

Design-Build Project For

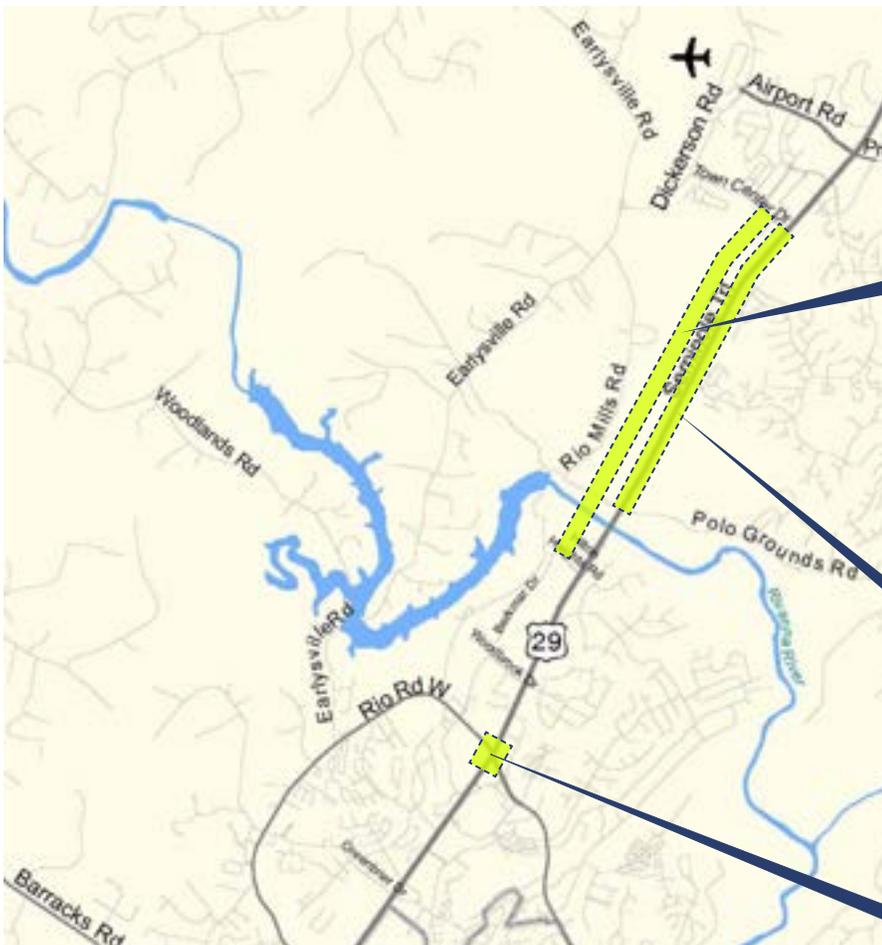
Route 29 Solutions Albemarle County, Virginia

Contract ID No. C00077383DB80



Skanska-Branch A Joint Venture

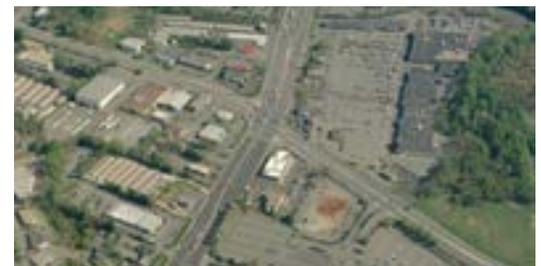
Statement of Qualifications | August 28, 2014



Berkmar Drive Extension
State Project No. 9999-002-900



US 29 Widening
State Project No. 0029-002-135 | Federal Project No. STP-5104(166)



US 29/Rio Road Grade Separated Intersection
State Project No. 0029-002-091 | Federal Project No. NHPP-002-7(045)



Design-Build Project For Route 29 Solutions
Albemarle County, Virginia
Contract ID No. C00077383DB80

3.2

Letter of Submittal

August 28, 2014

Mr. John Daoulas, P.E.
Alternate Project Delivery Office
Virginia Department of Transportation (VDOT)
1401 East Broad Street
Richmond, VA 23219

RE: Skanska-Branch A Joint Venture Statement of Qualifications,
Design-Build Project for Route 29 Solutions, Albemarle County, Virginia
Contract ID No: C00077383DB80

Dear Mr. Dauolas:

Skanska-Branch A Joint Venture (SBJV) is pleased to submit our Statement of Qualifications (SOQ) for the VDOT Design-Build Project for Route 29 Solutions (Route 29 Solutions). As the contractor selected to develop the Route 29/Charlottesville Bypass Design-Build project (29 Bypass), SBJV understands the critical importance of improving the transportation infrastructure in the Charlottesville area. We have the experience and capabilities to design and construct this project, including grade separated intersections, bridges over waterways, multiple concurrent construction projects, and major roadway widening in congested urban areas. We also bring experience and expertise in addressing the unique situation surrounding the development of this project, including community concerns and narrow construction windows critical to meeting VDOT's very aggressive schedule.

To manage these constraints, SBJV is providing **the same team** of leading construction, design, geotechnical, environmental and public relations firms that we assembled for the 29 Bypass project. The Team is very familiar with conditions in the Charlottesville area, and has an understanding of geotechnical issues, developed relations with utilities and other stakeholder groups, and will build upon these established relationships and prior work to support VDOT's fast-track schedule and project approach.

In accordance with the Section 3.2 requirements of the Request for Qualifications, we are submitting the following information, with additional information provided in the attachments.

29 Authorized Representative's Signature (3.2.1) - Mr. Salvatore F. Taddeo, an Authorized Representative of SBJV, has signed this Letter of Submittal.

29 Point of Contact (3.2.2)

Mr. Stephen Davis, Attorney in Fact
Skanska-Branch a Joint Venture
295 Bendix Rd., Suite 400
Virginia Beach, VA 23452
T 757.420.4140 x184 / F 757.420.3551
stephen.davis@skanska.com

Principal Officer Information (3.2.3)

Mr. Salvatore F. Taddeo, Authorized Representative
Skanska-Branch a Joint Venture
295 Bendix Road, Suite 400
Virginia Beach, VA 23452
T 757.420.4140 x141 / F 757.420.3551
salvatore.taddeo@skanska.com

29 Offeror's Corporate Structure (3.2.4) - SBJV is structured as a "joint and several" joint venture. As described in our JV agreement, SBJV is an integrated JV. SBJV is financially responsible for the project and does not have any liability limitations. Skanska and Branch are jointly and severally liable for the performance of the work. A single 100% performance bond and single 100% payment bond will be

provided for SBJV by our surety. Both Skanska and Branch are registered with the State Corporation Commission (SCC). Our certificates are attached. SBJV has a federal employer identification number of 45-3698838.

- 29 **Identity of Lead Contractor and Lead Designer (3.2.5)** - Skanska-Branch a Joint Venture is the Offeror and Lead Contractor responsible for overall contract execution and construction, and will serve as the legal entity who will execute a contract with VDOT. Johnson, Mirmiran & Thompson, Inc. (JMT) is SBJV's lead designer and will be responsible for the overall design of the project.
- 29 **Affiliated/Subsidiary Companies (3.2.6)** - Please refer to Attachment 3.2.6 Affiliated/ Subsidiary Companies, located in the Appendices of this SOQ.
- 29 **Debarment Forms (3.2.7)** – Skanska and Branch have executed Certification Regarding Debarment Forms Attachment 3.2.7(a) –Primary Covered Transactions. Subcontractors have executed Attachment 3.2.7 (b) - Lower Tier Covered Transactions. All of these forms can be found in the Appendices.
- 29 **VDOT Prequalification (3.2.8)** - SBJV (prequalification number JV060) is active and in good standing to bid on this project. Prequalification documents for Skanska and Branch are in the Appendix, as are the SCC certifications for Skanska and Branch.
- 29 **Bonding (3.2.9)** - SBJV is providing a letter from our surety attesting to our ability to receive performance and payment bonds, which will cover the project and any warranty periods for the Route 29 Solutions project.
- 29 **SCC/DPOR Registration Documentation (3.2.10)** - Attachment 3.2.10 provides evidence and certifies that SBJV complies with the requirements set forth in Sect. 3.2.10 subsections .1 through .4. Businesses and individuals listed are active and in good standing with the SCC and the DPOR. SCC Registrations and DPOR licenses for offices, key personnel and non-APELSCIDLA personnel are in Attachment 3.2.10.
- 29 **DBE Commitment (3.2.11)** - SBJV is committed to meeting or exceeding the 13 percent DBE participation goal during the design and construction of the Route 29 Solutions project. Additionally, our Team's formal subcontracting program will ensure maximum use of SWaM firms as required by the Governor's Executive Order No. 33.

We appreciate the opportunity to submit this SOQ. We are confident that our team, with its demonstrated expertise, experience working with VDOT and each other, ample resources, and history of providing innovative responsive solutions, we will ensure VDOT reaches its goals of improving mobility in a safe, cost-effective—and timely—fashion.

Sincerely,



Salvatore F. Taddeo, Authorized Representative
Skanska-Branch A Joint Venture



Design-Build Project For Route 29 Solutions
Albemarle County, Virginia
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3.3

Offeror's Team Structure

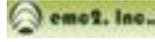
Skanska–Branch A Joint Venture brought together two leading Virginia construction firms with the resources, experience and capabilities to manage and construct high profile highway projects in the Charlottesville area. Support team members were carefully selected based on previous work relationships and capabilities in providing complementary services and resources in design, quality, public relations and engineering services. In working together to develop the 29 Bypass, we put in place organizational structures and developed internal and external relationships that will serve as the foundation for our work with VDOT on the Route 29 Solutions project. This preparation will help us manage the accelerated schedule from day one of the project.

Skanska USA Civil Southeast Inc. (Skanska) headquartered in Virginia Beach, is a leading heavy civil construction contractor with an extensive portfolio of providing solutions in bridges and highways, rail, and marine construction. This breadth of experience allows us to address unique aspects of a project and apply our expertise and lessons learned on numerous roadway projects in Virginia and the Southeastern U.S.

Branch Highways, Inc. (Branch) a subsidiary of The Branch Group, Inc. an employee-owned company, founded in 1963 and headquartered in Roanoke, VA has been engaged in highway and bridge construction for over fifty years with a successful record of completing large, complex roadway projects for VDOT.

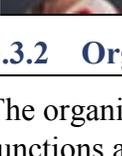
Johnson, Mirmiran & Thompson, Inc. (JMT) founded in 1971, is a multi-disciplined, A/E employee-owned company with over 1,000 professionals that offers a full array of consulting and technology services for infrastructure projects throughout the U.S.

Many subconsultants shown below were team members of the 29 Bypass project team and will be retained for this project. We have added Moffatt & Nichol to our consultant team as a peer reviewer because of its experience with **grade-separated intersections**.

The SBJV Team	
 Offeror and Lead Contractor <i>VDOT Prequalified Joint Venture No. JV060</i> <i>Vendor Nos. T009 (Skanska)/B319 (Branch)</i>	 Lead Designer and Independent Quality Assurance Manager (QAM) <i>VDOT Prequalified ROW Consultant</i>
 QA Lead Inspectors <i>DBE/SWaM No. 690040</i>	 QC Materials/Laboratory Testing <i>DBE/SWaM No. 000307</i>
 Geotechnical Engineering, Drilling and QA Materials/ Laboratory Testing	 Traffic Signal Design <i>SWaM No. 692714</i>
 Environmental & Permitting <i>SWaM No. 7052</i>	 Cultural Resources <i>DBE/SWaM No. 647398</i>
 Peer Review	 US 29/Rio Road QA Inspector
 Review Appraisal <i>VDOT Prequalified Appraisal Firm</i>	V. Lynn Kelsey Fee Appraisal <i>VDOT Prequalified Appraiser</i> <i>SWaM No. 633682</i>
 Public Relations <i>DBE No. MWAA DB2007-0079-2016/ SWaM Cert. No. 669711</i>	

3.3.1 Identity of and Information about the Key Personnel

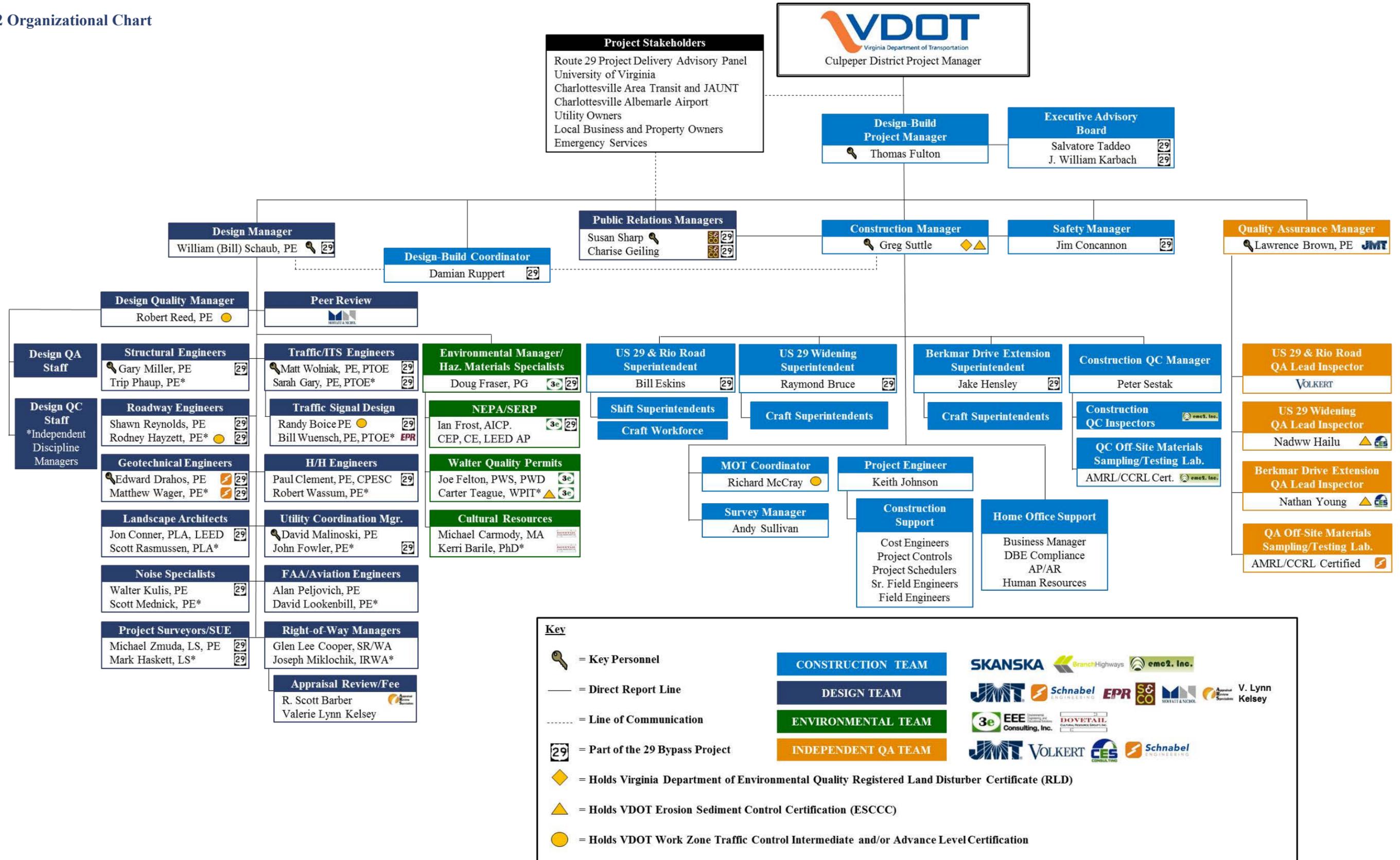
The SBJV has made the following nine individuals available for the duration of the project to fill the key roles. Full resumes of each of our team’s key personnel are located in Section 3.3.1 of the Appendices.

	Qualification Highlights	Relevant Projects
	<p>.1 Thomas J. Fulton - Design-Build Project Manager (Skanska)</p> <ul style="list-style-type: none"> ✓ 27 years of Project Management experience ✓ DB experience ✓ Fast-track and incentive projects 	<ul style="list-style-type: none"> ✓ Route 1/I-95/I-495, Alexandria ✓ Huguenot Bridge, Richmond ✓ APM Entrance (DB), Portsmouth
	<p>.2 Lawrence (Larry) W. Brown, PE – Quality Assurance Manager (JMT)</p> <ul style="list-style-type: none"> ✓ 10 years of CM/I and QAM experience ✓ Former VDOT Area Construction Engr. ✓ DB experience/VA Professional Engr. 	<ul style="list-style-type: none"> ✓ I-95 Bridge Rehabilitation, Henrico County ✓ Pacific Boulevard (DB), Chantilly ✓ Route 36 Improve. (DB), City of Hopewell
	<p>.3 William (Bill) E. Schaub, PE – Design Manager (JMT)</p> <ul style="list-style-type: none"> ✓ 34 years of highway/bridge experience ✓ Design Manager on 29 Bypass ✓ DB experience/VA Professional Engineer 	<ul style="list-style-type: none"> ✓ 29 Bypass (DB), Albemarle County ✓ Fairfax County Parkway (DB), Springfield ✓ 9th Street Bridge (DB), Washington, DC
	<p>.4 Greg Suttle – Construction Manager (Branch)</p> <ul style="list-style-type: none"> ✓ 27 years of CM and QA/QC experience ✓ Extensive DB and VDOT experience ✓ Certified DEQ RLD and VDOT ESCCC 	<ul style="list-style-type: none"> ✓ Route 15 (DB), Prince William County ✓ I-95 Exp. Lanes (DB), Stafford County ✓ I-64 Jackson River, Alleghany County
	<p>.5 Gary R. Miller, PE – Lead Structural Engineer (JMT)</p> <ul style="list-style-type: none"> ✓ 38 years of structural experience ✓ DB experience/VA Professional Engineer 	<ul style="list-style-type: none"> ✓ 11th Street Corridor (DB), Washington, DC ✓ ICC MD 200 Contract C (DB), Maryland
	<p>.6 Matthew J. Wolniak, PE, PTOE – Lead Traffic Engineer (JMT)</p> <ul style="list-style-type: none"> ✓ 32 years of traffic and ITS experience ✓ Developed 29 Bypass IMR and traffic study 	<ul style="list-style-type: none"> ✓ 29 Bypass (DB), Albemarle County ✓ Hillsdale Drive Extension, Charlottesville
	<p>.7 Edward G. Drahos, PE – Lead Geotechnical Engineer (Schnabel)</p> <ul style="list-style-type: none"> ✓ 37 years of geotechnical experience ✓ Developed 29 Bypass geotechnical report 	<ul style="list-style-type: none"> ✓ 29 Bypass (DB), Albemarle County ✓ US 29/US 250 Bypass, Albemarle County
	<p>.8 Dave Malinoski, PE – Lead Utility Coordination Manager (JMT)</p> <ul style="list-style-type: none"> ✓ 34 years of utility and design experience ✓ DB experience/VA Professional Engineer 	<ul style="list-style-type: none"> ✓ I-495 HOT Lanes, Fairfax County ✓ Route 3 Widening, Culpeper County
	<p>.9 Susan Sharp – Public Relations Manager (S&CO)</p> <ul style="list-style-type: none"> ✓ 39 years of developing and implementing effective public relations programs 	<ul style="list-style-type: none"> ✓ I-66 Beltway Study, Fairfax County ✓ Bi-County/Corridor Study, Loudoun County

3.3.2 Organizational Chart Showing the “Chain of Command”

The organization chart provided on the next page shows the “chain of command,” identifies major functions and defines the reporting relationships of personnel responsible for the management of design, construction, and QA/QC activities. We have organized our lower level supervision and management team to align with the VDOT project segments – Rio Road Intersection, Route 29 Widening, and Berkmar Drive Extension. Staffing matches the organization to ensure elements with fast-track schedules such as the Rio Road Intersection will be completed on-time.

3.3.2 Organizational Chart



3.3.2 Organizational Chart Narrative

SBJV is building upon the structure and relationships it developed both internally and with stakeholders for the 29 Bypass project. Our structure:

- 1) Fosters communication within our organization, with VDOT, and with involved stakeholders such as the Route 29 Project Delivery Advisory Panel, businesses, residents and utilities
- 2) Responds to and is organized to deliver multiple projects on a fast-track schedule
- 3) Allocates resources efficiently to respond to project challenges
- 4) Provides independence for quality, safety and environmental personnel.

Functional Relationship and Communication among Participants

The SBJV organization is optimized to present clear and logical reporting relationships to manage design and construction while maintaining distinct responsibilities and project controls. The SBJV has made the following individuals available for the duration of the project to fill key roles.

- 29 Design-Build Project Manager (DBPM) - Mr. Thomas Fulton** reports to the SBJV Executive Advisory Board. Mr. Fulton will have primary responsibility for execution of design, construction, project management, quality, safety and customer/stakeholder relations. He is the principal point of contact for communication with VDOT. Mr. Fulton will have six direct reports: the QA Manager, Design Manager, Construction Manager, Public Relations Manager, Design-Build Coordinator, and Safety Manager.
- 29 Quality Assurance Manager (QAM) - Mr. Larry Brown, P.E.** is the independent QAM and will report directly to the DBPM. Direct reports include segment quality assurance inspectors, the off-site materials sampling and testing laboratory, and other QA staff. The QAM organization will, through the DBPM, establish communication paths to the construction quality control and construction organization to ensure that the QAM is apprised of activities and to ensure that corrective activities and remediations are implemented as quickly as possible.
- 29 Design Manager (DM) - Mr. Bill Schaub, P.E.** will report to the DBPM. During the design phase of the project the design discipline leads and design subconsultants will report to Mr. Schaub. He will also establish and oversee the Design QA/QC program. The environmental team will also report to Mr. Schaub throughout the project.
- 29 Construction Manager (CM) – Mr. Greg Suttle** will report to the DBPM. He is responsible for managing the construction process, which includes all QC activities. The Construction QC Manager will report to the CM. Mr. Suttle is a Virginia certified ESCCC and RLD.
- 29 Design-Build Coordinator (DBC) – Mr. Damian Ruppert’s** role is to improve communication between design and construction and project management, and to facilitate and generate interaction between design and construction. The DBC reports to the DBPM, and duties include actively participating in design meetings, constructability reviews and conveying field information. This is a value added position.
- 29 Public Relations Manager (PRM) – Ms. Susan Sharp** will report to the DBPM. She is responsible for developing a public relations plan and for managing all external communication with stakeholders, the media and the general public during the design and construction, in coordination with the Culpeper District Communications Office.

Communications

Developing and maintaining clear and open lines of communication both within the team, with our customer and with stakeholders is key to providing VDOT with a successful, quality project. In addition to utilizing the reporting lines shown on our organization chart, we will be relying upon lessons learned from our most successful design-build projects. These include:

- 29 Partnering** - Formal partnering with the customer is a key component on our projects. By aligning goals and establishing a framework for communications early in the project, we are better able to respond to concerns in an atmosphere of mutual trust, and to work together to resolve issues before they significantly affect the project.
- 29 Internal communications** - Key components of internal communications to ensure suitable levels of interaction of design and construction elements include **co-location of design and construction** personnel, and **regularly scheduled (weekly) meetings**. In addition, the team establishes strong communication lines that benefit the project through informal meetings, through the design-build coordinator, and through events such as joint constructability reviews.
- 29 Outreach** - Susan Sharp, our Public Relations Manager, will be responsible for ensuring that the team interacts with stakeholders, businesses, and residents. The Team will take part in outreach events. We describe some outreach activities from other projects in Section 3.4, Experience.

Description of the QA/QC Program and Associated Elements

The SBJV will develop and execute the QA and QC Plans (QMSP) in accordance with *VDOT's "Minimum Requirements for QA and QC on DB and PPTA Projects" (January 2012)* and will include Design and Construction Quality Management Plans (DQMP and CQMP). The QMSP will be prepared by the on-site quality management team and submitted to VDOT for review and approval.

Design QA/QC Plan - JMT will implement a DQMP program to verify that the drawings, specifications, and other submittals are prepared in accordance with generally accepted design practices. The DQMP program will include outside QA review of all design documents.

Construction QA/QC Plan – The SBJV Construction QA/QC Plan will detail how we will provide quality oversight including sampling, testing, inspection, document control, and communication.

QA Independent of QC - The QA process will be independent and fully staffed. QA personnel are not assigned other duties or responsibilities. The QAM will have the authority to suspend field activities in the event QA tasks or issues are not complete or found to be non-conforming.

Ensuring Delivery of a Quality Product - In addition to independent quality organizations, the SBJV takes additional steps to ensure quality. All SBJV employees will receive regular quality training as part of daily, weekly and monthly training. Each project work plan includes a specific quality plan. Quality reports are reviewed by the DBPM and the Executive Advisory Board. Superintendents are held responsible for the quality of the work performed under their direction, and their metrics include quality performance.

The most vital part in our delivering a quality product is our attitude and approach. We believe that quality is the responsibility of every person in the entire organization. To ensure this, we provide every employee with the tools, knowledge and support they need. Workers are our first quality inspectors. We make them responsible for the quality of the work they do. To affirm this, ***we give each worker the authority and responsibility to stop any work that does not meet quality standards.***



Design-Build Project For Route 29 Solutions
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3.4

Experience of Offeror's Team

3.4 Experience of Offeror's Team



Skanska-Branch A Joint Venture

The Skanska-Branch JV (SBJV) has the demonstrated experience to successfully complete the Route 29 Solutions project and to meet VDOT requirements for quality, schedule, and engagement with the local community and stakeholders. While experience is important, it is *how* the experience will be applied to the Route 29 Solutions project that makes all the difference. VDOT and Charlottesville will benefit from SBJV's work on projects of similar scope and complexity and from the application of lessons learned from managing multi-segment projects on a fast-track schedule in a congested urban area. The SBJV work in community outreach and creating relationships with utilities and local DBE and SWaM businesses will benefit VDOT and stakeholders. Established relationships within the team, a partnering relationship established with the VDOT Culpepper District, and processes and procedures developed specifically for use in the US 29 Corridor will also benefit the SBJV Team, VDOT, and local stakeholders and residents.

SBJV Work History Forms and Experience Working Together

SBJV selected three projects for both construction and design that we believe are the most relevant to the Route 29 Solutions project to demonstrate our capabilities. Details can be found in the Work History Forms in the Appendices, Section 3.4.1 (a) & (c). Below are examples of recent experience of team members working together and on projects with a similar scope and complexity as the Route 29 Solutions project.

29 29 Bypass Project - The most relevant example of our working together is the 29 Bypass project. We acquired knowledge of local conditions, area stakeholders, developed documentation (including quality), and began planning and explorations for areas such as traffic control, geotechnical conditions, and grade separated intersections. We also developed a strong internal relationship, building on existing relationships to forge a strong, capable team prepared to respond to a challenging project. The benefits to VDOT is our ability to transfer this knowledge base, having in place a team with an existing relationship with the Culpeper Residency, a firm grasp of local conditions and an understanding of and relationships with stakeholders, utilities, businesses and other parties with an interest in Route 29 development. For a fast-track project with abbreviated schedules, this experience and preparedness will be a significant factor in helping VDOT achieve its goals.

29 Skanska and JMT - Skanska and JMT have a long, successful and proven cooperative work history starting at the referenced 11th Street Corridor Project for the District DOT (DDOT) in Washington DC. The relationship among DDOT, Skanska and JMT on this high profile design-build project resulted in 12 national and local awards. Our combined processes and procedures, ability to mitigate risk, effective communications, community relations, and partnering with DDOT has provided the citizens of the DC area with a project that they are proud of, and which we delivered on time, under budget and with minimum disruption to the traveling public and local businesses.

Skanska and JMT are teamed on the Elizabeth River Tunnels Project, with Skanska as the contractor and JMT as the QAM and QA firm. Our understanding of and adherence to VDOT policies and procedures, combined with integrated team work and partnering, is delivering one of the most challenging and technically sophisticated projects in the Commonwealth's history.

29 Branch and JMT – Branch and JMT are working together as the Design-Builder and Designer on the VDOT Design-Build Route 3 Widening Project for the Culpeper District. This project includes many of the same elements as the Route 29 Solutions Project such as increasing capacity of an existing roadway under traffic, ROW acquisition, utility relocation, permitting and mitigation. Though the Route 3 Widening Project is in the early stages, VDOT has been the beneficiary of the cooperative and integrated team effort. These same procedures will be used on the Route 29 Solutions Project.

Branch and JMT also worked together on the Prince William County PPTA Route 15 Improvements Project, which was a multi-element project along a highly developed corridor (37,000 vehicles on Route 15 and 14,000 vehicles on Waterfall Drive, the smallest element) delivered on a fast track schedule with multiple stakeholders. JMT provided bridge design, ROW acquisition, and utility relocation coordination. Branch was the Design-Builder for the project. Branch received the 2010 “Outstanding Contractor Award” from Prince William County.

Additional Experience

While the six projects included on our work history forms demonstrate a high degree of relevance, SBJV team members have worked on many projects with a similar scope and complexity that require the same capabilities and responses as the Route 29 Solutions project will. Some examples are shown below.

Delivering Multiple Projects Concurrently on Fast Track Schedules

- 29 Cooper River Bridge (\$540M, DB)** - The Skanska-led joint venture divided this project into five segments or subprojects. Each had its own project manager, superintendents, equipment, procurement system, schedule, and laydown yard. The Project Director handled schedule coordination.
- 29 Elizabeth River Tunnels (\$1.5B, DB)** - This VDOT project is effectively four distinct projects: construction of the new Midtown Tunnel; land work (approaches, utilities, etc.); renovation of three existing tunnels; and construction of the \$275 million extension to the Martin Luther King Jr. Expressway, which includes over a mile of elevated highway in a developed urban corridor.

Delivering Projects in Developed Urban Corridors

- 29 I-275 Reconstruction (\$218M, DB)** - This project includes reconstruction of three and a half-miles of I-275 and bisects Tampa, FL. The highway traverses industrial and commercial areas, and is adjacent to a historic residential district. Skanska is working to discourage cut-through traffic away from side streets.
- 29 Pinnars Point Interchange (\$155M)** - Skanska constructed a connector to the Midtown Tunnel from Route 164 and the MLK Jr. Expressway. Work included five land bridges and one bridge over water. The construction zone was adjacent to the Port Norfolk historic residential area and went through the staging area for the Portsmouth Container Port, requiring coordination with rail/port operations.

Use of Innovative Design Solutions and Construction Techniques

- 29 Indian River Inlet Bridge (\$150M, DB)** - DelDOT replaced the Indian River Inlet Bridge due to excessive scour to piers. The Skanska team innovations included proposing a stay cable bridge with no supports in the water, and then, through use of travelers, constructing the bridge out of the water.
- 29 I-10 Bridges over Escambia Bay (\$255M, DB)** - On this fast track, incentivized contract, the Skanska team used innovative top-down construction to build a part of the bridge, and took an innovative, award-winning approach to disposal of construction debris that reduced strain on nearby landfills.
- 29 Port Republic Road Widening (\$10M):** Working for VDOT’s Staunton District, Branch widened Port Republic Road from an existing 2-lane road to a 4-lane, median separated road with a shared-use path. This roadway provided access to the new Rockingham Memorial Hospital along with new developments for the growing campus of James Madison University. Branch developed value-engineering proposals to reduce the number of traffic phases and improved the pavement sections.

Limiting Impacts to the Traveling Public and Communities

- 29 Tampa Airport Interchange (SR-60) (\$219M)** - The Skanska team developed a robust traffic control plan to manage traffic during construction. We proposed improvements to the design to minimize weaving following project completion. The team worked closely with FDOT to ensure that traffic lanes were open during events (such as the 2009 Super Bowl). The team also coordinated with the FAA and Tampa Airport authorities to ensure that normal airport operations were maintained.
- 29 I-64/895 Connector Road, Richmond International Airport (\$17M)** - Branch constructed the new grade separated entrance roadways to the Richmond International Airport terminals and parking facilities and provided direct access from I-64 to the 895 connector on the south end of the airport. Working with the owner, Branch revised the contract construction phasing plan to allow for separation between traveling public and work zones while maintaining full-access to all airport facilities.

Developing and Managing Effective Communication Strategies with Key Stakeholders

- 29 Indian River Inlet Bridge (IRIB)** - Like the Route 29 Solutions project, the IRIB had a Construction Advisory Committee. A Skanska representative (the Project Manager or Construction Manager) attended each of the over 48 monthly meetings to answer questions, respond to concerns and provide construction updates. Skanska also held regular open houses for residents and visitors to tour the site.
- 29 North Main Street and College Avenue Improvements (\$6M)** - Branch delivered both of these projects to the Town of Blacksburg with minimal impacts to the businesses located along these roads by meeting daily with the businesses, stakeholders and providing walkways and travel ways.

Previous Success in Taking and Managing Calculated Risks and Realizing Incentives

- 29 Huguenot Bridge Reconstruction (\$34M)** - VDOT provided incentives for overall completion and for reaching other milestones, including shifting traffic from the old bridge onto the new bridge deck. Skanska reached all milestones and realized incentives. Risks included flooding from the James River.
- 29 I-10 Bridges Over Escambia Bay** - The Skanska team reached all milestones on this project. We outperformed on one milestone by opening a bridge to eastbound traffic eleven days early.

Previous Success in the Coordination of Complex Utility Relocation

- 29 Huguenot Bridge Reconstruction** - Skanska worked closely with utility companies to relocate utilities. Skanska was responsible for the relocation of sewer lines along the approach roads, and coordinated with the cable company for installing cable conduit under the bridge.
- 29 Elizabeth River Tunnels** - The Skanska-led JV has a major utility relocation effort underway in both Norfolk and Portsmouth VA, working with ten utility companies to identify and relocate underground and overhead utilities in heavily built up areas of both cities.

Meeting or Exceeding Required Disadvantaged Business Enterprise Program Commitments

- 29 Huguenot Bridge Reconstruction** - DBE goal: 14.5 percent. Achieved: 16 percent.
- 29 The Tide Light Rail Starter Line (\$92M total value)** - DBE goals: 20 percent and 24 percent. Achieved 21.1 percent and 26.2 percent respectively.



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3.5

Project Risks

3.5 Project Risks



Skanska-Branch A Joint Venture

Managing project risk is the most critical activity for any design-build contracting team. While certain risks are common to all projects, each project has its own mix of risks, each with its own probability and impact severity. For any project to be successful, each risk has to be identified, analyzed for impacts, and a mitigation/management plan has to be prepared. Risk assessment, management and mitigation is a continuing process, as processes used to mitigate and manage risk must be evaluated for effectiveness, and the team needs to analyze any new risks that may have arisen and develop effective mitigation strategies.

To evaluate the risks associated with this project, SBJV has developed a Risk Management Register, a “living document” that we continuously review, analyze and update during the project, starting with proposal development and through design and construction. We define and assess potential risks, develop mitigation strategies and manage the risk mitigation. The SBJV has carefully considered the key elements of work for this project to determine what we currently consider the five most relevant and critical project risks to mitigate for the successful project delivery. We considered numerous potential risks to the project including: geologic conditions in the Charlottesville region, drainage, stormwater management (SWM), environmental permit acquisition, traffic control during construction, bridge construction, noise control, right-of-way, utilities, retaining walls, project schedule, community stakeholders, and cultural resources. Ultimately, we concluded that traffic control, project schedule, utilities, community stakeholders, and geologic conditions are the five risks with the greatest potential to adversely impact this project.

Below, we analyze each risk and score the impacts, provide a risk mitigation strategy, and provide our expectation for the level of involvement required of VDOT and other stakeholders.

Project Risk No. 1 – Traffic Control

VDOT’s benchmark for a successfully delivered project will be a Transportation Management Plan (TMP) and its execution that provides the least disruption to the traveling public and also ensures an acceptable level of service to local businesses during construction.

Why the risk is critical and the impact the risk will have on the Project.

- 29 US Route 29 and Rio Road Grade Separated Intersection (●●● high)** – During construction the slightest activity can have a profound effect on operational efficiency and degrade the mobility of the corridor. Construction operations that limit or impede access to business and commerce will have a detrimental impact to businesses and UVA operations. Significant concerns that must be addressed relative to the TMP include: utility relocation; access to adjacent intersection and businesses during construction; operation of Route 29 traffic and minimizing cut-through traffic on local streets; alternative routing; local noise regulations; and lane closures supporting multiple shift work.
- 29 US Route 29 Widening (●●● medium)** - The widening of US 29 to six lanes between Polo Grounds Road and Town Center Drive involves vertical geometric modifications, especially between Polo Grounds and Ashwood Boulevard. Motorists travelling US 29 northbound, experience a high rate of collisions as a result of queuing and the vertical geometry. The high volume of traffic warrants that two lanes be maintained in each direction during reconstruction.
- 29 Berkmar Drive Extension (●●● low)** – This extension is mostly on new alignment and the maintenance of traffic (MOT) will be relatively non-impactive except for tie-in activities.

Mitigation strategies the SBJV will investigate to address the risk (●●● reduction to medium/low).

Transportation Management Plan (TMP) - The traffic issues associated with these three elements will be studied as part of our TMP development in order to understand and accommodate both vehicular and

pedestrian/bicyclist flows. The TMP will be developed to balance the needs of the construction schedule with the safe and timely conveyance of the public through the jobsites. The TMP is comprised of three components:

- 29 Temporary Traffic Control Plans (TTCP)** - Provides the sequence of construction activities. The proposed construction along with any proposed lane closures will be shown with the appropriate traffic control devices (i.e. barrels-Group 2 channelizing devices, concrete barriers, temporary pavement, temporary pavement markings, temporary signs and signals, etc.). Typical sections will be provided to demonstrate how each interim phase of construction interacts with the existing condition and the ultimate completed project. These typical sections will help identify areas of need for temporary drainage facilities to ensure that water is not being trapped during any phase of construction. SBJV will consider strategies to improve safety and operations including modifying the proposed design to reduce MOT requirements, real time signal timing modifications by interfacing with the adaptive signal management system consultant, and sequencing the construction to move traffic out of the work zone. Our Team has a wealth of VDOT-certified Traffic Control Designers and the in-house capability to train and certify all of our staff. Each plan will meet RFP requirement and adhere to the VDOT Work Area Protection Manual and MUTCD criteria to address work-zone traffic control, detours, work restrictions, constructability concerns and potential traffic impacts. These plans and associated provisions will include ADA and MUTCD compliant details such as traffic management stage narratives/schedules, work zone signage, detour routes, access to local homes and businesses, public notification requirements, alternate routes, maintenance of pedestrian and bike routes, and coordination with emergency services and school transportation. The TTCP will expedite the opening of completed sections to travelers in order to improve traffic operations when possible.
- 29 Public Communication Plan** - This plan is critical for traffic, incident, and congestion management. Lane closures/new traffic patterns will need to be communicated to all users including City of Charlottesville, UVA, Charlottesville Area Transit (CAT), Albemarle County Services including JAUNT, bus schedules and emergency vehicles using the corridor in advance of their implementation. The public communication plan will be coordinated with the construction schedule.
- 29 Transportation Operations Plan** - Provides a process to notify the Traffic Operations Center (TOC) to place detour and lane closure information on the 511 system. A list of local emergency response agencies will be included in the plan along with procedures to respond to traffic incidents that may occur in the work zone. Traffic analysis will be performed for each phase of construction to confirm that the proper LOS is being maintained at each intersection within the project limits plus the adjacent intersections along US 29. The traffic analysis along with any traffic incidents will provide the tools necessary for modifying the TTCP if required along with providing historical data for future projects. SBJV conducted traffic analysis using Synchro and VISSIM traffic simulation models of Route 29 for the 29 Bypass study, which will play an important role in these analyses.

Access to Businesses - As the project commences, the most vocal stakeholders will likely be business owners that rely on accessibility to their businesses for survival. Development of an access management plan that addresses access to small and large businesses, such as the Charlottesville Fashion Square Mall southeast of the Rio Road Intersection, will be a challenge since there must be an adequate work zone to provide safety for pedestrians, motorists and workers. The risk of not providing adequate accessibility is the negative publicity the project will receive if the business owners perceive that they are losing business because their access is no longer readily available for their customers. In order to reduce this risk, accessibility impacts must be addressed in the development of the access management plan and the

maintenance of traffic plans. Our team will be able to efficiently develop these plans since SBJV has worked together for numerous years and we work collaboratively to identify the best plan to enhance construction efficiency and maximize available access to businesses in the area.

When the MOT plans are complete, additional risk mitigation will be achieved by communicating access impact detail with the businesses through several communication outlets. We will use face to face meetings, websites, social media and existing venues such as the Route 29 Project Delivery Advisory Panel to distribute information. Businesses will be encouraged to take ownership and post on their own website information such as traffic pattern changes and links to VDOT web pages. The overall process and strategy will be identified as part of the transportation management plan.

US Route 29 and Rio Road Grade Separated Intersection (●●● high) - Maintaining acceptable traffic operations along US 29 is vital to both local and regional traffic. The US 29/Rio Road Intersection is one of the most congested intersections along the corridor and during the grade separated intersection construction, operations will further degrade. This intersection is surrounded by businesses and other intersections and does not have right of way capacity for traffic shifts without impacting the existing business operations or traffic operations. Construction activities will likely reduce the capacity of the roadway network through lane reductions, either in lane width or complete lane reduction, “rubbernecking” to see the construction activity and progress, and reduction in access at adjacent intersections. This will increase the risk of delays, travel times, and the potential for accidents.

Since the ability to increase throughput at the intersection will be very limited we will explore various transportation demand measures to reduce the volume of traffic through the intersection. Among the areas to be examined include providing a temporary park and ride lot outside the study area, improving bus routes and stops, and working with Charlottesville Area Transit and JAUNT to encourage the use of public transportation. Additionally, most grade separation work will take place when traffic volumes are the lowest, between Commencement Activities and the first UVA home football game.

Another concern with the Rio Road Intersection construction is the diversion of motorists from US 29 to parallel routes and the resultant increase of traffic volumes on lower functioning roadways. The resultant risk is the negative public perception of the project that could ensue. In order to address this risk, the team proposes to collect traffic data on several roadways prior to construction. If issues arise during the course of construction we will recount those roadways to define the level of cut through traffic. We would then identify any measures that may mitigate the concerns and define possible solutions such as right-in/right-outs. If speeding is a concern, we can work through VDOT and with the local police to assist with enforcement and implement the use of speed trailers.

Role SBJV expects VDOT or other agencies may have in addressing these Project risks.

In any very congested urban area, there are always risks associated with any construction project. SBJV believes we can minimize those risks during construction by a combination of strategies to successfully complete the construction. Additionally, our team has extensive previous experience along this corridor having completed the US 29 Bypass Northern Terminus Traffic Study.

We would ask that VDOT consider continuing participation in public outreach events and stakeholder meetings, assist in coordination and provide information on their website, participate in selecting strategies to be employed, and aid with traffic calming approaches if speeding becomes a concern.

Project Risk No. 2 – Project Schedule

Maintaining a detailed, stakeholder sensitive and aggressive project schedule for all three elements of the project is a key to successful completion of this challenging project. We have the experience in fast-track, incentivized contracts, schedule driven projects and working on multiple projects simultaneously to know what resources are required to ensure we maintain schedule, and use our purchasing power to ensure the right materials are delivered on site at the right time. Below, we are including several innovative solutions to mitigate risk, which are marked with an asterisk (*).

Why the risk is critical and the impact the risk will have on the Project.

The US Route 29 project area is a critical local and regional link, and a central business and commercial area for Charlottesville. Any extended schedule that disrupts traffic or access to commercial establishments could have significant economic impacts on businesses along the highway. Maintaining a tight schedule will also reduce construction impacts (noise, etc.) to residents, travelers, businesses, the environment and other quality of life issues.

Negative impacts on all three elements of the project could result from extreme weather, utility identification and relocation, right-of-way acquisition, unforeseen geotechnical conditions, and delays in permitting (●●● **high**).

29 US Route 29 and Rio Road Grade Separated Intersection (●●● high) - VDOT has proposed a very aggressive schedule for the most complicated work element. This will be the driver for incentive work and provide the critical milestones for a significant portion of the schedule. Resource and materials availability, subsurface conditions, and unknown utilities could adversely impact the schedule.

29 US Route 29 Widening (●●● medium) - Keeping traffic lanes open and maintaining accessibility to local streets will be a significant consideration in developing transportation management plans. Coordinating with other projects in the corridor may add some risk.

29 Berkmar Drive Extension (●●● medium) - Berkmar Drive has some risk that could threaten the schedule, with increased risk from the water crossing over the south branch of the Rivanna River, the amount of new work, and the largest ROW acquisition requirements. Other potential impacts could be experienced from environmental mitigation and delays in acquiring permits.

Mitigation strategies the SBJV will investigate to address the risk (●●● reduction to medium/low).

- 1) **Weather** SBJV’s combined years of local experience in the region will ensure developing a realistic calendar that will incorporate weather events when preparing the schedule. We will have an in-place schedule recovery plan to minimize effects of weather, which will be included in task and work plans.
- 2) **Special events management.** SBJV will build planning for special events (UVA, festivals, sporting events, concerts, and regional events) into the construction schedule.
- 3) **Coordination and cooperation with utilities.** We will hold early coordination meetings led by our Utility Coordination Manager to schedule outages and relocations well in advance of construction activities, and remain in close contact with utilities during construction that affects utilities.
- 4) **Scheduling of available resources, ability to draw upon JV members’ resources to recover schedule.** Skanska and Branch will rely upon and employ their buying power to procure equipment and materials in a timely and cost-effective manner.

- 5) **Local subcontractors and suppliers.** Based on our previous work on the 29 Bypass, we will leverage our existing relationships with local subcontractors and suppliers.
- 6) **Scheduling techniques.** During the Rio Road Intersection construction window, we will employ a rolling, *double-shifted 4 day/10 hour work schedule*,* develop one-week look ahead schedules with detailing in hourly increments, and *assign a full-time scheduler** to schedule 204 work shifts into 102 calendar days. SBJV will secure personnel, equipment and material resources to support scheduling.
- 7) **Incentivizing subcontractors.*** Subcontractors will participate in and benefit from a project specific incentive program.
- 8) **The Design-Build Project Manager** has full authority to commit and draw upon Branch and Skanska resources to recover schedule and achieve successful project completion.
- 9) **Resources will be in place prior to the start of construction** for the Rio Road intersection element. Personnel will be hired and trained, materials will be pre-ordered and on site (or scheduled for just-in-time delivery), and redundant backup resources (equipment and materials) will be placed on standby during the construction window.
- 10) **3D modeling software** will be used by SBJV to streamline materials acquisition and delivery, identify design conflicts and clashes early in the design process, and resolve those conflicts before they become an (expensive) issue in the field that also impacts schedule.
- 11) **Accelerated bridge construction (ABC)** techniques will be considered to determine if there are benefits in moving the Rio Road element schedule forward.

Role SBJV expects VDOT or other agencies may have in addressing these Project risks.

To mitigate schedule risks, SBJV will need VDOT to provide IA/IV personnel when we implement our rolling, double shifted 4/10 work schedule during the Rio Road construction window. To complete this segment of the schedule, VDOT personnel will need to be available to approve work expeditiously prior to continuation.

Project Risk No. 3 – Utilities

Plans and information provided in the RFQ indicate there are both public and private utilities within the limits of the three project elements. Utility facilities include electric, telecom, fiber optic cables, cable TV, water, sewer and gas. Electric and telecom facilities are both overhead and underground.

Why the risk is critical and the impact the risk will have on the Project.

The critical risk to the project from utilities is in determining the potential conflicts with new work and scheduling relocation and adjustments. Protection of utilities from both direct and indirect impacts is critical to the success of the project. Failure of any of the utility owners to provide timely assistance can disrupt the schedule and the ability of the Team to complete the construction of particular areas of the project. Early coordination/planning is necessary in order to identify conflicts and the scope of relocations, acquire rights of way and easements and schedule the utility relocations. Managing the utility relocations must be aggressive and comprehensive to avoid impacts to the construction of the project elements.

- 29** **Route 29 and Rio Road Grade Separated Intersection (●●● high)** - Utilities found in this element include a 24 inch water main, 6 inch gas main, sanitary sewer, telephone duct bank and electric facilities. Identification and relocation of those facilities in conflict with the grade separation need to be coordinated with construction and maintenance of traffic sequences.

- 29 Route 29 Widening (●●● high)** - The utilities in this element include electric, telecom, cable TV, multiple fiber optic cables, water, sewer and gas. Many of these facilities are impacted by the proposed cuts and fills along the alignment. Early identification of the conflicts and prioritized acquisition of right of way and easements will allow utility relocation to proceed early in the schedule.
- 29 Berkmar Drive Extension (●●● medium)** - There are few utilities along the proposed extension on the new alignment. Water, sewer, gas and electric are found at the intersection with Route 639. An overhead electric line runs parallel with Rio Mills Road and will need to be protected during construction of the bridge spanning the Rivanna River.

Mitigation strategies the SBJV will investigate to address the risk.

The Team will provide early and continuous coordination with the impacted utility companies throughout the design and construction phases of the project. We will meet early in the process with each utility owner to gain an understanding of how to work together to achieve the project goals. We intend to build upon the relationship developed with the utility companies during the 29 Bypass project and manage utility relations through partnering and open communication.

The SBJV has assigned Mr. David Malinoski, P.E., of JMT as the Lead Utility Coordination Manager. He will lead the Team’s utility coordination efforts throughout design and construction to identify and define potential impacts, evaluate avoidance solutions and facilitate relocation services. To help avoid unforeseen utility impacts, the Team will obtain as-built information from the utility companies and field verify the existing utility mapping. Supplemental designating will be performed on any known facilities not shown on the existing mapping. JMT’s in-house Subsurface Utility Engineering (SUE) Team will detect and designate the location of existing utilities and implement a Level A test-hole program to obtain the precise depth of utilities. This program data will enable a complete review of existing facilities, confirm conflicts identified during design development and will provide data for the UT-9 forms that will be provided to the utility companies prior to the Utility Field Inspection (UFI) meeting(s). Our Team will investigate alternative designs to help avoid or minimize the impact to existing utilities.

The Team anticipates holding a separate UFI meeting for each of the three project elements. New information regarding the designs and schedules will be shared with the utilities. Follow-up meetings will be held as necessary with utility companies to develop relocation designs. Design and schedule changes will be communicated to the utilities during the project.

Utility relocations will be identified in the project schedule. The SBJV Team will work with the utility owners to examine methods, such as phased relocations, to expedite utility related plans and estimates (P&E) and advance the project schedule. Acquisition of right-of-way and easements will be prioritized to allow the relocation of utilities as early as possible. The team will look at self-performing some utility relocations in order to maintain control of the schedule during construction.

The SBJV Team is familiar with the UFI process and the preparation of the documents required by *VDOT’s Utility Manual of Instructions-Utility Relocation Policies & Procedures*. The Team will perform the relocation effort in all three project elements in accordance with the Manual’s and the RFP’s requirements.

Role SBJV expects VDOT or other agencies may have in addressing these Project risks.

The SBJV Team will coordinate directly with the utility companies and will invite VDOT to participate in the relocation planning efforts including attending UFI meetings. We expect VDOT to provide any previously collected utility information and provide timely review and approval of each utility relocation plan. The success of the utility relocation effort is contingent upon the active participation of the utility

companies. Should a utility fail to participate, we would ask VDOT for assistance in obtaining the necessary cooperation.

We would recommend that any of the utility owners with facilities within the Rio Road grade separation element conduct a Level B survey prior to the issuance of the RFP.

Project Risk No. 4 – Community Stakeholders

A lack of information, misinformation, and limited communications can derail a successful project and damage relationships. Informing stakeholders and keeping them engaged in the project and processes is key to partnering. We will develop and manage effective communications strategies and we will foster working relationships with the Route 29 Project Delivery Advisory Panel, business owners and key stakeholders.

Why the risk is critical and the impact the risk will have on the Project (●●● medium-high).

Impacts to traffic are always a concern when preparing to launch road construction projects. The Route 29 Solutions involves disrupting a major route that carries both local and through traffic. This will inconvenience the public not just in the immediate vicinity but also those traveling to and through this destination. The impact on businesses in the area may be significant.

Vocal, upset citizens and business owners will not hesitate to contact their elected officials or area media to let them know of their displeasure, which can disrupt and seriously impact project schedule and budget. These and other stakeholders have already fought for years to prevent a VDOT project in the area.

Mitigation strategies the Team will investigate to address the risk.

Responding to the concerns of the public will be paramount to a successful project. SBJV recognizes the importance of effective public relations and knows that the success of the project will hinge greatly upon the proper and timely dissemination of information to the public about the construction schedule and its impacts on their daily business. To address this important concern, the Team includes Sharp & Company, Inc. (S&CO) whose principals provide more than 50 years combined experience in the field of public relations, including experience with VDOT on I-66 and Route 29 projects.

Key to addressing these issues is a proactive public awareness program that prepares the public early in the project during the design phase. Several public hearings will have already taken place prior to contract award. The Berkmar Drive Extension public hearing is scheduled to occur in September 2014, and the Rio Road Intersection and Route 29 widening public hearings have been announced for November 2014. The program will begin with the development of a comprehensive strategy in collaboration with VDOT. In addition, the SBJV will develop and manage effective communication strategies and working relationships with the Route 29 Project Delivery Advisory Panel, business owners and other key stakeholders. This strategy will establish what will be done, who will do it, and when it will be done.

Public relations must be treated as an essential activity for this project and positioned to immediately express how the benefits outweigh any potential inconveniences. To accomplish this, we propose the following activities as part of our comprehensive public outreach efforts:

- 28 Develop or participate in a Formal Partnering Program to include conducting an initial meeting with key stakeholders to discuss "rocks in the road," issues resolution ladders, and other items that will require active partnering to achieve project goals. Schedule periodic follow up meetings through construction progress.
- 29 Develop benefit-focused theme and messaging for all communication.

- 29 Conduct public meetings to introduce project plans to the community and provide them an opportunity to ask questions and voice their concerns.
- 29 If VDOT so desires, develop a stand-alone website for the project that becomes a resource for traffic and public transportation information, alternate routes, anticipated traffic interruptions, etc.
- 29 Create and regularly communicate via an “e-blast” notification system.
- 29 Provide project overview/traffic mitigation information with regular updates to travel organizations such as AAA and VA Tourism Corporation's "Virginia Travel Post," traffic reporters and other media outlets.
- 29 Coordinate with public transportation service providers to inform them of the project/anticipated delays.
- 29 Regularly communicate with UVA, elected officials, major employers, homeowners associations, and other organizations to keep them apprised of project progress.
- 29 Regularly meet with businesses and communities in the area to prepare them for upcoming disruptions by using communication vehicles such as community informational meetings, announcements on list-servs and bulletin boards and pop-up meetings at community events.
- 29 Build community goodwill through community-based interactions and participation in community events (e.g., clean up days, sports, etc.).
- 29 Communicate to those with driving needs all day long, not just during rush hour (e.g., local residents running errands).
- 29 Encourage Travel Demand Management to create effective choices for commuters, special events, shopping, businesses to reduce congestion/demand on the roadway system by reducing the number of single occupant vehicles, encouraging non-peak hour driving and other avenues such as telecommuting.
- 29 Work with the Traffic Mitigation team to develop and disseminate disruption messages and provide alternate routes and discourage cut-through traffic.
- 29 Notify police and emergency personnel of project and anticipated disruptions.

Extra attention must be paid to the impact this project will have on local businesses. We recommend an innovative, outside-the-box approach that uses social media to encourage the local population to support these businesses. An app would be developed allowing users to sign up and earn points by patronizing affected businesses. The businesses could offer discounts or specials to those who have registered on the app. Extra points could be given when patrons shop at particularly inconvenient times due to construction disruptions. Registrants could sign in at various locations and otherwise connect via social media.

Rewards would be given when registered users accumulate a certain number of points. These rewards could be for free meals or shopping cards at affected merchants. In addition, we recommend providing regular prizes and a drawing for a grand prize. This will keep attention on the merchants in the area and provide material for “good news” press stories reminding the public to patronize these merchants.

We will also coordinate with public transit services, including Charlottesville Area Transit (CAT) and JAUNT to notify them of rerouting, delays, and alternate trip planning tools so that they can share the information with their drivers and passengers. Though not expected to be an issue, we will coordinate the Berkmar Drive Extension segment with Charlottesville-Albemarle Airport to ensure there are no concerns associated with FAA Circular AC-150-5300-13A, for Airport Design and 14 CFR Part 77 requirements for objects affecting navigable airspace.

Role the SBJV expects VDOT or other agencies may have in addressing these project risks.

The team will coordinate and communicate regularly with Culpeper District Communications Office to be sure they are informed of project progress, events, concerns, media opportunities, etc. The Team expects VDOT, stakeholders and other entities will embrace formal partnering under this contract and that VDOT project staff will attend public meetings and events and approve the Public Communication Plan.

Project Risk No. 5 – Geologic Conditions in the Charlottesville Region

The project includes three elements, the US 29 and Rio Road Grade Separated Intersection, the US 29 Widening from Polo Grounds Road to Towncenter Drive, and the Berkmar Drive Extension. The Request for Qualifications (RFQ) supplemental information did not include specific subsurface exploration data for the Berkmar Drive Extension nor the US 29 and Rio Road Grade Separated Intersection segments.

The existing geotechnical data included as part of the supplemental information provided with the RFQ indicates the general subsurface conditions consist of residual soil, intermediate geomaterial (IGM) and rock. The Geologic Map of Virginia 1993 indicates that the rock types underlying the site include gneiss, conglomerate, metagrawacke, phyllite, and granite. The natural residual soils above the rock are generally competent but include soft or loose layers.

The depths to rock and ground water vary widely across the site. For example, the borings drilled for a retaining wall near the US 29 and Rio Road intersection in 1992 indicates IGM at a depth of about 41 to 55 feet. However, one of the recent Schnabel borings drilled for the proposed Northside Library encountered IGM at a shallow depth of about 6 feet. Most of the borings drilled in 2013 for the widening of US 29 indicated IGM at depths of about 2 to 31 feet. Similarly, ground water was encountered at variable depths of about 1 to 30 feet in most of the 2013 borings drilled for the widening of US 29.

A total of 41 California Bearing Ratio (CBR) test results were included in the GDR for the proposed US 29 Bypass in 2011. The CBR values varied from 0.4 to 46.1. Seven of the CBR test values were less than four and 11 of the CBR values were greater than 20. These test results indicate a possible wide variability in pavement subgrade conditions.

Why the risk is critical and the impact the risk will have on the Project (●●● medium).

The geotechnical risks are critical because the Design-Builder is expected to submit a lump sum price to perform all work on the project using only the information provided in the RFP Documents, prior to finalizing all design elements. The SBJV Team has identified several geotechnical-related risks as follows:

- 29 Variable Elevation of Rock and Groundwater** – Major excavations will be required for all three project elements; therefore, excavation in IGM or rock, or excavation below the groundwater table is expected, which could potentially add cost and time impacts to the project.
- 29 US 29 and Rio Road Grade Separated Intersection** - In addition to possible excavation difficulties and shallow ground water, the variable subsurface conditions could affect the construction of the bridge foundations and retaining walls.
- 29 Berkmar Drive Bridge over the South Fork Rivanna River** - The new bridge abutment foundations will likely consist of piles or footings, and the pier foundations will likely consist of drilled shafts or piles. Information provided by VDOT for the 29 Bypass Bridge (which was near the proposed Berkmar Drive Bridge) indicated variable rock conditions below the Rivanna River floodplain. If a significant amount of fill is needed to construct approach fills to the bridge abutments, there could also be a risk of embankment settlement and slope stability.

- 29 **Potential Unsuitable Soils** - Existing borings encountered some soils that will likely be considered unsuitable due to low strength, high plasticity and/or high moisture content.
- 29 **US 29 and Berkmar Drive Extension Pavements** - Due to the extreme variation in CBR values that will be used in the pavement design, including several very low values, it is likely that some of these soils will be considered unsuitable and can be undercut or chemically treated to support the pavements.

The impacts from potential geotechnical issues include additional cost and time to mitigate the following risks: excess rock excavation, construction dewatering, additional permanent underdrains, variable length or depth of bridge and retaining wall foundations, embankment settlement or stability, and excess unsuitable soils requiring removal or stabilization.

Mitigation strategies the SBJV will investigate to address the risk.

Mitigation strategies would include those performed during the design phase to reduce the number of unknowns and to incorporate mitigation measures into the design, and those performed during the construction phase to minimize costs and delays. A summary of these strategies is as follows:

- 29 Perform additional subsurface exploration, soil and rock laboratory testing and geophysical testing to better delineate the risks. The additional subsurface exploration would include the number of borings and types of sampling to meet or exceed the requirements of the VDOT Materials Manual of Instructions, Chapter III. This could include additional borings and/or auger probing to evaluate the variability of the rock surface, and undisturbed Shelby tube sampling and testing of clay soils to evaluate settlement characteristics of the in-situ soils. To better mitigate the potential adverse impact of rock a combination of test pits, air-track probes, and geophysical techniques such as seismic refraction surveys could be utilized to better delineate the rock surface between borings.
- 29 Provide additional testing in areas where low CBR values were obtained to confirm the low values, estimate the necessary amount of undercut and replacement, and evaluate subgrade improvement options.
- 29 Provide triaxial shear strength testing on proposed embankment materials for slope stability analyses. Quality tests could show that standard 2H:1V slopes have an adequate factor of safety so that flattening or benching the slopes might not be needed.
- 29 Provide a thorough evaluation of the subsurface conditions in order to properly characterize the conditions, and perform the necessary calculations to decide if the potential risks described herein are likely to occur.
- 29 Select appropriate foundation systems.
- 29 Include standardized remedial design information on the plans to illustrate how the impacts should be mitigated during construction.
- 29 Perform additional testing to identify unsuitable conditions and mitigation options.
- 29 Monitor various aspects of construction such as settlement of embankments and foundations.

During the design phase, the SBJV Team will identify issues and options to work towards an optimal solution for any of the risks encountered.

Role SBJV expects VDOT or other agencies may have in addressing these Project risks.

We would recommend that sufficient soil and geotechnical investigations are completed and issued to the Offerors with the RFP.



Design-Build Project For Route 29 Solutions
Albemarle County, Virginia
Contract ID No. C00077383DB80

Appendices

ATTACHMENT 3.1.2

DESIGN-BUILD PROJECT FOR ROUTE 29 SOLUTIONS, CONTRACT ID C00077383DB80
STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

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

Statement of Qualifications Component	Form (if any)	RFQ Cross-Reference	Included within 20-page limit	SOQ Page Reference
Statement of Qualifications Checklist and Contents	Attachment 3.1.2	Section 3.1.2	no	NA
Acknowledgement of RFQ, Revision and/or Addenda	Attachment 2.11 (Form C-78-RFQ)	Section 2.10	no	NA
Letter of Submittal (on Offeror's letterhead)				1-2
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	2
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	Appendices
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	Appendices
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	Appendices
Evidence of obtaining bonding	NA	Section 3.2.9	no	Appendices

ATTACHMENT 3.1.2

DESIGN-BUILD PROJECT FOR ROUTE 29 SOLUTIONS, CONTRACT ID C00077383DB80
STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross-Reference	Included within 20-page limit	SOQ Page Reference
SCC and DPOR registration documentation (Appendix)	Attachment 3.2.10	Section 3.2.10	no	Appendices
Full size copies of SCC Registration	NA	Section 3.2.10.1	no	Appendices
Full size copies of DPOR Registration (Offices)	NA	Section 3.2.10.2	no	Appendices
Full size copies of DPOR Registration (Key Personnel)	NA	Section 3.2.10.3	no	Appendices
Full size copies of DPOR Registration (Non-APELSCIDLA)	NA	Section 3.2.10.4	no	Appendices
DBE statement within Letter of Submittal confirming Offeror is committed to achieving the thirteen (13%) DBE goal	NA	Section 3.2.11	yes	2
Offeror's Team Structure				3
Identity and qualifications of Key Personnel	NA	Section 3.3.1	yes	4
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	Appendices
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.2	no	Appendices
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.3	no	Appendices
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.4	no	Appendices
Key Personnel Resume – Lead Structural Engineer	Attachment 3.3.1	Section 3.3.1.5	no	Appendices
Key Personnel Resume – Lead Traffic Engineer	Attachment 3.3.1	Section 3.3.1.6	no	Appendices
Key Personnel Resume – Lead Geotechnical Engineer	Attachment 3.3.1	Section 3.3.1.7	no	Appendices
Key Personnel Resume – Lead Utility Coordination Manager	Attachment 3.3.1	Section 3.3.1.8	no	Appendices
Key Personnel Resume – Public Relations Manager	Attachment 3.3.1	Section 3.3.1.9	no	Appendices

ATTACHMENT 3.1.2

DESIGN-BUILD PROJECT FOR ROUTE 29 SOLUTIONS, CONTRACT ID C00077383DB80
STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross-Reference	Included within 20-page limit	SOQ Page Reference
Organizational chart	NA	Section 3.3.2	yes	5
Organizational chart narrative	NA	Section 3.3.2	yes	6-7
Experience of Offeror's Team				8-10
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	Appendices
Sub-Contractor Work History Form, if applicable	Attachment 3.4.1(b)	Section 3.4	no	NA
Lead Designer Work History Form	Attachment 3.4.1(c)	Section 3.4	no	Appendices
Sub-Consultant Work History Form, if applicable	Attachment 3.4.1(d)	Section 3.4	no	NA
Project Risk				
Identify and discuss five critical risks for the Project	NA	Section 3.5.1	yes	11-20



Design-Build Project For Route 29 Solutions
Albemarle County, Virginia
Contract ID No. C00077383DB80

Attachment 2.11

Acknowledgment of the RFQ, Revision, and/or Addenda



Skanska-Branch A Joint Venture

ATTACHMENT 2.11**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION**

PROJECT: Design-Build Project for Route 29 Solutions
CONTRACT ID: C00077383DB80

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 07/24/2014
(Date)
2. Cover letter of Addendum No. 1 08/15/2014
(Date)
3. Cover letter of _____
(Date)



SIGNATURE

8/25/14

DATE

J. William Karbach

PRINTED NAME

Authorized Representative

TITLE



Design-Build Project For Route 29 Solutions
Albemarle County, Virginia
Contract ID No. C00077383DB80

3.2.6 Affiliated and/or Subsidiary
Companies of the Offeror

3.2.6

Affiliated and/or Subsidiary Companies of the Offeror



Skanska-Branch A Joint Venture

ATTACHMENT 3.2.6

DESIGN-BUILD PROJECT FOR ROUTE 29 SOLUTIONS, CONTRACT ID C00077383DB80

Affiliated and Subsidiary Companies of the Offeror

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

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

Relationship with Offeror (Affiliate or Subsidiary)	Full Legal Name	Address
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 Mesa Rd., Riverside, CA 92509
Affiliate	Skanska Koch Inc	400 Roosevelt Ave, Carteret, NJ 07008
Subsidiary	Bayshore Concrete Products Corp.	1134 Bayshore Rd., Cape Charles, VA 23310
Subsidiary	TEC Skanska, Inc.	295 Bendix Rd., Suite 400, Virginia Beach, VA 23452
Subsidiary	CDK Skanska Inc.	295 Bendix Rd., Suite 400, Virginia Beach, VA 23452



Design-Build Project For Route 29 Solutions
Albemarle County, Virginia
Contract ID No. C00077383DB80

3.2.7

Certification Regarding Debarment Forms (Primary and Lower Tier)

ATTACHMENT NO. 3.2.7(a)

**CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS**

Project: **Design-Build Project for** Route 29 Solutions
Contract ID: C00077383DB80

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

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

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

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

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

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

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


Signature _____ Date 8/28/2014 Secretary _____
Title _____

Skanska USA Civil Southeast Inc.
Name of Firm _____

ATTACHMENT NO. 3.2.7(a)

**CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS**

Project: **Design-Build Project for** Route 29 Solutions
Contract ID: C00077383DB80

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

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

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

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

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

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

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

 8-20-14
Signature Date

Vice President of Design-Build Services
Title

Branch Highways, Inc.
Name of Firm

ATTACHMENT NO. 3.2.7(b)

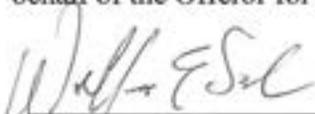
**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project: **Design-Build Project for** Route 29 Solutions
Contract ID: C00077383DB80

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

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

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



Signature

August 19, 2014

Date

Vice President

Title

Johnson, Mirmiran & Thompson, Inc.

Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project: Design-Build Project for Route 29 Solutions
Contract ID: C00077383DB80

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

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



Signature

8/15/2014

Date

President

Title

Name of Firm

CES Consulting LLC

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project: **Design-Build Project for** Route 29 Solutions
Contract ID: C00077383DB80

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

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

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

Edward G. Djabov 08/19/14
Signature Date

Senior Vice President
Title

Schnabel Engineering Consultants, Inc.
Name of Firm

ATTACHMENT NO. 3.2.7(b)

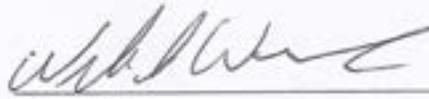
**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project: Design-Build Project for Route 29 Solutions
Contract ID: C00077383DB80

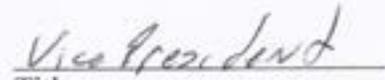
- 1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

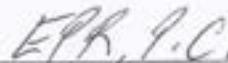
- 2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this form.

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


Signature

8-26-14
Date


Title


Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project: **Design-Build Project for** Route 29 Solutions
Contract ID: C00077383DB80

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

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



Signature

August 19, 2014
Date

President
Title

EEE Consulting, Inc.
Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project: **Design-Build Project for** Route 29 Solutions
Contract ID: C00077383DB80

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

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


Signature

8/20/2014
Date

President
Title

Dovetail Cultural Resource Group
Name of Firm

ATTACHMENT NO. 3.2.7(b)

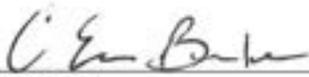
**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project: **Design-Build Project for** Route 29 Solutions
Contract ID: C00077383DB80

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

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

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

	08/22/2014	Business Unit Leader
Signature	Date	Title

Moffatt & Nichol
Name of Firm

ATTACHMENT NO. 3.2.7(b)

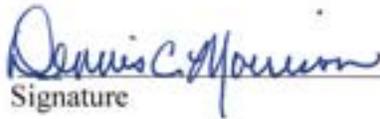
**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project: **Design-Build Project for** Route 29 Solutions
Contract ID: C00077383DB80

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

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

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


Signature

08/21/14
Date

Sr. Vice President
Title

Volkert, Inc.
Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project: Design-Build Project for Route 29 Solutions
Contract ID: C00077383DB80

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

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

Susan Sharp 8/20/14
Signature Date

President
Title

Sharp & Company, Inc.
Name of Firm



Design-Build Project For Route 29 Solutions
Albemarle County, Virginia
Contract ID No. C00077383DB80

3.2.8

VDOT Prequalification Certificate

3.2.8 VDOT Prequalification
Certificate

=====
T009
SKANSKA USA CIVIL SOUTHEAST INC.
PREQ. EXP : 11/30/2014

--PREQ ADDRESS ----- WORK CLASSES (LISTED BUT NOT LIMITED TO)
295 BENDIX RD., STE. 400 003 - MAJOR STRUCTURES
VIRGINIA BEACH, VA 23452-0000 007 - MINOR STRUCTURES
PHONE : 757-420-4140 043 - TUNNELING
FAX : 757-420-3551 080 - DEMOLITION OF STRUCTURES

BUSINESS CONTACT: DAVIS, STEPHEN ASHLEY
EMAIL: SOUTHEAST.ESTIMATING@SKANSKA.COM

-----DBE INFORMATION-----

DBE TYPE : N/A
DBE CONTACT: N/A

=====
S026
SLURRY PAVERS, INC.
PREQ. EXP : 09/30/2014

--PREQ ADDRESS ----- WORK CLASSES (LISTED BUT NOT LIMITED TO)
3617 NINE MILE RD 004 - ASPHALT CONCRETE PAVING
RICHMOND, VA 23223 068 - SLURRY SEAL OF PAVEMENT
PHONE : 804-264-0707
FAX : 804-264-0219

BUSINESS CONTACT: TARSOVICH, PHILLIP PAUL
EMAIL: PHILTARSOV@SLURRYPAVERS.COM

-----DBE INFORMATION-----

DBE TYPE : N/A
DBE CONTACT: N/A

=====

Received

JUN 16 2014

Branch Highways



COMMONWEALTH OF VIRGINIA



Scanned

JUN 16 2014

CERTIFICATE OF QUALIFICATION

BRANCH HIGHWAYS, INC.

Vendor Number: **B319**

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

PREQUALIFIED

Your firm specializes in the noted Classification(s):

GRADING; MAJOR STRUCTURES; UNDERGROUND UTILITIES

Issue Date: February 28, 2014

This Rating and Classification will Expire: February 28, 2015

Suzanne FR Lucas, State Prequalification Officer

Don E. Silies, State Contract Officer

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



Design-Build Project For Route 29 Solutions
Albemarle County, Virginia
Contract ID No. C00077383DB80

3.2.9

Surety Letter

3.2.9 Surety Letter

ZURICH AMERICAN INSURANCE COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND
FEDERAL INSURANCE COMPANY
LIBERTY MUTUAL INSURANCE COMPANY
THE CONTINENTAL INSURANCE COMPANY
HARTFORD FIRE INSURANCE COMPANY

August 19, 2014

Commonwealth of Virginia
Department of Transportation (VDOT)
Central Office Mail Center
Loading Dock Entrance
1401 E. Broad Street
Richmond, Virginia 23219
Attention: Brenda L. Williams

RE: Design –Build Project for Route 29 Solutions
State Project Nos:
US 29 Rio Road Grade Separated Intersection (0029-002-091)
US 29 Widening (0029-002-135)
Berkmar Drive Extension (9999-002-900)
ECP \$185 Million

Dear Ms. Williams:

We understand that Skanska-Branch a Joint Venture will be submitting a proposal on the above captioned project. Fidelity and Deposit Company of Maryland/Zurich American Insurance Company, Liberty Mutual Insurance Company, Federal Insurance Company, The Continental Insurance Company and Hartford Fire Insurance Company have the pleasure of extending surety credit to the partners of Skanska-Branch Joint Venture: Skanska USA Civil Inc. and Branch Highways.

As sureties for Skanska-Branch a Joint Venture, Fidelity and Deposit Company of Maryland/Zurich American Insurance Company, Federal Insurance Company, Liberty Mutual Insurance Company, The Continental Insurance Company and Hartford Fire Insurance Company are capable of providing 100% Performance Bond and 100% Labor and Materials Payment bond in the amount of the anticipated cost of construction, and said bonds will cover the Project and any warranty periods as provided for in the Contract Documents on behalf of the Contractor, in the event that such firm be the successful bidder and enter into a contract for this Project.

Please note that any arrangement for surety bonds is a matter strictly between the Contractor and the co-sureties, and the sureties assume no liability to third parties or to you by issuance of the letter.

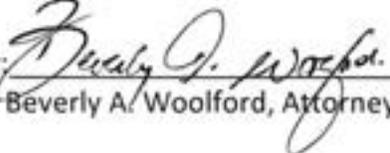
The Zurich American Insurance Company/The Fidelity and Deposit Company of Maryland has an A.M. Best Rating of A+XV, Federal Insurance Company has an A.M. Best Rating of A++XV, Liberty Mutual Insurance Company has an A.M. Best Rating of A XV , The Continental Insurance Company has an A.M. Rating of A XV and Hartford Fire Insurance Company has an A.M. Best Rating of A XV

If we can provide any further assurance or assistance, please do not hesitate to call me at 516-396-4291.

Signed, Sealed and dated this 19th August, 2014.

Very truly yours,

ZURICH AMERICAN INSURANCE COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND
FEDERAL INSURANCE COMPANY
LIBERTY MUTUAL INSURANCE COMPANY
THE CONTINENTAL INSURANCE COMPANY
HARTFORD FIRE INSURANCE COMPANY

By: 
Beverly A. Woolford, Attorney-In-Fact

ACKNOWLEDGEMENT OF SURETY

STATE OF New York,)
COUNTY OF Nassau,)

ON THE 19th DAY OF August, 2014 , BEFORE ME PERSONALLY CAME Beverly A. Woolford TO ME KNOWN, WHO, BEING BY ME DULY SWORN, DID DEPOSE AND SAY THAT (S)HE RESIDES AT Queens County, New York THAT (S)HE IS THE ATTORNEY-IN-FACT OF Fidelity and Deposit Company of Maryland/Zurich American Insurance Company, Federal Insurance Company, Liberty Mutual Insurance Company, The Continental Insurance Company, Hartford Fire Insurance Company THE CORPORATION DESCRIBED IN AND WHICH EXECUTED THE ABOVE INSTRUMENT; THAT (S)HE KNOWS THE SEAL OF SAID CORPORATION; THAT ONE OF THE SEALS AFFIXED TO THE FOREGOING INSTRUMENT IS SUCH SEAL; THAT IT WAS SO AFFIXED BY ORDER OF THE BOARD OF DIRECTORS OF SAID CORPORATION; AND THAT (S)HE SIGNED HIS/HER NAME THERETO BY LIKE ORDER.

Handwritten signature of Andrea E. Gorbert
Notary Public

ANDREA E. GORBERT
Notary Public, State of New York
No. 01GO6170063
Qualified in Suffolk County
Commission Expires July 02, 2015

**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 **THOMAS O. MCCLELLAN, 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 **David W. ROSEHILL, Nancy SCHNEE, Andrea E. GORBERT, Annette LEUSCHNER, Valorie SPATES, Beverly A. WOOLFORD and Anne POTTER, all of Jericho, New York, 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 10th day of December, A.D. 2013.

ATTEST:

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



By

*Assistant Secretary
Eric D. Barnes*

*Vice President
Thomas O. McClellan*

State of Maryland
City of Baltimore

On this 10th day of December, A.D. 2013, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **THOMAS O. MCCLELLAN, Vice President, and ERIC D. BARNES, 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, depose 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, Notary Public
My Commission Expires: July 14, 2015*



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 AUG 19 2014



Geoffrey Delisio

Geoffrey Delisio, Vice President

FIDELITY AND DEPOSIT COMPANY

OF MARYLAND

600 Red Brook Blvd., Suite 600, Owings Mills, MD 21117

Statement of Financial Condition

As Of December 31, 2013

ASSETS

Bonds.....	\$ 139,272,722
Stocks.....	22,258,887
Cash and Short Term Investments.....	6,595,113
Reinsurance Recoverable.....	17,970,134
Other Accounts Receivable.....	33,409,916
TOTAL ADMITTED ASSETS.....	\$ 219,506,772

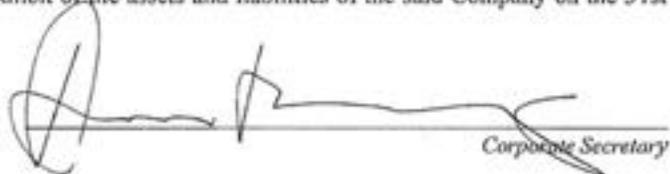
LIABILITIES, SURPLUS AND OTHER FUNDS

Reserve for Taxes and Expenses.....	\$ 1,787,480
Ceded Reinsurance Premiums Payable.....	42,146,005
Securities Lending Collateral Liability.....	6,613,750
TOTAL LIABILITIES.....	\$ 50,547,235
Capital Stock, Paid Up.....	\$ 5,000,000
Surplus.....	163,959,537
Surplus as regards Policyholders.....	168,959,537
TOTAL.....	\$ 219,506,772

Securities carried at \$58,378,690 in the above statement are deposited with various states as required by law.

Securities carried on the basis prescribed by the National Association of Insurance Commissioners. On the basis of market quotations for all bonds and stocks owned, the Company's total admitted assets at December 31, 2013 would be \$223,222,696 and surplus as regards policyholders \$172,675,461.

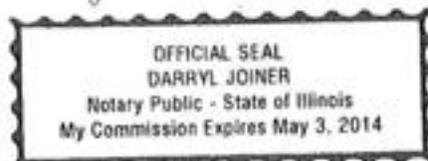
I, DENNIS F. KERRIGAN, Corporate Secretary of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing statement is a correct exhibit of the assets and liabilities of the said Company on the 31st day of December, 2013.


Corporate Secretary

State of Illinois }
City of Schaumburg } SS:

Subscribed and sworn to, before me, a Notary Public of the State of Illinois, in the City of Schaumburg, this 15th day of March, 2014.

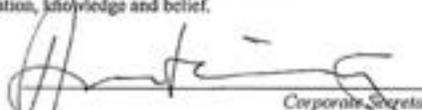

Notary Public



ZURICH AMERICAN INSURANCE COMPANY
COMPARATIVE BALANCE SHEET
ONE LIBERTY PLAZA, 165 BROADWAY, 32nd FLOOR, NEW YORK, NY 10006
As of December 31, 2013 and December 31, 2012

	12/31/2013	12/31/2012
Assets		
Bonds	\$ 18,990,565,123	\$ 18,907,466,866
Preferred Stock	-	-
Common Stock	2,411,755,638	2,123,025,432
Other Invested Assets	2,505,133,631	2,035,077,824
Short-term Investments	327,019,081	126,053,209
Receivable for securities	123,767,865	134,410,839
Cash and cash equivalents	(65,045,469)	728,298,115
Securities lending reinvested collateral assets	208,060,537	225,335,750
Employee Trust for Deferred Compensation Plan	142,420,097	130,493,778
Total Cash and Invested Assets	\$ 24,643,676,503	\$ 24,410,161,814
Premiums Receivable	\$ 3,358,946,105	\$ 3,649,247,239
Funds Held with Reinsurers	2,383,155	3,681,443
Reinsurance Recoverable	391,812,478	215,451,507
Accrued Investment Income	113,886,701	121,729,727
Federal Income Tax Recoverable	940,033,456	930,267,731
Due from Affiliates	183,852,738	187,274,289
Other Assets	549,410,052	493,265,075
Total Assets	\$ 30,184,001,188	\$ 30,011,078,824
Liabilities and Policyholders' Surplus		
Liabilities:		
Loss and LAE Reserves	\$ 13,894,112,327	\$ 14,244,436,264
Unearned Premium Reserve	4,321,146,577	4,159,670,241
Funds Held with Reinsurers	185,460,548	212,412,675
Loss In Course of Payment	357,922,606	408,170,112
Commission Reserve	68,132,284	64,038,359
Federal Income Tax Payable	290,773,995	16,190,044
Remittances and Items Unallocated	111,710,550	196,410,982
Payable to parent, subs and affiliates	154,428,297	57,540,814
Provision for Reinsurance	43,942,761	66,649,220
Ceded Reinsurance Premiums Payable	807,651,125	551,510,878
Securities Lending Collateral Liability	208,060,537	225,335,750
Other Liabilities	1,942,241,242	2,166,453,164
Total Liabilities	\$ 22,385,582,849	\$ 22,368,818,502
Policyholders' Surplus:		
Common Capital Stock	\$ 5,000,000	\$ 5,000,000
Paid-In and Contributed Surplus	4,394,131,321	4,394,131,321
Surplus Notes	-	430,000,000
Special Surplus Funds	34,865,000	43,259,000
Cumulative Unrealized Gain	505,136,565	331,857,594
Unassigned Surplus	2,859,285,454	2,438,012,408
Total Policyholders' Surplus	\$ 7,798,418,339	\$ 7,642,260,323
Total Liabilities and Policyholders' Surplus	\$ 30,184,001,188	\$ 30,011,078,824

I, Dennis F. Kerrigan, Corporate Secretary of ZURICH AMERICAN INSURANCE COMPANY do hereby certify that the foregoing statement is a correct exhibit of the assets and liabilities of the said Company, on the 31st day of December, 2013, according to the best of my information, knowledge and belief.



 Corporate Secretary

State of Illinois
 County of Cook

} SS:

Subscribed and sworn to, before me, a Notary Public of the State of Illinois, in the City of Schaumburg, this 15th day of March, 2014.



 Notary Public

OFFICIAL SEAL
 DARRYL JOINER
 Notary Public - State of Illinois
 My Commission Expires May 3, 2014



**Chubb
Surety**

**POWER
OF
ATTORNEY**

**Federal Insurance Company
Vigilant Insurance Company
Pacific Indemnity Company**

**Attn: Surety Department
15 Mountain View Road
Warren, NJ 07059**

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 **Andrea E. Gorbett, Annette Leuschner, James E. Marran, Jr., Anne Potter, David W. Rosehill, Nancy Schnee, Valorie Spates and Beverly A. Woolford of Jericho, New York**-----

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 **28th** day of **January, 2013**.

Dawn M. Chloros, Assistant Secretary

David B. Norris, Jr., Vice President

STATE OF NEW JERSEY

County of Somerset

ss.

On this **28th** day of **January, 2013** 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 he 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 the By-Laws of said Companies; and that he signed said Power of Attorney as Assistant Secretary of said Companies by like authority, and that he is acquainted with David B. Norris, Jr., and knows him to be Vice President of said Companies; and that the signature of David B. Norris, Jr., subscribed to said Power of Attorney is in the genuine handwriting of David B. Norris, Jr., and was thereto subscribed by authority of said By-Laws and in deponent's presence.

Notarial Seal



**KATHERINE J. ADELAAR
NOTARY PUBLIC OF NEW JERSEY
No. 2316685
Commission Expires July 14, 2014**

Notary Public

CERTIFICATION

Extract from the By-Laws of **FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY**:

"All powers of attorney for and on behalf of the Company may and shall be executed in the name and on behalf of the Company, either by the Chairman or the President or a Vice President or an Assistant Vice President, jointly with the Secretary or an Assistant Secretary, under their respective designations. The signature of such officers may be engraved, printed or lithographed. The signature of each of the following officers: Chairman, President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary and the seal of the Company may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such power of attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding upon the Company with respect to any bond or undertaking to which it is attached."

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 extract of the By-Laws of the Companies is true and correct,
- (ii) the Companies are duly licensed and authorized to transact surety business in all 50 of the United States of America and the District of Columbia and are authorized by the U.S. Treasury Department, further, Federal and Vigilant are licensed in Puerto Rico and the U.S. Virgin Islands, and Federal is licensed in American Samoa, Guam, and each of the Provinces of Canada except Prince Edward Island, and
- (iii) the foregoing Power of Attorney is true, correct and in full force and effect.

Given under my hand and seals of said Companies at Warren, NJ this day of **AUG 19 2014**



Dawn M. Chloros, Assistant Secretary

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

FEDERAL INSURANCE COMPANY

STATEMENT OF ASSETS, LIABILITIES AND SURPLUS TO POLICYHOLDERS

Statutory Basis

DECEMBER 31, 2013

(in thousands of dollars)

<u>ASSETS</u>		<u>LIABILITIES AND SURPLUS TO POLICYHOLDERS</u>	
Cash and Short Term Investments.....	\$ 352,393	Outstanding Losses and Loss Expenses.....	\$ 12,129,450
United States Government, State and Municipal Bonds.....	9,295,185	Unearned Premiums.....	3,504,583
Other Bonds.....	5,535,360	Ceded Reinsurance Premiums Payable.....	338,026
Stocks.....	1,000,938	Provision for Reinsurance.....	61,351
Other Invested Assets.....	1,452,598	Other Liabilities.....	986,628
TOTAL INVESTMENTS.....	17,636,474	TOTAL LIABILITIES.....	17,020,038
Investments in Affiliates:		Capital Stock.....	20,980
Chubb Investment Holdings, Inc.....	3,364,996	Paid-In Surplus.....	3,106,809
Pacific Indemnity Company.....	2,771,422	Unassigned Funds.....	11,613,523
Executive Risk Indemnity Inc.....	1,218,625		
Chubb Insurance Investment Holdings Ltd....	1,111,941	SURPLUS TO POLICYHOLDERS.....	14,741,312
CC Canada Holdings Ltd.....	629,592		
Great Northern Insurance Company.....	478,838		
Chubb Insurance Company of Australia Ltd.	449,419		
Chubb European Investment Holdings SLP..	281,312		
Vigilant Insurance Company.....	264,883		
Other Affiliates.....	472,259		
Premiums Receivable.....	1,586,676		
Other Assets.....	1,494,913		
TOTAL ADMITTED ASSETS.....	\$ 31,761,350	TOTAL LIABILITIES AND SURPLUS TO POLICYHOLDERS.....	\$ 31,761,350

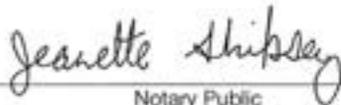
Investments are valued in accordance with requirements of the National Association of Insurance Commissioners.
At December 31, 2013, investments with a carrying value of \$452,687,680 were deposited with government authorities
as required by law.

State, County & City of New York, — ss:

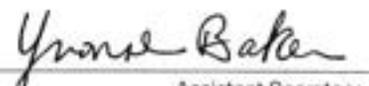
Yvonne Baker, Assistant Secretary _____ of the Federal Insurance Company

being duly sworn, deposes and says that the foregoing Statement of Assets, Liabilities and Surplus to Policyholders of said Federal Insurance Company on December 31, 2013 is true and correct and is a true abstract of the Annual Statement of said Company as filed with the Secretary of the Treasury of the United States for the 12 months ending December 31, 2013.

Subscribed and sworn to before me
this March 11, 2014.


Notary Public

JEANETTE SHIPSEY
Notary Public, State of New York
No. 02SH5074142
Qualified in Nassau County
Commission Expires March 10, 2015


Assistant Secretary

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

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

Certificate No. 6649141

American Fire and Casualty Company
The Ohio Casualty Insurance Company

Liberty Mutual Insurance Company
West American Insurance Company

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That American Fire & Casualty Company and The Ohio Casualty Insurance Company are corporations 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, Andrea E. Gorbert; Anne Potter; Annette Leuschner; Beverly A. Woolford; David W. Rosehill; Nancy Schnee; Valorie Spates

all of the city of Jericho, state of NY 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 24th day of April, 2014

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

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



STATE OF PENNSYLVANIA ss
COUNTY OF MONTGOMERY

On this 24th day of April, 2014, before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of American Fire and Casualty Company, Liberty Mutual Insurance Company, The Ohio Casualty Insurance 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 Plymouth Meeting, Pennsylvania, on the day and year first above written.



COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Teresa Pastella, Notary Public
Plymouth Twp., Montgomery County
My Commission Expires March 28, 2017
Member, Pennsylvania Association of Notaries

By: Teresa Pastella
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of American Fire and Casualty Company, 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, Gregory W. Davenport, the undersigned, Assistant Secretary, of American Fire and Casualty Company, 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 day of , 20

AUG 19 2014



By: Gregory W. Davenport
Gregory W. Davenport, 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.



LIBERTY MUTUAL INSURANCE COMPANY
FINANCIAL STATEMENT — DECEMBER 31, 2013

Assets		Liabilities	
Cash and Bank Deposits.....	\$1,118,180,550	Unearned Premiums.....	\$5,940,431,054
*Bonds — U.S Government.....	1,888,225,943	Reserve for Claims and Claims Expense	17,305,063,560
*Other Bonds.....	12,039,490,815	Funds Held Under Reinsurance Treaties.....	212,659,311
*Stocks	9,030,962,112	Reserve for Dividends to Policyholders.....	1,226,236
Real Estate.....	251,301,907	Additional Statutory Reserve.....	63,348,980
Agents' Balances or Uncollected Premiums.....	4,781,042,931	Reserve for Commissions, Taxes and Other Liabilities	5,826,683,629
Accrued Interest and Rents.....	149,855,386	Total	\$29,349,412,770
Other Admitted Assets.....	<u>15,216,749,451</u>	Special Surplus Funds.....	\$55,686,852
		Capital Stock.....	11,250,000
		Paid in Surplus.....	7,898,288,167
		Unassigned Surplus.....	7,161,171,306
Total Admitted Assets.....	<u>\$44,475,809,095</u>	Surplus to Policyholders	<u>15,126,396,325</u>
		Total Liabilities and Surplus	<u>\$44,475,809,095</u>



* Bonds are stated at amortized or investment value; Stocks at Association Market Values.
The foregoing financial information is taken from Liberty Mutual Insurance Company's financial statement filed with the state of Massachusetts Department of Insurance.

I, TIM MIKOLAJEWSKI, Assistant Secretary of Liberty Mutual Insurance Company, do hereby certify that the foregoing is a true, and correct statement of the Assets and Liabilities of said Corporation, as of December 31, 2013, to the best of my knowledge and belief.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation at Seattle, Washington, this 20th day of March, 2014.

T. Mikolajewski

Assistant Secretary

Authorizing By-Laws and 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:

***Article VI-Execution of Documents**

Section 3. Appointment of Attorney-in-Fact. The Chairman of the Board of Directors, the President or any Executive or Senior Vice President may, from time to time, appoint by written certificates attorneys-in-fact to act in behalf of the Company in the execution of policies of insurance, bonds, undertakings and other obligatory instruments of like nature. Such attorneys-in-fact, subject to the limitations set forth in their respective certificates of authority shall have full power to bind the Company by their signature and execution of any such instruments and to attach the seal of the Company thereto. The Chairman of the Board of Directors, the President or any Executive or Senior Vice President or the Board of Directors, may, at any time, revoke all power and authority previously given to any attorney-in-fact.

This Power of Attorney is granted and is signed by facsimile under and by the authority of the following Resolution adopted by the Executive Committee of the Board of Directors of The Continental Insurance Company by unanimous written consent dated the 13th day of January, 1989:

RESOLVED, that the signatures of such officers and the seal of the Company may be affixed to any such Power of Attorney or to any certificate relating thereto by facsimile, and any such Power of Attorney or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the Company when so affixed and in the future with respect to any bond, undertaking or contract of suretyship to which it is attached."

THE CONTINENTAL INSURANCE COMPANY
Radnor, Pennsylvania
Statement of Net Admitted Assets and Liabilities
December 31, 2013

ASSETS

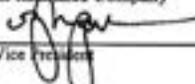
Bonds	\$ 1,684,328,034
Stocks	158,773,278
Cash and short-term investments	187,796,353
Amounts recoverable from reinsurers	193,598,356
Net deferred tax asset	73,211,237
Other assets	47,825,939
Total Assets	<u><u>\$ 2,345,533,197</u></u>

LIABILITIES AND SURPLUS

Losses	\$ 908,894,332
Loss adjustment expense	34,732,682
Unearned premiums	-
Ceded reinsurance premiums payable (net of ceding commissions)	26,174,058
Funds held by company under reinsurance treaties	719,991,228
Provision for reinsurance	76,000,000
Other liabilities	(787,119,094)
Total Liabilities	<u><u>978,673,206</u></u>
 Surplus Account:	
Capital paid up	53,566,360
Gross paid in and contributed surplus	1,423,436,994
Special Surplus	105,639,025
Unassigned funds	<u>(215,782,388)</u>
Surplus as regards policyholders	1,366,859,991
Total Liabilities and Capital	<u><u>\$ 2,345,533,197</u></u>

I, OJ B. Magana, Assistant Vice President of The Continental Insurance Company hereby certify that the above is an accurate representation of the financial statement of the Company dated December 31, 2013, as filed with the various Insurance Departments and is a true and correct statement of the condition of The Continental Insurance Company as of that date.

The Continental Insurance Company

By 
Assistant Vice President

Subscribed and sworn to me this 12th day of March, 2014.

My commission expires:


Notary Public



POWER OF ATTORNEY

Direct Inquiries/Claims to:

THE HARTFORD

Bond T-4

One Hartford Plaza

Hartford, Connecticut 06155

call: 888-266-3488 or fax: 860-757-5835)

Agency Code: 12-122777

KNOW ALL PERSONS BY THESE PRESENTS THAT:

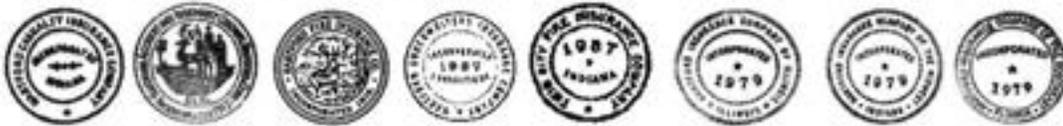
- Hartford Fire Insurance Company, a corporation duly organized under the laws of the State of Connecticut
- Hartford Casualty Insurance Company, a corporation duly organized under the laws of the State of Indiana
- Hartford Accident and Indemnity Company, a corporation duly organized under the laws of the State of Connecticut
- Hartford Underwriters Insurance Company, a corporation duly organized under the laws of the State of Connecticut
- Twin City Fire Insurance Company, a corporation duly organized under the laws of the State of Indiana
- Hartford Insurance Company of Illinois, a corporation duly organized under the laws of the State of Illinois
- Hartford Insurance Company of the Midwest, a corporation duly organized under the laws of the State of Indiana
- Hartford Insurance Company of the Southeast, a corporation duly organized under the laws of the State of Florida

having their home office in Hartford, Connecticut (hereinafter collectively referred to as the "Companies") do hereby make, constitute and appoint, **up to the amount of Unlimited** :

Valorie Spates of New York NY, Andrea E. Gorbert, Annette Leuschner, James E. Marran, Anne Potter, David W. Rosehill, Nancy Schnee, Beverly Woolford of JERICHO, New York

their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign its name as surety(ies) only as delineated above by , and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

In Witness Whereof, and as authorized by a Resolution of the Board of Directors of the Companies on August 1, 2009, the Companies have caused these presents to be signed by its Vice President and its corporate seals to be hereto affixed, duly attested by its Assistant Secretary. Further, pursuant to Resolution of the Board of Directors of the Companies, the Companies hereby unambiguously affirm that they are and will be bound by any mechanically applied signatures applied to this Power of Attorney.



Wesley W. Cowling

Wesley W. Cowling, Assistant Secretary

M. Ross Fisher

M. Ross Fisher, Vice President

STATE OF CONNECTICUT

COUNTY OF HARTFORD

} ss. Hartford

On this 12th day of July, 2012, before me personally came M. Ross Fisher, to me known, who being by me duly sworn, did depose and say: that he resides in the County of Hartford, State of Connecticut; that he is the Vice President of the Companies, the corporations described in and which executed the above instrument; that he knows the seals of the said corporations; that the seals affixed to the said instrument are such corporate seals; that they were so affixed by authority of the Boards of Directors of said corporations and that he signed his name thereto by like authority.



CERTIFICATE

Kathleen T. Maynard

Kathleen T. Maynard
Notary Public

My Commission Expires July 31, 2016

I, the undersigned, Vice President of the Companies, 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 still in full force effective as of
Signed and sealed at the City of Hartford.

AUG 19 2014



Gary W. Stumper

Gary W. Stumper, Vice President

HARTFORD FIRE INSURANCE COMPANY

Hartford, Connecticut

Financial Statement, December 31, 2013

Statutory Basis

ASSETS		LIABILITIES	
U.S. Government Bonds	\$ 780,061,723	Reserve for Claims	\$
Bonds of Other Governments	205,462,236	and Claim Expense	7,398,473,964
State, County Municipal		Reserve for Unearned Premiums	1,974,760,680
Miscellaneous Bonds	12,573,216,866	Reserve for Taxes, License	
Stocks	5,555,472,843	and Fees	65,815,530
Short Term Investments	530,067,872	Miscellaneous Liabilities	2,164,375,329
	<u>\$ 19,644,281,540</u>	Total Liabilities	<u>\$ 11,603,425,503</u>
Real Estate	\$ 218,502,301	Capital Paid In \$	55,320,000
Cash	83,164,668	Surplus	<u>14,026,092,911</u>
Agents' Balances (Under 90 Day)	2,811,774,213		
Other Invested Assets	574,272,350	Surplus as regards Policyholders	<u>\$ 14,081,412,911</u>
Miscellaneous	2,352,843,342	Total Liabilities, Capital	
Total Admitted Assets	<u>\$ 25,684,838,414</u>	and Surplus	<u>\$ 25,684,838,414</u>

STATE OF CONNECTICUT
 COUNTY OF HARTFORD
 CITY OF HARTFORD

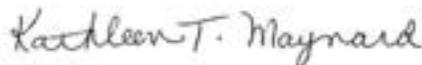
} ss.

M. Ross Fisher, Vice President, and Wesley W. Cowling, Assistant Secretary of the Hartford Fire Insurance Company, being duly sworn, each deposes and say that the foregoing is a true and correct statement of the said company's financial condition as of December 31, 2013.

Subscribed and sworn to before me
 this 22nd day of April, 2014.

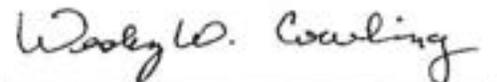


M. Ross Fisher, Vice President



Kathleen T. Maynard
 Notary Public

My Commission Expires July 31, 2016

Wesley W. Cowling, Assistant Secretary



Design-Build Project For Route 29 Solutions
Albemarle County, Virginia
Contract ID No. C00077383DB80

3.2.10

SCC and DPOR Table and Supporting Registrations



Skanska-Branch A Joint Venture

ATTACHMENT 3.2.10

DESIGN-BUILD PROJECT FOR ROUTE 29 SOLUTIONS, CONTRACT ID C00077383DB80

SCC and DPOR Information

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

SCC & DPOR INFORMATION FOR BUSINESSES (RFQ Sections 3.2.10.1 and 3.2.10.2)							
Business Name	SCC Information (3.2.10.1)			DPOR Information (3.2.10.2)			
	SCC Number	SCC Type of Corporation	SCC Status	DPOR Registered Address	DPOR Registration Type	DPOR Registration Number	DPOR Expiration Date
Skanska USA Civil Southeast Inc.	0038275-4	Corporation	Active	295 Bendix Road Suite 400 Virginia Beach, VA 23452	Class A Contractors	2701000041	10-31-2014
Branch Highways, Inc.	0295618-3	Corporation	Active	P.O. Box 40004 Roanoke, VA 24022-0004	Class A Contractors	270129434	03-31-2015
Johnson, Mirmiran & Thompson, Inc.	F149901-3	Corporation	Active	9201 Arboretum Parkway Suite 310 Richmond, VA 23236	ENG, LS	041100029	02-29-2016
				72 Loveton Circle Sparks, MD 21152	ENG, LA, ARC, LS	0407001314	12-31-2015
				13921 Park Center Road Suite 140 Herndon, VA 20171	ENG, LS	0411000441	02-29-2016
				272 Bendix Road Suite 260 Virginia Beach, VA 23452	ENG, LS	0411000440	02-29-2016
CES Consulting, LLC	S341600-7	Limited Liability Company	Active	13991 Virginia Cedar Ct. Gainesville, VA 20155	ENG	0407005783	12-31-2015
EMC2, Inc.	0399766-5	Corporation	Active	10110 Molecular Drive Suite 314 Rockville, MD 20850	ENG	0407006470	12-31-2015
Schnabel Engineering Consultants, Inc.	0712674-1	Corporation	Active	One Cary Street Richmond, VA 23220	ENG	0411000700	02-29-2016
				480 Four Season Drive Charlottesville, VA 22901	ENG	0411000698	02-29-2016
EPR, P.C.	0734485-6	Professional Corporation	Active	637 Berkmar Circle Charlottesville, VA 22911	ENG	0405001919	12-31-2015

ATTACHMENT 3.2.10

DESIGN-BUILD PROJECT FOR ROUTE 29 SOLUTIONS, CONTRACT ID C00077383DB80

SCC and DPOR Information

EEE Consulting, Inc.	0504941-6	Corporation	Active	201 Church Street Blacksburg, VA 24060	ENG	0411000435	02-29-2016
				8525 Bell Creek Road Mechanicsville, VA 23116	ENG	0407003798	12-31-2015
Dovetail Cultural Resource Group I, Inc.**	0668553-1	Corporation	Active	300 Central Road Suite 200 Fredericksburg, VA 22401	NA	NA	NA
Moffatt & Nichol, Inc.	F058239-7	Corporation	Active	1100 Boulders Parkway Suite 350 Richmond, VA 23225	ENG	0407002877	12-31-2015
				800 World Trade Center Norfolk, VA 23510	ENG	0411000532	02-29-2016
				1616 E. Millbrook Road Suite 160 Raleigh, NC 27609	ENG	0411001090	02-29-2016
Volkert, Inc.	F136659-2	Corporation	Active	5400 Shawnee Road Suite 301 Alexandria, VA 2312	ENG, LA	0407002610	12-31-2015
				1214 Progressive Drive Suite 102 Chesapeake, VA 23320	ENG	0411000940	02-29-2016
Appraisal Review Specialists, LLC**	T049068-2	Limited Liability Company	Active	3058 Mount Vernon Road Suite 12 Hurricane, WV 25526	Appraisal Business Registration	4008001735	04-30-2016
Sharp & Company, Inc.**	F176141-2	Corporation	Active	794 Nelson Street Rockville, MD 20850	NA	NA	NA

** These firms do not provide professional services.

ATTACHMENT 3.2.10

DESIGN-BUILD PROJECT FOR ROUTE 29 SOLUTIONS, CONTRACT ID C00077383DB80

SCC and DPOR Information

DPOR INFORMATION FOR INDIVIDUALS (RFQ Sections 3.2.10.3 and 3.2.10.4)						
Business Name	Individual's Name	Office Location Where Professional Services will be Provided (City/State)	Individual's DPOR Address	DPOR Type	DPOR Registration Number	DPOR Expiration Date
Johnson, Mirmiran & Thompson, Inc.	Lawrence Weir Brown	Richmond, VA	12213 Chiasso Way Chesterfield, VA 23838	ENG	0402047134	06-30-2016
	William E. Schaub	Sparks, MD	3805 Three Wood Dr. Hampstead, MD 21074	ENG	0402047571	07-31-2016
	Gary R. Miller	Sparks, MD	720 Marvel Dr. Westminster, MD 21157	ENG	0402048752	03-31-2015
	Matthew J. Wolniak	Sparks, MD	9 Silent Meadow Ct. Cockeysville, MD 20130	ENG	0402023760	12-31-2014
	David Anthony Malinoski	Richmond, VA	6153 Stronghold Dr. Mechanicsville, VA 23111	ENG	0402031971	02-29-2016
Schnabel Engineering Consultants, Inc.	Edward George Drahos	Glen Allen, VA	14410 Galloway Ct. Midlothian, VA 23113	ENG	0402015605	07-31-2015
V. Lynn Kelsey**	Valerie Lynn Kelsey	Spotsylvania, VA	13511 Buglenote Way Spotsylvania, VA 22553	Certified General Real Estate Appraiser	4001010298	11-30-2015

**Sole Proprietor (Not required to be registered with the SCC).



Design-Build Project For Route 29 Solutions
Albemarle County, Virginia
Contract ID No. C00077383DB80



.1 SCC Business Entity



Please note: The SCC website will be unavailable Thursday, August 21, from 6 p.m. to 10 p.m. for system maintenance. We apologize for the inconvenience and appreciate your patience.

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CISM0180

CORPORATE DATA INQUIRY

08/19/14

18:12:19

CORP ID: 0038275 - 4 STATUS: 00 ACTIVE STATUS DATE: 06/22/11
 CORP NAME: Skanska USA Civil Southeast Inc.

DATE OF CERTIFICATE: 05/09/1932 PERIOD OF DURATION: INDUSTRY CODE: 00
 STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
 MERGER IND: S SURVIVOR CONVERSION/DOMESTICATION IND:
 GOOD STANDING IND: Y MONITOR INDICATOR:
 CHARTER FEE: MON NO: MON STATUS: MONITOR DTE:
 R/A NAME: CORPORATION SERVICE COMPANY

STREET: BANK OF AMERICA CENTER, 16TH FLOOR AR RTN MAIL:
 1111 EAST MAIN STREET

CITY: RICHMOND STATE : VA ZIP: 23219

R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 07/01/14 LOC : 216

ACCEPTED AR#: 214 51 9659 DATE: 04/16/14 RICHMOND CITY

CURRENT AR#: 214 51 9659 DATE: 04/16/14 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
14	1,700.00					1,000,000

(Screen Id:/Corp_Data_Inquiry)

Please note: The SCC website will be unavailable Thursday, August 21, from 6 p.m. to 10 p.m. for system maintenance. We apologize for the inconvenience and appreciate your patience.

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State Corporation Commission

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CISM0180

CORPORATE DATA INQUIRY

08/19/14

18:15:15

CORP ID: 0295618 - 3 STATUS: 00 ACTIVE STATUS DATE: 11/25/86
CORP NAME: BRANCH HIGHWAYS, INC.

DATE OF CERTIFICATE: 11/25/1986 PERIOD OF DURATION: INDUSTRY CODE: 00
STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: MON NO: MON STATUS: MONITOR DTE:
R/A NAME: MELANIE F WHEELER

STREET: 442 RUTHERFORD AVE NE AR RTN MAIL:

CITY: ROANOKE STATE : VA ZIP: 24016
R/A STATUS: 2 OFFICER EFF. DATE: 01/11/08 LOC : 217
ACCEPTED AR#: 213 16 7645 DATE: 11/20/13 ROANOKE CITY
CURRENT AR#: 213 16 7645 DATE: 11/20/13 STATUS: A ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
13 100.00 5,000

(Screen Id:/Corp_Data_Inquiry)



Commonwealth of Virginia
State Corporation Commission

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CISM0180

CORPORATE DATA INQUIRY

06/24/14

18:58:48

CORP ID: F149901 - 3 STATUS: 00 ACTIVE STATUS DATE: 10/17/06
 CORP NAME: Johnson, Mirmiran & Thompson, Inc.

DATE OF CERTIFICATE: 10/17/2006 PERIOD OF DURATION: INDUSTRY CODE: 70
 STATE OF INCORPORATION: MD MARYLAND STOCK INDICATOR: S STOCK
 MERGER IND: CONVERSION/DOMESTICATION IND:
 GOOD STANDING IND: Y MONITOR INDICATOR:
 CHARTER FEE: 50.00 MON NO: MON STATUS: MONITOR DTE:
 R/A NAME: ROBERT GALLAGHER

STREET: 9201 ARBORETUM PKY STE 140 AR RTN MAIL:

CITY: RICHMOND STATE : VA ZIP: 23236
 R/A STATUS: 2 OFFICER EFF. DATE: 09/06/07 LOC : 120
 ACCEPTED AR#: 213 56 5183 DATE: 02/20/14 CHESTERFIELD CO
 CURRENT AR#: 213 56 5183 DATE: 02/20/14 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
13	100.00					1,000

 (Screen Id:/Corp_Data_Inquiry)

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08/19/14

LLCM3220

LLC DATA INQUIRY

18:16:29

LLC ID: S341600 - 7 STATUS: 00 ACTIVE STATUS DATE: 10/14/10
LLC NAME: CES Consulting, LLC

DATE OF FILING: 10/14/2010 PERIOD OF DURATION: INDUSTRY CODE: 70

STATE OF FILING: VA VIRGINIA MERGER INDICATOR:

CONVERSION/DOMESTICATION INDICATOR:

P R I N C I P A L O F F I C E A D D R E S S

STREET: 13991 VIRGINIA CEDAR COURT

CITY: GAINESVILLE STATE: VA ZIP: 20155-0000

R E G I S T E R E D A G E N T I N F O R M A T I O N

R/A NAME: AVTAR SINGH

STREET: 13991 VIRGINIA CEDAR COURT

RTN MAIL:

CITY: GAINESVILLE STATE: VA ZIP: 20155-0000

R/A STATUS: 1 MEMBER/MANAGER EFF DATE: 01/04/13 LOC: 176 PRINCE WILLIAM

YEAR FEES PENALTY INTEREST BALANCE

14 50.00

(Screen Id:/LLC_Data_Inquiry)

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CISM0180

CORPORATE DATA INQUIRY

08/19/14

18:19:43

CORP ID: 0399766 - 5 STATUS: 00 ACTIVE STATUS DATE: 10/22/92
CORP NAME: EMC2, INC.

DATE OF CERTIFICATE: 10/22/1992 PERIOD OF DURATION: INDUSTRY CODE: 00
STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: 50.00 MON NO: MON STATUS: MONITOR DTE:
R/A NAME: GARY D. LECLAIR

STREET: LECLAIR RYAN, A PROFESSIONAL CORPORATION AR RTN MAIL:
951 E BYRD ST RIVERFRONT PLZ E TWR
CITY: RICHMOND STATE : VA ZIP: 23219
R/A STATUS: 4 ATTORNEY EFF. DATE: 05/04/05 LOC : 216
ACCEPTED AR#: 213 15 2819 DATE: 10/16/13 RICHMOND CITY
CURRENT AR#: 213 15 2819 DATE: 10/16/13 STATUS: A ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
14 100.00 100.00 5,000

(Screen Id:/Corp_Data_Inquiry)

Please note: The SCC website will be unavailable Thursday, August 21, from 6 p.m. to 10 p.m. for system maintenance. We apologize for the inconvenience and appreciate your patience.

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CISM0180

CORPORATE DATA INQUIRY

08/19/14

18:21:55

CORP ID: 0712674 - 1 STATUS: 00 ACTIVE STATUS DATE: 08/12/09
 CORP NAME: Schnabel Engineering Consultants, Inc.

DATE OF CERTIFICATE: 08/12/2009 PERIOD OF DURATION: INDUSTRY CODE: 00
 STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
 MERGER IND: CONVERSION/DOMESTICATION IND:
 GOOD STANDING IND: Y MONITOR INDICATOR:
 CHARTER FEE: 50.00 MON NO: MON STATUS: MONITOR DTE:
 R/A NAME: CT CORPORATION SYSTEM

STREET: 4701 COX ROAD, SUITE 285

AR RTN MAIL:

CITY: GLEN ALLEN

STATE : VA ZIP: 23060

R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 10/04/13 LOC : 143

ACCEPTED AR#: 214 10 8962 DATE: 07/22/14 HENRICO COUNTY

CURRENT AR#: 214 10 8962 DATE: 07/22/14 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
14	130.00					10,000

(Screen Id:/Corp_Data_Inquiry)



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CISM0180

CORPORATE DATA INQUIRY

08/26/14

19:12:10

CORP ID: 0734485 - 6 STATUS: 00 ACTIVE STATUS DATE: 03/08/11
 CORP NAME: **EPR, P.C.**

DATE OF CERTIFICATE: 03/08/2011 PERIOD OF DURATION: INDUSTRY CODE: 70
 STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
 MERGER IND: CONVERSION/DOMESTICATION IND:
 GOOD STANDING IND: Y MONITOR INDICATOR:
 CHARTER FEE: 50.00 MON NO: MON STATUS: MONITOR DTE:
 R/A NAME: LYNETTE WUENSCH

STREET: 3205 WATTS STATION DR AR RTN MAIL:

CITY: CHARLOTTESVILLE STATE : VA ZIP: 22911
 R/A STATUS: 1 DIRECTOR EFF. DATE: 03/08/11 LOC : 101
 ACCEPTED AR#: 214 50 8228 DATE: 02/12/14 ALBEMARLE COUNT
 CURRENT AR#: 214 50 8228 DATE: 02/12/14 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
14	100.00					5,000

 (Screen Id:/Corp_Data_Inquiry)



Commonwealth of Virginia
State Corporation Commission

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CISM0180

CORPORATE DATA INQUIRY

06/24/14

19:07:58

CORP ID: 0504941 - 6 STATUS: 00 ACTIVE STATUS DATE: 08/04/04
 CORP NAME: EEE CONSULTING, INC.

DATE OF CERTIFICATE: 06/23/1998 PERIOD OF DURATION: INDUSTRY CODE: 00
 STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
 MERGER IND: CONVERSION/DOMESTICATION IND:
 GOOD STANDING IND: Y MONITOR INDICATOR:
 CHARTER FEE: 700.00 MON NO: MON STATUS: MONITOR DTE:
 R/A NAME: CT CORPORATION SYSTEM

STREET: 4701 COX ROAD, SUITE 285 AR RTN MAIL:

CITY: GLEN ALLEN STATE : VA ZIP: 23060
 R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 10/04/13 LOC : 143
 ACCEPTED AR#: 214 52 6530 DATE: 05/23/14 HENRICO COUNTY
 CURRENT AR#: 214 52 6530 DATE: 05/23/14 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
14	1,700.00					333,000

 (Screen Id:/Corp_Data_Inquiry)

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Commonwealth of Virginia
State Corporation Commission

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08/19/14

CISM0180

CORPORATE DATA INQUIRY

18:23:20

CORP ID: 0668553 - 1 STATUS: 00 ACTIVE STATUS DATE: 11/30/06
CORP NAME: Dovetail Cultural Resource Group I, Inc.

DATE OF CERTIFICATE: 11/30/2006 PERIOD OF DURATION: INDUSTRY CODE: 00
STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: 50.00 MON NO: MON STATUS: MONITOR DTE:
R/A NAME: CHARLES W PAYNE JR

STREET: 725 JACKSON ST STE 200

AR RTN MAIL:

CITY: FREDERICKSBURG

STATE : VA ZIP: 22401

R/A STATUS: 4 ATTORNEY

EFF. DATE: 11/30/06 LOC : 206

ACCEPTED AR#: 213 16 7141 DATE: 11/18/13

FREDERICKSBURG

CURRENT AR#: 213 16 7141

DATE: 11/18/13

STATUS: A

ASSESSMENT INDICATOR: 0

YEAR

FEES

PENALTY

INTEREST

TAXES

BALANCE

TOTAL SHARES

13

100.00

1,000

(Screen Id:/Corp_Data_Inquiry)



Commonwealth of Virginia
State Corporation Commission

Virg

CISM0180

CORPORATE DATA INQUIRY

08/26/14

09:54:53

CORP ID: F058239 - 7 STATUS: 00 ACTIVE STATUS DATE: 05/29/01
 CORP NAME: MOFFATT & NICHOL, Inc. (USED IN VA BY: MOFFATT & NICHOL)
 DATE OF CERTIFICATE: 03/06/2000 PERIOD OF DURATION: INDUSTRY CODE: 70
 STATE OF INCORPORATION: CA CALIFORNIA STOCK INDICATOR: S STOCK
 MERGER IND: CONVERSION/DOMESTICATION IND:
 GOOD STANDING IND: Y MONITOR INDICATOR:
 CHARTER FEE: MON NO: MON STATUS: MONITOR DTE:
 R/A NAME: CT CORPORATION SYSTEM
 STREET: 4701 COX ROAD, SUITE 285 AR RTN MAIL:
 CITY: GLEN ALLEN STATE : VA ZIP: 23060
 R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 10/04/13 LOC : 143
 ACCEPTED AR#: 214 50 7658 DATE: 02/07/14 HENRICO COUNTY
 CURRENT AR#: 214 50 7658 DATE: 02/07/14 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
14	550.00					77,000

 (Screen Id:/Corp_Data_Inquiry)



Commonwealth of Virginia
State Corporation Commission

Virg

CISM0180

CORPORATE DATA INQUIRY

08/26/14

10:02:58

CORP ID: F136659 - 2 STATUS: 00 ACTIVE STATUS DATE: 01/21/99
 CORP NAME: Volkert, Inc.

DATE OF CERTIFICATE: 01/21/1999 PERIOD OF DURATION: INDUSTRY CODE: 00
 STATE OF INCORPORATION: AL ALABAMA STOCK INDICATOR: S STOCK
 MERGER IND: S SURVIVOR CONVERSION/DOMESTICATION IND:
 GOOD STANDING IND: Y MONITOR INDICATOR:
 CHARTER FEE: 50.00 MON NO: MON STATUS: MONITOR DTE:
 R/A NAME: CORPORATION SERVICE COMPANY

STREET: BANK OF AMERICA CENTER, 16TH FLOOR AR RTN MAIL:
 1111 EAST MAIN ST.

CITY: RICHMOND STATE : VA ZIP: 23219

R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 07/13/11 LOC : 216

ACCEPTED AR#: 214 50 3519 DATE: 01/13/14 RICHMOND CITY

CURRENT AR#: 214 50 3519 DATE: 01/13/14 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
14	100.00					2,250

 (Screen Id:/Corp_Data_Inquiry)

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Virg

08/19/14

LLCM3220

LLC DATA INQUIRY

11:21:09

LLC ID: T049068 - 2 STATUS: 00 ACTIVE STATUS DATE: 02/03/12
 LLC NAME: Appraisal Review Specialists, LLC

DATE OF FILING: 02/03/2012 PERIOD OF DURATION: 99/99/9999 INDUSTRY CODE: 00

STATE OF FILING: WV WEST VIRGINIA MERGER INDICATOR:

CONVERSION/DOMESTICATION INDICATOR:

P R I N C I P A L O F F I C E A D D R E S S

STREET: 3058 MOUNT VERNON RD

CITY: HURRICANE STATE: WV ZIP: 25526-0000

R E G I S T E R E D A G E N T I N F O R M A T I O N

R/A NAME: INCORP SERVICES INC

STREET: 7288 HANOVER GREEN DR

RTN MAIL:

CITY: MECHANICSVILLE STATE: VA ZIP: 23111-0000

R/A STATUS: 5 ENTITY AUTHORIZ EFF DATE: 02/03/12 LOC: 142 HANOVER COUNTY

YEAR FEES PENALTY INTEREST BALANCE

14 50.00

(Screen Id:/LLC_Data_Inquiry)



Commonwealth of Virginia
State Corporation Commission

Virg

CISM0180

CORPORATE DATA INQUIRY

06/24/14

19:09:18

CORP ID: F176141 - 2 STATUS: 00 ACTIVE STATUS DATE: 01/04/13
 CORP NAME: SHARP & COMPANY INCORPORATED

DATE OF CERTIFICATE: 07/23/2008 PERIOD OF DURATION: INDUSTRY CODE: 00
 STATE OF INCORPORATION: MD MARYLAND STOCK INDICATOR: S STOCK
 MERGER IND: CONVERSION/DOMESTICATION IND:
 GOOD STANDING IND: Y MONITOR INDICATOR:
 CHARTER FEE: 50.00 MON NO: MON STATUS: MONITOR DTE:
 R/A NAME: KAREN A DONER

STREET: ROTH DONER JACKSON PLC AR RTN MAIL:
 8200 GREENSBORO DR STE 820
 CITY: MCLEAN STATE : VA ZIP: 22102
 R/A STATUS: 4 ATTORNEY EFF. DATE: 10/02/12 LOC : 129
 ACCEPTED AR#: 214 09 4352 DATE: 06/17/14 FAIRFAX COUNTY
 CURRENT AR#: 214 09 4352 DATE: 06/17/14 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
14	130.00					10,000

 (Screen Id:/Corp_Data_Inquiry)



Design-Build Project For Route 29 Solutions
Albemarle County, Virginia
Contract ID No. C00077383DB80

.2 DPOR Office Registration Information

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
10-31-2014

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
2701000041

BOARD FOR CONTRACTORS
CLASS A CONTRACTOR
CLASSIFICATIONS BLD EMC H/H

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



Gordon N. Dixon
Gordon N. Dixon, Director

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

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)

(POCKET CARD)

COMMONWEALTH OF VIRGINIA
CLASS A BOARD FOR CONTRACTORS
CONTRACTOR

CLASSIFICATIONS BLD EMC H/H
NUMBER: 2701000041 EXPIRES: 10-31-2014

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



POCKET

(DETACH HERE)

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
03-31-2015

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
2701029434

BOARD FOR CONTRACTORS
CLASS A CONTRACTOR
CLASSIFICATIONS H/H SDS

BRANCH HIGHWAYS INC
PO BOX 40004
ROANOKE, VA 24022-0004



Gordon N. Dixon
Gordon N. Dixon, Director

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

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)

(POCKET CARD)

COMMONWEALTH OF VIRGINIA
CLASS A BOARD FOR CONTRACTORS
CONTRACTOR

CLASSIFICATIONS H/H SDS
NUMBER: 2701029434 EXPIRES: 03-31-2015

BRANCH HIGHWAYS INC
PO BOX 40004
ROANOKE, VA 24022-0004



(FOLD)

(DETACH HERE)

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
02-29-2016

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
0411000029

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

PROFESSIONS: ENG, LS

JOHNSON, MIRMIRAN & THOMPSON, INC.
9201 ARBORETUM PKWY
SUITE 310
RICHMOND, VA 23236



Nick A. Christner
Nick A. Christner, Interim Director

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(POCKET CARD)

COMMONWEALTH OF VIRGINIA
BOARD FOR AP/ELSC/DLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000029 EXPIRES: 02-29-2016
PROFESSIONS: ENG, LS
JOHNSON, MIRMIRAN & THOMPSON, INC.
9201 ARBORETUM PKWY
SUITE 310
RICHMOND, VA 23236



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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
12-31-2015

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
0407001314

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

PROFESSIONS: ENG, LA, ARC, LS

JOHNSON MIRMIRAN & THOMPSON INC
72 LOVETON CIRCLE
SPARKS, MD 21152



Gordon N. Dixon
Gordon N. Dixon, Director

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(POCKET CARD)

COMMONWEALTH OF VIRGINIA
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS,
LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY REGISTRATION
NUMBER: 0407001314 EXPIRES: 12-31-2015
PROFESSIONS: ENG, LA, ARC, LS
JOHNSON MIRMIRAN & THOMPSON INC
72 LOVETON CIRCLE
SPARKS, MD 21152



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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON

02-29-2016

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER

0411000441

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

PROFESSIONS: ENG, LS

JOHNSON MIRMIRAN & THOMPSON INC
13921 PARK CENTER RD
SUITE 140
HERNDON, VA 20171



Nick A. Christner
Nick A. Christner, Interim Director

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(POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR APESCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000441 EXPIRES: 02-29-2016
PROFESSIONS: ENG, LS
JOHNSON MIRMIRAN & THOMPSON INC
13921 PARK CENTER RD
SUITE 140
HERNDON, VA 20171



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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
02-29-2016

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
0411000440

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

PROFESSIONS: ENG, LS

JOHNSON MIRMIRAN & THOMPSON INC
272 BENDIX ROAD
SUITE 260
VIRGINIA BEACH, VA 23452



Nick A. Christner
Nick A. Christner, Interim Director

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(POCKET CARD)

COMMONWEALTH OF VIRGINIA
BOARD FOR APPLICANTS
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000440 EXPIRES: 02-29-2016
PROFESSIONS: ENG, LS
JOHNSON MIRMIRAN & THOMPSON INC
272 BENDIX ROAD
SUITE 260
VIRGINIA BEACH, VA 23452



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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
12-31-2015

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
0407005783

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

PROFESSIONS: ENG

CES CONSULTING LLC
13991 VIRGINIA CEDAR COURT
GAINESVILLE, VA 20155



Georges N. Dumas
Georges N. Dumas, Director

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(POCKET CARD)

COMMONWEALTH OF VIRGINIA
BOARD FOR APPLSCIDLA
BUSINESS ENTITY REGISTRATION
NUMBER: 0407005783 EXPIRES: 12-31-2015
PROFESSIONS: ENG
CES CONSULTING LLC
13991 VIRGINIA CEDAR COURT
GAINESVILLE, VA 20155



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Details of license number 0407006470

Name:	EMC2 OF VIRGINIA INC	print
License Number:	0407006470	
License Description:	Business Entity Registration	
Business Type:	CORP	
Address:	10110 MOLECULAR DR STE 314 ROCKVILLE, MD 20850	
Initial Certification Date:	2014-02-11	
Expiration Date:	2015-12-31	

Filter:

Related Licenses

License Number	License Holder Name	License Type	License Expiry
0402010129 (licenseDetail.cfm? lrn=0402010129)	SINGH, S	Professional Engineer License	2014-09-30

Showing 1 to 1 of 1 entries

No Open Complaints

"Open Complaints" reflect only those complaints against regulants for which a departmental investigation has determined that sufficient evidence exists to establish probable cause of a violation of the law or regulations. Only those cases that have proceeded through an investigation to the adjudication stage are displayed. **State law exempts information about open cases from mandatory public disclosure**[Code of Virginia Section 54.1-108]. (<http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+54.1-108>) Members of the public may review official records and obtain copies only after a complaint investigation is closed.

No Closed Complaints

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

To inquire about closed complaints, see the department's Public Records Access (<http://www.dpor.virginia.gov/recordsanddocuments/>) or contact the department's Information Management Section at (804) 367-8583 or publicrecords@dpor.virginia.gov (<mailto:publicrecords@dpor.virginia.gov>).

The information on this page was last updated on 2014-08-25.

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON

02-29-2016

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER

0411000698

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

PROFESSIONS: ENG

SCHNABEL ENGINEERING CONSULTANTS, INC
480 FOUR SEASONS DRIVE
CHARLOTTESVILLE, VA 22901



Nick A. Christner
Nick A. Christner, Interim Director

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(POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR APESCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000698 EXPIRES: 02-29-2016
PROFESSIONS: ENG
SCHNABEL ENGINEERING CONSULTANTS, INC
480 FOUR SEASONS DRIVE
CHARLOTTESVILLE, VA 22901



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9960 Mayland Dr., Suite 400, Richmond, VA 23233

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
02-29-2016

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
0411000700

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

PROFESSIONS: ENG

SCHNABEL ENGINEERING CONSULTANTS, INC
ONE CARY STREET
RICHMOND, VA 23220



Nick A. Christner
Nick A. Christner, Interim Director

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(POCKET CARD)

COMMONWEALTH OF VIRGINIA
BOARD FOR AP/LS/CD/LA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000700 EXPIRES: 02-29-2016
PROFESSIONS: ENG
SCHNABEL ENGINEERING CONSULTANTS, INC
ONE CARY STREET
RICHMOND, VA 23220



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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233

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**DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA**

EXPIRES ON
12-31-2015

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
0405001919

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

PROFESSIONS: ENG

EPR, P.C.
637 BERKMAR CIRCLE
CHARLOTTESVILLE, VA 22911



Gordon N. Dixon
Gordon N. Dixon, Director

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
02-29-2016

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
0411000435

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

PROFESSIONS: ENG

EEE CONSULTING INC
201 CHURCH ST
BLACKSBURG, VA 24060



Nick A. Christner
Nick A. Christner, Interim Director

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
12-31-2015

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
0407003798

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

PROFESSIONS: ENG

EEE CONSULTING INC
8525 BELL CREEK RD
MECHANICSVILLE, VA 23116



Gordon N. Dixon
Gordon N. Dixon, Director

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(POCKET CARD)

COMMONWEALTH OF VIRGINIA
BOARD FOR APPEALS
BUSINESS ENTITY REGISTRATION
NUMBER: 0407003798 EXPIRES: 12-31-2015
PROFESSIONS: ENG
EEE CONSULTING INC
8525 BELL CREEK RD
MECHANICSVILLE, VA 23116



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9960 Mayland Dr., Suite 400, Richmond, VA 23233

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**DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA**

EXPIRES ON

12-31-2015

**9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500**

NUMBER

0407002877

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

PROFESSIONS: ENG

**MOFFATT & NICHOL INC
1100 BOULDERS PARKWAY
SUITE 350
RICHMOND, VA 23225**



Gordon N. Dixon
Gordon N. Dixon, Director

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
02-29-2016

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
0411000532

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

PROFESSIONS: ENG

MOFFATT & NICHOL INC
800 WORLD TRADE CENTER
NORFOLK, VA 23510



Nick A. Christner
Nick A. Christner, Interim Director

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
02-29-2018

6000 Westland Dr., Suite 400, Richmond, VA 23231
Telephone: (804) 367-4000

NUMBER
0411007000

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

PROFESSION: ENG

MOFFATT & NICHOL INC
1616 E MILLBROOK RD
STE #160
RALEIGH, NC 27609



W. A. Christian
W. A. Christian, Director

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON

12-31-2015

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER

0407002610

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

PROFESSIONS: ENG, LA

VOLKERT INC
5400 SHAWNEE RD
STE 301
ALEXANDRIA, VA 22312



Gordon N. Dixon
Gordon N. Dixon, Director

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
02-29-2016

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
0411000940

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

PROFESSIONS: ENG

VOLKERT INC
1214 PROGRESSIVE DR STE 102
CHESAPEAKE, VA 23320



Nick A. Christner
Nick A. Christner, Interim Director

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
04-30-2016

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
4008001735

REAL ESTATE APPRAISER BOARD
APPRAISAL BUSINESS REGISTRATION

APPRAISAL REVIEW SPECIALISTS LLC
3058 MOUNT VERNON ROAD
SUITE 12
HURRICANE, WV 25523



Nick A. Christner
Nick A. Christner, Interim Director

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COMMONWEALTH OF VIRGINIA
REAL ESTATE APPRAISER BOARD
APPRAISAL BUSINESS REGISTRATION
NUMBER: 4008001735 EXPIRES: 04-30-2016

APPRAISAL REVIEW SPECIALISTS LLC
3058 MOUNT VERNON ROAD
SUITE 12
HURRICANE, WV 25523



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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233

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50010 (7/11) 107028-3

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON

06-30-2016

9980 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER

0402047134

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

LAWRENCE WEIR BROWN
12213 CHIASSO WAY
CHESTERFIELD, VA 23838



Jay W. DeBoer
Jay W. DeBoer, Director

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(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)

(POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR APESCIDLA
PROFESSIONAL ENGINEER LICENSE
NUMBER: 0402047134 EXPIRES: 06-30-2016

LAWRENCE WEIR BROWN
12213 CHIASSO WAY
CHESTERFIELD, VA 23838



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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9980 Mayland Dr., Suite 400, Richmond, VA 23233

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COMMONWEALTH OF VIRGINIA

EXPIRES ON
07-31-2016

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
0402047571

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

WILLIAM E SCHAUB
3805 THREE WOOD DR
HAMPSTEAD, MD 21074



James W. DeBorja
James W. DeBorja, Director

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
03-31-2015

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
0402048752

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

GARY ROBERT MILLER
720 MARVEL DR
WESTMINSTER, MD 21157



Gordon N. Dixon
Gordon N. Dixon, Director

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**DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA**

EXPIRES ON
12-31-2014

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
0402023760

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

**MATTHEW J WOLNIAK
9 SILENT MEADOW CT
COCKEYSVILLE, MD 21030**



Ordeen N. Dixon
Ordeen N. Dixon, Director

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COMMONWEALTH OF VIRGINIA

EXPIRES ON
02-29-2016

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
0402031971

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

DAVID ANTHONY MALINOSKI
6153 STRONGHOLD DR
MECHANICSVILLE, VA 23111



Nick A. Christner
Nick A. Christner, Interim Director

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**DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA**

EXPIRES ON

07-31-2015

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER

0402015605

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

**EDWARD GEORGE DRAHOS
14410 GALLOWAY CT
MIDLOTHIAN, VA 23113**



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Gordon N. Dixon
Gordon N. Dixon, Director

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.4 DPOR Registration Information for Non-APELSCIDLA Individuals

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
11-30-2015

9960 Mayland Dr., Suite 400, Richmond, VA 23223
Telephone: (804) 367-6500

NUMBER
4001010298

REAL ESTATE APPRAISER BOARD

CERTIFIED GENERAL REAL ESTATE APPRAISER

VALERIE LYNN KELSEY
13511 BUGLENOTE WAY
SPOTSYLVANIA, VA 22553



George N. Davis
George N. Davis, Director

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Design-Build Project For Route 29 Solutions
Albemarle County, Virginia
Contract ID No. C00077383DB80

3.3.1 Key Personnel
Resume Forms

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:	Thomas J. Fulton, Project Executive/Project Manager		
b. Project Assignment:	Design-Build Project Manager (DBPM)		
c. Name of Firm with which you are now associated:	SKANSKA		
d. Years experience: With this Firm <u>23</u> Years With Other Firms <u>4</u> Years	Please list chronologically (most recent experience first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list the experience for those years you have worked. Project specific experience shall be included in Section (g) below):		
	Skanska USA Civil Southeast Inc. (Skanska) / Duration of Employment: June 2005 to Present		
	Position: Project Executive/Project Manager / Responsibilities: He provides corporate oversight/and actively maintains, and improves customer communications and relations, provides project oversight, project strategic direction, and project reporting to senior management. He reviews the safety and quality statistics with the Project Manager and keeps in constant contact with safety/environmental and QC Mangers to ensure the progress and success of this project. He is also responsible for providing project financial forecasts. He is often assigned to provide on-site project management for specific projects, where he has direct responsibility for project staffing, schedule, budget and cost control, subcontractor relations, and provides direction and coordination for superintendents and other supervisory staff.		
	Skanska USA Civil Southeast Inc. (Skanska) / Duration of Employment: August 1995 to May 2005		
	Position: Superintendent / Responsibilities: He provided on-site direction for daily activities for various highway and bridge projects in VA. He ensured and was responsible for ensuring compliance with corporate quality, safety, and environmental programs; training; leading the construction team; subcontractor management; managing field work; ensuring that required materials, equipment and personnel were available to ensure successful completion of the assigned tasks and maintain within schedule and cost constraints. He was responsible for documentation, reporting, and identifying, managing and mitigating risk on the project, as well as working closely with the project manager to ensure work was coordinated with other superintendents.		
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:	University of Manchester School of Science and Technology, Manchester, England/BS/1986/Building Technology		
f. Active Registration: Year First Registered/ Discipline/VA Registration #:	N/A		
g. Document the extent and depth of your experience and qualifications relevant to the Project.	<ol style="list-style-type: none"> <i>Note your specific responsibilities and authorities for each project, not those of the firm.</i> <i>Note whether experience is with current firm or with other firm.</i> <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> <p>(List at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.)</p> <p>* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.</p> <p>(1.) VDOT, Elizabeth River Tunnel Approaches (D-B PPTA), Norfolk and Portsmouth, VA (\$1.5B) – Project Executive/ Project Manager. Mr. Fulton is responsible for managing the approach work for this construction project. He is working with VDOT and the City to design, build, construct, finance, operate and maintain the Downtown Tunnel/ Midtown Tunnel/MLK Freeway Extension. The project includes a new two-lane tunnel under the Elizabeth River adjacent to the existing Tunnel; extension and modification of major local roads and interchanges; and extending the MLK from London Blvd. to I-264, with an interchange at High St. The project also includes maintaining MOT (90,000 vehicles a day) as well as marine traffic, ITS, utility relocations, environmental compliance, and community relations. Mr. Fulton is currently assigned full-time to this project and is responsible for tunnel approaches. His duties include oversight and reporting of safety and quality on his segment; setting schedules, procurement and budget in consultation with the project director; preparation of project activity plans; subcontractor management; and coordination of utility relocations. While the project is scheduled to complete in 2018, the tunnel approach work is scheduled to be completed in 2016. He will be made available for the Route 29 Solutions project following project award/NTP.</p> <p>Firm: Skanska USA Civil Southeast Inc. /Project Dates: October 2012- August 2018</p>		
	Similar Scope Activities to the Route 29 Solutions Project		
	✓Roadway/Survey	✓Hydraulics/Drainage/SWM	✓TCD/TMP
	✓Structures/Bridges	✓Milling/Overlaying	✓Traffic Maintenance/Mgmt
	✓Env./Permitting	✓Demolition of Structures	✓Signs/Struct./Foundations
	✓Geotechnical	✓Guardrails/Retaining Walls	✓ROW/Utilities
			✓Stakeholder Coordination
			✓Public Hearing/Involvement
			✓QA/QC and CEI Services
			✓Project Mgmt./Project Coord.

- (2.) **VDOT, Huguenot Bridge (Route 147) Replacement over James River between Henrico County and the City Richmond, VA (\$37M)** – *Project Executive/On-Site Project Manager*. Mr. Fulton was responsible for all aspects of project management including customer relations, community relations, quality, safety and environmental oversight, and schedule and cost control. He was also responsible for material equipment and personnel acquisition. As Project Executive, he was responsible for project oversight, project reporting, reviewing safety, schedule, and cost activities; reporting to executive management and ensuring customer satisfaction, and ensuring the project had access to resources to successfully complete the project.

Firm: Skanska USA Civil Southeast Inc. /

Project Dates: October 2010 – October 2013 (Substantial Completion May 2013)

Similar Scope Activities to the Route 29 Solutions Project

✓ Roadway/Survey	✓ Hydraulics/Drainage/SWM	✓ TCD/TMP	✓ Stakeholder Coordination
✓ Structures/Bridges	✓ Milling/Overlaying	✓ Traffic Maintenance/Mgmt	✓ Public Hearing/Involvement
✓ Env./Permitting	✓ Demolition of Structures	✓ Signs/Struct./Foundations	✓ QA/QC and CEI Services
✓ Geotechnical	✓ Guardrails/Retaining Walls	✓ ROW/Utilities	✓ Project Mgmt./Project Coord.

- (3.) **VDOT, I-95/I-495 Reconstruction (Telegraph Road through the Interchange at U.S. Route 1), Alexandria, VA (\$189M)** – *Project Executive/Project Manager*. Mr. Fulton provided corporate and customer communications and general oversight for this project. He was responsible for on-site administration, leadership and technical direction. He had overall responsibility for quality and safety, performance, customer communication and reporting, and maintaining schedule. Mr. Fulton was also responsible for subcontractor relations; documentation and compliance with contract specifications, laws and regulations, As an on-site manager, He was responsible for supervising staff, ensuring all work plans and documentation complied with Skanska and customer requirements.

Firm: Skanska USA Civil Southeast Inc. / **Project Dates:** January 2004 – June 2009

Similar Scope Activities to the Route 29 Solutions Project

✓ Roadway/Survey	✓ Hydraulics/Drainage/SWM	✓ TCD/TMP	✓ Stakeholder Coordination
✓ Structures/Bridges	✓ Milling/Overlaying	✓ Traffic Maintenance/Mgmt	✓ Public Hearing/Involvement
✓ Env./Permitting	✓ Demolition of Structures	✓ Signs/Struct./Foundations	✓ QA/QC and CEI Services
✓ Geotechnical	✓ Guardrails/Retaining Walls	✓ ROW/Utilities	✓ Project Mgmt./Project Coord.

- (4.) **VDOT, Pamunkey River (Eltham) Bridge Replacement, West Point, VA (\$90M)** – *On-Site Project Manager*. Mr. Fulton was responsible for all aspects of construction of the Pamunkey River Bridge in West Point, VA. This project had significance for sensitive marine environmental considerations, as 3,000 feet of approach was constructed across a marshland. He was responsible for providing project review and direction, oversight of safety and quality, staffing, procurement, reviewing schedule, quality, risk and contract administration, reporting, and ensuring compliance with contract specifications and applicable rules and regulations.

Firm: Skanska USA Civil Southeast Inc. / **Project Dates:** December 2004 - October 2007

Similar Scope Activities to the Route 29 Solutions Project

✓ Roadway/Survey	✓ Hydraulics/Drainage/SWM	✓ TCD/TMP	✓ Stakeholder Coordination
✓ Structures/Bridges	✓ Milling/Overlaying	✓ Traffic Maintenance/Mgmt	✓ Public Hearing/Involvement
✓ Env./Permitting	✓ Demolition of Structures	✓ Signs/Struct./Foundations	✓ QA/QC and CEI Services
✓ Geotechnical	✓ Guardrails/Retaining Walls	✓ ROW/Utilities	✓ Project Mgmt./Project Coord.

- (5.) **VDOT, APM Entrance Roadway Interchange (DB), Hampton, VA (\$22M)** – *Design-Build Project Manager*. Mr. Fulton was Skanska’s DBPM for VDOT’s first DB roadway project, a \$22M modified diamond interchange and ancillary roadways, with separated levels. Mr. Fulton was responsible for all aspects of project management, including contract compliance, scheduling, cost control, subcontractor management, customer communications, and oversight of quality and safety. Other duties included ensuring documentation and reporting were completed and submitted in a timely fashion.

Firm: Skanska USA Civil Southeast Inc. / **Project Dates:** October 2002 - July 2004

Similar Scope Activities to the Route 29 Solutions Project

✓ Roadway/Survey	✓ Hydraulics/Drainage/SWM	✓ TCD/TMP	✓ Stakeholder Coordination
✓ Structures/Bridges	✓ Milling/Overlaying	✓ Traffic Maintenance/Mgmt.	✓ Public Hearing/Involvement
✓ Environ./Permitting	✓ Demolition of Structures	✓ Signs/Struct./Foundations	✓ QA/QC and CEI Services
✓ Geotechnical	✓ Guardrails/Retaining Walls	✓ ROW/Utilities	✓ Project Mgmt./Project Coord.

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. **Not required for DB Project Manager.**

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a.	Name & Title: Lawrence (Larry) W. Brown, P.E., Construction Manager
b.	Project Assignment: Quality Assurance Manager (QAM)
c.	Name of Firm with which you are now associated: 
d.	Years experience: With this Firm <u><1</u> Years With Other Firms 10 Years Please list chronologically (most recent experience first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list the experience for those years you have worked. Project specific experience shall be included in Section (g) below): Johnson, Mirmiran & Thompson, Inc. / Duration of Employment: August 2014 to Present Position: Senior Associate-CM / Responsibilities: Larry is responsible for all CM services in JMT's Richmond Office. Michael Baker Jr., Inc. / Duration of Employment: October 2011 to July 2014 Position: <i>Construction Manager/Construction Insp. Coordinator</i> / Responsibilities: Larry was assigned to the I-95 Bridges Rehabilitation project in Richmond. His duties included: scheduling/ oversight of inspection staff; schedule and budget reviews; MOT coordinator; coordination with Public Affairs; reviewed and approved monthly estimates; provided engineering supported field staff; reviewed, processed and tracked all RFIs, submittals and correspondence; interpreted contract ambiguities; ensured contractor was abiding by contract, plans, specifications and standards; developed and prosecuted work orders; attended and facilitated project meetings as needed. NXL Construction Services, Inc. / Duration of Employment: March 2011 to October 2011 Position: <i>Quality Assurance Manager (QAM)</i> / Responsibilities: Larry worked statewide serving as the QAM on DB projects certifying the contractor was performing their role as outlined in the contract and materials. Also worked in conformance with the contract, specs. and project controls performing constructability reviews and CPM schedules. Virginia Department of Transportation Duration of Employment: September 2010 to March 2011 / Position: <i>Area Construction Engineer (ACE)</i> / Responsibilities: Larry managed CM/I staff during project delivery for DB and DBB projects. Used Primavera for manpower planning and project critical path evaluations and approvals. Coordinated with project controls staff on constructability reviews, project duration, CEI budgets and project close out. Worked with FHWA representatives to ensure cost effectiveness delivery of projects and compliance with safety and other federal/state standards. Coordinated QA with CM, inspection staff and material division. Provided oversight to locally administered projects and technical assistance to construction/design staff. Worked with various entities on problem resolution to avoid delays or NOIs. Duration of Employment: July 2007 to September 2010 / Position: <i>Construction Manager - QAM</i> / Responsibilities: Larry managed the administration of construction/maintenance contracts. Planned and conducted pre-construction conferences and progress meetings on contracts, monitor contract expenditures, reviewed work in progress and project records prepared by field forces to assure compliance with the contract documents and environmental regulations set by all agencies. Managed, supervised and reviewed performance for inspection staff. Solved problems and communicated with various entities including public, contractors, landowners, and various agencies. Prepared reports, correspondence and documents and attended meetings for scheduling, safety, project progress, public information and field inspections. Duration of Employment: May 2005 to July 2007 / Position: <i>Design Engineer/VDOT's Liaison to the General Assembly</i> / Responsibilities: Larry designed multiple roads to meet VDOT, AASHTO and FHWA standards and specifications. Projects included horizontal/vertical alignment, ROW, drainage, cross section, constructability review.
e.	Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: NC State University, Raleigh, NC/ME/2009/Engineering (Concentration in Construction) University of Arizona, Tucson, AZ/BS/1996/Civil Engineering
f.	Active Registration: Year First Registered/ Discipline/VA Registration #: 2010/Virginia Registered Professional Engineer No. 0402047134 Certifications include OSHA-30 Hours; Confined Space; Fall Protection; Nuclear Gauge; and ASBO Grout
g.	Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none">1. <i>Note your specific responsibilities and authorities for each project, not those of the firm.</i>2. <i>Note whether experience is with current firm or with other firm.</i>3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> (List at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.) <small>* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.</small>

- (1.) **VDOT, Construction Management and Inspection Services for I-95 Bridge Rehabilitation Project, Henrico County, VA (\$106M)** – *Construction Manager*. Developed and managed the project control and document control systems, responses to contractor requests for information, change-order review, claims avoidance, utility coordination, health and safety plans, partnering, public involvement, scheduling of inspection staff, environmental compliance reviews, maintenance of traffic coordination, review, and approve pay estimates. Baker provided CM/CI services for the rehabilitation of 11 bridges along I-95 using ABC techniques.

Firm: Michael Baker, Jr., Inc. /**Project Dates:** October 2011 – August 2014

Similar Scope Activities to the Route 29 Solutions Project

✓ Roadway/Survey	✓ Hydraulics/Drainage/SWM	✓ TCD/TMP	✓ Stakeholder Coordination
✓ Structures/Bridges	✓ Milling/Overlaying	✓ Traffic Maintenance/Mgmt	✓ Public Hearing/Involvement
✓ Env./Permitting	✓ Demolition of Structures	✓ Signs/Struct./Foundations	✓ QA/QC and CEI Services
✓ Geotechnical	✓ Guardrails/Retaining Walls	✓ ROW/Utilities	✓ Project Mgmt./Project Coord.

- (2.) **VDOT, Pacific Boulevard (DB), Chantilly, VA (\$4M)** – *Quality Assurance Manager*. Responsibilities included review of schedule, budget, estimates, environmental, and materials for contract compliance. Coordinated staffing needs, material testing needs, and document review. Maintained materials notebook, approved pay estimates, and provided engineering support for problem resolution. This DB project extended Pacific Boulevard one mile.

Firm: NXL Construction Services, Inc. /**Project Dates:** March 2011 - October 2011

Similar Scope Activities to the Route 29 Solutions Project

✓ Roadway/Survey	✓ Hydraulics/Drainage/SWM	✓ TCD/TMP	✓ Stakeholder Coordination
✓ Structures/Bridges	✓ Milling/Overlaying	✓ Traffic Maintenance/Mgmt	✓ Public Hearing/Involvement
✓ Env/Permitting	✓ Demolition of Structures	✓ Signs/Struct./Foundations	✓ QA/QC and CEI Services
✓ Geotechnical	✓ Guardrails/Retaining Walls	✓ ROW/Utilities	✓ Project Mgmt./Project Coord.

- (3.) **VDOT, I-295/Meadowville Interchange (DB), Chesterfield County, VA (\$11.7M)** – *QAM*. Provided QC oversight to include materials testing, documentation control and assuring the contractor was in compliance with all of the VDOT's standards, specs. and plans for this new interchange on I-295 including construction of the outer ramps, widening of Meadowville Road, two new traffic signals at the ramp intersections and auxiliary lanes on I-295 connecting the new ramps to existing Route 10. This project was vital to the growth of Chesterfields Technology Park.

Firm: NXL Construction Services, Inc. /**Project Dates:** March 2011 - October 2011

Similar Scope Activities to the Route 29 Solutions Project

✓ Roadway/Survey	✓ Hydraulics/Drainage/SWM	✓ TCD/TMP	✓ Stakeholder Coordination
✓ Structures/Bridges	✓ Milling/Overlaying	✓ Traffic Maintenance/Mgmt	✓ Public Hearing/Involvement
✓ Env./Permitting	✓ Demolition of Structures	✓ Signs/Struct./Foundations	✓ QA/QC and CEI Services
✓ Geotechnical	✓ Guardrails/Retaining Walls	✓ ROW/Utilities	✓ Project Mgmt./Project Coord.

- (4.) **VDOT, Route 36 Improvements (DB), City of Hopewell, Prince George County, VA (\$5M)** – *QAM*. Responsible for preparation of project's QA/QC plan, oversight of project QA procedures and plan, performance and coordination of QA testing and inspection in accordance with VDOT's DB guidelines throughout the project, and monitoring of contractor's QC program and serving as the liaison with the Department with respect to project compliance and to ensure that IA/IV testing is being performed. He was also responsible for approving QC inspection staff assignment to project and the QC frequency testing plan before submission to VDOT, the preparation, maintenance, and submission of associated project documentation including but not limited to diaries, EEO, ARRA, materials notebook/ documentation, as-built sketches, and monthly pay documents including verifying and approving monthly pay packages, and preparation and submission of final records, and managing the project QA staff and ensure that there is sufficient staffing to ensure compliance with contract, plans, and specifications.

Firm: NXL Construction Services, Inc. /**Project Dates:** March 2011 - October 2011

Similar Scope Activities to the Route 29 Solutions Project

✓ Roadway/Survey	✓ Hydraulics/Drainage/SWM	✓ TCD/TMP	✓ Stakeholder Coordination
✓ Structures/Bridges	✓ Milling/Overlaying	✓ Traffic Maintenance/Mgmt.	✓ Public Hearing/Involvement
✓ Environ./Permitting	✓ Demolition of Structures	✓ Signs/Struct./Foundations	✓ QA/QC and CEI Services
✓ Geotechnical	✓ Guardrails/Retaining Walls	✓ ROW/Utilities	✓ Project Mgmt./Project Coord.

- (5.) **VDOT, Airport Connector (P3), Richmond, VA (\$40M)** – *Construction Manager*. Served as VDOT representative and coordinated efforts for IA and IV, reviewed and approved schedule and budget, provided oversight of design drawings and submittals review and approval process, facilitated weekly progress meetings and quarterly partnering meetings, processed required work orders, and assisted with ROW acquisition. This project included construction of an interchange, 4 bridges, and a 1.6 mile extension from limited access highway to Richmond International Airport.

Firm: Virginia Department of Transportation. /**Project Dates:** September 2009 – March 2011

Similar Scope Activities to the Route 29 Solutions Project

✓ Roadway/Survey	✓ Hydraulics/Drainage/SWM	✓ TCD/TMP	✓ Stakeholder Coordination
✓ Structures/Bridges	✓ Milling/Overlaying	✓ Traffic Maintenance/Mgmt.	✓ Public Hearing/Involvement
✓ Environ./Permitting	✓ Demolition of Structures	✓ Signs/Struct./Foundations	✓ QA/QC and CEI Services
✓ Geotechnical	✓ Guardrails/Retaining Walls	✓ ROW/Utilities	✓ Project Mgmt./Project Coord.

- 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. **Larry joined JMT on Aug. 1, 2014 and does not have any current project obligations and is committed to be on-site full-time for the duration of construction.**

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.			
a.	Name & Title: William E. Schaub, P.E., Design-Build Practice Leader		
b.	Project Assignment: Design Manager (DM)		
c.	Name of Firm with which you are now associated: 		
d.	Years experience: With this Firm <u>9</u> Years With Other Firms <u>25</u> Years Please list chronologically (most recent experience first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list the experience for those years you have worked. Project specific experience shall be included in Section (g) below): Johnson, Mirmiran & Thompson, Inc. / Duration of Employment: February 2008 to Present Position: <i>Vice President/Design-Build Practice Leader</i> / Responsibilities: Was promoted to Vice President in February of 2008 and is currently JMT's Practice Leader for transportation design-build efforts throughout the United States. Has lead and completed multiple DB projects in Northern Virginia, MD and PA. Johnson, Mirmiran & Thompson, Inc./ Duration of Employment: January 2005 to January 2008 Position: <i>Senior Associate/Civil-Structural Engineer</i> / Responsibilities: Worked on numerous transportation and facility projects for federal and state agencies including the Virginia Department of Transportation, Federal Highway Administration-Eastern Federal Lands Highway Division, MSHA, MPA, and MDTA. Wallace Montgomery and Associates, LLP / Duration of Employment: August 2003 to December 2004 Position: <i>Structural Engineer/Project Manager</i> / Responsibilities: Managed the construction document preparation of numerous highway and bridge projects using MicroStation, InRoads and AutoCAD software for the MSHA. STV, Inc. / Duration of Employment: May 1983 to August 2003 Position: <i>Project Manager/Chief Structural Engineer/GIS Manager</i> / Responsibilities: Managed the construction document preparation of numerous highway/bridge projects using MicroStation, InRoads and AutoCAD. Experienced in planning and design of structures and highways. The types of highway structures for which he designed include concrete, steel and timber bridges for roads and railroads. His bridge and roadway design experience includes both rehabilitation and new design. Also supervised the firm's GIS efforts. This experience included survey and data collection of interior and exterior infrastructure/facilities components and GIS development software for military clients.		
e.	Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: UMD, College Park, MD/BS/1984/Civil Engineering / Essex Comm. College, Essex, MD/AA/1981/General Studies		
f.	Active Registration: Year First Registered/ Discipline/VA Registration #: 2010/Virginia Registered Professional Engineering No. 040247571 (Also registered in DC/DE/MD/PA/SC/WV)		
g.	Document the extent and depth of your experience and qualifications relevant to the Project. a. <i>Note your specific responsibilities and authorities for each project, not those of the firm.</i> b. <i>Note whether experience is with current firm or with other firm.</i> c. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> (List at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.) * On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project. (1.) VDOT, US Route 29 Bypass (DB), Albemarle County, VA (\$136M) – Design Manager. The project is 6.2 miles of 4-lane divided, limited access highway west of existing US 29 that would connect to US 29/ US 250 to the south at the existing connector road into the North Grounds of the UVA, (Leonard Sandridge Road), the north connection will be located along US 29 (Ashwood Blvd. and Polo Grounds Road/Rio Mills Road). Access to the new highway would be via interchanges at both ends, with no intermediate access points to crossroads or adjacent properties. Responsible, under NTP 1, for the development of an IMR, and Northern Terminus Traffic Study; development of H&V alignment alternatives for the southern terminus; attendance at Citizen Info. Meeting; alternative alignments study for Sammons Cemetery avoidance; project wetlands delineation and gaining USACE concurrence; and geotechnical engr. data report for an approx. 4,600 ft. section of between Barracks and Lambs Roads. Project currently on-hold by VDOT. Firm: Johnson, Mirmiran & Thompson, Inc./ Project Dates: June 2012 - April 11, 2014 (Stop Work Order)		
Similar Scope Activities to the Route 29 Solutions Project			
✓Roadway/Survey	✓Hydraulics/Drainage/SWM	✓TCD/TMP	✓Stakeholder Coordination
✓Structures/Bridges	✓Milling/Overlying	✓Traffic Maintenance/Mgmt.	✓Public Hearing/Involvement
✓Env./Permitting	✓Demolition of Structures	✓Signs/Struct./Foundations	✓QA/QC and CEI Services
✓Geotechnical	✓Guardrails/Retaining Walls	✓ROW/Utilities	✓Project Mgmt./Project Coord.

(2.) FHWA-EFLHD/VDOT, Fairfax County Parkway (FCP) Extension (DB), Springfield, VA (\$112.5M) – Design Manager. Responsible for executing the design and design QA/QC program of this DB project, which included roadways, interchanges, bridges, retaining walls and sound walls. The initial FCP project had an extremely aggressive schedule of 750 calendar days to complete the project. The addition of Boudinot Interchange design to the contract resulted in need to deliver two design projects on accelerated schedules concurrently. Both project designs were completed ahead of schedule and resulted in early completion of construction. FCP is located between U.S. 1 and Route 7. FCP runs for approx. 1.5 miles through the western and southern portions of the Fort Belvoir EPG and was a critical link to the success of the BRAC Initiative at EPG. Bill oversaw the multi-disciplined design effort utilizing over 75 engineers, CAD technicians and other specialists with multiple design firms whose work included geotechnical, environmental mitigations and permitting, roadway, structural, traffic, SWM, drainage, ESC, a multipurpose trail, lighting, utility SUE/relocations/coordination, public coordination. In depth stakeholder coordination with USACE BRAC Integration office, Fort Belvoir DPW, ENRD and Fairfax Co. *Received a “Star Partner” award for their exceptional dedication, teamwork, and professionalism in support of the project's goals by the NGA & USACE*
Firm: Johnson, Mirmiran & Thompson, Inc./**Project Dates:** October 2008 - July 2011

Similar Scope Activities to the Route 29 Solutions Project

✓ Roadway/Survey	✓ Hydraulics/Drainage/SWM	✓ TCD/TMP	✓ Stakeholder Coordination
✓ Structures/Bridges	✓ Milling/Overlaying	✓ Traffic Maintenance/Mgmt.	✓ Public Hearing/Involvement
✓ Env./Permitting	✓ Demolition of Structures	✓ Signs/Struct./Foundations	✓ QA/QC and CEI Services
✓ Geotechnical	✓ Guardrails/Retaining Walls	✓ ROW/Utilities	✓ Project Mgmt./Project Coord.

(3.) FHWA-EFLHD/DDOT, 9th Street Bridge Replacement over CSXT and Amtrak Rail and New York Avenue (DB), Washington, DC (\$58.4M) – Design Manager. Mr. Schaub was the lead designer, responsible for the QA/QC program and primary point of contact for the DB Team, which included a multi-disciplined design effort that included geotechnical, roadway, structural, traffic, SWM, drainage, ESC, lighting, utility designs and electric traction design to facilitate the phased removal and complete reconstruction of an existing structure and the reconstruction of the 9th St. - NY Ave. Interchange. The DB Team consisted of over 50 engineers, CADD technicians and other specialists with multiple design firms. The bridge was a 645’ long four-span structure, spanning NY Ave. and CSXT and Amtrak railroads. The project included context sensitive solutions, which resulted in numerous user enhancements.
Firm: Johnson, Mirmiran & Thompson, Inc./**Project Dates:** September 2006 - July 2011

Similar Scope Activities to the Route 29 Solutions Project

✓ Roadway/Survey	✓ Hydraulics/Drainage/SWM	✓ TCD/TMP	✓ Stakeholder Coordination
✓ Structures/Bridges	✓ Milling/Overlaying	✓ Traffic Maintenance/Mgmt.	✓ Public Hearing/Involvement
✓ Env./Permitting	✓ Demolition of Structures	✓ Signs/Struct./Foundations	✓ QA/QC and CEI Services
✓ Geotechnical	✓ Guardrails/Retaining Walls	✓ ROW/Utilities	✓ Project Mgmt./Project Coord.

(4.) MDTA, I-95/I-695 Interchange – Section 100 Express Toll Lanes (ETL), Baltimore County, MD (\$450M) – Deputy Project Manager. Responsible for the prelim./final design for the I-95/I-695 interchange which is part of the \$875M I-95 ETL Section 100 mega project which involves 3 major interchanges and interstate design. Bill participated in the supervision of the design of highways, bridges, retaining walls, utility relocations, geotechnical program and drainage facilities. The design team consisted of a staff of over 100 from several design firms. The I-95/I-695 interchange design involved 11 lane-miles of I-95, 12 lane-miles of I-695, 1 lane-mile of local roads and 16 lane-miles of ramps, 22 bridges, 30 retaining walls, 6 noise barriers and 5 culverts. Environmental elements included stream restoration assessment, environmental construction monitoring and design for Stemmer’s Run; drainage; ESC; SWM; and H/H modeling. The projects geotechnical subsurface exploration program included 500+ borings.
Firm: Johnson, Mirmiran & Thompson, Inc./**Project Dates:** April 2005 - April 2011

Similar Scope Activities to the Route 29 Solutions Project

✓ Roadway/Survey	✓ Hydraulics/Drainage/SWM	✓ TCD/TMP	✓ Stakeholder Coordination
✓ Structures/Bridges	✓ Milling/Overlaying	✓ Traffic Maintenance/Mgmt.	✓ Public Hearing/Involvement
✓ Env./Permitting	✓ Demolition of Structures	✓ Signs/Struct./Foundations	✓ QA/QC and CEI Services
✓ Geotechnical	✓ Guardrails/Retaining Walls	✓ ROW/Utilities	✓ Project Mgmt./Project Coord.

(5.) MSHA, Post Award Services for US 29 at Briggs-Chaney Road Intersection Grade Separation, Prince George’s County, MD (\$43M) – Task Manager. Reviewed shop drawings for 7 retaining walls. Reviewed DB documents submitted by contractor and for coordination with MSHA Office of Bridge Design. Attended monthly Partnering Meetings, addressed Contractor RFI’s and coordinated with utility companies. Reviewed the relocation plans for a 12-inch Washington Gas Distribution Main and the relocation of a 20-inch WSSC Water Main both of which were installed in 43-inch steel casing tunnels. Also reviewed/approved the contractor DB documents for a large retaining wall consisting of soldier piles and lagging with drilled anchors.

Firm: Wallace Montgomery and Associates, LLP/**Project Dates:** March 2003 – June 2004

Similar Scope Activities to the Route 29 Solutions Project

✓ Roadway/Survey	✓ Hydraulics/Drainage/SWM	✓ TCD/TMP	✓ QA/QC and CEI Services
✓ Structures/Bridges	✓ Milling/Overlaying	✓ Traffic Maintenance/Mgmt.	✓ Project Mgmt./Project Coord.
✓ Geotechnical	✓ Demolition of Structures	✓ Utilities	
	✓ Guardrails/Retaining Walls		

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. **Not required for Design Manager.**

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title:	Greg Suttle , Construction Manager
b. Project Assignment:	Construction Manager (CM)
c. Name of Firm with which you are now associated:	
d. Years experience: With this Firm <u>25</u> Years With Other Firms <u>2</u> Years	Please list chronologically (most recent experience first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list the experience for those years you have worked. Project specific experience shall be included in Section (g) below):
Branch Highways, Inc. / Duration of Employment: May 2010 to Present	
Position: Project Manager / Responsibilities: All phases of Project Management to include, but not limited to; planning, organizing, staffing, directing, controlling and executing. Projects include new and re-construction of highways, bridges and heavy civil work. Owners include various state departments of transportation, federal government agencies and private corporations. Responsibilities include: scheduling and supervision of manpower and equipment, owner/subcontractor/supplier contact and coordination, modification/extra work estimating, pricing and negotiation, claims management, EEO compliance, enforcement and compliance with corporate safety regulations including training.	
Branch Highways, Inc. / Duration of Employment: June 1998 to April 2010	
Position: General Superintendent / Responsibilities: Jointly responsible with the Project Manager for the overall success of the project. Responsible for meeting schedule, controlling costs, and managing manpower and equipment (if applicable) on assigned project. Provides continuous hands-on field supervision of all construction operations, including subcontractors and other construction related personnel; directing them in the planning, scheduling, and execution of work on time, within budget, and with high standards of workmanship. Attains or exceeds profit goals and promotes workplace safety while meeting or exceeding owner's expectations. Promotes a positive company image. Is the leader on every project and is ultimately responsible for its operational success.	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:	<ul style="list-style-type: none">West Virginia Institute of Technology (WVU Tech), Montgomery, WV/BS/1987/Mining Engineering
f. Active Registration: Year First Registered/ Discipline/VA Registration #:	<ul style="list-style-type: none">2013/ACI Concrete Certification No. 012739692003/Virginia DEQ Responsible Land Disturber (RLD) No. 380281995/VDOT Erosion Sediment Control Contractor Certification (ESCCC) No. 1-011351995/Virginia Blaster – Unrestricted No. E2692501989/First Aid/CPR Certified
g. Document the extent and depth of your experience and qualifications relevant to the Project.	<ul style="list-style-type: none"><i>Note your specific responsibilities and authorities for each project, not those of the firm.</i><i>Note whether experience is with current firm or with other firm.</i><i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i>
(List at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.)	
* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.	
(1.) VDOT, I-95 HOT/HOV Express Lanes, DB, Segment 1, Alexandria, Fairfax, Prince William and Stafford Counties, Virginia (\$47M) - Project Manager. Responsible for overall project including managing the construction process to ensure materials used and work performed met contract requirements. Work consisted of the construction of approx. 9 miles of new interstate HOT Lanes. The majority of the work was performed within the median area of this highly congested section of I-95 just south of I-495. Work included surveying, erosion & sediment control, maintenance of traffic, clearing & grubbing, misc. demolition, approx. 550,000 cubic yards of on-site excavation and approx. 400,000 cubic yards of borrow excavation, storm drainage, retaining walls, box culverts and aggregate base.	
Firm: Branch Highways, Inc./ Project Dates: August 2011 - December 2014	
Similar Scope Activities to the Route 29 Solutions Project	
<ul style="list-style-type: none">✓Roadway/Survey✓Hydraulics/Drainage/SWM✓TCD/TMP✓Stakeholder Coordination✓Geotechnical✓Demolition of Structures✓Traffic Maintenance/Mgmt.✓Project Mgmt./Project Coord.✓Retaining Walls	

- (2.) **VDOT, I-64, Low Moor, VA (\$11.8M) - Project Manager.** Responsible for overall project management and administration including coordination with owner, subcontractors and other stakeholders, jointly responsible for managing the construction process and ensuring that materials used and work performed met contract requirements. Work included reconstruction of over 5 miles of interstate roadway along with reconstructing median shoulders, storm drain removal/replacement, new guardrail, underdrain. Was the 2nd project in Virginia to use High Tension Cable Barrier.
Firm: Branch Highways, Inc./**Project Dates:** May 2010 - December 2011

Similar Scope Activities to the Route 29 Solutions Project

✓Roadway/Survey	✓Milling/Overlaying	✓TCD/TMP	✓Stakeholder Coordination
✓Hydraulics/ Drainage/SWM	✓Demolition of Structures	✓Traffic Maintenance/Mgmt.	✓Project Mgmt./Project Coord.
	✓Guardrails/Retaining Walls	✓Signs/Struct./Foundations	

- (3.) **DOT, James Madison Highway, Route 15 (DB), Prince William County, VA (\$55M) - Project Superintendent/Construction Manager.** Responsible for managing the construction process, including quality control activities to ensure the materials used and work performed met the contract requirements. Project consisted of 5 separate phases/roadways which were delivered within a 3-year time period. Work included construction, design, ROW acquisitions, utility relocation and coordination, permitting and environmental monitoring, construction quality management, QA/QC for design and construction, and contract administration.
Firm: Branch Highways, Inc./**Project Dates:** February 2007 to December 2009

Similar Scope Activities to the Route 29 Solutions Project

✓Roadway/Survey	✓Hydraulics/Drainage/SWM	✓TCD/TMP	✓Stakeholder Coordination
✓Structures/Bridges	✓Milling/Overlaying	✓Traffic Maintenance/Mgmt.	✓Public Hearing/Involvement
✓Env./Permitting	✓Demolition of Structures	✓Signs/Struct./Foundations	✓QA/QC and CEI Services
✓Geotechnical	✓Guardrails/Retaining Walls	✓ROW/Utilities	✓Project Mgmt./Project Coord.

- (4.) **VDOT, I-64 Jackson River, Alleghany County, VA (\$12.8M) - Project Superintendent/Construction Manager.** Responsible for managing the construction process, including quality control activities to ensure the materials used and work performed met the contract requirements. Project consisted of the phased demolition and total reconstruction of two bridges over the Jackson River. Work included upgrading and widening over 2 miles of Interstate 64 near Covington, including placement of paved median, concrete barrier, signs and guardrail. Implemented Value Engineering proposal to separate existing interstate traffic from the work zones.
Firm: Branch Highways, Inc./**Project Dates:** June 2002 to February 2005

Similar Scope Activities to the Route 29 Solutions Project

✓Roadway/Survey	✓Hydraulics/Drainage/SWM	✓TCD/TMP	✓Stakeholder Coordination
✓Structures/Bridges	✓Milling/Overlaying	✓Traffic Maintenance/Mgmt.	✓Public Hearing/Involvement
✓Env./Permitting	✓Demolition of Structures	✓Signs/Struct./Foundations	✓QA/QC and CEI Services
✓Geotechnical	✓Guardrails/Retaining Walls	✓ROW/Utilities	✓Project Mgmt./Project Coord.

- (5.) **VDOT, I-81/US 11/460 Interchange, Christiansburg, VA (\$55.8M) - Project Superintendent/Construction Manager.** Responsible for managing the construction process, including quality control activities to ensure the materials used and work performed met the contract requirements. The project consisted of 68 lane-miles of interstate and primary roadway including 2 major interchanges at Exit 118 on I-81. Work was performed under traffic and included 12 bridges, 5 MSE walls, sound walls, several miles of storm drainage pipe, over 7,700 meters of barrier wall with inset drainage structures and approximately 1.7 million CY of excavation.
Firm: Branch Highways, Inc./**Project Dates:** March 1998 to January 2003

Similar Scope Activities to the Route 29 Solutions Project

✓Roadway/Survey	✓Milling/Overlaying	✓TCD/TMP	✓Stakeholder Coordination
✓Structures/Bridges	✓Demolition of Structures	✓Traffic Maintenance/Mgmt.	✓Project Mgmt./Project Coord.
✓Hydraulics/ Drainage/SWM	✓Guardrails/Retaining Walls	✓Signs/Struct./Foundations	

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.

- VDOT Route 3 Widening, Design-Build Project, Construction Manager, October 2013 to May 2016 (will be reassigned)
- VDOT I-95 HOT/HOV Express Lanes, DB, Segment 1, Alexandria, Fairfax, Prince William and Stafford Counties, Virginia, *Project Manager*, August 2011 to December 2014

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.			
a.	Name & Title:	Gary R. Miller, P.E., Chief Structural Engineer	
b.	Project Assignment:	Lead Structural Engineer	
c.	Name of Firm with which you are now associated:		
d.	Years experience: With this Firm <u>30</u> Years With Other Firms <u>8</u> Years	Please list chronologically (most recent experience first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list the experience for those years you have worked. Project specific experience shall be included in Section (g) below):	
Johnson, Mirmiran & Thompson, Inc. / Duration of Employment: April 1984 to Present			
Position: <i>Senior Vice President/Chief Structural Engineer (17 years)</i> / Responsibilities: Mr. Miller has 38+ years of structural engineering experience in the design of new structures and rehabilitation of existing structures. His bridge design experience has included long multi-span curved steel girder structures in large complex interchanges, bridges over waterways as well as other structures such as retaining walls, tunnels, box culverts, sign and lighting structures and noise walls. He has managed the design on multi-structure contracts, including DB contracts, in Washington DC, Maryland, Pennsylvania, Florida, Delaware and Virginia. He is familiar with VDOT design standards as well as the AASHTO Load and Resistance Factor Bridge Design Specifications.			
Gary has been involved with developing and implementing Context Sensitive Design approaches and aesthetic aspects of design on bridges, both steel and concrete, during the past 28 years. In addition, he has worked with bridge architects, public artists, landscape architects and various governmental reviewing agencies in obtaining consensus on some of the largest transportation projects in the Washington Metro area.			
e.	Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:	<ul style="list-style-type: none"> ○ Trine University, Angola, IN/BSCE/1975/Civil Engineering ○ Dale Carnegie Management Training 	
f.	Active Registration: Year First Registered/ Discipline/VA Registration #:	<ul style="list-style-type: none"> ○ 2011/Virginia Registered Professional Engineering No. 0402 048752 Also registered in DC, DE, FL, MD, NC, PA, SC and WV	
g.	Document the extent and depth of your experience and qualifications relevant to the Project.		
	<ol style="list-style-type: none"> 1. <i>Note your specific responsibilities and authorities for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> 		
(List at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.)			
* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.			
(1.) DDOT, 11th Street Bridges and Interchanges over the Anacostia River (DB), Washington, DC (\$378M) – Lead Structural Engineer/Deputy Design Manager. JMT was the lead designer and worked directly with the Lead JV Contractor, Skanska on three new major continuous steel multi-girder bridge crossings of the Anacostia River and two complex interchanges. Gary oversaw all aspects of the structural design and assisted the Visual Quality Manager in coordinating the aesthetic features of the structures. This large DB project included 23 bridges and numerous retaining walls. These bridges include a 5 span 866 foot long bridge, a 5 span 926 foot long bridge and a 10 span 1,650 foot long bridge. Spans range up to 234 feet for the main span over the Anacostia River. Several existing bridges were rehabilitated for use in the new interchanges. Bridge types included multi-span steel plate girders, steel rolled beams and prestressed concrete bulb-tee beams. The three bridges over the Anacostia River utilized 66” prestressed concrete cylinder piles with a cast-in-place concrete cap.			
Firm: Johnson, Mirmiran & Thompson, Inc. / Project Dates: April 2009 – May 2015 (Substantial Completion June 2013)			
Similar Scope Activities to the Route 29 Solutions Project			
✓ Roadway/Survey	✓ Hydraulics/Drainage/SWM	✓ TCD/TMP	✓ Stakeholder Coordination
✓ Structures/Bridges	✓ Milling/Overlying	✓ Traffic Maintenance/Mgmt	✓ Public Hearing/Involvement
✓ Env./Permitting	✓ Demolition of Structures	✓ Signs/Struct./Foundations	✓ QA/QC and CEI Services
✓ Geotechnical	✓ Guardrails/Retaining Walls	✓ ROW/Utilities	✓ Project Mgmt./Project Coord.

- (2.) **MSHA, Intercounty Connector (MD 200) Contract C (DB), MD 200/U.S. 29, MD 200/Briggs Chaney Road, and MD 200/I-95 Interchanges, Montgomery and Prince George’s Counties, MD (\$513.9M) – Lead Structural Engineer.** Responsible for the design of 19 bridges, 25 retaining walls, 5 noise barriers, 4 large box culverts, toll gantries, sign structures and high mast light poles for this DB project. He ensured that the project aesthetic goals were addressed. All bridges, retaining walls and noise barriers incorporate architectural features and treatments, including formliner finishes/stained concrete on bridge parapets, wingwalls, noise barriers and retaining walls. Special pier shapes were developed for bridges on and over the Intercounty Connector.

Firm: Johnson, Mirmiran & Thompson, Inc./**Project Dates:** October 2008 - July 2011

Similar Scope Activities to the Route 29 Solutions Project

✓Roadway/Survey	✓Hydraulics/Drainage/SWM	✓TCD/TMP	✓QA/QC
✓Structures/Bridges	✓Milling/Overlaying	✓Traffic Maintenance/Mgmt.	✓Project Mgmt./Project Coord.
✓Env./Permitting	✓Demolition of Structures	✓Signs/Struct./Foundations	
✓Geotechnical	✓Guardrails/Retaining Walls	✓ROW/Utilities	

- (3.) **FHWA-EFLHD/DDOT, 9th Street Bridge Replacement over CSXT and Amtrak Rail and New York Avenue (DB), Washington, DC (\$58.4M) – Designer of Record.** The work included the complete replacement of the existing 7 span structure with a 4 span steel plate girder bridge using a hybrid design with Grade 50 and 70 weathering steel. Aesthetic features developed with an infrastructure artist include entry columns, granite-faced curbs, ornamental light poles, fencing and railings and a stone-like finish on retaining walls. Assisted the Public Artist and Visual Quality Manager in the development of PowerPoint presentations and display boards for meetings to receive DDOT and community approval.

Firm: Johnson, Mirmiran & Thompson, Inc. / **Project Dates:** September 2006 - July 2011

Similar Scope Activities to the Route 29 Solutions Project

✓Roadway/Survey	✓Hydraulics/Drainage/SWM	✓TCD/TMP	✓Stakeholder Coordination
✓Structures/Bridges	✓Milling/Overlaying	✓Traffic Maintenance/Mgmt.	✓Public Hearing/Involvement
✓Env./Permitting	✓Demolition of Structures	✓Signs/Struct./Foundations	✓QA/QC and CEI Services
✓Geotechnical	✓Guardrails/Retaining Walls	✓ROW/Utilities	✓Project Mgmt./Project Coord.

- (4.) **MDTA, I-95/I-695 Interchange – Section 100 Express Toll Lanes (ETL), Baltimore County, MD (\$450M) – Chief Structural Engineer.** Responsible for the preliminary layouts of bridge structures in a complex network of multilevel interchange design at the I-695 & I-895 interchanges. Responsible for the final design of all structures within the Interchange which includes 22 bridges, 38 retaining walls, 7 noise barriers and 5 culverts. All bridges, retaining walls and noise barriers incorporate architectural features and treatments, including special pier shapes.

Firm: Johnson, Mirmiran & Thompson, Inc./**Project Dates:** April 2005 - April 2011

Similar Scope Activities to the Route 29 Solutions Project

✓Roadway/Survey	✓Hydraulics/Drainage/SWM	✓TCD/TMP	✓Stakeholder Coordination
✓Structures/Bridges	✓Milling/Overlaying	✓Traffic Maintenance/Mgmt.	✓Public Hearing/Involvement
✓Env./Permitting	✓Demolition of Structures	✓Signs/Struct./Foundations	✓QA/QC and CEI Services
✓Geotechnical	✓Guardrails/Retaining Walls	✓ROW/Utilities	✓Project Mgmt./Project Coord.

- (5.) **MSHA, I-95/I-495/I-295 Interchanges at the Woodrow Wilson Memorial Bridge, Prince George’s County, MD (\$250M) – Chief Structural Engineer/Assistant Design Manager.** Responsible for the design of numerous structures including bridges and retaining walls and coordinating the design activities among various disciplines and subconsultants for this multi-level interchange constructed over several contracts totaling \$255 million. This project was unique due to the complexity of the design and the considerations required for the development of plans for Maintenance of Traffic (MOT) and construction phasing to maintain an Average Daily Traffic (ADT) of nearly 200,000 vehicles per day as well as coordinating MOT between adjoining major projects. The mainline of the Capital Beltway had to be raised nearly 40 feet at the approach to the new Woodrow Wilson Bridge, while maintaining traffic. The interchange included: 8 I-95 mainline bridges, 16 ramp bridges, 3 pedestrian trail bridges, 31 permanent retaining walls, 6 temporary retaining walls, headwalls, a large drainage structure, sign structures and high mast light poles. Additional services included: Surveying, right-of-way plats, traffic engineering, complex MOT, signing and lighting, geotechnical investigations, value engineering, environmental permits, hydrology/hydraulics, SWM, erosion and sediment control, on-site engineering support, landscape architecture, utility relocation and post award services

Firm: Johnson, Mirmiran & Thompson, Inc./**Project Dates:** September 1998 – December 2008

Similar Scope Activities to the Route 29 Solutions Project

✓Roadway/Survey	✓Hydraulics/Drainage/SWM	✓TCD/TMP	✓Stakeholder Coordination
✓Structures/Bridges	✓Milling/Overlaying	✓Traffic Maintenance/Mgmt.	✓Public Hearing/Involvement
✓Env./Permitting	✓Demolition of Structures	✓Signs/Struct./Foundations	✓QA/QC and CEI Services
✓Geotechnical	✓Guardrails/Retaining Walls	✓ROW/Utilities	✓Project Mgmt./Project Coord.

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. **Not required for Lead Structural Engineer.**

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title:	Matthew J. Wolniak, P.E., P.T.O.E., Chief Traffic Engineer
b. Project Assignment: Lead Traffic Engineer	
c. Name of Firm with which you are now associated:	
d. Years experience: With this Firm <u>27</u> Years With Other Firms <u>5</u> Years	<p>Please list chronologically (most recent experience first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list the experience for those years you have worked. Project specific experience shall be included in Section (g) below):</p> <p>Johnson, Mirmiran & Thompson, Inc. / Duration of Employment: April 1984 to Present</p> <p>Position: <i>Vice President/Chief Traffic Engineer (23 years)</i> / Responsibilities: Mr. Wolniak has 32+ years of professional traffic engineering experience and is a Professional Traffic Operations Engineer with extensive experience including capacity analysis and design plans, MOT plans, traffic signal designs, signing, marking and lighting, Intelligent Transportation Systems (ITS) and traffic analysis. He has served as project manager on numerous traffic engineering contracts in the mid-Atlantic region.</p>
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:	<ul style="list-style-type: none"> ○ University of Baltimore, Baltimore, MD/MBA/1987/Business Administration ○ Clarkson University/Potsdam, NY/BSCEE/1982/Civil and Environmental Engineering ○ Dale Carnegie Management Training
f. Active Registration: Year First Registered/ Discipline/VA Registration #:	<ul style="list-style-type: none"> ○ 1992/Virginia Registered Professional Engineering No. 0402 023760 Also registered in DC, DE, FL, MD, NY, PA and SC ○ 1999/Professional Traffic Operations Engineer (P.T.O.E.) No. 086
g. Document the extent and depth of your experience and qualifications relevant to the Project.	<ol style="list-style-type: none"> 1. <i>Note your specific responsibilities and authorities for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> <p>(List at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.)</p> <p>* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.</p> <p>(1.) VDOT, Route 29/Charlottesville Bypass (DB), Albemarle County, VA (\$136M) – Chief Traffic Engineer. The project involved the development of an Interchange Modification Report and traffic operational analysis for the proposed U.S. Route 29 Bypass in Charlottesville. A separate traffic study was prepared for the northern termini interchange. Performed Synchro and VISSIM modeling of the study area. The southern interchange involved evaluating six different interchange concepts. A framework document was prepared in preparation for the IJR and was submitted to FHWA. Coordinated the development of travel demand forecasts. Performed travel time runs and supervised traffic count collection.</p> <p>Firm: Johnson, Mirmiran & Thompson, Inc./Project Dates: June 2012 - April 11, 2014 (Stop Work Order)</p>
Similar Scope Activities to the Route 29 Solutions Project	
✓Roadway/Survey	✓Hydraulics/Drainage/SWM ✓TCD/TMP ✓Stakeholder Coordination ✓Structures/Bridges ✓Milling/Overlaying ✓Traffic Maintenance/Mgmt. ✓Public Hearing/Involvement ✓Env./Permitting ✓Demolition of Structures ✓Signs/Struct./Foundations ✓QA/QC and CEI Services ✓Geotechnical ✓Guardrails/Retaining Walls ✓ROW/Utilities ✓Project Mgmt./Project Coord.

- (2.) **DDOT, 11th Street Bridges and Interchanges over the Anacostia River (DB), Washington, DC (\$378M)** – *Lead Traffic Engineer*. JMT was the lead designer and worked directly with the Lead JV Contractor, Skanska on three new major continuous steel multi-girder bridge crossings of the Anacostia River and two complex interchanges. Traffic analysis consisted of developing Synchro/CORSIM models for the local street network to determine lane configurations. Developed an IJR for the project and developed traffic engineering plans for signals, signing, pavement marking, lighting and MOT. Signal plans included phasing for the temporary signals during MOT. Signal plan design incorporated Federal and DC ADA requirements. The MOT included analysis of traffic operations during construction and included project phasing, layout of temporary signing, marking, channelization devices, temporary pavement and temporary concrete barrier. Plans were developed to DDOT/MUTCD standards. Signing plans included the layout of all guide, regulatory and warning signs.

Firm: Johnson, Mirmiran & Thompson, Inc.

Project Dates: April 2009 – May 2015 (Substantial Completed June 2013)

Similar Scope Activities to the Route 29 Solutions Project

✓ Roadway/Survey	✓ Hydraulics/Drainage/SWM	✓ TCD/TMP	✓ Stakeholder Coordination
✓ Structures/Bridges	✓ Milling/Overlaying	✓ Traffic Maintenance/Mgmt.	✓ Public Hearing/Involvement
✓ Env./Permitting	✓ Demolition of Structures	✓ Signs/Struct./Foundations	✓ QA/QC
✓ Geotechnical	✓ Guardrails/Retaining Walls	✓ ROW/Utilities	✓ Project Mgmt./Project Coord.

- (3.) **FHWA-EFLHD/DDOT, 9th Street Bridge Replacement over CSXT and Amtrak Rail and New York Avenue (DB), Washington, DC (\$58.4M)** – *Lead Traffic Engineer*. Responsible for Synchro traffic modeling for the phased removal and complete reconstruction of an existing structure and the reconstruction of the 9th Street-NY Avenue Interchange. This work included the development of MOT, signing, signal and pavement marking plans. The project includes close coordination with DDOT, EFLHD, Advisory Neighborhood Commissions and the U.S. Postal Service. **Firm:** Johnson, Mirmiran & Thompson, Inc. / **Project Dates:** September 2006 - July 2011

Similar Scope Activities to the Route 29 Solutions Project

✓ Roadway/Survey	✓ Hydraulics/Drainage/SWM	✓ TCD/TMP	✓ Stakeholder Coordination
✓ Structures/Bridges	✓ Milling/Overlaying	✓ Traffic Maintenance/Mgmt.	✓ Public Hearing/Involvement
✓ Env./Permitting	✓ Demolition of Structures	✓ Signs/Struct./Foundations	✓ QA/QC and CEI Services
✓ Geotechnical	✓ Guardrails/Retaining Walls	✓ ROW/Utilities	✓ Project Mgmt./Project Coord.

- (4.) **MDTA, I-95/I-695 Interchange – Section 100 Express Toll Lanes (ETL), Baltimore County, MD (\$450M)** – *Lead Traffic Engineer*. Responsible for the preliminary layouts of bridge structures in a complex network of multilevel interchange design at the I-695 & I-895 interchanges. Responsible for the final design of all structures within the Interchange which includes 22 bridges, 38 retaining walls, 7 noise barriers and 5 culverts. Performed VISSIM modeling and travel demand forecasting associated with the construction of express toll lanes and reconstruction of the interchange. For the interchange, designed MOT, signing, pavement markings, lighting and ITS equipment/communications. Also provided the post-it note layout of all signing. Other tasks included design of field equipment locations, conduit/fiber optic cable layouts to the field equipment as well as pavement marking for the interchange. **Firm:** Johnson, Mirmiran & Thompson, Inc./ **Project Dates:** April 2005 - April 2011

Similar Scope Activities to the Route 29 Solutions Project

✓ Roadway/Survey	✓ Hydraulics/Drainage/SWM	✓ TCD/TMP	✓ Stakeholder Coordination
✓ Structures/Bridges	✓ Milling/Overlaying	✓ Traffic Maintenance/Mgmt.	✓ Public Hearing/Involvement
✓ Env./Permitting	✓ Demolition of Structures	✓ Signs/Struct./Foundations	✓ QA/QC and CEI Services
✓ Geotechnical	✓ Guardrails/Retaining Walls	✓ ROW/Utilities	✓ Project Mgmt./Project Coord.

- (5.) **Hillsdale Drive Extension, City of Charlottesville, VA (\$295K)** – *Lead Traffic Engineer*. Developed existing and forecasted traffic to show relevant peak hour data plus average daily traffic, reviewed land use based on the regional model and developer’s traffic impact studies as to its impact on the project, performed validation of the existing Thomas Jefferson Planning District Commission (TJPDC) model, performed design year model runs for each build and the no build alternative, developed environmental traffic and performed traffic analysis based existing and design year traffic. The analysis was based on SIDRA for roundabouts and Synchro for intersections. Analyzed the impact of cut through traffic that would occur along Hillsdale Drive due to the proposed improvement. Presented findings at numerous public meetings.

Firm: Johnson, Mirmiran & Thompson, Inc./ **Project Dates:** January 2003 – January 2005

Similar Scope Activities to the Route 29 Solutions Project

✓ Roadway/Survey	✓ Hydraulics/Drainage/SWM	✓ TCD/TMP	✓ Stakeholder Coordination
✓ Structures/Bridges	✓ Milling/Overlaying	✓ Traffic Maintenance/Mgmt.	✓ Public Hearing/Involvement
✓ Env./Permitting	✓ Demolition of Structures	✓ Signs/Struct./Foundations	✓ QA/QC and CEI Services
✓ Geotechnical	✓ Guardrails/Retaining Walls	✓ ROW/Utilities	✓ Project Mgmt./Project Coord.

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. **Not required for Lead Traffic Engineer.**

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.																			
a.	Name & Title:	Edward G. Drahos, P.E., Sr. Vice President/Sr. Geotechnical Reviewer																	
b.	Project Assignment:	Lead Geotechnical Engineer																	
c.	Name of Firm with which you are now associated:																		
d.	Years experience: With this Firm <u>31</u> Years With Other Firms <u>6</u> Years Please list chronologically (most recent experience first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list the experience for those years you have worked. Project specific experience shall be included in Section (g) below): Schnabel Engineering, Inc. / Duration of Employment: June 1997 to Present <hr/> Position: <i>Sr. Vice President-Sr. Geotechnical Reviewer</i> / Responsibilities: General responsibilities include lead geotechnical engineer on design-build transportation projects; geotechnical project management; geotechnical senior reviewer on transportation, water and wastewater treatment, university, private and municipal building projects; and business development.																		
e.	Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: <ul style="list-style-type: none">○ The Ohio State University, Columbus, Ohio/Bachelor of Science/1975/Civil Engineering○ The Ohio State University, Columbus, Ohio/Master of Science/1977/Geotechnical Engineering																		
f.	Active Registration: Year First Registered/ Discipline/VA Registration #: <ul style="list-style-type: none">○ 1985/Virginia Registered Professional Engineering No. 0402 015605 Also registered in OH																		
g.	Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none">1. <i>Note your specific responsibilities and authorities for each project, not those of the firm.</i>2. <i>Note whether experience is with current firm or with other firm.</i>3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> (List at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.) * On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project. (1.) VDOT, Route 29/Charlottesville Bypass (DB), Albemarle County, VA (\$136M) – Lead Geotechnical Engineer. The project was 6.2 miles in length, includes nine (9) new bridges and is designed to circumvent seventeen (17) traffic signals along the existing Route 29 corridor prior to cancellation of the project. Provided a geotechnical engineering data report for an approximate 4,600 ft. long section of the bypass between Barracks Road and Lambs Road. This portion of the site included cut and fill slopes more than 25-ft. high, the mainline bridge over Tributary K, the overpass bridge at Lambs Road, two culverts greater than 36 inches diameter, two stormwater management basins, and two retaining walls. Firm: Schnabel Engineering, Inc./ Project Dates: June 2012 - April 11, 2014 (Stop Work Order)																		
Similar Scope Activities to the Route 29 Solutions Project																			
<table style="width: 100%; border: none;"><tr><td style="width: 25%;">✓Roadway/Survey</td><td style="width: 25%;">✓Hydraulics/Drainage/SWM</td><td style="width: 25%;">✓TCD/TMP</td><td style="width: 25%;">✓Stakeholder Coordination</td></tr><tr><td>✓Structures/Bridges</td><td>✓Milling/Overlaying</td><td>✓Traffic Maintenance/Mgmt.</td><td>✓Public Hearing/Involvement</td></tr><tr><td>✓Env./Permitting</td><td>✓Demolition of Structures</td><td>✓Signs/Struct./Foundations</td><td>✓QA/QC and CEI Services</td></tr><tr><td>✓Geotechnical</td><td>✓Guardrails/Retaining Walls</td><td>✓ROW/Utilities</td><td>✓Project Mgmt./Project Coord.</td></tr></table>				✓Roadway/Survey	✓Hydraulics/Drainage/SWM	✓TCD/TMP	✓Stakeholder Coordination	✓Structures/Bridges	✓Milling/Overlaying	✓Traffic Maintenance/Mgmt.	✓Public Hearing/Involvement	✓Env./Permitting	✓Demolition of Structures	✓Signs/Struct./Foundations	✓QA/QC and CEI Services	✓Geotechnical	✓Guardrails/Retaining Walls	✓ROW/Utilities	✓Project Mgmt./Project Coord.
✓Roadway/Survey	✓Hydraulics/Drainage/SWM	✓TCD/TMP	✓Stakeholder Coordination																
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✓Geotechnical	✓Guardrails/Retaining Walls	✓ROW/Utilities	✓Project Mgmt./Project Coord.																

- (2.) **VDOT, U.S. Route 29 (Emmet Street)/U.S. Route 250 Bypass Interchange Improvements, Charlottesville, VA (\$400K)** – *Geotechnical Quality Assurance Reviewer*. Responsible for the design of interchange improvements in Charlottesville. The project included the widening of U.S. Route 29, widening of the ramp from southbound U.S. Route 29 to westbound U.S. Route 250 Bypass, pavement design, retaining walls, noise barrier walls, a stormwater management facilities. Provided recommendations for the retaining wall earth pressures and foundations and noise barrier wall foundations, stormwater improvements and pavements.
Firm: Schnabel Engineering, Inc./**Project Dates:** May 2013 – August 2014

Similar Scope Activities to the Route 29 Solutions Project

✓Roadway/Survey	✓Hydraulics/Drainage/SWM	✓TCD/TMP	✓Stakeholder Coordination
✓Structures/Bridges	✓Milling/Overlaying	✓Traffic Maintenance/Mgmt.	✓Public Hearing/Involvement
✓Env./Permitting	✓Demolition of Structures	✓Signs/Struct./Foundations	✓QA/QC and CEI Services
✓Geotechnical	✓Guardrails/Retaining Walls	✓ROW/Utilities	✓Project Mgmt./Project Coord.

- (3.) **VDOT, U.S. Route 250 Bypass Bridge at McIntire Road, Charlottesville, VA (\$199K)** – *Geotechnical Quality Assurance Reviewer*. Responsible for the design of a new interchange at the Route 250 Bypass and McIntire Road in Charlottesville. The project included bridge foundations, embankments on soft ground, cut slopes, pavements and stormwater management facilities. Foundations were designed using AASHTO LRFD Bridge Design Specifications.
Firm: Schnabel Engineering, Inc./**Project Dates:** January 2011 – May 2012

Similar Scope Activities to the Route 29 Solutions Project

✓Roadway/Survey	✓Hydraulics/Drainage/SWM	✓TCD/TMP	✓Stakeholder Coordination
✓Structures/Bridges	✓Milling/Overlaying	✓Traffic Maintenance/Mgmt.	✓Public Hearing/Involvement
✓Env./Permitting	✓Demolition of Structures	✓Signs/Struct./Foundations	✓QA/QC and CEI Services
✓Geotechnical	✓Guardrails/Retaining Walls	✓ROW/Utilities	✓Project Mgmt./Project Coord.

- (4.) **FHWA-EFLHD/VDOT, Fairfax County Parkway Extension (DB), Springfield, VA (\$112.5M)** – *Lead Geotechnical Engineer/ Senior Reviewer*. Subconsultant to the lead designer JMT on this award-winning project. The project included six new bridges and one widened bridge, cut and fill slopes in soil and weathered rock, stormwater management basins, storm drains, pavements, MSE walls, soil nail walls, sound walls, signal poles, and overhead sign structures. Provided foundation design recommendations for footings, drilled shafts and driven H-piles using AASHTO LRFD Bridge Design Specifications, and provided review of borings, soil laboratory testing, engineering analyses and the geotechnical reports. Also provided review during construction of the dynamic testing of piles supporting bridge abutments and piers.
Firm: Schnabel Engineering, Inc./ **Project Dates:** October 2008 - July 2011

Similar Scope Activities to the Route 29 Solutions Project

✓Roadway/Survey	✓Hydraulics/Drainage/SWM	✓TCD/TMP	✓Stakeholder Coordination
✓Structures/Bridges	✓Milling/Overlaying	✓Traffic Maintenance/Mgmt.	✓Public Hearing/Involvement
✓Env./Permitting	✓Demolition of Structures	✓Signs/Struct./Foundations	✓QA/QC
✓Geotechnical	✓Guardrails/Retaining Walls	✓ROW/Utilities	✓Project Mgmt./Project Coord.

- (5.) **VDOT, I-81 Truck Climbing Lane (DB), Rockbridge County, VA (\$817K)** – *Lead Geotechnical Engineer/ Senior Reviewer*. For widening of 7.5 miles of the northbound lanes of I-81 from Mile Marker 195 to Mile Marker 202.5. The project included embankment widening, cut slopes in soil and rock, three replacement bridges, stormwater management basins, storm drains, and pavements. Provided foundation design recommendations for bridges supported on driven piles, drilled micropiles, and footings in limestone rock in karst geology. Provided recommendations for design of a geofoam embankment used to reduce settlements at one bridge abutment over soft residual soil (epi-karst), reliability analyses for all settlement and slope stability analyses, and review of borings, soil laboratory testing, engineering analyses and the geotechnical reports.
Firm: Schnabel Engineering, Inc./**Project Dates:** June 2009 – June 2012

Similar Scope Activities to the Route 29 Solutions Project

✓Roadway/Survey	✓Hydraulics/Drainage/SWM	✓TCD/TMP	✓Stakeholder Coordination
✓Structures/Bridges	✓Milling/Overlaying	✓Traffic Maintenance/Mgmt.	✓Public Hearing/Involvement
✓Env./Permitting	✓Demolition of Structures	✓Signs/Struct./Foundations	✓QA/QC and CEI Services
✓Geotechnical	✓Guardrails/Retaining Walls	✓ROW/Utilities	✓Project Mgmt./Project Coord.

- 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. **Not required for Lead Geotech. Engineer.**

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title:

David Malinoski, P.E., Utility Project Engineer

b. Project Assignment: **Lead Utility Coordination Manager**

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



d. Years experience: With this Firm <1 Years With Other Firms 34 Years

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

Johnson, Mirmiran & Thompson, Inc. / Duration of Employment: March 2014 to Present

Position: Associate/Utilities Project Engineer / **Responsibilities:** Dave brings 34+ years of design experience in the management and design of utility, transportation and site improvement projects. He will be responsible for preparing utility design plans and coordinating the relocation of utilities on interstate, arterial and secondary roadways constructed as DB and Design-Bid-Build projects.

Stantec, Inc. (formerly Greenhorne & O'Mara, Inc.) / Duration of Employment: August 2000 to February 2014

Position: Project Manager / **Responsibilities:** Dave provided utility field inspection services that include conflict analysis, cost estimates and prorates, scheduling and in-plan design deliverables for water, sewer, electric and telecommunications facilities.

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

- o Northeastern University, Burlington, MA /Bachelor of Science/1978/Civil Engineering

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

- o 1998/Virginia Registered Professional Engineering No. 0402 031971

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

1. Note your specific responsibilities and authorities 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 at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.)

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

(1.) VDOT, Route 3 Widening - Culpeper District, Culpeper District, VA (\$23.5M) – Lead Utilities Coordination Manager. JMT is the lead designer and Branch Highways is the Contractor on this widening project that consists of a 5-mile section of this rural arterial roadway from 2 lanes to 4 lanes with a 40 foot median through a historically sensitive corridor. Responsible for identifying utility conflicts, conducting utility field inspections, coordinating the relocation of existing utilities, and reviewing utility relocation plans and estimates. Utilities that are being relocated include overhead electric distribution and telephone facilities and several underground fiber optic cables. The project also requires relocation of an overhead electric transmission tower. The roadway alignment is being adjusted to eliminate the need to relocate three high pressure gas transmission lines and accommodate the limited length of casing extensions that can be added to each pipeline

Firm: Johnson, Mirmiran & Thompson, Inc./**Project Dates:** March 2014 – May 2017

Similar Scope Activities to the Route 29 Solutions Project

✓Roadway/Survey	✓Hydraulics/Drainage/SWM	✓TCD/TMP	✓Stakeholder Coordination
✓Structures/Bridges	✓Milling/Overlaying	✓Traffic Maintenance/Mgmt.	✓Public Hearing/Involvement
✓Env./Permitting	✓Demolition of Structures	✓Signs/Struct./Foundations	✓QA/QC and CEI Services
✓Geotechnical	✓Guardrails/Retaining Walls	✓ROW/Utilities	✓Project Mgmt./Project Coord.

- (2.) **VDOT, I-495 Capital Beltway HOT Lanes Utility Relocation, Fairfax, VA (\$1.2B) – Lead Utilities Coordination Manager.** Responsible for coordinating utility relocations and design of water and sewer relocations for 14 miles of interstate roadway widening that added high occupancy toll lanes. Tasks included analyzing utility conflicts, conducting multiple utility field inspections, coordinating the relocation of existing utilities, and reviewing utility relocation plans and estimates. Relocation designs included 12-inch and 16-inch ductile iron waterlines on three new bridge attachments and 20-inch PCCP relocation in conflict with bridge pier construction. New bored crossings were designed to replace existing gravity sewers in conflict with the roadway widening. An 1,800 LF duct bank was designed for telephone and CATV relocation.

Firm: Stantec, Inc. (formerly Greenhorne & O'Mara, Inc.)/**Project Dates:** April 2007 – May 2011

Similar Scope Activities to the Route 29 Solutions Project

✓Roadway/Survey	✓Hydraulics/Drainage/SWM	✓TCD/TMP	✓Stakeholder Coordination
✓Structures/Bridges	✓Milling/Overlaying	✓Traffic Maintenance/Mgm	✓Public Hearing/Involvement
✓Env./Permitting	✓Demolition of Structures	✓Signs/Struct./Foundations	✓QA/QC and CEI Services
✓Geotechnical	✓Guardrails/Retaining Walls	✓ROW/Utilities	✓Project Mgmt./Project Coord.

- (3.) **I-295/Meadowville Interchange (DB), Chesterfield County, VA (\$13M) – Lead Utilities Coordination Manager.** Responsible for the identification of utility conflicts and coordination of electric, telephone and water utility relocations within the project located in Chesterfield that included the first phase of construction of a new cloverleaf interchange on I-295 at VA 618 and local road improvements to improve access to the Meadowville Technology Park.

Firm: Stantec, Inc. (formerly Greenhorne & O'Mara, Inc.)/**Project Dates:** April 2010 – May 2011

Similar Scope Activities to the Route 29 Solutions Project

✓Roadway/Survey	✓Hydraulics/Drainage/SWM	✓TCD/TMP	✓Stakeholder Coordination
✓Structures/Bridges	✓Milling/Overlaying	✓Traffic Maintenance/Mgm	✓Public Hearing/Involvement
✓Env./Permitting	✓Guardrails/Retaining Walls	✓Signs/Struct./Foundations	✓QA/QC and CEI Services
✓Geotechnical		✓ROW/Utilities	✓Project Mgmt./Project Coord.

- (4.) **Route 10 Utility Design, Chesterfield County, VA (\$30M) – Utility Project Manager.** Responsible for preparation of design plans and specifications of water, gravity sewer and sewer force main relocations for this project that included approximately one mile of roadway widening from four to six lanes and bridge replacement over a CSXT rail line. Relocations include 3000 LF of 12-inch ductile iron waterline, 2,000 LF of 24-inch ductile iron sewer force main and 1500 LF of 10-inch gravity sewer. Tasks included sewer flow analysis, cost estimates, betterment calculations and preparation of CSX railroad permit for bored utility crossing.

Firm: Stantec, Inc. (formerly Greenhorne & O'Mara, Inc.)/**Project Dates:** April 2006 – May 2008

Similar Scope Activities to the Route 29 Solutions Project

✓Roadway/Survey	✓Hydraulics/Drainage/SWM	✓TCD/TMP	✓Stakeholder Coordination
✓Structures/Bridges	✓Demolition of Structures	✓Traffic Maintenance/Mgm	✓Public Hearing/Involvement
✓Env./Permitting	✓Guardrails/Retaining Walls	✓Signs/Struct./Foundations	✓QA/QC and CEI Services
✓Geotechnical		✓ROW/Utilities	✓Project Mgmt./Project Coord.

- (5.) **VDOT, I-95/U.S. Route 1 Interchange at Woodrow Wilson Memorial Bridge Utility Relocation, Alexandria, VA (\$600M) – Utility Project Manager.** Developed design plans for the utility relocation of 2,500 LF of fiber optic duct bank and of 12,500 LF overhead power into underground duct banks crossing interchange, interstate and arterial highway and waterway in 5 phased construction contracts. Reviewed utility relocation plans and estimates.

Firm: Stantec, Inc. (formerly Greenhorne & O'Mara, Inc.)/**Project Dates:** April 2001 – May 2005

Similar Scope Activities to the Route 29 Solutions Project

✓Roadway/Survey	✓Hydraulics/Drainage/SWM	✓TCD/TMP	✓Stakeholder Coordination
✓Structures/Bridges	✓Milling/Overlaying	✓Traffic Maintenance/Mgmt.	✓Public Hearing/Involvement
✓Env./Permitting	✓Demolition of Structures	✓Signs/Struct./Foundations	✓QA/QC and CEI Services
✓Geotechnical	✓Guardrails/Retaining Walls	✓ROW/Utilities	✓Project Mgmt./Project Coord.

- 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.

Not required for Lead Utility Coordination Manager.

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title:

Susan Sharp, Public Relations Manager

b. Project Assignment: **Public Relations Manager**

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



Sharp & Company, Inc.

d. Years experience: With this Firm 30 Years With Other Firms 9 Years

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

Sharp & Company, Inc. / Duration of Employment: March 1982 to Present

Position: *President, Founding Partner/Public Relations Manager* **Responsibilities:** Ms. Sharp has over 39 years of professional experience in electronic and print information communication and marketing, information architecture, creation and implementation of effective communication strategies, strategic planning, marketing communications, and graphic design. She is a successful entrepreneur with experience delivering value and quality to an extensive loyal client base, including profit and non-profit organizations, government agencies, and institutions.

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

- o The American University, Washington, DC /BFA/1973/Graphic Design

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

- o N/A

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

1. *Note your specific responsibilities and authorities 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 at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.)

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

(1.) Rockville Pike: The MD 355 Crossing (BRAC) (\$105,000) – Public Relations Manager. The BRAC project is located in affluent Bethesda, Maryland, a densely populated and developed area inside the Capital Beltway (I-495), and adjacent to the National Institutes of Health (NIH) and the Walter Reed National Military Medical Center (WRNMMC). Under Ms. Sharp’s direction, Sharp & Company created the project website to keep the public informed throughout the procurement phase of the project. As the project moves into the construction phase, the website will expand to include additional content, pages, and sections and Sharp & Company will be responsible for working with those affected by the disruption to this major traffic artery throughout the construction process.

Firm: Sharp & Company, Inc./**Project Dates:** August 2013 - Present

Similar Scope Activities to the Route 29 Solutions Project

- ✓Stakeholder Coordination
- ✓Public Hearing/Involvement

(2.) **VDOT, I-66 Inside the Beltway Multimodal Study, Fairfax, VA (\$280K) - Public Relations Manager.** Ms. Sharp supported this study that identified highway, transit, bicycle, and pedestrian alternatives along this critical Northern Virginia commuter corridor crossing two counties from the beltway to the District line. Ms. Sharp developed and implemented a public process that reached out to, gathered input from, and built consensus among stakeholders affected by the study. These stakeholders included state and local jurisdiction technical staff, local transportation agencies, elected officials, interest groups, residents, commuters, businesses, and the general public. In addition to public meetings, Ms. Sharp conducted over 25 individual stakeholder interviews to inform and learn about project concerns.

Firm: Sharp & Company, Inc./**Project Dates:** June 2011 - June 2012

— **Similar Scope Activities to the Route 29 Solutions Project**

- ✓Stakeholder Coordination
- ✓Public Hearing/Involvement

(3.) **VDOT, Bi-County/North-South Corridor Study, Loudoun and Prince George's County, VA - The Bi-County Parkway Study** developed alternative routes to improve capacity, reduce congestion, enhance mobility, and link communities between I-66 and Route 50. Sharp & Company coordinated three public meetings in Northern Virginia to present the North-South Master Plan study alternative corridor strategies to the public and receive their comments and input. In addition, under Ms. Sharp's direction, Sharp & Company, developed the layout for three project newsletters and edited technical content and information to provide it in a context that the public can understand.

Firm: Sharp & Company, Inc./ **Project Dates:** November 2012 – October 2013

— **Similar Scope Activities to the Route 29 Solutions Project**

- ✓Stakeholder Coordination
- ✓Public Hearing/Involvement

(4.) **Virginia Department of Rail and Public Transportation (DRPT), Rail Plan, Statewide, VA (\$75K) - Public Relations Manager.** To help build support for its ambitious rail program, DRPT engaged Ms. Sharp to position the program in a way that elected officials, stakeholders, and the general public would support. To tell the story in a compelling way, Ms. Sharp crafted a new document. Working from a technical document created to meet Federal Railroad Administration requirements, Ms. Sharp worked closely with DRPT to devise a strong message and purpose to this document, one that would resonate with stakeholders and the public. Based on that, she rewrote and oversaw redesign of the text, emphasizing the narrative value and story that addressed the Commonwealth's rail needs. Ms. Sharp repurposed material for public meetings, creating PowerPoint presentations and writing text for other meeting materials. The report was cited by AASHTO in its best practices for communicating about rail plans. Based on the success of the Statewide Rail Plan, Ms. Sharp was again asked to craft a public document based on numerous planning studies, analyses, and presentations that had been developed. Working closely with DRPT, Ms. Sharp devised a structure and theme and then wrote the copy for the document.

Firm: Sharp & Company, Inc./**Project Dates:** November 2009 – June 2010

— **Similar Scope Activities to the Route 29 Solutions Project**

- ✓Stakeholder Coordination
- ✓Public Hearing/Involvement

(5.) **DDOT, Circular Transit Development Plan, Washington, DC (\$73K) - Public Relations Manager.** Ms. Sharp developed and implemented the public engagement plan for route expansion. An integral part of the transportation planning process, the engagement plan successfully built stakeholder support among varied constituents for new route considerations. To facilitate research and develop strategic goals, Ms. Sharp hosted Community Advisory Panel and Public meetings to brainstorm high-level themes regarding what the Circulator should aim to achieve. Because constituent groups had been provided an opportunity to share their concerns and be listened to, the new routes selected were embraced by the public with no backlash.

Firm: Sharp & Company, Inc./**Project Dates:** May 2010 – April 2011

— **Similar Scope Activities to the Route 29 Solutions Project**

- ✓Stakeholder Coordination
- ✓Public Hearing/Involvement

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. **Not required for Public Relations Manager.**



Design-Build Project For Route 29 Solutions
Albemarle County, Virginia
Contract ID No. C00077383DB80

3.4.1

Work History Forms

3.4.1 (a) Lead Contractor Work History Forms

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 2 PAGE PER PROJECT)

a. Project Name & Location ***	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual)*	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 Contract Value**	
1) 11 th Street Corridor (DB) SINGLE CONTRACT*** Washington, DC SKANSKA	Johnson, Mirmiran & Thompson, Inc.	District Department of Transportation P 202-673-6813 PM Mr. Joseph Dorsey, PE P 202-671-4605 E joseph.dorsey@dc.gov	July 13, 2013	Nov. 30, 2015	\$260,000	\$375,079	\$172,140

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.

EVALUATE AS A ROADWAY PROJECT



Skanska was able to complete 70% of the work out of traffic, speeding construction.



Skanska constructed a number of grade separated intersections.

Skanska, as managing partner of a JV, was awarded a \$260M DB contract by the District Department of Transportation (DDOT) to reconstruct the 11th Street Corridor in Washington, DC. The work included design and construction of approximately 16 lane miles of new roadway, three river bridges and 17 land bridges. The project featured three distinct areas of construction—the eastern interchange and roadway; the western interchange and roadway; and the three bridge river crossing. The contract was a “best value” award on a “build to budget” basis, where teams proposed additional work they could accomplish within the proposed \$260M ceiling. Our proposal was rated #1 by all five evaluators.

As the project progressed the Skanska team worked closely with DDOT to ensure the project met customer needs and requirements. The strength of the relationship is reflected in DDOT’s issuance of a \$90M change order (with time extension) to complete originally-planned work on city roads and intersections to improve access and mobility in the area.

Johnson, Mirmiran & Thompson, Inc. (JMT) was the designer for this project. We selected JMT because of their innovative approach to traffic management and ability to commit resources on-site dedicated to a successful project completion within an aggressive design schedule.

RELEVANCE TO 29

- **Delivering multiple projects concurrently on fast track schedule** - The work was divided into three segments: eastside interchange and roadway, westside interchange and roadway, and river bridges, all with an aggressive schedule. Each segment had its own CM and resources, and was coordinated by the DBPM. As needed, resources were allocated to another segment to meet schedule. By implementing our inclement weather plans, we were able to quickly recover from snowstorms and hurricanes. While the project was not designated as a fast-track project, Skanska worked to complete and open project segments ahead of schedule. We opened every ramp early, some by as much as 8-9 months.
- **Delivering projects in developed urban corridors** - The work took place in the Anacostia neighborhood, one of Washington’s oldest neighborhoods, and about 1.5 miles from the U.S. Capitol. The construction zone was surrounded by a number of office buildings, including the Washington Navy Yard facilities, as well as residences and commercial facilities.
- **Use of innovative design solutions and construction techniques** - Our JMT partners provided a number of innovative designs, including one that minimized traffic shifts, which was also a major risk factor and DDOT concern for this project. Seventy percent of the construction work was out of traffic and completed with only two major traffic movements for the project. Our innovation included our approach to ground improvements, where we used techniques such as installing additional wick drains and geofoam blocks at our own expense to ensure the schedule was maintained.
- **Previous Design-Build experience** - At the time of award, the 11th St. project was the eighth DB project for Skanska, six of which were transportation projects. Our designer on this project was JMT, which has also teamed with us as lead designer on the 29 Bypass for VDOT, as well as serving as the Quality Assurance Manager on the Elizabeth River Tunnels DB project.

SIMILAR SCOPE TO ACTIVITIES TO 29

- ✓ Design-Build
- ✓ Roadway and survey
- ✓ Structures and bridges
- ✓ Environmental including permitting
- ✓ Geotechnical
- ✓ Hydraulics
- ✓ Storm drainage and SWM facilities
- ✓ Milling and overlaying existing pavement
- ✓ Demolition of structures
- ✓ Guardrail
- ✓ Retaining walls
- ✓ Traffic control devices
- ✓ Signs, sign structures and foundations
- ✓ Transportation management plan
- ✓ Traffic maintenance and management during all phases of construction
- ✓ Right-of-Way
- ✓ Utilities
- ✓ Stakeholder coordination
- ✓ Public hearings and public involvement
- ✓ Quality assurance and quality control
- ✓ Overall project management and coordination with active projects

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 ** If actual contract value is different from the original contract value (i.e. more or less), please explain under Section (h) above.
 *** For multiple phase projects, only single phase of construction (or single contract) will be considered as a Project. If additional phases are shown under the same Work History Form, only the first phase (or contract) listed will be evaluated.

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.

RELEVANCE TO 29



Work was in an area of Washington DC with nearby residences and businesses including the Washington Navy Yard.



Traffic was shifted to new construction in one major phase.

o **Limiting impacts to the traveling public and affected business and communities, including commitments to effective strategies to minimize congestion during construction** - The Skanska/JMT construction plan included innovative responses to project problems, including designing and scheduling activities that moved a majority of the construction work out of traffic, and minimized traffic shifts and lane closures. Our communications plan kept travelers, local businesses and nearby residents apprised of traffic activities. Additionally, through meetings with neighborhood associations, the Skanska team solicited input from residents that reduced impacts to the nearby residents through a lowered profile, moving the centerline away from nearby homes and reducing noise. We planned around local events such as sporting events and government-related events to ensure construction did not interfere with travelers to an event.

AADT through the Corridor was 106,000 vehicles. Our strategy to minimize congestion included working out of traffic, minimizing traffic shifts by waiting until new roadways were complete before shifting traffic, and working at times of lighter traffic. We also publicized construction activities to allow drivers to make alternate plans for travel and to make them aware of changes, detours, etc. The team took a “big picture” view, analyzed where traffic in the work zone was coming from, and looked at an area sometimes as much as five miles away from the construction zone. We outlined alternate routes that drivers could take, and posted electronic signage informing drivers of faster options. The technique was very effective in eliminating congestion in the construction zone as drivers had useful information in a timely fashion on avoiding delays.

o **Developing and managing effective communication strategies with business owners and other key stakeholders** - DDOT managed the communication, while we developed and provided a great deal of information to the agency. The Skanska team used available print, electronic and internet media to inform residents, drivers and local businesses of project activities that might affect them. Communications with the customer were also excellent, as the DDOT project oversight team was co-located with the Skanska DB team on site. The Skanska team attended meetings of stakeholders, local businesses and residents, where we presented information about the project progress, upcoming events, and answered questions and addressed concerns. Because of input from these meetings, the team made design changes that reduced permanent impacts of the new roadway on nearby residents.

o **Previous success in taking and managing calculated risks and realizing incentives** - Skanska maintained a risk register for this project. Risk identification, analysis and mitigation was a regularly scheduled topic of discussion both for our internal weekly meetings as well as for meetings with DDOT. As part of updating our four-week look ahead schedule, we examined activities to determine the risk potential for schedule or cost impacts and probability, and implemented risk remediation activities. Risk analysis also included review of previous risk mitigation efforts to determine if they were successful and if any additional mitigation was required. Specific risks included taking geotechnical risk on the project, and opening sections of the project early with phased openings.

o **Previous success in the coordination of complex utility relocation** - We assigned a senior engineer to coordinate with utility companies. The engineer held monthly meetings with affected utilities and other stakeholders, including DDOT. A prime consideration was assigning responsibility for utility work to the Skanska team or to the utility owner. Prior to work starting in a particular area, we “pot-holed” existing utilities in the field to ensure that they did not conflict with any new underground work we were performing, and that utilities remained accessible when we completed work. We maintained monthly tracking logs and included utility activities in our regular weekly reports.

o **Meeting or exceeding required Disadvantaged Business Enterprise Programs commitments** - The Skanska team is on target to meet/exceed its \$40M DBE goal (we have already committed over \$36M to DBE firms). Throughout the course of the project, we have maintained a proactive approach to utilizing DBE firms. Activities have included hosting regular job fairs, helping potential DBE firms with the application process, and hosting regular “Lunch & Learn” sessions for subcontractors discussing industry issues and providing information about “best practices.” The project has a dedicated DBE Compliance Officer on site to ensure the team activities, practices and reporting are in compliance with rules and regulations. The Skanska team made a concerted effort to hire qualified local firms and to recruit/hire local workers for the job and for the on-the-job training program.

*Explanation of *Contract Completion Date and **Contract Value Difference* - When Skanska was awarded this project in 2009, DDOT deferred some of the planned work due to a lack of funds. When they secured funding, DDOT and Skanska negotiated a \$90M change order to complete the project as originally planned. In addition to funding, the contract was extended an additional 30 months to November of 2015. The customer has also issued some 30 task orders that have altered the scope of work.

SIMILAR PROJECT RISKS TO 29

1. **Traffic Control** – Skanska moved traffic in two major shifts. Traffic analysis went far beyond the project boundaries, and by providing drivers with real time info, allowed them to avoid the construction zone.
2. **Project Schedule** - Skanska used a four-week look-ahead schedule, and is on track to finish the project nearly ten months early.
3. **Utilities** - Because of the volume of utility activity, Skanska assigned an engineer full-time to serve as utility coordinator.
4. **Community Stakeholders** –This was DDOT’s largest project to date, and has a very high visibility. Skanska met regularly with stakeholder groups and neighborhood associations to inform them of progress and hear their concerns. Input from these meetings led to design changes to benefit nearby neighborhoods.
5. **Geological Conditions** - The Skanska team discovered unsuitable materials throughout the construction area. These were remediated, and we also used geofoam to protect the utility lines traversing the site.

PROJECT HIGHLIGHTS

- o Largest Construction Project To-Date in DDOT’s History.
- o Innovative and Cost-Effective Design and Construction saved DDOT \$81.7M from the original engineer’s estimate.
- o Awarded the 2014 ACEC/MD “Grand Award;” ACEC/MW “Honor Award”
- o Ranked 1st in the 2012 “Top 10 Bridges” listing by *Roads & Bridges* magazine, a nationwide review of significant roadway and bridge projects.
- o Recognized as Skanska’s Global Project of the Year for 2012.

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 2 PAGE PER PROJECT)

a. Project Name & Location ***	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual)*	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 Contract Value**	
2) Route 1/I-95/I-495 Interchange SINGLE CONTRACT*** Alexandria, VA SKANSKA	HNTB Corporation	Virginia Department of Transportation P 703-783-8368 PM Mr. Jalal Masumi P 703-259-2215 E jalal.masumi@vdot.virginia.gov	June 30, 2009	June 1, 2009	\$146,577	\$189,425	\$101,805

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.

<p>EVALUATE AS A BRIDGE PROJECT</p>  <p><i>Skanska had to manage 220,000 vehicles a day traveling through the construction zone.</i></p>  <p><i>Skanska had to accommodate major utility work, both above ground (as shown here) and below.</i></p>	<p>This \$189M project was the reconstruction of Interstate I-95/495 from Telegraph Road through the interchange of US Route 1 (Jefferson Davis Highway) to the approaches of the Woodrow Wilson Memorial Bridge on I-495. The Route 1 Interchange is the last exit in Northern Virginia along the beltway before crossing the Potomac River into Maryland.</p> <p>The project included construction of 19 structural steel bridges, 1.6 miles of interstate roadway 12 to 14 lanes in width, 2 temporary bridges and the demolition of 7 existing bridges. Project challenges included maintenance of traffic, working in limited space in a densely populated urban area, utility coordination, coordination with contractors working on adjacent parts of the project, community relations, and environmental mitigation for adjacent sensitive wetlands. This project was very high profile and received a high amount of public interest and attention.</p> <p>One key to our success was entering into a partnering relationship with VDOT, which was recognized by a silver medal from the National Partnership for Highway Quality.</p> <p>The scope of work for the project included approximately 4,000 concrete and steel piles for foundations, bridge concrete substructures (footings, columns and caps), setting 685 large structural steel bridge girders and 525 concrete girders, placing more than 70,000 cubic yards of concrete, installing steel sheet piles, more than 30,000 square feet of sound walls, and more than 25,000 square feet of MSE walls. Utility upgrades along Route 1 (including jack and bore piping under the existing roadway), asphalt paving with base courses along Route 1 and the Capital Beltway, highway lighting improvements, a SMART traffic communications system, and wetlands area mitigation were completed. The project also included:</p> <ul style="list-style-type: none"> o 22 Major Traffic Switches o 18 Detours o 15 MSE / Sound / Visual Walls o 3,200 Ground Improvement Piles o Urban Construction o High level of community interest o High Voltage Overhead Power lines required special attention / procedures o Required coordination with adjacent contractors working on other phases of the project o Utilities o Roadway Widening Precast Concrete o Cast-in-place Concrete o Reinforcing Steel o Miscellaneous Metals/Steel o Specialized Equipment o Close Coordination w/Subcontractors o Schedule constrained by 19 separate access release dates o Asphalt paving along Route 1 and I-495 (Capital Beltway) o Highway lighting and signage improvements o Signalization o SMART traffic communications system o Wetlands area mitigation 	<p>SIMILAR SCOPE ACTIVITIES TO 29</p> <ul style="list-style-type: none"> ✓ Roadway and survey ✓ Structures and bridges ✓ Environmental including permitting ✓ Geotechnical ✓ Hydraulics ✓ Storm drainage and SWM facilities ✓ Milling and overlaying of existing pavement ✓ Demolition of structures ✓ Guardrail, fencing ✓ Retaining walls ✓ Traffic control devices ✓ Signs, sign structures and foundations ✓ Transportation management plan ✓ Traffic maintenance and management during all phases of construction ✓ Utilities ✓ Stakeholder coordination ✓ Public involvement ✓ Overall project management and coordination with active projects
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*** For multiple phase projects, only single phase of construction (or single contract) will be considered as a Project. If additional phases are shown under the same Work History Form, only the first phase (or contract) listed will be evaluated.

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 project was constructed in a highly developed area of Alexandria, with nearby businesses and residential areas.



Skanska constructed 17 grade-separated bridges on this project.



Skanska was able to construct major portions of the interchange out of traffic, improving safety for workers and drivers.

RELEVANCE TO 29

- **Delivering multiple projects concurrently on fast track schedule** - The Route 1/I-95/I-495 Interchange project was part of the \$2.2B Woodrow Wilson Bridge project. The Route 1 interchange was the first project encountered when coming off the bridge into Virginia. Skanska coordinated with seven other contractors working nearby on other segments of the project. Skanska achieved all six interim milestones and realized incentives totaling \$6.9M.
- **Delivering projects in developed urban corridors** - The work took place in Alexandria, Virginia, along a very highly developed urban corridor, with adjacent businesses, residences and industrial facilities.
- **Use of innovative design solutions and construction techniques** - Skanska was able to implement a number of innovative construction techniques while building the Route 1 project. Most notable was the use of geofoam blocks to protect a major water main that ran under the highway.
- **Limiting impacts to the traveling public and affected business and communities, including commitments to effective strategies to minimize congestion during construction** – Average Annual Daily Traffic (AADT) through the work zone was 220,000 vehicles. Our strategy to minimize congestion included working out of traffic, minimizing traffic shifts by waiting until new roadways were complete before shifting traffic, and working at times of lighter traffic.
- **Previous success in taking and managing calculated risks and realizing incentives** - Skanska maintained a risk register for this project. Risk identification, analysis and mitigation was a regularly scheduled topic of discussion for our internal team weekly meetings. Risk analysis included review of previous risk mitigation efforts to determine if they were successful and if any additional mitigation was required. This was key to achieving multiple milestones and incentives.
- **Previous success in the coordination of complex utility relocations** - Major utility coordination and relocated utility lines (particularly water and sewer) along Route 1.
- **Meeting or exceeding required Disadvantaged Business Enterprise Programs commitments** - The DBE goal for this project was 14%. We exceeded this goal (14.1%).

*Explanation of **Contract Value Difference* – The difference is attributable to incentives, owner initiated change orders for the project, quantity adjustments, and additional scope of work. .

SIMILAR PROJECT RISKS TO 29

- 1. Traffic Control** – Skanska’s strategy to minimize congestion included working out of traffic, working at times of lighter traffic, and working with contractors constructing other segments of the roadway to coordinate traffic shifts.
- 2. Project Schedule** - Multiple incentives and work activity limitations and constraints.
- 3. Utilities** - Major relocations along Route 1, coordination with utilities.
- 4. Community Stakeholders** – The project was very high profile and received a high degree of public interest and attention.
- 5. Geologic Conditions** -Settlement and loading of major water mains led to an innovative use of geofoam to protect a major water line running under the highway.

PROJECT HIGHLIGHTS

- The Skanska team had six incentive clauses in our contract, and we realized all incentives.
- Ranked 4th in the 2008 “Top 10 Roads” listing by Roads & Bridges magazine, a nationwide review of significant roadway and bridge projects.
- National Partnership for Highway Quality (NPHQ) 2006 Silver Winner in the Partnering Category.

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 2 PAGE PER PROJECT)

a. Project Name & Location ***	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual)*	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 Contract Value**	
3) James Madison Highway (Route 15) (PPTA-DB) SINGLE CONTRACT*** Prince William Co., VA 	Rinker Design Associates, P.C.	Prince William County Department of Transportation (DOT) P 703-792-6825 PM Mr. Thomas Blaser P 703-792-6825 E tblaser@pwcgov.org	Dec. 15, 2009	June 2, 2010	\$52,139	\$54,126	\$47,858

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.

<p>EVALUATE AS A ROADWAY PROJECT</p>  <p><i>Phase 1: Route 15 Intersection with Heathcote Boulevard</i></p>  <p><i>Phase 2: Route 15 South</i></p>	<p>Branch Highways was the Design-Build Contractor providing design, construction, right of way, and utility relocation for Route 15 (James Madison Highway) Improvements under the authority of the Virginia PPTA of 1995 for Prince William County (PWC). Similar to the Route 29 Solutions Project, the Route 15 project consisted of widening existing Route 15 from a two-lane roadway to a four-lane median divided facility along with improvements to several adjacent secondary roadways. The project was designed and constructed in accordance with VDOT and PWC standards.</p> <p>Phase 1: The Route 15 North phase consisted of the design, construction, right-of-way acquisition, utility relocation and permitting for roadway improvements from the intersection with Dominion Valley Drive extending north approximately 2.2 miles to tie-in to the existing two-lane Route 15, which has a design speed of 60 MPH. Highlights of this phase included two new bridges across Catharpin Creek, signalization at three locations (intersections of Route 15 with Waterfall Road/Sudley Road, Waverly Farm Drive and Long Park), several tie-ins with existing roads, and utilizing the existing pavement structure of Route 15 where possible, and in accordance with PWC and VDOT.</p> <p>Phase 2: The Route 15 South phase consisted of the construction of roadway improvements from north of Interstate 66, extending north approximately 1.2 miles to tie-in to the previously improved four-lane section of Route 15. This phase specifically excludes design, right of way acquisition, utility relocation (other than waterline and sanitary sewer included in the drawings), and permitting. Highlights of this phase included two new bridges across Little Bull Run, signalization at two locations (intersections of Route 15 with Heathcote Boulevard and Old Carolina Road), retaining wall, several tie-ins, and utilizing the existing pavement structure of Route 15 where possible, and in accordance with PWC and VDOT.</p> <p>Phase 3: The Heathcote Boulevard phase consisted of the design, construction, right-of-way acquisition, utility relocation and permitting for a new roadway from the intersection of Route 15 extending east approximately 0.3 miles to the intersection with Old Carolina Road with a design speed of 50 MPH. Highlights of this phase included signalization at one location (the intersections of Heathcote Boulevard and Old Carolina Road) and a tie-in to existing Heathcote Boulevard just east of existing Old Carolina Road.</p> <p>Phase 4: The Old Carolina Road phase, with a design speed of 35 MPH, consisted of the design, construction, right-of-way acquisition, utility relocation and permitting for roadway improvements from a tie-in to existing Old Carolina Road extending north approximately 0.7 miles to a tie-in to existing Old Carolina, and one new bridge across Little Bull Run. Highlights of this phase included several tie-ins, utilizing the existing pavement structure of Old Carolina Rd in accordance with PWC and VDOT where possible, and approximately 1,150 linear feet of asphalt multi-purpose trail along the east side of Old Carolina Road from Heathcote Boulevard south to the limited access line of I-66.</p> <p>Phase 5: The Waterfall Road phase consisted of the design, construction, right-of-way acquisition, utility relocation and permitting for a relocated Waterfall Road between Shelter Lane and the existing roadway, including a signalized connection to Route 234. This phase was approximately 0.35 miles long with a design speed of 40 MPH.</p>	<p>SIMILAR SCOPE ACTIVITIES TO 29</p> <ul style="list-style-type: none"> ✓ Design-Build ✓ Roadway and Survey ✓ Structures and Bridges ✓ Environmental including permitting ✓ Geotechnical ✓ Hydraulics ✓ Storm drainage and SWM facilities ✓ Milling and overlaying of existing pavement ✓ Demolition of structures ✓ Hazardous materials abatement ✓ Guardrail ✓ Retaining Wall ✓ Signs, sign structures and foundations ✓ Traffic control devices ✓ Traffic management plan ✓ Traffic maintenance and management during all phases of construction ✓ Right-of-Way ✓ Utilities ✓ Stakeholder coordination ✓ Public hearing and public involvement ✓ Quality assurance and quality control ✓ Construction engineering and inspection ✓ Overall project management and coordination with active projects
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RELEVANCE TO 29



Phase 3: Heathcote Boulevard Intersection with Old Carolina Road



Phase 4: Old Carolina Road Intersection with Heathcote Boulevard



Phase 5: Waterfall Drive Intersection with Route 15

- **Delivering multiple projects concurrently on fast track schedule** - The five distinct phases of the Route 15 PPTA required multiple crews and supervisory personnel sufficient to deliver each phase simultaneously.
- **Delivering projects in developed urban corridors** - The Route 15 PPTA involved several affected businesses, schools, neighboring housing developments, and heavy traffic volumes in a confined environment that was essentially gridlocked prior to our construction start-up.
- **Use of innovative design solutions and construction techniques** - Partnering with local developers, the Branch Team integrated future construction within the scope of the project that ultimately enhanced the entire scope and allowed for future growth in concert with the ongoing work.
- **Previous Design-Build experience** - The PPTA procurement type for Route 15 essentially included all the tenets of a typical Design Build endeavor along with additional services during preconstruction activities.
- **Limiting impacts to the traveling public and affected business and communities, including commitments to effective strategies to minimize congestion during construction** – Identifying challenges associated with the pre-existing conditions and holding meetings with affected homeowner associations and businesses prior to construction helped remediate the effects of construction on traffic flow.
- **Developing and managing effective communication strategies with business owners and other key stakeholders** – Branch engaged homeowner associations, regional park entities, local utility concerns, national developers, and adjacent businesses at all stages of design and construction to ensure minimal impacts and maximum utility both during and after construction.
- **Previous success in taking and managing calculated risks and realizing incentives** - While there were no specific incentives associated with Route 15 PPTA, there were many cases where construction moved forward in anticipation of design approvals in order to progress the work and meet an aggressive schedule.
- **Previous success in the coordination of complex utility relocation** – There were utilities involving communications, power, water and sewer services, and a host of lessor concerns on the Route 15 Project. In the end, all were moved to allow construction to proceed and the entire anticipated utility relocation costs fell approximately two-million dollars [\$2,000,000] beneath that anticipated at the project inception. This was due in large measure to the active coordination effort made by the Branch Team.
- **Meeting or exceeding required Disadvantage Business Enterprise Programs commitments** - There were no specific goals set out in the contract documents. However, the Branch team did utilize DBE and SWAM businesses throughout the life of the project including design and construction activities.

Explanation of *Contract Completion Date and **Contract Value Difference

Project Completion Date - Although the Contract Completion Date exceeds the original date, it was recognized within the Contract itself that there was a potential for the project to extend into 2010. This extension was predicated on substantial completion being met in 2009, which was accomplished, and having only temperature-sensitive activities remaining. The winter of 2009-2010 was unusually harsh and inclement weather started earlier than expected. However, an allowance was made in the contract in anticipation of just that scenario.

Contract Value Difference – While the final contact amount did exceed the original, there were four significant occurrences that contributed and were out of the control of either Branch or the Owner. These were Unsuitable Material Allowances that overran [~\$1,000,000], redesign and correction of a previously approved interconnection in which the Owner had responsibility for design [~\$1,000,000], a sharp escalation in the Asphalt Liquid index [~\$1,200,000], and developer-driven and paid changes to the original scope [~\$1,000,000].

SIMILAR PROJECT RISKS TO 29

1. **Traffic Control** –Engaged the multiple stakeholders and derived a TMP consistent with the overall project goal to minimize our footprint and eliminate congestion.
2. **Project Schedule** – The aggressive nature of the five-phase approach required adequate resource management and availability that the Branch Team successfully managed throughout the duration of the Project.
3. **Utilities** –There were many instances where a case-by-case approach, on practically a daily basis, lead to contractor-utility company combined efforts that ultimately expedited their work and created a considerable cost savings.
4. **Community Stakeholders** – As noted above, these included both public, private, utility, quasi-public, community, and other third party entities. While the coordination between all of these was often an exercise in determining priorities for the overall best interests, the Branch Team successfully created real partnerships.
5. **Geologic Conditions** –Varied widely through the 5 phases. In this case, the interplay of rock, unsuitable materials and fatty clays, and a large volume of lightweight controlled fill materials, created the need for constant vigilance as these conditions changed. The Branch QA/QC Team worked together to anticipate and solve any difficulties these various conditions created.

PROJECT HIGHLIGHTS

- Branch received the 2010 “Outstanding Contractor Award” from Prince William Co.
- Fast Track, Multi-Phase Construction.
- Able to efficiently limit impacts to traveling public, affected businesses and communities, including commitments to effective strategies to minimize congestion during construction.
- Developed and maintained effective communication strategies with business owners and key stakeholders.

3.4.1 (b) Lead Designer Work History Forms

ATTACHMENT 3.4.1(c)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 2 PAGE PER PROJECT)

a. Project Name & Location ***	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Completion Date (Original)	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)**	
1) Fairfax County Parkway (Rte. 286) Extension (DB) SINGLE CONTRACT*** Springfield, VA 	Cherry Hill Construction, Inc.	Federal Highway Administration Eastern Federal Lands Hwy. Division P 703-404-6302 PM Mr. Robert Morris, PE P 703-404-6302 E robert.morris@fhwa.dot.gov	July 2011	June 23, 2011	\$73,756	\$112,416 (Actual)	\$11,538 JMT Design Fee

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.

<p>JMT Location(s) involved with Design</p> <ul style="list-style-type: none"> o Richmond, VA o Herndon, VA o Virginia Beach, VA o Sparks, MD <p>FCP Team Proposed for the Rte. 29 Project</p> <ul style="list-style-type: none"> o William Schaub, PE o Rodney Hayzlett, PE o Shawn Reynolds, PE o Paul Clement, PE o Matt Wolniak, PE, PTOE o Randy Boice, PE o Sarah Gary, PE, PTOE o Trip Phaup, PE o John Fowler, PE o Mark Haskett, PE o Mike Zmuda, LS, PE o Ed Drahos, PE (SEI) o Matt Wager, PE (SEI) o Ian Frost, CEP (EEE) o Doug Fraser, PG (EEE) o Carter Teague (EEE) 	<p>The U.S. Army was relocating 8,500 jobs to the National Geospatial-Intelligence Agency (NGA) Campus East at Fort Belvoir North Area in Virginia as part of the BRAC in 2011. In preparation for this event, highway improvements were needed to address the traffic impacts. The extension of Fairfax County Parkway (FCP) would complete a vital link to I-95 near Fort Belvoir. This project was highly publicized as critical to the success of the region's BRAC initiative. To meet the requirements of BRAC the FCP Route 286 project had an extremely aggressive schedule of 750 calendar days to design, permit, relocate utilities, and construct the parkway. The design team initiated design upon notice of award beginning in Oct. 2008 and delivered approval for construction plans that allowed construction of the western end (west of Accotink Creek) of the Project to commence in April 2009. Segment IV of the project was initially delayed due to funding constraints. With the ARRA funding bill passage, Segment IV was added to the DB team's contract and included completion of two additional bridges and the Boudinot Dr. Interchange. The addition of Boudinot Interchange to the contract resulted in the need to deliver two design projects on accelerated schedules concurrently. Through aggressive management practices, the projects original schedule for Segments I and II was maintained, while executing a significant contract modification, adding the design build of Segment IV (25% increase in scope) within the time frame required to receive ARRA stimulus funding. The team met all schedule milestones and exceeded many of them. The critical portion, Segments I & II of the mainline Parkway, was substantially completed and opened to traffic on September 19, 2010, two months ahead of schedule. Segment IV was substantially completed and open in June 2011, one month ahead of schedule.</p> <p>The design included new interchanges at FCP and Barta Road for access to the West North Loop Rd. of the NGA facility interior roadway network. Extensive design collaboration/coordination with the U.S. Army for this access point was required and included coordination for security lighting, overheight vehicle detection, geometry and utility connections. A majority of this FCP was located on the southern portion of Fort Belvoir. The FCP work included: grading, drainage and paving, shared use paths, seven new bridges and a bridge widening, noise walls, lighting, traffic signals, landscaping, signing/ striping, geotechnical engineering/exploration, utility relocations/coordination and extensive environmental services. FCP also included widening of I-95 to accommodate a new exit lane designed as a certified Defense Access Road to provide direct access to the NGA.</p> <p>The environmental challenges were complicated by the fast-track schedule, involvement of multiple stakeholders, and complex environmental and regulatory issues. The alignment traversed through the Fort Belvoir and crossed five former firing ranges and testing sites including three RCRA sites that had significant groundwater/soil contamination, and stringent Land Use Controls required by an EPA Consent Order to protect human health and the environment. Design services included a comprehensive in-situ waste characterization study to determine the nature and extent of the contamination on several areas and groundwater modeling to evaluate the impact of construction on the fate and transport of multiple contaminated groundwater plumes. The models successfully demonstrated to the U.S. Environmental Protection Agency (EPA) and the Virginia Department of Environmental Quality (DEQ) that the migration of the contaminant plumes would not be exacerbated by construction of the project. The team's comprehensive Hazardous Materials Management Plan was approved by the DEQ and EPA.</p>	<p>SIMILAR SCOPE ACTIVITIES TO</p> <ul style="list-style-type: none"> ✓ Design-Build ✓ Roadway and survey ✓ Structures and bridges ✓ Environmental including permitting ✓ Geotechnical ✓ Hydraulics ✓ Storm drainage and SWM facilities ✓ Milling and overlaying existing pavement ✓ Demolition of structures ✓ Guardrail ✓ Retaining walls ✓ Traffic control devices ✓ Signs, sign structures and foundations ✓ Transportation management plan ✓ Traffic maintenance and management during all phases of construction ✓ Right-of-Way ✓ Utilities ✓ Stakeholder coordination ✓ Public hearing and public involvement ✓ Quality assurance and quality control ✓ Construction engineering and inspection ✓ Overall project management and coordination with active projects
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** If actual contract value is different from the original contract value (i.e. more or less), please explain under Section (h) above and if design was a factor.

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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.



Fairfax County Parkway over Accotink Creek and Boudinot Drive



Fairfax County Parkway Defense Access Road Interchange



Fairfax County Parkway over Fullerton Road "Fullerton Flip"

- **Delivering multiple projects concurrently on fast track schedule** –The initial FCP project was completed on an aggressive schedule of 750 calendar days. The DBT met all schedule milestones with the mainline FCP being substantially completed and open to traffic ahead of the schedule. ARRA funding increased Team’s contract by 25% and resulted in the need to deliver two design projects on accelerated schedules concurrently. The team met all schedule milestones and exceeded many of them. The critical portion, Segments I/II of the mainline FCP, was substantially completed and opened to traffic in Sept. 2010 (2 months ahead). Segment IV was substantially completed and open in June 2011 (1 month ahead).
- **Delivering projects in developed urban corridors** –Design/constructed in Springfield, VA, along a very highly developed urban corridor in NOVA between the Franconia-Springfield Pkwy., I-95, Fort Belvoir, the NGA’s headquarters, adjacent businesses, residences and industrial facilities. The project also relocated portions of Rolling Rd., a heavily traveled local roadway/widened I-95 to accommodate DAR and new exit Ramp to FCP.
- **Use of innovative design solutions and construction techniques** – During the bidding process, JMT prepared ATCs that improved the overall project design and reduced the cost. The most significant change identified was the “Fullerton Flip”. The original design depicted Fullerton Rd. crossing over FCP. JMT was able to revise the profiles for both the FCP and Fullerton Rd. to take FCP over Fullerton Rd. The benefits that raising the grade of FCP brought to the project were: reduced amount of soil/rock excavation; minimized disturbance of contaminated material by placing embankment over the Central Motors site; reduced the surplus material on the project; and resulted in a balanced earthwork project significantly reducing project cost. Extensive rock excavation material was crushed on site and used as backfill for MSE walls. Also identified areas on FCP where the remaining surplus material could be used. This eliminated the need to dispose material off site and substantial reduced trucking on local roadways.
- **Previous Design-Build experience** - At the time of award, this was JMT’s 11th and largest highway and/or bridge DB project. Through aggressive resource management and work package development techniques, the project’s original schedule for Segments I/II were maintained, while executing a significant contract modification, adding the Segment IV (25% increase in scope). JMT routinely separates DB projects into logical work packages that enable early construction starts and ordering of long lead items. JMT has been providing innovative DB projects for the past 20 years.
- **Limiting impacts to the traveling public and affected business and communities, including commitments to effective strategies to minimize congestion during construction** – The FCP addressed potential traffic safety concerns in and around long-term work zone closures and temporary lane closures. The DBT recognized that it would benefit the public and minimize congestion during to construction if a detour was provided to allow construction of the grade separation for Fullerton Rd. High traffic volumes using Fullerton Rd. were heading to I-95. Meetings were held to discuss the detour with nearby property/business owners and the school bus facility and acceptance was gained. It should be noted that the DBT met personally with Mr. Keith Hartman of Central Property Associates to discuss the detour and its impact to his business. This personal meeting proved very beneficial for both the team and Mr. Hartman’s team, providing a wide range of information that may not have otherwise been obtained.
- **Developing and managing effective communication strategies with business owners and other key stakeholders** – A driving factor contributing to the success of this project was the establishment of a formal partnering agreement between the project stakeholders. It was evident from the NTP that the project would be schedule driven but also had to address the goals of the numerous and diverse stakeholders. To address this major project concern, the DBT instituted project partnering. Partnering began with formal partnering sessions and continued throughout the design/construction. Bi-weekly partnering or task force meetings were held with all major stakeholders. The DBT hosted and attended numerous public outreach events (“Citizen Information” and “Pardon-Our-Dust” meetings) and accommodated public involvement during the course of the project.
- **Previous success in taking and managing calculated risks and realizing incentives** – The contractor maintained a risk matrix which was a topic of discussion during design review meetings during which new risks were identified, and existing risks reassessed.
- **Previous success in the coordination of complex utility relocation** – Met early with utility owners and provided assistance in the development of their plan/estimate submittals by providing design plans and profiles in CAD for them to design their relocations against. Addressed County concerns by conducting vibration analysis to predict impacts rock drilling would have on a 48” diameter reinforced concrete sanitary sewer interceptor. Provided emergency sewer back-up system design to provide redundant protection. Adjusted roadway design to minimize relocation of 20” water line and 8” gas line along Barta Rd. that avoided delays to construction schedule. Completed relocations of 1,420 LF of water mains and several 8” sewer relocation along Fullerton Rd., coordinated utility relocations with several utility owners. There were no project delays related to relocations.
- **Meeting or exceeding required Disadvantage Business Enterprise Programs commitments** – The DBT included VA Certified SWaM and DBE firms. The Federal requirements for subcontracting to DBE firms was successful and met commitments.

*Explanation of * Contract Completion Date and **Contract Value Difference* – The difference in contract completion date and contract value difference were attributable to additional Scope added by Owner. The additional scope did not impact the original scheduled opening dates of FCP and design was not an adverse factor.

SIMILAR PROJECT RISKS TO 29

1. **Traffic Control** - Met with stakeholders to solicit input and gain acceptance of a detour plan to allow the construction of the grade separation of Fullerton Road.
2. **Project Schedule** - The extremely aggressive schedule required the start of design at Notice of Award and two design projects to be completed concurrently within an accelerated time frame.
3. **Utilities** - Met early with utility owners and provided assistance in the development of the plans and estimates by providing design plan and profiles in CAD for them to design their relocations against. Also adjusted roadway design to minimize relocations.
4. **Community Stakeholders** – Instituted formal partnering with the numerous and diverse stakeholders to address their goals. Throughout construction bi-weekly partnering or task force meetings were held with all major stakeholders.
5. **Geologic Conditions** – Performed vibration analysis to predict the impacts of rock drilling on existing infrastructure. Also, adjusted profiles to reduce soil/rock excavation and minimize disturbance of contaminated material.

PROJECT HIGHLIGHTS

- Several members of EFLHD and JMT received the “Star Partner” awards for their exceptional dedication, teamwork and professionalism in support of the project’s goals by the NGA and USACE.
- This project was recognized with several awards from many professional organizations.
- “I am extremely pleased with the performance of CHC & JMT...they provided to be extremely responsive to our needs and concerns throughout the project.
Tom Fahrney, VDOT/BRAC Coord. (3-25-11)
- “Impressed with the solutions that were reached to counter the site constraints and the numerous ways the owner/client’s expectations were obviously exceeded. Your work ethic and ingenuity on this project is impressive.”
ACEC/MW Judging Panel (1-25-13)

ATTACHMENT 3.4.1(c)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 2 PAGE PER PROJECT)

a. Project Name & Location ***	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Completion Date (Original)	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)**	
2) 11th Street Corridor (DB) Bridges and Interchanges SINGLE CONTRACT*** Washington, DC 	Skanska USA Civil Southeast Inc.	District Department of Transportation P 202-673-6813 PM Mr. Joseph Dorsey, PE P 202-671-4605 E joseph.dorsey@dc.gov	July 13, 2013	Nov. 30, 2015	\$260,000	\$375,079	\$17,300 JMT Design Fee

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.

JMT Location(s) involved with Design

- o Sparks, MD
- o Washington, DC (Skanska Hub Office)
- o York, PA
- o Trenton, NJ

11th St. Team Proposed for the Rte. 29 Project

- o William Schaub, PE
- o Gary Miller, PE
- o Shawn Reynolds, PE
- o Matt Wolniak, PE, PTOE
- o Sarah Gary, PE, PTOE
- o Paul Clement, PE
- o Jon Conner, PLA
- o Scott Rasmussen, PLA
- o Walter Kulis, PE
- o Ian Frost, CEP (EEE)
- o Doug Fraser, PG (EEE)

Previously, no direct connection existed between the Southeast Freeway (I-695) and the northern segment of the Anacostia Freeway (DC 295/I-295). Because of this unfinished connection, regional traffic was forced to neighborhood streets, resulting in significantly increased traffic on local streets within the Anacostia and Capitol Hill neighborhoods. The 11th Street Project will complete all freeway connections for regional traffic between the I-695 and DC 295/I-295, and to-date is the largest construction project in DDOT history. The project also promotes job growth and economic stimulus to the area as part of the greater Anacostia Waterfront Initiative Plan.

In our nation's capital, Skanska is the lead JV Contractor working with JMT as the Lead/Prime Designer for this stipulated sum Design-Build Project of \$260M (modified to \$287.6M) in Washington, DC adjacent to the Washington Navy Yard. The original engineer's estimate to complete the entire project was \$460M (including initial and ultimate construction). Due to budget constraints, DDOT undertook a \$260M Design-Build-to-Budget Stipulated Sum procurement with a challenge of seeing how much of a functional improvement of the initial project could be built for this sum. The Skanska JV and JMT were selected as the DB Team that would provide DDOT the best value, providing three new bridges over the Anacostia River.

This project has included three new major continuous steel multi-girder bridge crossings of the Anacostia River and two complex interchanges with the Southeast Anacostia Freeway (I-295). These bridges have included a 5 span 866-ft. long bridge, a 5 span 926-ft. long bridge and a 10 span 1,650-ft. long bridge. Spans range up to 234-ft. for the main span over the Anacostia River. Several existing bridges were rehabilitated for use in the new interchanges. One new interchange has a lower overall height and was located further away from the adjacent neighborhood, thereby reducing impacts on the local community, which had significant input on the design of the project. Skanska is managing partner on this project, performing 70% of the work. This project is the largest construction job in DDOT history. It will allow better regional connections and provide drivers with easier accessibility to DC neighborhoods and will replace deficient infrastructure.

JMT, supported by EEE, authored the NEPA Environmental Reevaluation of the FEIS and has provided all environmental compliance and permitting efforts for this project. To date the project has had perfect compliance with all 188 environmental commitments.

SIMILAR SCOPE ACTIVITIES TO



- ✓ Design-Build
- ✓ Roadway and survey
- ✓ Structures and bridges
- ✓ Environmental including permitting
- ✓ Geotechnical
- ✓ Hydraulics
- ✓ Storm drainage and SWM facilities
- ✓ Milling and overlaying existing pavement
- ✓ Demolition of structures
- ✓ Guardrail
- ✓ Retaining walls
- ✓ Traffic control devices
- ✓ Signs, sign structures and foundations
- ✓ Transportation management plan
- ✓ Traffic maintenance and management during all phases of construction
- ✓ Right-of-Way
- ✓ Utilities
- ✓ Stakeholder coordination
- ✓ Public hearing and public involvement
- ✓ Quality assurance and quality control
- ✓ Construction engineering and inspection
- ✓ Overall project management and coordination with active projects

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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.

RELEVANCE TO 29



Anacostia Freeway (DC 295/I-295)



11th Street Bridge (Southeast Freeway I-695)



Southeast Freeway (I-695) over CSXT Tracks

- **Delivering multiple projects concurrently on fast track schedule** – The project location and schedule facilitated breaking the project design into strategic work packages to accommodate the fast track schedule. Approximately 200 Released for Construction submittals were accomplished and more than 1,000 structural component work packages were developed to facilitate construction and ordering of long lead items.
- **Delivering projects in developed urban corridors** – The design had to accommodate the heavily traveled roadway network (106,000 AADT) near the highly urbanized area in the Anacostia water front area that includes adjacent businesses, residences and industrial facilities including the Navy Yard.
- **Use of innovative design solutions and construction techniques** – JMT refined the planning document alignments and interchanges to reduce costs, environmental and community impacts, minimized community impacts, maintained traffic and built public support through extensive public involvement. Seventy percent of the project was constructed without major interruption to vehicular traffic. As a result of the Team's innovative and cost effective design and construction, the Skanska JV and JMT Design-Build team was awarded \$90.7M in additional scope to complete the final design and construction of the total project to provide the full functionality considered in the NEPA documentation. With a total design and construction cost of approximately \$375M, DDOT has saved a total of \$81.7M from the original engineer's estimate. Design for the additional scope of work is complete as construction proceeds towards an expected project completion in early 2015.

Structure durability was enhanced by designing the bridges using AASHTO LRFD Specifications and incorporating high performance concrete, integral abutments and other design and construction practices to achieve a minimum 75 year service life. Pedestrian and bicycle traffic has been continuously maintained across the Anacostia River throughout the duration of construction. JMT was able to accomplish this by enhancing local pedestrian and bicycle connections by separating freeway and local traffic on to separate bridges crossing the Anacostia River.

- **Previous Design-Build experience** – At the time of award, this was JMT's fourteenth highway and/or bridge DB project and is the largest DB project for JMT. JMT also has a long-standing relationship with our Lead Contractor Skanska USA Civil Southeast Inc. Since, the 11th Street project JMT has been the lead designer for Skanska on 29 Bypass DB project for VDOT and is serving as the Quality Assurance Manager on the Elizabeth River Tunnels DB project.
- **Limiting impacts to the traveling public and affected business and communities, including commitments to effective strategies to minimize congestion during construction** – The team's innovative design resulted in seventy percent of the project being constructed without major interruption to vehicular traffic, thereby limiting impacts to the traveling public for an extended period of construction.
- **Developing and managing effective communication strategies with business owners and other key stakeholders** – Extensive public relations and communications were part of the project approach. The communications strategies were managed by Skanska and DDOT with design information and graphics provided by the design team.
- **Previous success in taking and managing calculated risks and realizing incentives** – The contractor maintained a risk matrix which was a topic of discussion during design review meetings during which new risk were identified, and existing risks reassessed.
- **Previous success in the coordination of complex utility relocation** – JMT performed Subsurface Utility Engineering (SUE) as a part of a utility designation for the project. In total, over 150 test holes were completed with JMT's own SUE trucks and crews. These in-house efforts provided the Owner, designers and utility companies detailed information that allowed early communications and design strategies to be employed. Design accommodation was a large focus of our team's approach to avoiding utilities for this project. The numerous bridge foundations impacted extensive Verizon ductbanks and large diameter DC Water combined sewer systems for which relocation could not be accommodated in the project schedule. Innovative deep foundations that bridged the utilities were designed to avoid relocations of these facilities and eliminate schedule conflicts.
- **Meeting or exceeding required Disadvantage Business Enterprise Programs commitments** – The DBE goal for this project was \$40M. We have achieved \$36M and expected that we will easily meet the goal.

*Explanation of * Contract Completion Date and **Contract Value Difference* – The difference in contract completion date and contract value difference were attributable to additional Scope added by Owner. The additional scope did not impact the original scheduled opening dates of 11th Street. The additional design work is complete and construction is ahead of schedule. Design was not an adverse factor.

SIMILAR PROJECT RISKS TO 29

1. **Traffic Control** – Innovative design resulted in 70% of the project being constructed without major interruption to vehicular traffic thereby limiting impacts to the traveling public for an extended period of construction.
2. **Project Schedule** - Strategically broke the project design into discrete work packages to facilitate construction and ordering of long lead items to meet the fast track schedule.
3. **Utilities** - Design accommodation was a large focus of our teams approach to avoiding utilities for this project. Innovative deep foundations that bridged utilities were designed to avoid relocations of facilities and eliminate schedule conflicts.
4. **Community Stakeholders** - Extensive public relations and communications were part of the project approach. Design accommodated benefits to nearby neighborhoods based on input received during stakeholder meetings.
5. **Geologic Conditions** – To address geologic conditions encountered ground improvements techniques, such as installing additional wick drains and the use of geofoam blocks at our teams own expense were implemented to ensure the schedule was maintained.

PROJECT HIGHLIGHTS

- *Largest Construction Project to Date in DDOT's History.*
- *Completes all freeway connections and replaces structurally deficient river bridges*
- *Innovative/cost-effective design/construction saved the client (DDOT) a total of \$81.7M from the original engineer's estimate.*
- *JMT was responsible for all pedestrian/bicycle enhancements that help Washington, DC to earn the designation as a "Gold Level Walk Friendly Community" by the Pedestrian and Bicycle Information Center.*
- *Ranked 1st in the 2012 "Top 10 Roads" list by Roads & Bridges magazine, a nationwide review of significant roadway projects.*
- *Recognized as Skanska's Global Project of the Year for 2012.*
- *Recognized with Awards from ACEC/MD and by ACEC/MW in 2014.*

ATTACHMENT 3.4.1(c)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 2 PAGE PER PROJECT)

a. Project Name & Location ***	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Completion Date (Original)	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)**	
3) I-95/I-695 (Section 100) Interchange SINGLE CONTRACT*** Baltimore County, MD 	G.A. & F.C. Wagman, Inc./ McLean Contracting Company A Joint Venture	Maryland Transportation Authority P 410-931-0110 x251 PM Mr. David LaBella, PE P 443-271-8804 E dlabela@mdta.state.md.us	April 20, 2011	April 20, 2011 (Actual)	\$450,000	\$450,000 (Actual)	\$26,000 JMT Design Fee

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.

JMT Location(s) involved with Design

- o Richmond, VA
- o Herndon, VA
- o Sparks, MD
- o York, PA

I-95 Section 100 Team Proposed for the Rte. 29 Project

- o William Schaub, PE
- o Gary Miller, PE
- o Rodney Hayzlett, PE
- o Shawn Reynolds, PE
- o Walter Kulis, PE
- o Scott Mednick
- o Matt Wolniak, PE, PTOE
- o Randy Boice, PE
- o Sarah Gary, PE, PTOE
- o Paul Clement, PE
- o Jon Conner, PLA, LEED
- o Joe Miklochik, IRWA

JMT served as lead/prime designer for this complex multilevel fast tracked interchange design project. JMT developed the planning and preliminary design for Section 100 of the I-95 Express Toll Lane project and final design on the I-95/I-695 Interchange. This \$1B project involved complete replacement of three (3) major interchanges and mainline interstate design which implemented the latest technologies in Traffic and ITS Management. Section 100 is the first project within MD to implement both general purpose and managed lanes in the same facility. Services included:

- o **Highway Design** - The preliminary design included developing and analyzing multiple concepts for General Purpose and Managed Lanes for I-95's mainline. In addition, JMT evaluated multiple line and grade options for the I-695 MD 43, and I-895 interchanges. One of the unique challenges was the re-design of the existing "double-braided" directional I-695 interchange to a fully directional multilevel design serving both the Express Toll Lanes and the General Purpose lanes of I-95. The preliminary design encompassed an array of design elements i.e. horizontal and vertical alignment, typical sections, developing and reviewing design standards, minimizing impacts to the existing ROW and utilities. Final design included eleven (11) lane-miles of I-95, twelve (12) lane-miles of I-695, one (1) lane-mile of local roads and sixteen (16) lane-miles of ramps.
- o **Structural Engineering** - Prepared preliminary layouts of bridge structures in a complex network of multilevel interchange design at the MD 43, I-695 & I-895 interchanges that involved many elevated structures for the directional ramps. The preliminary structural design work included superstructure types, span arrangements, pier location and sizes and phased construction. Prepared final design plans for (22) bridges, (38) retaining walls, (7) noise barriers and (5) culverts at the I-95/I-695 interchange.
- o **Traffic Engineering/ITS Elements** - JMT performed travel demand forecasts for the various alternatives, developed environmental traffic, conducted travel time runs and performed traffic counts. In addition, performed capacity and operational analyses, studied MOT options and evaluated constructability issues and evaluated impacts to existing signing, lighting and ITS systems. Developed all signing, lighting, pavement marking and ITS plans for the ETL implementation. JMT also led the design of the ITS and Electronic Toll Collection elements within the project limits as well as coordinated the fiber optic communication and wireless communication designs between adjacent projects. An interim wireless CCTV system was designed and implemented during construction of the first phase of the work to maintain video surveillance throughout the construction period. The ITS elements included CCTV surveillance, DMS, RWIS, fiber optic and wireless communication designs and temporary connections to vital ITS infrastructure in the core of the interchange and the video surveillance system.
- o **Additional Services** - Wetland and forest delineation, coordination with environmental agencies permitting requirements, drainage and SWM, utility coordination and relocations, H/H analyses, geotechnical engineering including obtaining more than 500 borings and associated testing, SUE investigations and delineation for seven different utilities and an extensive public involvement and interagency coordination. JMT used focus group meetings with agencies, utility companies and communities to establish a partnering environment.

SIMILAR SCOPE ACTIVITIES TO

- ✓ Roadway and survey
- ✓ Structures and bridges
- ✓ Environmental including permitting
- ✓ Geotechnical
- ✓ Hydraulics
- ✓ Storm drainage and SWM facilities
- ✓ Milling and overlaying existing pavement
- ✓ Demolition of structures
- ✓ Guardrail
- ✓ Retaining walls
- ✓ Traffic control devices
- ✓ Signs, sign structures and foundations
- ✓ Transportation management plan
- ✓ Traffic maintenance and management during all phases of construction
- ✓ Right-of-Way
- ✓ Utilities
- ✓ Stakeholder coordination
- ✓ Public hearing and public involvement
- ✓ Quality assurance and quality control
- ✓ Construction engineering and inspection
- ✓ Overall project management and coordination with active projects

29

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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.

RELEVANCE TO 29



I-95/I-695 (Section 100) Interchange



I-95/I-695 (Section 100)



I-95/I-695 (Section 100)

- **Delivering multiple projects concurrently on fast track schedule** – JMT completed the fast tracked design of this complex multilevel interchange within 10 months. Over 1,100 drawings were produced along with a detailed engineers’ estimate and project specifications.
- **Delivering projects in developed urban corridors** – Section 100 is the most congested section of I-95 in Maryland north of Baltimore, experiencing ADT’s of 166,000 Vehicles Per Day (VPD), and operates at Level of Service (LOS) F during the morning and evening rush hours. With 2025 traffic volumes projected to increase to 225,000 VPD, congestion on Section 100 will continue to worsen and extend the existing AM and PM peak hours into several hours as well as LOS F during peak hours on weekends.
- **Use of innovative design solutions and construction techniques** – JMT refined multiple line and grade options for the I-95/I-695 interchange and prepared the final design and geometrics of this complex interstate interchange. The preliminary design encompassed an array of design elements, which included horizontal and vertical alignment, typical sections, developing and reviewing design standards, and minimizing impacts to the existing ROW and utilities. One of the unique challenges was the re-design of the existing "double-braided" directional I-95/I-695 interchange to a fully directional multilevel design with no ingress or egress ramps from left lanes of the two mainlines. Complex MOT plans were prepared to stage this interchange without disrupting the existing traffic of nearly 170,000 ADT.
- **Limiting impacts to the traveling public and affected business and communities, including commitments to effective strategies to minimize congestion during construction** – Extensive traffic control plans and modeling were developed that minimized impacts to the travelling public by maintaining all existing lanes during construction. Communications with CHART occurred daily throughout construction and prior to lane shifts and/or any temporary closures for girder erections.
- **Developing and managing effective communication strategies with business owners and other key stakeholders** – Because the project was the first in Maryland to consider the use of managed lanes, public involvement was imperative for this project. This project was unique because local, State, and Federal agencies, as well as the public were initially involved with Section 100 during the I-95 Master Plan Study. The early involvement allowed the Section 100 Planning Team to implement the public and agencies comments early on which helped in the public’s acceptance of using ETLs along this section of the I-95 corridor. In an effort to simplify the explanations of the engineering involved with this study, state-of-the-art renderings and animation were used during focus group meetings, public workshops and the public hearing to clearly illustrate the issues and challenges that faced the project planning team. Because of the early agency and public involvement, as well as the streamlined schedule, the project planning team was able to develop design plans to 30% completion. With a schedule for completing the planning study in the summer and construction beginning in the fall of the same year, the development of design plans during planning was essential in fast tracking the design phase and helping this project move to construction on schedule. The project planning team also assisted MSHA in the development of a preliminary concept for the I-695 future widening project to allow future expansion of I-695.
- **Previous success in taking and managing calculated risks and realizing incentives** - JMT coordinated with the Lead Contractor’s JV during the construction on this project. Collaboration between design/construction resulted in value engineering proposals involving foundations, MOT and utilities that saved the project several million dollars as well as reduced the schedule and increased safety of the traveling public and workers.
- **Previous success in the coordination of complex utility relocation** – A BGE Electrical Transmission Line and tower and a BGE Natural Gas Transmission line were in conflict with the proposed interchange reconstruction. JMT partnered with BGE and the electrical transmission designer to fast track the design and relocation of the electrical transmission line and tower. JMT also worked under the direction of BGE to prepare gas transmission relocation plans. Both of the major utility relocations were designed with the proposed interchange and relocated concurrently with the construction of the interchange.
- **Meeting or exceeding required Disadvantage Business Enterprise Programs commitments** - The DBE goal for this project was 18%. JMT exceeded the goal (18.1%).

SIMILAR PROJECT RISKS TO 29

- 1. Traffic Control** - Extensive traffic control plans and modeling were developed that minimized impacts to the traveling public by maintaining all existing lanes during construction.
- 2. Project Schedule** - Fast tracked design of over 1,100 drawings, detailed estimates and specifications for this complex multilevel interchange within 10 months.
- 3. Utilities** - Partnered with utility owner and their designer to fast track design and relocation to allow relocation of utilities and interchange construction to occur concurrently.
- 4. Community Stakeholders** – In an effort to simplify the explanations of the engineering involved, state-of-the-art renderings and animation were used during focus group meetings, public workshops and the public hearing to clearly illustrate the issues and challenges that faced the project team.
- 5. Geologic Conditions** – Performed geotechnical engineering services including more than 500 borings, testing and associated reports within a fast tracked 10 month design period.

PROJECT HIGHLIGHTS

- *Complex multilevel interchange fast tracked designed in 10 months*
- *First project within Maryland to implement both general purpose and managed lanes in the same facility.*
- *Recognized for Excellence in Partnering*
- *“I can personally say that JMT has delivered a product of the highest quality on this project. JMT managed their design budgets and two large construction project in a meticulous fashion and was extremely responsive to the aggression design schedule the MDTA imposed on JMT and its other firms.”*

*Mr. David LaBella, PE
MDTA Major Programs Manager
(02-14-2013)*



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