walls, electrical, signs and traffic management system was installed. **Responsibilities:**

As construction manager, Mr. Eskins ensured project controls were in place and being executed, managed costs and schedule, provided direction and coordination for superintendents and personnel, ensured adequate staffing and materials acquisition, documented contractual issues, and provided constant communication with customer and community. Duties also included compliance with contract documents and approved plans and specifications, safety, quality and environmental oversight and subcontractor coordination. **Challenges & Resolutions:** The project included 54-inch cylinder piles to be driven in the water with only a small channel for access. Mr. Eskins developed a work plan using barges to walk the crane out to the needed location to drive the piles. During the boring operation under the CSX railroad tracks, the team encountered unknown debris. Mr. Eskins stopped the operation and changed to an alternative method to avoid any damage to the tracks. Firm: Skanska USA Civil Southeast Inc. | Date: 2000-2006

While boring under the CSX tracks, the team ran into a lot of unknown debris. Mr. Eskins switched plans and utilized another method of boring to avoid any damages to the tracks.

**I-10 Bridges over Escambia Bay, Pensacola, FL - Construction Manager.** The project consisted of two new 2.6-mile bridges with 10-foot inside and outside shoulders and three 12-foot travel lanes and improvements to the I-10 eastbound on-ramp and the I-10 westbound off-ramp at the Scenic Highway interchange. This design-build contract was the first bridge project in FDOT history to use 36-inch square piles for the foundations. **Responsibilities:** As construction manager of this \$255 million complex marine project, Mr. Eskins was responsible for supervising the on-site personnel, project administration, and the overall construction schedule. He ensured that the materials used and work performed was in compliance with the contract plans and specifications, and upholding our safety and environmental policies. Mr. Eskins held overall responsibility for the safety and high quality of work performed under his leadership. His specific duties on the project included scheduling, cost management, worker and subcontractor management, preparing documentation and reports for project management and customers, and providing direction for specific tasks and training for employees. **Challenges & Resolutions:** Mr. Eskins assisted in a redesign of the original plans that changed the tie-in point on the Pensacola side. The new design minimized traffic impacts by modifying the bridge spans. This redesign reduced the construction schedule by three months. The pile installation plan presented another challenge. The original plan used piledriving templates but when the templates were being removed, the vibration caused the 36-inch piles to lose capacity. Mr. Eskins switched from the template methodology to using an A-frame on the barge to drive the 36-inch square piles. Despite having two major hurricanes during construction, one being Katrina, the project was completed on time and within budget. Firm: Skanska USA Civil Southeast Inc. | Date: 2005-2006

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

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment. **Mr. Eskins is currently assigned to the I-4 Ultimate D-B P3 project, a \$2.3 billion project to add express lanes and update 21 mile of I-4 through Orlando for the FDOT. He will be made available in November 2019 to assist in the pursuit of the Skiffes Creek project.**

## 3.4.1(a) Lead Contractor Work History Forms

**ATTACHMENT 3.4.1(A)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

(LIMIT 1 PAGE PER PROJECT)

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: <b>Roadway Improvement to Support APM Terminal, Design-Build Project</b> Location: <b>Portsmouth, VA</b>	Name: <b>Vanasse Hangen Brustlin Inc. (VHB)</b>	Name of Client/ Owner: <b>Virginia Department of Transportation</b> Phone: <b>757.494.5470</b> Project Manager: <b>Robert Morgan</b> Phone: <b>757.494.5472</b> Email: <b>robert.morgan@vdot.virginia.gov</b>	<b>02/2007</b>	<b>02/2007</b>	<b>\$17,763</b>	<b>\$21,678</b> <b>[owner change orders]</b>	<b>\$15,174 (70%)</b>

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.

**Lead Contractor:** Skanska USA Civil Southeast Inc. Skanska was responsible for all aspects of construction, including design-build coordination, environmental compliance, subcontracting, **safety, quality, maintenance of traffic, and schedule adherence.**

This contract was for VDOT's first design-build roadway project. The work included design and construction of a modified diamond interchange to provide access to a new shipping terminal. The project included constructing a new highway interchange including two overpass bridges; constructing 2.1 miles of new roadway; relocating segments of existing roadway and drainage; approximately 130,000 cubic yards of earthwork; utility relocation and protection; and wetlands mitigation and protection requirements. This project was a major trucking route for the shipping terminal; therefore, the original number of lanes of traffic was maintained throughout construction.

**Achievement of Environmental Compliance, Safety, Quality, Workmanship:** Over the course of the project, Skanska installed two signalized intersections, one at the new intersection of Virginia International Gateway Boulevard and Western Freeway and the other at Cedar Lane and Coast Guard Boulevard. While working on installing the new roadway, Skanska coordinated work performed adjacent to and under high voltage power lines. In addition, we ensured proper coordination with the railroad that runs parallel to Western Freeway. Flaggers were on-site as required when any work was performed in the railroads right-of-way or within 50 feet of the rail. All new construction tied in with old roadways already in place. Work within wetlands was coordinated with the appropriate agencies to ensure compliance with the permits required. Skanska implemented a robust safety program for the project. Safety meetings were held every morning at the job site along with daily job briefings. Work plans for all operations were created and implemented throughout the project to further ensure a safe working environment.

**QA/QC Plan:** Skanska implemented a QC plan in coordination with VDOT's QA role. Skanska coordinated daily with VDOT's QA staff who were on-site. Our QC plan entailed preparatory meetings in the office and follow up meetings in field to discuss the quality procedures to be followed.

**Innovative Construction Techniques:** The direct involvement of construction personnel in the design process created a near seamless product delivery assuring safety, environmental, quality and community relations issues were well understood by the entire project team. Throughout this project, there were numerous utility relocations that were required. Through coordination with the City, the large water line running through the middle of the project was relocated. There was also substantial coordination with the power company due to the power lines that ran parallel to the project to ensure safety and continuous service. With a portion of the new roadway being in a location with substandard soil conditions, major surcharges were effectively used for the settlement period to avoid any long-term settlement issues.



<b>Similar Scope Elements</b>
✓ Design-Build
✓ 2.1 miles of new roadway
✓ Bridge construction
✓ Work near/under power lines
✓ Signalized intersections
✓ Large water line relocation
✓ Work in wetlands
✓ Railroad Coordination
✓ Truck Traffic
✓ Utility Coordination
✓ Environmental Compliance and Mitigation
✓ Geotechnical Coordination and Mitigation
<b>Proposed Consistent Team Members</b>
✓ Brent Hunt, PE

**ATTACHMENT 3.4.1(A)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

(LIMIT 1 PAGE PER PROJECT)

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: <b>Martin Luther King Expressway Extension, Elizabeth River Crossings/ Midtown Tunnel (D-B) P3</b> Location: <b>Portsmouth, VA</b>	Name: <b>WSP USA Inc. Volkert, Inc. performed the Lead Design function on this \$210 million element of the overall P3 project as a subconsultant to WSP.</b>	Name of Client/ Owner: <b>Virginia Department of Transportation</b> Phone: <b>757.925.2511</b> Project Manager: <b>Bradley Weidenhammer</b> Phone: <b>757.925.2511</b> Email: <b>Bradley.Weidenhammer@VDOT.Virginia.gov</b>	<b>12/2016</b>	<b>11/2016</b>	<b>\$210,000</b>	<b>\$210,000</b>	<b>\$21,000 (10%)</b> <b>(As part of the overall Elizabeth River Crossings project, this segment was utilized to reach the DBE goal. This portion of the work was standard in comparison to the specialty work at the tunnels.)</b>

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.

**Lead Contractor:** SKW Constructors (Skanska USA Civil Southeast Inc. led joint venture with Kiewit and Weeks Marine) The SKW team was responsible for all aspects of construction, including design, utility coordination, environmental compliance, subcontracting, safety, quality, and maintenance of traffic. The project provides broad and lasting benefits to the Hampton Roads transportation system, its economy and the lives of those who live and work in the region every day.

**Joint Venture Structure:** Skanska was the managing partner of the integrated joint venture.

The Martin Luther King Freeway extension added an additional 4.9 miles of roadway in Portsmouth, VA with one mile of that extension elevated as it travels through a developed area near downtown Portsmouth over railroads, interstate highways, city streets and neighborhoods. The project included a tie-in at the north end to the existing freeway, and two interchanges, one at High Street and one at I-264 at the south end of the project. There were nine new or reconfigured ramps, aesthetics and 47,000 square feet of noise walls. A pedestrian bridge over I-264 was also constructed. The Skanska team was responsible for all aspects of construction, including program management, design coordination, subcontracting, safety, quality, and maintenance of traffic. This extension provides a direct route between the US 58 Midtown Tunnel and the I-264 Downtown Tunnel as well as creating an alternate route between the Peninsula and the Southside of Hampton Roads.

**Achievement of Environmental Compliance, Safety, Quality, Workmanship:** The MLK Extension **opened one month ahead of schedule.** (Volkert led this design of the \$210 million portion of the overall project). Skanska coordinated with both VDOT and the City for any lane closures needed. A robust safety program was implemented for this project with the introduction of a safety ambassador. In addition to the daily superintendent safety meetings, we created a culture where the crews held daily job briefings and reviewed work plans at the start of every shift for all operations. Craft employees were rotated into positions within the safety program's office to help train them on safety. These positions lasted for approximately two months. This allowed the craft workers to go back to the field with their new knowledge of safety standards. There were numerous locations where work took place directly under a utility line at bridges and ramps. Coordination with the utility company and the City was necessary in these locations. All utility relocation work was coordinated through the appropriate company with the exception of water and sewer where SKW self-performed the relocation of these utilities. Through coordination with VDOT and VDOT's consultant, SKW purchased the required right-of-way for the projects and assisted in the relocation of 20 Portsmouth residents. Erosion and sediment control features to protect the environment were installed and maintained as needed throughout the project.

For three years, SKW worked with CSX to perform work in their yard to construct the MLK Extension above their yard. In addition to this coordination with CSX, there was also railroad coordination with the Norfolk and Portsmouth Beltline (NPBL) that connects Portsmouth to Norfolk. SKW coordinated the construction of a new bridge and widened another over these rail lines.

**QA/QC Plan:** Skanska established an extensive QA/QC plan and implemented it on the project. VDOT had IA/IV staff on-site. We held multiple coordination meetings, preparatory meetings in the office, initial meetings for major items of work with follow up on-site. The program established a deficiency tracking program where construction issues were identified and tracked until there was a resolution. The entire QA/QC program was under SKW with transparent tracking procedures to allow VDOT to verify every step.

**Innovative Construction Techniques:** In order to lessen future maintenance on structures, SKW designed light weight fill under roadways in lieu of structures. Light weight aggregate and geofoam were used to build up roadways due to poor soil conditions and potential for settlement; this allowed SKW to eliminate structures therefore lessening maintenance in the future. With the use of hybrid girders in our design, we were able to install longer spans with a smaller member thus reducing the weight, height and load of the girders on the piers for structures. This in turn reduced the substructure size, and long-term maintenance. Light weight fill was also used to replace ground improvement piles.

**Awards:** The Martin Luther King Expressway Extension, Elizabeth River Crossings/Midtown Tunnel project received over 19 awards in total. These awards include: **Governor's Environmental Excellence Silver Award (2015); DEQ's Virginia Environmental Excellence Program (2014); ENR Regional Best Project of the Year Award (2017); and DBIA Design Excellence – Engineering Award (2017).**



**Similar Scope Elements**

- ✓ Design-build
- ✓ 2.5 miles of new roadway
- ✓ Elevated roadways
- ✓ Tie into existing roadways
- ✓ Signalized intersections
- ✓ Railroad/CSX Coordination
- ✓ Truck Traffic
- ✓ Utility Coordination
- ✓ Environmental Compliance and Mitigation
- ✓ Geotechnical Coordination and Mitigation
- ✓ Right-of-Way Acquisition

**Proposed Consistent Team Members**

- ✓ Brent Hunt, PE



**ATTACHMENT 3.4.1(A)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

(LIMIT 1 PAGE PER PROJECT)

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: <b>Huguenot Bridge Replacement</b> Location: <b>Richmond, VA</b>	Name: <b>Ammann &amp; Whitney (Bridge Structures)</b> <b>The Louis Berger Group, Inc. (Grading)</b> <b>Whitman, Requardt &amp; Associates, LLP (Utilities)</b>	Name of Client/ Owner: <b>Virginia Department of Transportation</b> Phone: <b>804.720.4229</b> Project Manager: <b>Shane Mann, PE</b> Phone: <b>804.720.4229</b> Email: <b>Shane.Mann@VDOT.Virginia.gov</b>	<b>10/2013</b>	<b>7/2013</b>	<b>\$34,000</b>	<b>\$40,000</b> <b>[owner change orders]</b>	<b>28,000 (70%)</b>

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.

**Lead Contractor:** Skanska USA Civil Southeast Inc.

The bridge reconstruction project involved replacing the existing structure with a new structure in approximately the same location. The new structure has one 12-foot lane and one 10-foot shoulder in each direction. The 10-foot shoulder functions as both an emergency lane and a lane to allow bicyclists to safely use the bridge. The bridge deck also includes a five-foot wide sidewalk on each side for pedestrians. The approach roadways were also improved as necessary to accommodate the bridge replacement.

**Achievement of Environmental Compliance, Safety, Quality, Workmanship:** The project was **completed three months ahead of schedule**. This entire project was constructed in an environmentally sensitive area: over the James River flood plain, an archeological site, the Kanawha Canal, wetlands and then over land. The project's environmental permit was obtained by VDOT; however, Skanska coordinated with VDOT for compliance and any changes that were required. One major change to the permit was for the causeway construction. The permit originally allowed for it to extend 50 percent of the river; the permitted causeway was extended to 60 percent to allow access to the third pier for construction. Flooding was a constant concern at this project due to storms and Skanska developed emergency preparedness plans. Skanska implemented a robust safety program and completed the project with zero recordables.

**QA/QC Plan:** Skanska worked closely with VDOT on QA/QC efforts. Our supervisors worked directly with our QC staff daily and coordinated our work with the QA team. Issues were resolved at the lowest level and no claims were made during construction.

**Innovative Construction Techniques:** The new Huguenot Bridge was built in two phases. The first phase involved constructing the western half of the new bridge while traffic was maintained on the existing bridge.

During phase two, traffic was shifted onto the new section of the bridge that was built during phase one. At that time, the existing Huguenot Bridge was torn down and the second half of the new bridge was constructed. There was only a two-foot clearance between the new bridge deck being constructed and the existing deck, which was still an active roadway. Skanska utilized a slide rail shoring system to construct the piers. Since the piers were founded on rock, a hole was dug into the rock, chipped out and concrete poured. A post was driven into the ground with panels for shoring.

Rather than having to re-mobilize on the east side of the bridge, Skanska developed a structural steel plan to avoid having to re-mobilize on the east side. This avoided any environmental concerns on the east side. Portable dams were also used for four of the piers in the river. After the portable dam was constructed, a cofferdam ramp was constructed to provide access to the portable dam. Water and sewer utilities that were initially 16 feet deep were also relocated as well as a gas line. Skanska coordinated directly with CSX for the construction of the bridge crossing over the CSX two-track railroad.



“Coordination between the contractor, VDOT, local partners and the community was key to completing this project on schedule,”

~ Mike Saunders, VDOT Project Manager

**Similar Scope Elements**

- ✓ Bridge construction
- ✓ Approach improvements
- ✓ Railroad/CSX Coordination
- ✓ Work in wetlands
- ✓ Utility Coordination
- ✓ Environmental Compliance and Mitigation
- ✓ Geotechnical Coordination and Mitigation

**Proposed Consistent Team Members**

- ✓ Brent Hunt, PE
- ✓ Bill Eskins, Jr.

## 3.4.1(b) Lead Designer Work History Forms

**ATTACHMENT 3.4.1(B)**

**LEAD DESIGNER - WORK HISTORY FORM**

(LIMIT 1 PAGE PER PROJECT)

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: <b>Courtland Interchange on Route 58 (Southampton Parkway)</b> Location: <b>Southampton County, VA</b>	Name: <b>Curtis Contracting, Inc.</b>	Name of Client: <b>VDOT Hampton Roads District</b> Phone: <b>540.332.9075</b> Project Manager: <b>Bruce Duvall, PE</b> Phone: <b>757.494.5480</b> Email: <b>bruce.duvall@vdot.virginia.gov</b>	<b>03/2016</b>	<b>12/2018</b>	<b>\$15,000</b>	<b>\$15,000</b>	<b>\$2,601</b>
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.							

**Lead Designer:** Volkert, Inc. (Springfield, VA Office Location)

Route 58 is a four-lane, divided, primary arterial, an east-west highway and a National Highway Safety designated corridor, serving as a primary evacuation route and an economic thoroughfare connecting I-95 and I-85 with the Hampton Roads region.

Providing project management and civil, structural, traffic, and hydraulic engineering services, Volkert developed a design that consolidates three intersections and provides a new gateway to Courtland. The design consists of a new 224-foot-long two-span interchange bridge, and ramps; two roundabouts; a new 525-foot-long five-span bridge over wetlands; roadway widening to add an auxiliary lane; constructed wetlands; retaining walls; signs; and pavement markings.

**Achievement of Environmental Compliance, Safety, Quality, Workmanship:**

- **IJR development on an accelerated schedule** — Volkert conducted traffic and safety analyses of three alternatives and documented the transportation implications related to the build-out of each per VDOT and FHWA requirements (IIM-LD-200.8). The study results demonstrated that the existing at-grade connections cannot accommodate future traffic demands and a grade-separated interchange was recommended to provide unimpeded traffic flow along US 58 and enhance mobility and vehicular safety through the corridor.
- **Context Sensitive Solutions (CSS) approach to design** — through the use of a CSS and multidisciplinary approach, the design preserves the scenic and environmental resources—wetlands and property owned by the Cheroenhaka Indian Tribal Heritage Foundation—of the area and adds lasting value while achieving VDOT's goal for an operationally efficient and safe interchange.
- **Minimizing Impacts and Cost-Effective Solutions** — The strategic use of MSE walls and roundabouts reduced the project footprint; widening Route 58 in the median reduced utility relocations and ROW acquisition; and replacement of top-controlled intersections by roundabouts eliminated stops, increased safety, and calmed traffic.

**QA/QC Plan:** As part of our mature Corporate QA/QC program, Volkert implemented a project specific QA/QC plan for the Courtland Interchange project that integrated VDOT's internal processes and checklists (e.g. LD-436) along with Volkert's own Quality processes and checklists, peer reviews, and reviews of Subconsultant plans and processes to identify any issues early on, thus avoiding any rework and schedule impacts. This included review and validation of Volkert's IJR to meet FHWA requirements for purpose and need and NEPA documentation.

**Innovative Design Techniques:** The design of surface-flow constructed wetlands was a cost-effective and innovative way of dealing with high groundwater elevations. The technology used removes pollutants while expanding the natural ecosystem. Impacts to wetlands were minimized with longer bridge spans, reducing the number of piers supporting the new bridge, and with pile bents to eliminate excavation. Utility relocations and ROW acquisition were reduced by widening Route 58 in the median.



"I can convey that the District Project Management Office is very pleased with Volkert's responsiveness, technical and professional guidance, and aggressive design advancement on this project. Another very strong trait that the Volkert team has brought to this project is its thorough knowledge of VDOT's project development process; which, I believe, is invaluable."  
~ Bruce Duvall, PE, District Manager, Project Management Office, VDOT

**Similar Scope Elements**

- ✓ New interchange with structures & ramps
- ✓ 2.9-miles of roadway designed
- ✓ IJR on an accelerated schedule
- ✓ Two new roundabouts
- ✓ Route 58 roadway widening
- ✓ Safety & operations improvements
- ✓ Drainage and SWM
- ✓ Innovative SWM design included 1.5 acres of surface-flow constructed wetlands
- ✓ Transportation Management Plan
- ✓ Signing & pavement marking
- ✓ MSE retaining walls
- ✓ Minimize ROW acquisition
- ✓ Minimized utility relocation coordination
- ✓ Addressed challenging geotechnical conditions

**Proposed Consistent Team Members**

- ✓ Keith Weakley, PE, DBIA
- ✓ Robert Hester, PE
- ✓ Ty Lee, PE
- ✓ Jason Jiménez-Pisani, PE
- ✓ Bharat Bhargava, PE
- ✓ Hari Thaker, PE, PTOE
- ✓ Manuel Richardson, PE, PTOE
- ✓ Brian Graham, PE

**ATTACHMENT 3.4.1(B)**

**LEAD DESIGNER - WORK HISTORY FORM**

(LIMIT 1 PAGE PER PROJECT)

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: <b>Martin Luther King Expressway Extension, Elizabeth River Crossings/ Midtown Tunnel (D-B) P3</b> Location: <b>Portsmouth, VA</b>	Name: <b>SKW Constructors (Skanska, Kiewit, Weeks Marine Joint Venture)</b> Skanska was the managing partner of the integrated joint venture.	Name of Client: <b>Elizabeth River Crossing, LLC &amp; VDOT</b> Phone: <b>757.932.4400</b> Project Manager: <b>Jeff Sullivan</b> Phone: <b>757.673.9483</b> Email: <b>jeff.sullivan@kiewit.com</b>	<b>10/2012</b>	<b>11/2016</b>	<b>\$210,000</b>	<b>\$210,000</b>	<b>\$11,922</b>

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.

**Lead Designer:** Volkert, Inc. Volkert performed the Lead Design function on this \$210 million element of the overall P3 project as a subconsultant to WSP. (Springfield, VA Office Location)

Volkert managed engineering and design of the 4.9-mile Martin Luther King Expressway extension, including a one-mile, four-lane, **elevated**, limited-access, urban principal arterial, a significant component of the Elizabeth River Tunnels P3 project. In addition, this specific \$210 million project component included design of two new urban interchanges at I-264 and High Street, modifications to the London Boulevard interchange, an urban plaza, two bridge widenings on I-264, the widening of I-264 to add auxiliary lanes, side road improvements, retaining walls, and new stormwater management facilities. While WSP was the lead designer of the overall P3 project, Volkert led the multidisciplinary design team on this standalone D-B roadway corridor element directly providing project management; roadway design; traffic, structural, and hydraulic engineering design; landscape architecture design; and construction phase services. In addition, Volkert developed the design of two new interchanges at I-264 and High Street; two bridge widenings on I-264; the widening of I-264 to add auxiliary lanes; modifications to the London Boulevard interchange; side road improvements; an urban pedestrian plaza; retaining walls; and new stormwater management (SWM) facilities.

**Achievement of Environmental Compliance, Safety, Quality, Workmanship:** The project was designed on an extremely fast-track, progressing from 30% roadway plans to RFC 100% drawings within a span of approximately 10 months. Volkert's design not only met budget, but in some areas the design resulted in cost savings:

- The use of hybrid plate girders saved approximately \$700,000.
- Revision of one span arrangement from a three-span to a two-span unit, and elimination of one line of pre-stressed concrete girders and one pier saved approximately \$300,000.
- Fiberglass reinforced plastic deck drainage system reduced the amount and size of equipment needed.
- A segment of the project incorporated 18 EPS and MSE walls as a cost-effective alternative to bridge construction, reducing the project footprint and minimizing right of way impacts. In addition, the lightweight EPS retaining walls decreased the load on the highly compressible underlying soils, reducing settlement.

The design of the BMP SWM facilities complied with the performance criteria of the Chesapeake Bay TMDL, and maximized the available space for SWM facilities while minimizing impacts to an aging and over-taxed storm drain system.

**QA/QC Plan:** The design team developed a project specific quality control plan that was strictly followed during all phases of design. A QA/QC Certification form was signed by the Discipline Manager and the Project Manager for every submittal to validate that the requirements of the plan were met.

**Innovative Design Techniques:** The multi-disciplinary team used a context sensitive design approach to minimize impacts to the traveling public and the local historic elements (including a cemetery, Calvary Baptist Church, and the Prentiss Park neighborhood). The design maintained connectivity between neighborhoods with pedestrian friendly amenities; provided streetscape enhancements and an urban plaza on High Street to serve as a gateway into the historic district; and incorporated aesthetic treatments on and under the bridges. Connectivity to the existing pedestrian paths on the north side enhanced the project and improved safety for residents using the improved signalized crossing.



**Similar Scope Elements**

- ✓ 4.9-miles of roadway designed
- ✓ 1-mile elevated roadway designed
- ✓ Interchange modifications
- ✓ Interchange ramp modifications
- ✓ Side road improvements
- ✓ Bridge design
- ✓ Landscape architecture design
- ✓ Added auxiliary lane to improve merge area on interstate
- ✓ H&H, SWM, E&SC & drainage improvements
- ✓ Retaining walls
- ✓ Type C TMP
- ✓ MOT
- ✓ Signage & pavement marking
- ✓ Minimized ROW acquisition to 70 properties
- ✓ Urban pedestrian plaza design
- ✓ Context-sensitive solutions
- ✓ High traffic volume successfully maintained throughout the four phases of construction
- ✓ I-264 widening & two bridge widenings

**Proposed Consistent Team Members**

- ✓ Keith Weakley, PE, DBIA
- ✓ Jason Jiménez-Pisani, PE
- ✓ Hari Thaker, PE, PTOE
- ✓ Brian Graham, PE
- ✓ Oliver Boehm, RLA

**ATTACHMENT 3.4.1(B)**

**LEAD DESIGNER - WORK HISTORY FORM**

(LIMIT 1 PAGE PER PROJECT)

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: <b>US 15 / 17 / 29 / 29 Business (Warrenton Bypass)</b> Location: <b>Fauquier County, VA</b>	Name: <b>Shirley Contracting Co. of Lorton</b>	Name of Client: <b>VDOT Charlottesville Project Office</b> Phone: <b>434.293.0011</b> Project Manager: <b>Harold Jones, Jr., PE</b> Phone: <b>434.529.6311</b> Email: <b>harold.jones@vdot.virginia.gov</b>	<b>Winter 2019 [Design-Build Contract]</b>	<b>November 2020 [Design-Build Contract]</b>	<b>\$19,600</b>	<b>\$19,600</b>	<b>\$749</b>

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.

**Lead Designer:** Volkert, Inc. (Springfield, VA Office Location)

The US 15 / 17 / 29 / 29 Business (Warrenton Bypass) corridor is a busy commuter route – the convergence of multiple primary arterials – carrying approximately 43,500 motorists each day to employment centers in Northern Virginia. With substantial growth in the area, traffic is expected to increase to more than 74,000 by 2040. When the Warrenton Bypass was constructed in the 1980s, VDOT envisioned an interchange at Lord Fairfax Drive. With significant traffic delays and backups at the signalized intersection with Lord Fairfax Drive (Route 880), VDOT moved forward with the project.

In the course of the preliminary design contract, the project was selected for the Alternative Delivery Program. Volkert supported VDOT with not only finalizing the preliminary design, but also with development of bridging documents and support at the Public Hearing. Volkert is currently providing review of the design-build construction documents.

**Environmental Compliance, Safety, Quality, Workmanship:**

**Detailed Cost Analysis and Alternative Evaluation** – to reduce construction costs as part of the effort to meet the constrained Smart Scale Budget of \$26.3 million on the project, Volkert provided a meticulous cost estimate utilizing our in-house estimating tool, CoBRA (CONtract and Bid Research and Analysis System, a program developed by Volkert to provide cost estimating, including lifecycle cost analyses and benefit cost analysis), and was able to design to budget, and eliminate \$14 million from the project while still providing safety and congestion improvements for the traveling public. Ultimately, the estimates were used to evaluate contractor bids as well. The cost estimates (and work order analyses) generated by CoBRA are highly accurate and an exclusive Volkert added-value benefit for VDOT on the Skiffes Creek Connector project.

**Existing Conditions and Operational Analyses** – the existing conditions analysis involved modeling a one-mile segment of the Warrenton Bypass, using Synchro followed by the development of traffic forecasts for opening year 2020 and design year 2040. Synchro, SimTraffic, Sidra, and HCS were used for the operational analyses of the phase-able alternatives for opening year 2020 and design year 2040. The study addressed operational efficiency including impacts to three intersections, safety, geometric feasibility, environmental impacts, cost, and planning.

**QA/QC Plan:** As part of our mature Corporate QA/QC program, Volkert implemented a project specific QA/QC plan for the Warrenton Bypass project that integrated VDOT's internal processes and checklists (e.g. LD-436) along with Volkert's own Quality processes and checklists, peer reviews, and reviews of Subconsultant plans and processes to identify any issues early on, thus avoiding any rework and schedule impacts. This included review and validation of Volkert's IJR to meet FHWA requirements for purpose and need and NEPA documentation.

**Innovative Design Techniques:** Volkert studied solutions for improving traffic operations along the corridor with a focus on safety, efficiency, and economy. The study addressed operational efficiency including impacts to three adjacent intersections, safety, geometric feasibility, environmental impacts, and planning. Both at-grade and grade-separated alternatives were screened and studied including the following conventional and innovative interchange and intersection configurations:

- No-build at-grade intersection
- Displaced left-turn intersection
- Diverging, Tight and Single Point diamond interchange
- Tight diamond interchange with roundabout terminal intersections

Volkert's multi-disciplinary preliminary design incorporated a grade-separated interchange with two innovative roundabout solutions for ramp terminals connecting to existing local urban roadways. Volkert completed the project risk analysis matrix and participated in the risk analysis meeting in support of preparation of design-build documents.

<b>Similar Scope Elements</b>
✓ One mile of roadway designed
✓ Shared-use path
✓ Traffic engineering
✓ Operational analysis
✓ Project risk analysis
✓ Detailed cost analysis (CoBRA)
✓ Alternatives evaluation
✓ Stakeholder engagement
✓ Public involvement
✓ Utilized ProjectWise
✓ Constructability review
✓ Drainage
✓ TMP Analysis & Development
✓ Minimized ROW & Utility Impacts
<b>Proposed Consistent Team Members</b>
✓ Mark Burris, PE
✓ Ty Lee, PE
✓ Ben Lineberry, PE
✓ Robert Hester, PE
✓ Bharat Bhargava, PE
✓ Hari Thaker, PE, PTOE
✓ Manuel Richardson, PE, PTOE

# SKANSKA

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