



Request for Qualifications

Route 7 – Westbound Truck Climbing Lane Interchange Improvements — Design-Build Project

State Project No.: 6007-053-133, R201, C501

Federal Project No.: STP-5401 (518)

Contract ID Number C00058599DB54

January 10, 2013

Submitted to:



Submitted by:



8211 Washington Boulevard
Jessup MD 20794





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

January 10, 2012

Re: Statement of Qualifications
Route 7 – Westbound Truck Climbing Lane Interchange Improvements
RFQ Number: C00058588DB54

Dear Mrs. Williams:

Cherry Hill Construction, Inc. (CHC) is pleased to present our Design Build team with a proven track record of success and accomplishment in delivering a complete roadway reconstruction in a fast paced environment. The Design Build Team has a solid history of delivering projects on schedule and within budget. We offer the following benefits:

- A Northern Virginia District based lead design firm with current, relevant, and proven VDOT experience – *Greenhorne & O'Mara, Inc.*
- A Northern Virginia District based quality assurance team with current, relevant and proven VDOT experience – *The Louis Berger Group, Inc.*
- A Northern Virginia District based / geotechnical engineering firm with decades of institutional knowledge – *AMEC Environment & Infrastructure, Inc.*
- Several Northern Virginia District based DBE and Swam subconsultants with current and relevant VDOT experience – *Belstar, Inc.* (QMA testing); *Froehling & Robertston, Inc.* (QMA Testing); *Accumark, Inc.* (utility test holes/designations); *Siddall, Inc.* (public relations)

Enclosed for your evaluation is one original paper version of the Statement of Qualifications with full supporting documentation, one CD-ROM containing the entire State of Qualifications in a single cohesive Adobe PDF, and 10 abbreviated paper copies of the original Statement of Qualifications.

We welcome this opportunity to compete for this project and look forward to providing a safe, successful project within budget.

Cherry Hill Construction, Inc.

By:

Gregory M. Andricos, PE
Vice President/General Manager

3.2 LETTER OF SUBMITTAL

INTRODUCTION TO CHERRY HILL CONSTRUCTION

Choose Cherry Hill Construction, Inc. (CHC) as your design-builder for the Route 7 Design-Build project, and we will deliver a quality project to you on-time and within budget – a project that all parties will be proud of. With the CHC Team you will get:

- A proven heavy-highway contractor with decades of highway construction experience.
- A proven partner that excels in design-build project delivery with several recent successes to our credit.
- A proven design-builder that recognizes and welcomes stakeholder involvement.
- A design-build project manager with the organizational authority to back our commitment to you.

■ Cherry Hill Construction, Inc. Offeror | Design-Builder | Prime Contractor | Design-Build Management

Cherry Hill Construction, Inc. will be the design-builder responsible for design and construction of this project. CHC is a wholly owned subsidiary of the Tutor Perini Corporation (currently ranked No. 9 of Engineering News Record's list of the Top 400 Contractors, No. 34 on ENR's Top 100 Design-Build Firms, and No. 5 ENR's Top Green Contractors) and has the support and diversified resources of one of the nation's most experienced civil contractors. Founded in 1968, CHC is one of the largest constructors in Washington Metropolitan area, having delivered over \$179 million design-build projects in Maryland, Washington, and Virginia over the past six years. CHC recently completed the award winning \$112M design-build project in Fairfax County, Northern Virginia, for VDOT as administered by FHWA – EFLHD.

Greenhorne & O'Mara, Inc. *now Stantec*, our lead designer for this project, is the Lead Designer for the Route 1 widening design-build in Prince William County, VA and project was the Lead Joint Venture firm for the design of I-95 Section 100, Segment 1 and worked in partnership with CHC during construction of this project to bring it to a successful completion including receipt of a MDQI award for Partnering. Leading the CHC Team at the Senior Management Levels are Gregory Andricos, PE, a Vice President of CHC, serving as the design-build project manager; and Roger Lant, a Project Manager at CHC, serving as the construction manager on this contract.

INTRODUCTION TO THE CHERRY HILL TEAM

For delivery of this project, CHC has composed a Team that includes member firms and professional staff, nearly all of which are based in the Northern Virginia District. The graphics below depict our Team composition and responsibilities.



■ Greenhorne & O'Mara, Inc., *now Stantec* - Lead Designer | Design Management

Stantec is a national, full-service, multidisciplinary consulting engineering firm with offices in Chantilly, Leesburg, Richmond and Chesapeake, Virginia. *Stantec* has been providing engineering services in Washington Metropolitan area, including for Commonwealth of Virginia, since 1960s. They have consistently ranked as one of the top engineering design firms in the U.S. *Stantec* has over 4500 employees within Eastern United States with a large, diverse staff of more than **400 local** professionals that offer a broad spectrum of expertise. Over the past ten years, *Stantec* has been involved, either as a Lead Designer or a sub-consultant, on just about every design-build and 3P project in Virginia.

They are currently serving as the Lead Designer on the Route 1 Widening Design-build project for Prince William County, VA and have served in that capacity for the Britton Road and Bridge 3P project working directly with FD/MK, LLC in Henrico County VA. To date, Stantec has served as CHC's Lead Designer on four design-build projects in Maryland as well as partnering with us during construction on several large, complex design-bid-build projects in Washington Metropolitan area. G&O will be the Lead Designer for this project, performing designs for roadway, structures, traffic engineering and MOT, drainage/stormwater management; and permitting, utilities engineering, and right-of-way acquisition services.

■ **The Louis Berger Group, Inc.** **Quality Assurance Manager | Prime QAM**

The Louis Berger Group, Inc. (LBG) is a national engineering, planning, and construction administration organization consistently ranked by ENR among the top design firms in the United States. In 2012, LBG ranked 25th in the Top 500 Design Firms, 9th in the Top 100 Pure Designer List, and 10th in the Top 20 Transportation firms. Founded by Dr. Louis Berger in 1953, LBG has grown into a recognized worldwide leader in the consulting field employing over 3,000 personnel worldwide. LBG has completed projects and project assignments in nearly every county in the Commonwealth of Virginia for state agencies, local governments, and federal agencies.

LBG will serve as the primary quality assurance manager for this project utilizing its diverse experience to ensure delivery of high quality product to VDOT.

■ **Amec Environmental and Infrastructure, Inc.** (DBE/SWaM) **Geotechnical | Materials & Pavement Engineering**

AMEC Environment & Infrastructure, Inc. (AMEC) is an industry leader in engineering, geotechnical, construction materials testing, environmental and management consulting services. The firm is ranked 7th out of the top 500 design firms and 17th in the top 200 environmental firms by ENR. AMEC has completed transportation studies and designs on several transportation and design-build projects as well as construction management services. Notable projects include Route 460 Connector – Phase I; I-495 Widening (HOT Lanes); VA Route 28 Corridor Improvements; Dulles Corridor Metrorail Phase I; Richmond Airport Drive Connector; and VDOT Statewide and Northern Virginia Limited On-call Geotechnical Contracts.

■ **Accumark** (SWaM) **Utility Test Holes | Designations**

Accumark, located in Chantilly, Virginia provides professional subsurface utility engineering services on a daily basis across Virginia and the Eastern U.S. Accumark employs a team of professionals trained in utility designation, vacuum excavation, CADD design, research and documentation. Their staff has worked on various VDOT design projects statewide and was recently ranked number one for statewide subsurface utility designating and locating services. Accumark has also worked on VDOT design-build projects in the greater Richmond area, including I-295/Meadowville Interchange, Route 60/German School Road, and Middle Ground Boulevard.

■ **Froehling and Robertson, Inc.** (SWaM) **Independent QAM Materials Lab**

Established in 1881, **Froehling & Robertson, Inc.** (F&R) is a multi-disciplinary engineering firm that provides clients with the full range of services, including – but not limited to – core competencies of construction materials testing and geotechnical and environmental engineering. In support of this mission, F&R maintains a fleet of drilling equipment as well as accredited geotechnical and construction material testing laboratories that are utilized by each of our 13 offices, including Sterling, Virginia.

■ **Siddall, Inc.** (SWaM) **Public Involvement**

Siddall, Inc. (Siddall) is an independently owned advertising and public relations agency in Richmond founded in 1975. For over 35 years, Siddall has helped state, regional and local agencies communicate with the public. They have worked specifically in the transportation sector communicating to the public about construction, road expansion, public meetings, and other communications efforts to inform the public. They currently hold contracts with VDOT (Central) and the Richmond District Office, including the I-95 bridge restoration project. Relevant clients include VDOT, VA DMV, and VA DEQ.

■ **Belstar** (SWaM) **Construction Quality Control**

Established in 1985, **Belstar, Inc.** is a construction cost/project management company providing comprehensive services relating to the design, pre-construction, procurement, construction and post-construction phases of infrastructure development. Based in **Northern Virginia**, Belstar has teamed with Stantec to provide on-call CEI Services to several Districts throughout Virginia.

3.2.2 POINT OF CONTACT

Gregory Andricos, PE
Vice President/General Manager (CHC)

8211 Washington Blvd. Jessup, MD 20794
 (p) 410.799.2377 | (e) andricos@chconstr.com
 (f) 410.799.2381

3.2.3 PRINCIPAL OFFICER

James Laing, President, (CHC)
Senior Vice President, Tutor Perini Corp.

8211 Washington Blvd. Jessup, MD 20794
 (p) 914.739.1908 | (e) Jlaing@perini.com
 (f) 410.799.2381

3.2.4 CORPORATE STRUCTURE, PERSON(S) FINANCIALLY RESPONSIBLE FOR THE CONTRACT

CHC, as the Offeror, is a C-Corporation incorporated in the State of Maryland, Federal Tax ID #52-0890004. CHC will be signatory to the VDOT Contract and have financial responsibility for performance of the contract. As noted in the enclosed Surety Commitment letter ([Appendix E](#)), CHC has more than sufficient bonding capacity. There are no liability limitations.

3.2.5 FULL LEGAL NAME OF LEAD CONTRACTOR & LEAD DESIGNER

Lead Contractor: *Cherry Hill Construction, Inc.*
Lead Designer: *Greenhorne & O'Mara, Inc., now Stantec.*

3.2.6 AFFILIATES AND SUBSIDIARIES

Cherry Hill Construction, Inc. has no subsidiaries. For a list of affiliates and parent company, please see Attachment 3.2.6 in [Appendix B](#).

3.2.7 DEBARMENT CERTIFICATIONS

Completed [Attachment 3.2.7\(a\)](#) and [Attachments 3.2.7\(b\)](#) may be found in Appendix C.

3.2.8 OFFEROR'S VDOT PREQUAL NUMBER/STATUS

CHC has been issued VDOT Prequalification Number C090; CHC's current VDOT pre-qualification status is "Prequalified (Currently Inactive)." An 8.5x11 copy of the VDOT pre-qualification certificate is included in [Appendix D](#).

3.2.9 LETTER OF SURETY / INSURANCE

The requisite letter of surety for CHC may be found in [Appendix E](#) which indicates CHC is

capable of obtaining a performance and payment bond based on the current estimated contract value.

3.2.10 SCC DPOR TABLE

[Attachment 3.2.10](#) (SCC and DPOR table) and copies of DPOR and SCC licenses are provided in [Appendix F](#).

3.2.11 DBE COMMITMENT

CHC confirms our commitment to achieving the DBE goal of **15%** for this project. We also endeavor to include meaningful SWaM participation, consistent with Governor's Executive Order No. 33, across all three disciplines: design, quality assurance, and construction. We have included DBE subconsultants Belstar. SWaM subconsultants have also been made part of our team, including, Accumark; Belstar; and F&R.

3.3 TEAM STRUCTURE

TEAM EXPERIENCE

Over the years, CHC has been exceedingly successful with our approach to design-build teaming, and we commit that we can, and will be equally successful on the Route 7 Truck Climbing Lane project. Our teaming approach and structure centers on three important factors:

1. CHC selects a Lead Design firm that is capable, productive, and familiar with the client technical requirements. Whenever possible, CHC teams with a design firm that is very near to the project site. These factors help ensure responsiveness to both the needs of the project owner and of CHC. A local lead design firm also enhances budgetary competitiveness. CHC proposes Greenhorne & O'Mara, Inc., now *Stantec* as Lead Designer for these same reasons. We have a 15-year working relationship with Stantec; they are local, capable, and responsive service provider that is thoroughly familiar with VDOT project execution procedures and guidelines.
2. CHC selects a quality assurance management team that is familiar with the operational approaches of CHC and our client, and completely comprehends the culture of "turn-key" quality product delivery. This key role must represent the interests of the owner, and CHC must be able to trust their expertise when representing our product to the owner. We have selected The Louis Berger Group, Inc. (LBG) based on their capabilities and because of the confidence and partnership LBG has built within VDOT over the past decade.

3. CHC selects other team members consistent with our meaningful corporate commitment to the federal disadvantaged business enterprise program. Additionally, some of our clients, such as VDOT, have similar state based programs. CHC understands and shares VDOT's commitment to the SWaM / DBE programs. Our teaming structure reaches out to those potential services providers and as such, CHC has selected the following DBE or SWaM providers for this project: AMEC, Inc. (DBE /SWaM), Accumark, Inc. (SWaM), Belstar (SWaM), Siddall (SWaM), and Froehling & Robertson, Inc. (SWaM). Nearly all of these firms are local in Virginia, and are known services providers to VDOT.

3.3.1 KEY PERSONNEL

The CHC Team has assembled a highly qualified management team with demonstrated organizational capabilities. With more than a century of collective experience, our management personnel have the technical expertise in construction and design as well as the leadership skills necessary to deliver superior results. The personnel assigned to the Route 7 project indicate the level of commitment of these member firms. Completed [attachments 3.3.1](#) for the Design-Build Project Manager (DBPM), Quality Assurance Manager (QAM), Design Manager (DM), and Construction Manager (CM) detail their relevant experience and how their skills relate to your project needs. A brief introduction to these key individuals is shown below. Key personnel qualifications are detailed further in the resumes in [Appendix G](#).

■ Gregory Andricos, PE *Design Build | Project Manager*

Since graduating from VMI in 1992 (BS civil engineering), Mr. Andricos has held progressively responsible positions within CHC over period of 20 years and is now Vice President and General Manager. He currently holds PE licenses in Virginia, is a DCR certified Responsible Land Disturber, and holds VDOT ESCC Certificate. He has successfully managed roadway/bridge design-build projects as well as traditional construction projects for CHC clients including: VDOT, FHWA Eastern Federal Lands, Maryland Department of Transportation, U.S. Army, and DDOT. As noted in his attached Key Personnel Resume, his work on award winning FHWA –EFLHD Fairfax County Phase I, II & IV design-build project demonstrates his excellent DBPM experience, while the I-95 Section 100 design-bid-build project demonstrates

his personal experience with complex highway and interchange reconstruction projects.

■ Daniel Grey PE | *Quality Assurance Manager*

Daniel Grey, PE, is a Virginia-licensed professional engineer with more than 30 years of experience leading large engineering organizations and managing multimillion-dollar infrastructure programs. He is a proven senior leader and a team builder respected in military, federal agency, and engineering circles for his ability to establish a positive command climate and inspire his organizations to attain high levels of success. His responsibilities overseeing transportation projects have always included overall responsibility for quality. He has ensured that all systems were in place for quality control as well as quality assurance. His project assignments of leading large organizations and managing massive engineering and infrastructure programs in support of the U.S. government and political objectives have culminated in his duties as LBG's vice president overseeing all U.S. government-funded contingency construction projects.

■ Simon Simon, PE | *Design Manager*

Mr. Simon is a Virginia-Registered Professional Engineer with expertise in project management of transportation related design and construction projects. He has 34 years dedicated to design and management of transportation projects, particularly large, complex highway and bridge facilities involving the design-build and 3P method of project delivery including those involving on accelerated basis. Over the past 15 years, Mr. Simon has closely worked with CHC on a variety of design-build and design-bid-build projects. He currently serves as Stantec's project principal for the Route 1 Widening and Improvements design-build/ PPTA project in Prince William County, VA. He served as the JV project manager on the I-95 Express Toll Lanes, Section 100, Segment 1 project totaling \$230M in construction value (CHC constructed), and recently completed the I-595 Express Toll Lanes, Zone 6 (over 3 miles) 3P project in Ft. Lauderdale, FL.

■ Roger Lant | *Construction Manager*

We have assigned one of our most experienced construction managers to your project in Mr. Lant. He is a 19-year veteran of the construction industry and has significant experience as construction manager with specific expertise in highway and interchange projects, particularly those with compressed schedules, complex MOT phasing, stringent environmental regulations, and significant structural elements. Mr. Lant has been with CHC

for 10 years, is a Virginia-Registered Land Disturber and holds a VA ESCC certification. As construction manager, he recently completed the \$111.5 million “Award Winning” Fairfax County Parkway, Phase I, II, and IV Design-Build project for FHWA-ELHD. Similar to Route 7, the Fairfax County Parkway project included complex phasing and MOT, typical of construction projects in Northern Virginia.

QUALIFICATIONS IN BRIEF FOR NON-KEY PERSONNEL

Several personnel listed on the CHC Team Organization Chart contribute to team expertise and resource availability. A detailed resume form 3.3.1 is not included as per solicitation requirements. However, certain individual qualifications are briefly outlined below and serve demonstrate that our personnel planning for your project has already begun.

■ **Cody Smith, PE |** *Roadway / Transportation Design Task Manager*

Mr. Smith of Stantec is Virginia-Registered Professional Engineer with 16 years of experience in project management, civil engineering and construction management throughout Northern Virginia. He has experience in both the public and private sectors and has a well-rounded knowledge of development projects through his role as both an owner’s representative and consultant. He has directed and prepared feasibility studies, master plans, and construction drawings for a wide variety of projects, including major transportation infrastructure. Mr. Smith’s expertise also includes presentations to planning boards and City/County commissioners, and coordination with Federal, State, and local agencies regarding project reviews and approvals. He is currently serving as the lead roadway engineer for the Route 1 Widening PPTA project in Prince William County, VA.

■ **Michael Blose, PE, MBA |** *Drainage / SWM Design Task Manager*

Mr. Blose is a Professional Engineer with over 12 years of experience, specializing in all design aspects of civil and water resource engineering for federal, state, local and private construction projects. He is an approved Sediment and Stormwater Management Expedited Plan Reviewer and is Rosgen certified at Levels I, II, III, & IV. His experience includes stormwater management, erosion and sediment control, roadway and site drainage, dam safety and pond/dam embankment design, geomorphology and stream restoration & stabilization, construction inspection, hydrology, bridge/culvert and stream hydraulics, NPDES permit compliance, TMDL compliance,

environmental permitting, cost estimating, transportation planning, roadway design, and preparation of construction documents.

■ **John Christman, PE |** *Traffic Engineering & MOT*

Mr. Christman is a Virginia-Registered Professional Engineer with more than 40 years of experience in performing and managing transportation engineering projects. Specializing in highway and traffic engineering, John has served as project manager or task manager on multitude of highway and traffic tasks on design-build and conventional design projects in the Washington Metropolitan area. He has directed and prepared designs and construction documents for a variety of roadway and bridge projects, including, traffic management plans, maintenance of traffic plans, signal design, pavement marking, and signing and lighting plans all in accordance with VDOT, MDSHA, AASHTO, FHWA (including MUTCD) guidelines, policies and procedures. He is currently serving as the lead traffic engineer for preparation of Mot plans for the Route 1 Widening PPTA project in Prince William County, VA.

■ **Maurice DeBeary, PE |** *Structure Design Task Manager*

Mr. DeBeary of Stantec is a Virginia-Registered Professional Engineer with 27 years of experience specializing in the design management as well as hands-on design of transportation structures. His broad experience encompasses the design and management of structural projects involving design-build/3P methods of project delivery. In recent years he has served in such roles for major highway and bridge projects for VDOT, DDOT, Maryland SHA, Maryland Transportation Authority, and other Metro-Washington governmental jurisdictions. He is thoroughly familiar with VDOT, AASHTO and FHWA design and construction policies, procedures and guidelines. Maurice has served as structural manager for the I-895 Pocahontas Parkway 3P project in Richmond and Route 125 Bridge over Nansemond River in Suffolk Co., VA.

■ **Harold Canfield, PWS | Environmental**

Mr. Canfield has more than 22 years of environmental compliance experience including: wetland delineations; WUS/wetland permitting and regulatory compliance; environmental restoration including mitigation site searches, cost/benefit analyses, mitigation design (concept and final design plans) and post construction monitoring for wetland, stream, and forest restoration/mitigation projects; wetland functional assessments; forest stand delineations, forest conservation plans; monitoring and maintenance plans for mitigation

sites; RTE habitat and species searches; Technical Reports and NEPA documents; environmental construction monitoring and management, and other environmental compliance services.

■ **Tim Copeland | Right-of-Way Specialist**

Tim Copeland, G&O's Program Manager for Right of Way Services, who is a Virginia Certified General appraiser with nearly 10 years of experience in eminent domain appraisal experience in Virginia. He has worked extensively with VDOT's outside fee attorneys since 2008 and has prepared appraisers for approximately 40 properties that were involved in litigation. Additionally, Mr. Copeland has qualified as an expert witness in both Virginia Beach and Chesapeake Circuit Courts and has lead the ROW acquisitions services in several design build and "Mega Projects" for VDOT.

■ **Dave Malinowski | Utility Design/Coordination**

Mr. Malinoski of Stantec is a Virginia-Registered Professional Engineer with over 33 years of experience in the management, design and coordination of transportation, site improvement and utility projects. His expertise is in relocation design and coordination of utility relocations, particularly in Virginia. Over the past 12 years, he has been involved in many major design-build and PPTA projects in Virginia providing utility relocation coordination and design services. He is intimately familiar with all utility companies and VDOT procedures having provided the utility coordination and design services on such projects. His recent experience in Virginia includes serving as Utility Engineer for the I-495 HOT Lanes 3P and I-95/US Route 1 Interchange at Woodrow Wilson Bridge projects.

■ **Stanley Hite, PE | Geotechnical, Materials, Pavement Design**

As an AMEC senior principal engineer, Mr. Hite has a strong background and expertise in general roadway materials, geotechnical engineering, pavement design and evaluation, and value engineering. As a previous VDOT foundations engineer, he was the primary roadway geotechnical engineer for VDOT. Mr. Hite's function was to coordinate and supervise investigations for geotechnical work on VDOT projects throughout the Commonwealth.

■ **William LaBaugh, PE | Utility Designations and Test Holes**

Mr. LaBaugh is a professional engineer with 34 years of experience with VDOT and a thorough understanding of all aspects of construction and utility projects. He serves as the quality assurance/

quality control manager on Accumark's VDOT Statewide Subsurface Utility Designation and Location Contract.

■ **Ronnie Joe Cook | Construction QC**

Mr. Cook has 24 plus years of experience as an Engineering Assistant, Quality Control Manager and Site Manager and has experience in all aspects of construction. He has managed, supervised, and inspected over \$70 million of construction contracts, as well as supervised and provided drafting support for mission critical projects valued \$21.8 million. Mr. Cook is knowledgeable and able to provide construction management and administration for a variety of projects. His knowledge includes the Federal Acquisition Regulation, and Safety encompassing OSHA and the EM-385-1-1, and he is experienced in Lead Abatement/Asbestos Abatement/Confined Spaces. Mr. Cook is also knowledgeable of 01451 Contractor Quality Control Plan that includes the Three Phases of Control.

■ **Thomas "Nathan" Harvey | Construction QA**

As a construction inspector for the LBG, Mr. Harvey has been working with VDOT since successfully graduating from Radford University. He has acquired and recently reacquired multiple VDOT certifications in construction inspection and has worked on VDOT projects for 11 years as a transportation construction engineer, construction manager, and construction inspection consultant, including on LBG's current statewide maintenance contract. Mr. Harvey is intimately familiar with aspects of construction and inspection pertaining to VDOT's bridges and highways.

■ **John Vandergriff, PE | Design QA**

With more than 20 years of experience in transportation engineering, project management, and program management, Mr. Vandergriff of LGB will serve as an independent Design QA lead for this project. A registered Virginia PE; he is a former VDOT Richmond District project manager and fully understands the expectations and priorities for this project. His recent VDOT project successes include – U.S. 50 Lee Jackson Highway (UPC 68757), U.S. 29 & Gallows Road (UPC 11395), Telegraph Road Widening (UPC 58453), and Huguenot Bridge Replacement.

■ **John Siddall | Public Relations Manager**

Mr. Siddall (Siddall, Inc.) has been a contributing writer to Advertising Age, selected by the Richmond chapter of the American Advertising Federation as Advertising Person of the Year and served as a judge at the AMA EFFIE awards and the One Show. Because he has worked on the VDOT account from 1994 until 2003 and again

from 2008 until present, Mr. Siddall understands how communicating in the transportation sector evolves in dynamic times.

3.3.2 FUNCTIONAL RELATIONSHIPS AND TEAM COMMUNICATION

The CHC Team organization chart on page 9 depicts the requisite personnel and reporting structure of our team. The functional relationships and communication string for this project is briefly described below.

Mr. Andricos, as the Design-Build Project Manager (DBPM), will be the primary point of contact for VDOT and responsible for all project delivery management activities. He will interact extensively with the VDOT project manager and manage all contractual obligations between VDOT and the CHC Team.

All design disciplines and related activities, including subconsultants, shown on the organization chart under “Design Team” will report to Design Manager (DM), Mr. Simon. Contractually, all design related services, including right-of-way acquisition services, will be the responsibility of Stantec. Stantec will in turn be contractually obligated to CHC and Mr. Simon will report to Mr. Andricos. Construction operations, QC, and quality control testing all report directly to the Construction Manager (CM), Mr. Lant. In addition, CHC will subcontract QC inspection to Belstar, and these efforts will be led by Ronnie Cook. The QC lab is currently unidentified, but the selected lab will have no project relationship with the independent QAM lab. The design-build operations will hinge on effective and frequent communications between Roger Lant (CM) and Simon Simon, PE (DM), as depicted in the design-build coordination box.

The Quality Assurance Manager (QAM) is independent of all design-build operations and will be led by Daniel Grey, PE of LGB. To guarantee independent operations of QAM vs. design-build, CHC will contract directly with LBG. Mr. Grey will have no direct reporting obligations to the DBPM or CM, nor will LBG have any reporting or contractual obligations to the DM. The QAM has already identified the materials lab to be used for the Route 7 project, F&R. This lab effort led by Paul Burch will have no involvement with the QC testing or inspection efforts performed by the CM.

Public involvement efforts extend from concept through construction completion, and will be led by Siddall. Mr. Siddall and his team will report directly to the DBPM as their duties extend across of all phases of project development.

Effective communication depends not only on enforcing the reporting relationships identified, but the practical communication of these relationships. The CHC Team, if shortlisted, will implement Bentley ProjectWise Software. This tool promotes organized structure of communications and of all electronic data including, but not limited to: MicroStation files, GEOPAK files, MS Office data, scheduling, PDFs, submittals, etc. Similar to VDOT’s Falcon system, this software allows for real-time collaboration of design files and Microstation data, complete with version management tools. In addition, ProjectWise allows for the same data management tools for business related reporting software. The software may be web-based for non-design team users, with immersion capabilities allowing for real-time data sharing. ProjectWise will be implemented during the RFP stage, and, if selected, the CHC Team will continue its use through final construction. We have implemented a similar file structure on recent design-build as well as conventional design projects, wherein we have used it to store and control owner data, designs, estimates, schedules, reports and transfer files.

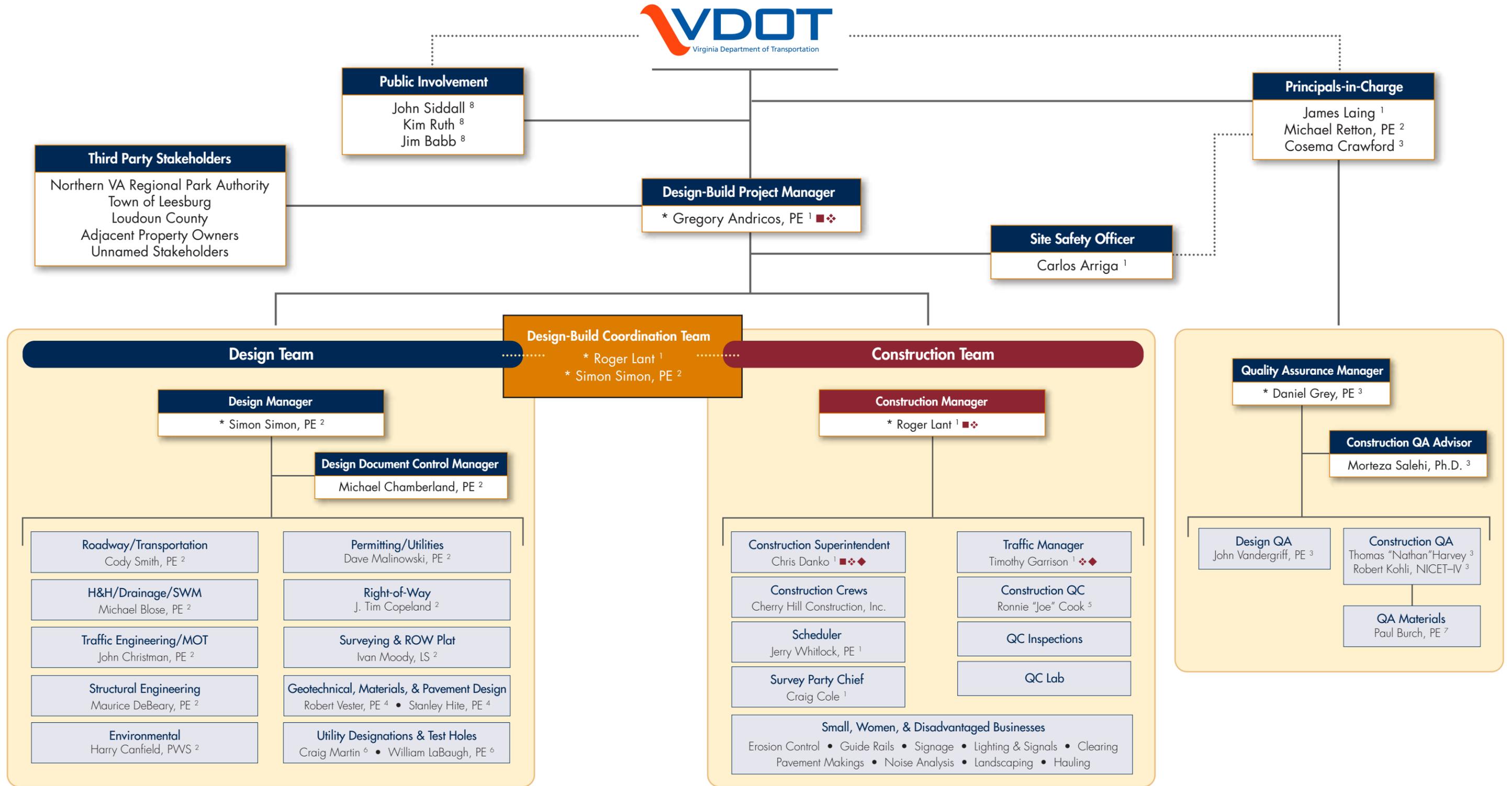
We will also implement a project communication plan which documents several aspects of our internal communications having these key features:

- Complete contact information for the project team, including external stakeholders;
- Chain of command reporting; and
- Roles and responsibilities matrix; and general milestone project calendar, complete with delivery dates, review deadlines, and internal deliverable dates. This portion of the communications plan will be a living document.

A complete CPM schedule in granular format will be developed and maintained for the project from inception until completion. This schedule will be maintained via scheduling software and “published” to project participants in PDF format at no less than a monthly basis.

External communication with project stakeholders will be crucial to a successful project perception and enhance project safety. Leading these external efforts is our public relations team of John Siddall, Kim Ruth, and Jim Babb of Siddall. Currently, this team of outreach experts is providing similar services for the I-95 Bridge Replacement Project. With ADTs exceeding 100,000, complex MOT/SOC scheme, and time sensitive construction, Siddall excelled in keeping the public informed.

Route 7 – Westbound Truck Climbing Lane Interchange Improvements — Design-Build Project



Legend: * Key Personnel • ■ VA RLD • ◆ VDOT ESCC • ◆ VDOT INT. MOT

¹ Cherry Hill Construction, Inc. • ² Greenhorne & O'Mara, Inc., now Stantec • ³ The Louis Berger Group, Inc. • ⁴ AMEC Environment & Infrastructure, Inc. • ⁵ Belstar, Inc. • ⁶ Accumark, Inc. (SWaM) • ⁷ Froehling and Robertson, Inc. (SWaM) • ⁸ Siddall, Inc. (SWaM)

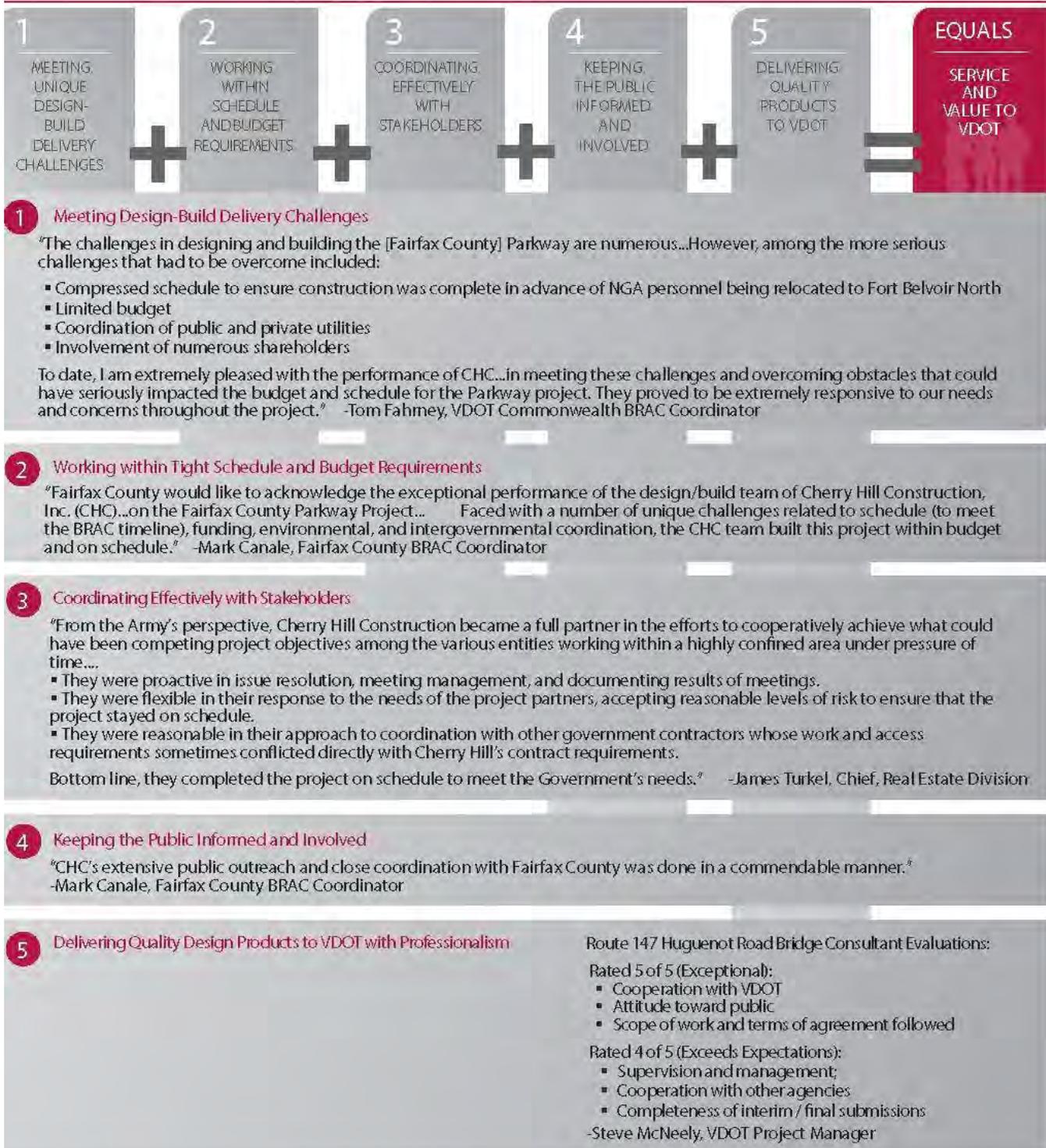


3.4 TEAM EXPERIENCE

3.4.1 PROJECT EXPERIENCE OF LEAD CONTRACTOR AND LEAD DESIGNER

Our key team members have extensive experience with design-build and roadway widening projects, particularly those requiring multi-disciplinary services under strict budget and schedule requirements. Relevant project experience is provided on the Work History Forms (Attachments 3.4.1a and b) in Appendix H.

The Cherry Hill Team – Service and Value



In addition, we have provided examples of our work quality straight from the source - our clients--as depicted below. Additional key project highlights and evidence of our team members' experience working together on similar contracts are noted in the table below.

CHERRY HILL TEAM COLLABORATION EXPERIENCE

Project Name, Location & Description	Similarities:	Client (Project Type)	Contactor / Designer	Const. Cost
“Award Winning” Fairfax County Parkway Phases I, II, and IV Design Build, Fairfax County, VA	<i>Similarities:</i> Reconstruction of roadways, interchanges and ramps, survey and mapping, structures including top-down walls, formal TMP, environmental permitting and compliance, formal public information and partnering programs, blasting, Contactor QA/QC Programs, coordination with adjacent contracts.	VDOT (Administered by FHWA-ELFHD)	CHC - Design-Build Contractor	\$111.5 M
“Award Winning” I-895 Express Toll Lanes, Section 100, Segment 1, Baltimore City/County, MD	<i>Similarities:</i> Competitively bid project; 3.6 miles of roadway reconstruction and widening, reconstruction of interchange and ramps, modifications to existing bridges including soil nail walls, multi-phase MOT, formal partnering program, coordination with adjacent contracts, and complete management of the project.	Maryland Transportation Authority	CHC - prime contractor ----- Stantec - lead designer	\$151.5 M
“Award Winning” I-66 Improvements (200-93A & 201-93A)	<i>Similarities:</i> Competitively bid project for 7.52 miles of roadway widening of I-66 constructing two new travel lanes in each direction. Involved reconstruction of interchanges, multiphase MOT coordinated with Regional TMP, and coordination with adjacent contracts.	VDOT	CHC - prime contractor	\$27.M (#200-93A) and \$39.3M (#201-93A)
I-495 Capital Beltway HOT/HOV Lanes 3P project; Fairfax County, VA	<i>Similarities:</i> Widening and reconstruction of interstate facility; ROW, surveying, and utility relocations design and coordination services	VDOT	Stantec – Lead ROW and utility engineer	\$900 million
Route 288 Reconstruction 3P Project, Richmond, VA	<i>Similarities:</i> Roadway and bridge reconstruction and associated independent QA services.	VDOT	Stantec – consultant to VDOT & QA Manager	\$212 million
“Award-Winning” MD 32 / Airfield Road Interchange Design-Build, Ann Arundel County, MD	<i>Similarities:</i> Interchange project, roadway and bridge reconstruction, roundabouts, surveying, utility relocation design and coordination services; construction phase services.	Maryland State Highway Administration	CHC – Design-builder ----- Stantec – Lead Designer	\$10 million
Route 895, Pocahontas Parkway 3P, Chesterfield and Henrico Counties, VA	<i>Similarities:</i> New roadway design, new bridge design (for Britton Road and Bridge); utility relocation design and coordination, utility tunnel design (entire corridor)	VDOT	Stantec – Lead Designer (Britton Road/Bridge & Utility relocation coordination & design)	\$30 million (Stantec’s portion) \$320M (entire Project)
I-81 Truck Climbing Lane, PPTA Rockbridge County, VA	<i>Similarities:</i> Roadway reconstruction, to implement a program of safety improvements to I-81, including construction of truck climbing lanes	VDOT Staunton District	Stantec – provided Utility relocation coordination & design; ROW Services	\$74 million

3.5 PROJECT RISKS

3.5.1 CRITICAL PROJECT RISKS

As part of a thorough review of the request for qualifications, the RFQ information package and the design public hearing plan as well as project site visits, the CHC Team identified more than twenty-five specific risks inherent to this project. The risks identified by our team spanned disciplines, activities, functions and roles. During several meetings at which key members of our team attempted to rank these risks, it became apparent that many of these specific risks were the result of larger critical project risk elements. The table below provides a summary of the risks identified by the project team as well as how each risk was resolved.

Based on the table of critical risks that we listed, the CHC Team identified the three most critical project risk elements associated with this project. Those critical risk elements are:

- **The Route 7/Route 9 Interchange**
- **Storm Water Management/Best Management Practices**
- **Access Management**

The remainder of this section is devoted to the discussion of the specific risks associated with each Critical project risk element, the impact of the risks to the project, potential mitigation strategies and the roles VDOT or other public agencies may have in addressing the risks.

■ Critical Risk Element 1 | Route 7/Route 9 interchange

I. Specific Risks

a. Slopes

Existing slopes on the northwest, northeast and southwest quadrants of the proposed northern traffic circle are steep with

approximately 1:1 slopes or greater. The graphic to the right shows approximate limits of the steep slopes.



These slopes appear to be in excess of 30 feet in height. Existing streams were observed near the toes of these slopes. The proposed roundabout design will require the widening of the existing intersection footprint likely requiring the complete reconstruction of these slopes at a minimum of a 2:1 slope.

b. Waters of the U.S. Impacts

At the toe of each of the steep slopes discussed in Item a, streams were observed. Portions of these streams appeared to support intermittent flow and are likely regulated as waters of U.S. Reconstruction of the aforementioned slopes would result in significant impacts to these waterways.

c. Earthwork

Reconstruction of the slopes around the northern traffic circle would require large quantities of imported material. Based on a preliminary review of overall project cuts and fills, it appears that sufficient fill material may not be available within the project limits.

d. W&OD Trail

Design and construction of the proposed relocated W&OD Trail will require close coordination with the Northern Virginia Regional Park Authority.

e. Route 9 Bridge over Route 7

The proposed widening of Route 7 coupled with the relocation of the W&OD Trail will require widening under the existing Route 9 Bridge over Route 7. This will likely result in the need for retaining walls at each end of the bridge.

f. Maintenance of Traffic

Construction of the proposed roundabouts will require a detailed and well-defined maintenance of construction plan to maintain current traffic movements. Traffic volumes from westbound Route 7 to northbound Route 9 and from southbound Route 9 to eastbound Route 7 are high. The second movement will heavily impact the construction of both the north and south roundabouts.

II. Mitigation Strategies

While the individual risks associated with the Route 7/Route 9 interchange are significant, the CHC Team has developed specific strategies to mitigate these risks. We have identified two

#	Risk Identified	Addressed as part of or:
1.	Maintenance of traffic during the construction of the proposed traffic circles at the Route 9 interchange	as part of Risk #1
2.	Overall maintenance of traffic as part of construction within the median of Route 7 within the project limits	as part of Risk #3
3.	Earthwork balances within the project limits	as part of Risk #s 1,2 & 3
4.	Potential rock excavation resulting in the need for blasting	as part of Risk #3
5.	Coordination of construction with local emergency services	as part of Risk #3
6.	Utility relocation delays specifically associated with the construction of Fort Johnston Road	as part of Risk #3
7.	Impacts to waters of the U.S.	as part of Risk #s 1 & 3
8.	Location and design of storm water management facilities	as part of Risk #2
9.	Location and design of BMP facilities	as part of Risk #2
10.	Proposed design and construction duration	Deemed a non-critical risk
11.	Coordination with the Northern Virginia Regional Park Authority regarding the relocation of the W&OD Trail	Addressed as part of Risk #1
12.	20% DBE participation	Deemed a non-critical risk
13.	High volumes of traffic on Route 7 and Route 9	as part of Risk #s 1 & 3
14.	Public outreach activities including web-site maintenance, the holding of public meetings and preparation of distribution materials	Deemed a non-critical risk
15.	Coordination with local stakeholders	Deemed a non-critical risk
16.	Noise issues	Deemed a non-critical risk
17.	Clearance under the Route 9 bridge over Route 7	as part of Risk #1
18.	Sliver fills of asphalt within the project limits	Deemed a non-critical risk
19.	Existing steep slopes within the project limits	as part of Risk #s 1 & 3
20.	Design and construction of soil nail walls under the Route 9 bridge	as part of Risk #1
21.	Confirmation that existing design waivers address all standard project design elements	Deemed a non-critical risk
22.	Right-of-way acquisition	as part of Risk #s 1, 2 and 3
23.	Socio-economic status of affected property owners	Deemed a non-critical risk
24.	Conservation easement on Parcel 20	as part of Risk #3
25.	Erosion and sediment control	as part of Risk #2
26.	Sight distance at proposed cross-overs along Route 7	as part of Risk #3
27.	Potential Design Waivers and/or Design Exceptions	as part of Risk #3

potential strategies to minimize, if not eliminate impacts to the steep slopes identified in the vicinity of the northern roundabout.

The first strategy is to shift the northern roundabout towards the southeast. Not only would shifting the roundabout minimize impacts to the steep slopes, our team believes that it would improve traffic flow. Shifting the roundabout to the southeast would reduce the curve to which southbound Route 9 traffic would be subjected. As this movement is the largest movement through the roundabout, significant traffic operation improvements could be realized.

The second strategy is to reduce the radius of the roundabout. The reduction of the roundabout radius would have a similar effect as shifting the roundabout to the southeast and could be used in combination with the roundabout shift.

Coordination with NVRPA will be critical to the success in relocating the W&OD Trail. While our research indicates that the trail relocation would not be considered a Section 4(f) or 6(f) impact, the trail is historic and one of the most important pedestrian facilities in Northern Virginia. Our team has recent and relevant experience in working with NVRPA on several projects throughout Northern Virginia. Greenhorne & O'Mara, Inc. recently completed a trail alignment study for NVRPA at Gateway Regional Park in Fairfax, Virginia. This trail study included the study of a trail under an existing roadway bridge and specific study to ensure trail grades were ADA accessible.

To address the need for retaining walls under the Route 9 Bridge, the CHC Team will investigate the installation of soil nail walls. The CHC Team has recent and relevant experience in the construction of soil nail walls. As part of the Section 100, Segment 1 portion of the I-95 Express Toll Lane project in Baltimore, Maryland, the CHC Team was required to widen I-95 under the Chesaco and Hazelwood Avenue Bridges. The CHC Team was able to accomplish this in part through the removal of existing rip-rap slopes and installation of soil nail walls. CHC also successfully constructed soil nail walls as the Fairfax County Parkway overpass of Fullerton Road in Newington, Virginia.

III. VDOT/Other Public Agency Roles

Our team anticipates working closely with VDOT to investigate the feasibility of modifying the specific roundabout alignment as well as developing a final design for the soil nail walls under the Route 9 Bridge.

Close coordination with the USACE, VMRC and/or DEQ will be required to identify the jurisdictional limits of, and to justify any impacts to, waters of the U.S. Relocation of the impacted streams to the new toe of slope would be coordinated with the agencies for permitting and stream mitigation requirements.

Given our recent successful history of working with NVRPA, our team does not anticipate any issues in working with NVRPA staff to develop a successful design for the W&OD Trail.

■ Critical Risk Element 2 | Stormwater Management

I. Specific Risks

a. Storm Water Management/BMP Facility Location

While the existing public hearing plan reflects potential SWM/BMP facility locations, careful study of final locations will be critical to the overall project success. These facilities must be located in a manner to honor the existing drainage divides and provide the necessary treatment for water entering the three watersheds identified in the design public hearing drainage analysis. Location of these facilities must also insure that facilities are at all times located within existing VDOT right-of-way when possible.

b. Best Management Practices

As discussed in the design public hearing drainage analysis, VDOT IIM-LD-195.7 requires water quality treatment at outfalls of project areas in which there is greater than a 16% increase in impervious area. Several areas are identified in the report meeting this criterion. Careful analysis of each drainage area will be necessary as part of the final design to ensure no additional drainage areas become subject to this requirement.

c. Earthwork

Location of each facility must take into account earthwork requirements to ensure as close to a balanced earthwork situation as possible on this

project. By balancing cuts and fills, overall project costs can be minimized.

d. Erosion and Sediment Control

As a large amount of disturbed area within the project limits will be located within the median of Route 7, design of silt traps, silt basins and other E&S controls will be spatially constrained.

II. Mitigation Strategies

Careful design of the storm water management and best management practice facilities will be the primary means by which the above referenced risks are mitigated. Our team will rely on our extensive experience in designing facilities such as these to ensure that these facilities are constructed in the most efficient way possible. Our team will specifically investigate ways in which to design these facilities in a linear fashion to minimize facility footprint and allow the facilities to be located within existing right-of-way.

The CHC Team will investigate the use of the recently approved “*Thirsty Duck*” early riser 200 series buoyant flow control device. This product was approved for conditional use by VDOT on November 8, 2012. The product allows for a constant rate of discharge reducing a pond’s required volume and ultimately its footprint.

We will also investigate alternative BMP facilities to satisfy project requirements. Our team was recently able to successfully utilize grass swales to satisfy BMP requirements associated with a pedestrian improvement project along Old Bridge Road (State Route 641) in Prince William County.

III. VDOT/Other Public Agency Roles

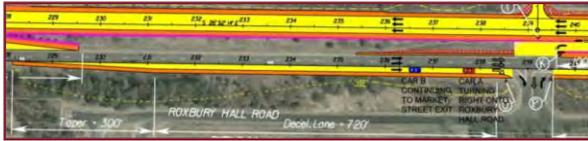
Our team anticipates working closely with VDOT to confirm technical requirements during the RFP stage of the project.

■ Critical Risk Element 3 | Access Management

I. Specific Risks

a. EB Route 7 Right Turn Lane onto Roxbury Hall Road

The design public hearing plans reflect a shared through/right turn lane along EB Route 7 as it approaches Roxbury Hall Road. The lane continues to the exit ramp to Market Street. This configuration may cause significant rear-end accidents as vehicles turning onto Roxbury



Hall Road will be at risk of rear end collisions with vehicles utilizing the lane to exit onto Market Street.

b. WB Route 7 Left Turn Lane onto Roxbury Hall Road

Our team understands that the configuration for the left turn lane onto Roxbury Hall Road is being driven by a desire to eliminate potential weave conflicts from traffic entering WB Route 7 from the Market Street interchange.

However, our team foresees a risk that a driver on WB Route 7 rounding the curve under the Market Street Bridge may have insufficient reaction time to identify the purpose of the left turn lane.

c. Maintenance of Traffic During Construction

Given the difference in grades between the EB and WB lanes of Route 7 in several locations, maintenance of traffic during the construction of the access management system along Route 7 will be critical. In addition, some rock excavation may be necessary in the median of Route 7.

d. Fort Johnston Road

The CHC Team understands that a conservation easement is recorded over Parcel 12. The design public hearing plans currently show realigned Fort Johnston Road bisecting the property. In addition, the CHC Team believes that the most significant utility relocation associated with this project will be required as part of the Fort Johnston Road construction.



e. EB Exit Ramp to Market Street

The widening of EB Route 7 between Roxbury Hall Road and the exit to Market Street will have a significant impact to the existing side slope along this portion of Route 7. The existing slope is approximately 1:1 with a concrete channel at the toe of slope. Widening of Route 7 in this area will likely require the conversion of the open channel to a closed

system. This may be considered a waters of the U.S. impact.

II. Mitigation Strategies

The CHC Team will carefully review the proposed design as part of the RFP process. We anticipate working closely with VDOT to review these issues and arrive at a mutually beneficial solution for many of these issues. As part of this review, the CHC Team will monitor the need for design waivers and/or design exceptions. The CHC Team understands that the use of these design waivers and/or exceptions require full justification and should only be utilized in cases where substantial project savings can be realized. Our team will carefully study the relative costs and benefits of any potential design waiver or exception our team identifies.

We anticipate possibly creating a separate right turn lane for Roxbury Hall Road along EB Route 7 to eliminate potential rear-end accidents. By creating a separate exit lane for Market Street east of Roxbury Hall Road, our team anticipates that we can also mitigate the potential waters of the U.S. impact currently anticipated as part of the design public hearing plan.

The CHC Team anticipates that careful attention to signing can mitigate the WB Route 7 left turn lane onto Roxbury Hall Road risk.

The CHC Team anticipates reviewing the proposed alignment of Fort Johnston Road to ensure that right-of-way impacts are minimized on Parcel 20 as well as all other parcels affected by the road construction.

The CHC Team will rely on its significant experience in working in roadway medians to mitigate the risks associated with the median of Route 7. Recent projects such as the Interstate 81 Truck Climbing Lane will help inform our decisions on construction sequencing and maintenance of traffic to minimize disruption to the traveling public and maximize both the traveling public's safety as well as our construction crews. The CHC Team will pay close attention to the preparation of maintenance of traffic plans and will investigate the possible use of night work to minimize traffic impacts.

III. VDOT/Public Agency Roles

Our team anticipates working closely with VDOT to confirm technical requirements during the RFP stage of the project.



Appendix A

SOQ Checklist and Addenda Acknowledgement (ATTACHMENT 3.1.2)

ATTACHMENT 3.1.2

Project: 6007-053-133, R201, C501

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

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

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
Statement of Qualifications Checklist and Contents	Attachment 3.1.2	Section 3.1.2	no	Appendix A
Acknowledgement of RFQ, Revision and/or Addenda	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	Appendix A
Letter of Submittal (on Offeror's letterhead)				
Authorized Representative's signature	NA	Section 3.2.1	yes	Page 1
Offeror's point of contact information	NA	Section 3.2.2	yes	Page 4
Principal officer information	NA	Section 3.2.3	yes	Page 4
Offeror's Corporate Structure	NA	Section 3.2.4	yes	Page 4
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	Page 4
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	Appendix B
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	Appendix C
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	Appendix D
Evidence of obtaining bonding	NA	Section 3.2.9	no	Appendix E

ATTACHMENT 3.1.2

Project: 6007-053-133, R201, C501

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
Full size copies of SCC and DPOR registration documentation (appendix)	NA	Section 3.2.10	no	Appendix F
SCC Registration	3.2.10	Section 3.2.10.1	no	Appendix F
DPOR Registration (Offices)	3.2.10	Section 3.2.10.2	no	Appendix F
DPOR Registration (Key Personnel)	3.2.10	Section 3.2.10.3	no	Appendix F
DPOR Registration (Non-APELSCIDLA)	3.2.10	Section 3.2.10.4	no	Appendix F
DBE statement within Letter of Submittal confirming Offeror is committed to achieving the required DBE goal	NA	Section 3.2.11	yes	Page 4
Offeror's Team Structure				
Identity of and qualifications of Key Personnel	NA	Section 3.3.1	yes	Page 5
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	Appendix G
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.2	no	Appendix G
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.3	no	Appendix G
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.4	no	Appendix G
Organizational chart	NA	Section 3.3.2	yes	Page 9
Organizational chart narrative	NA	Section 3.3.2	yes	Page 8

ATTACHMENT 3.1.2

Project: 6007-053-133, R201, C501

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

<i>Statement of Qualifications Component</i>	<i>Form (if any)</i>	<i>RFQ Cross reference</i>	<i>Included within 15- page limit?</i>	<i>SOQ Page Reference</i>
<i>Experience of Offeror's Team</i>				
<i>Lead Contractor Work History Form</i>	<i>Attachment 3.4.1(a)</i>	<i>Section 3.4</i>	<i>no</i>	<i>Appendix H</i>
<i>Lead Designer Work History Form</i>	<i>Attachment 3.4.1(b)</i>	<i>Section 3.4</i>	<i>no</i>	<i>Appendix H</i>
<i>Project Risk</i>				
<i>Identify and discuss three critical risks for the Project</i>	<i>NA</i>	<i>Section 3.5.1</i>	<i>yes</i>	<i>Page 12</i>

ATTACHMENT 2.10**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION**

RFQ NO. C00058599DB54
 PROJECT NO.: 6007-053-133, R201, C501

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 10/31/12
(Date)
2. Cover letter of Addendum #1 – 12/14/12
(Date)
3. Cover letter of _____
(Date)



SIGNATURE

01.09.13

DATE



Appendix B

Offeror's Subsidiaries & Affiliates (ATTACHMENT 3.2.6)

ATTACHMENT 3.2.6

State Project No. 6007-053-133, R201, C501

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
Affiliate	AirTech Systems, Inc	1125 Close Avenue Bronx, NY 10472
Affiliate	Anderson Companies, Inc.	11400 Reichold Rd. Gulfport, MS 39503
Affiliate	Black Construction Corporation	15901 Olden Street Sylmar, CA 91342
Affiliate	Black Construction Investments, Inc.	15901 Olden Street Sylmar, CA 91342
Affiliate	Black Micro Corporation	15901 Olden Street Sylmar, CA 91342
Affiliate	Bow Equipment Leasing Co., Inc.	15901 Olden Street Sylmar, CA 91342
Affiliate	Brice Building Co., LLC	201 Sunbelt Parkway Birmingham, AL 35211
Affiliate	Daniel J. Keating Construction Co., LLC	1600 Arch Street, Suite 300 Philadelphia, PA 19103
Affiliate	Desert Mechanical, Inc.	15870 Olden Street Sylmar, CA 91342
Affiliate	E.E. Black, Limited	15901 Olden Street Sylmar, CA 91342
Affiliate	Fisk Acquisition, Inc.	111 T C Jester Blvd. Houston, TX 77007
Affiliate	Fisk Electric Co.	111 T C Jester Blvd. Houston, TX 77007
Affiliate	Fisk International, Ltd.	111 T C Jester Blvd. Houston, TX 77007
Affiliate	Five Star Electric Corp.	101-32 101 ST Street Ozone Park, NY 11416

ATTACHMENT 3.2.6

State Project No. 6007-053-133, R201, C501

Affiliated and Subsidiary Companies of the Offeror

Affiliate	FK Management Services, Inc.	1695 Allen Road, PO Box 6690 Evansville, IN 47719-0690
Affiliate	FKC, LLC	1695 Allen Road, PO Box 6690 Evansville, IN 47719-0690
Affiliate	Frontier Kemper Constructoros Limitada	1695 Allen Road, PO Box 6690 Evansville, IN 47719-0690
Affiliate	Frontier-Kemper Constructors ULC	1695 Allen Road, PO Box 6690 Evansville, IN 47719-0690
Affiliate	G.W. Murphy Construction Company, Inc.	15901 Olden Street Sylmar, CA 91342
Affiliate	GreenStar Services Corporation	30 North HMacQuesten Parkway Mount Vernon, NY 10550
Affiliate	Harrell Contracting Group, LLC	368 Highland Colony Parkway Ridgeland, MS 39157
Affiliate	International Construction Management Services, Inc.	73 Mt. Wayte Avenue Framingham, MA 01701
Affiliate	James A. Cummings, Inc.	3575 NW 53rd Street Fort Lauderdale, FL 33309
Affiliate	Johnson Western Constructors, Inc.	940 Doolittle Drive San Leandro, CA 94577
Affiliate	Johnson Western Gunito Company	940 Doolittle Drive San Leandor, CA 94577
Affiliate	Keating Project Development, Inc.	1600 Arch Street, Suite 300 Philadelphia, PA 19103
Affiliate	Lunda Construction Company	620 Gebhardt Rd. Black River Falls, WI 54615-0699
Affiliate	Mt. Wayte Realty, LLC	73 Mt. Wayte Avenue Framingham, MA
Affiliate	Nagelbush Mechanical, Inc.	1800 NW 49th Street, Ste 110 Fort Lauderdale, FL 33309
Affiliate	PCR Insurance Company	15901 Olden Street Sylmar, CA 91342
Affiliate	Percon Constructors, Inc.	73 Mt. Wayte Avenue Framingham, MA 01701
Affiliate	Perini Holding Company Cayman Islands	73 Mt. Wayte Avenue Framingham, MA 01701
Affiliate	Perini International Corporation	73 Mt. Wayte Avenue Framingham, MA 01701

ATTACHMENT 3.2.6

State Project No. 6007-053-133, R201, C501

Affiliated and Subsidiary Companies of the Offeror

Affiliate	Perini Management Services, Inc.	73 Mt. Wayte Avenue Framingham, MA 01701
Affiliate	Perland Construction, Inc.	73 Mt. Wayte Avenue Framingham, MA 01701
Affiliate	R.E. Dailey & Co.	73 Mt. Wayte Avenue Framingham, MA 01701
Affiliate	RA Properties, LLC	11400 Reichold Road Gulfport, MS 39503
Affiliate	Roy Anderson Corp	11400 Reichold Road Gulfport, MS 39503
Affiliate	Rudolph & Sletten, Inc.	1600 Seaport Blvd., Suite 350 Redwood City, CA 94063-5575
Affiliate	Safe Harbor Electric, Inc.	1800 NW 49th St., Suite 110 Fort Lauderdale, FL 33309
Affiliate	Superior Gunite LLC	15901 Olden Street Sylmar, CA 91342
Affiliate	Superior Gunite	12306 Van Nuys Blvd. Lakeview Terrace, CA 91342
Affiliate	TPC Aggregates, LLC	15901 Olden Street Sylmar, CA 91342
Affiliate	Tutor Asia, Ltd	15901 Olden Street Sylmar, CA 91342
Affiliate	Tutor Holdings, LLC	15901 Olden Street Sylmar, CA 91342
Affiliate	Tutor International, Ltd.	15901 Olden Street Sylmar, CA 91342
Affiliate	Tutor Micronesia Construction, LLC	15901 Olden Street Sylmar, CA 91342
Affiliate	Tutor Pacific Construction, LLC	15901 Olden Street Sylmar, CA 91342
Affiliate	Tutor Pacific, Inc.	15901 Olden Street Sylmar, CA 91342
Affiliate	Tutor Perini Building Corp.	5055 E. Washington St., Ste 210 Phoenix, AZ 85034
Cherry Hill's Parent Company	Tutor Perini Corporation	15901 Olden Street Sylmar, CA 91342
Affiliate	Tutor Perini Merger Company	15901 Olden Street Sylmar, CA 91342

ATTACHMENT 3.2.6

State Project No. 6007-053-133, R201, C501

Affiliated and Subsidiary Companies of the Offeror

Affiliate	Tutor-Cayman, Ltd.	15901 Olden Street Sylmar, CA 91342
Affiliate	Tutor-Saliba Corporation	15901 Olden Street Sylmar, CA 91342
Affiliate	Tutor-Saliba LLC	15901 Olden Street Sylmar, CA 91342
Affiliate	Valley Concrete & Framing, Inc.	12308 Van Nuys Blvd Lakeview Terrace, CA 91342
Affiliate	WDF Development LLC	30 North Macquestan Parkway Mount Vernon, NY 10550
Affiliate	WDF/Nagelbush Holding Corp.	1800 NW 49th Street, Ste 110 Fort Lauderdale, FL 33309



Appendix C

Debarment Forms (ATTACHMENT 3.2.7 a & b)

ATTACHMENT NO. 3.2.7(a)

**CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS**

Project No.: 6007-053-133, R201, C501

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;

Yes - "See Attachment following this page."

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.

	1.10.13	Vice President Estimating
Signature	Date	Title
Bernard P. Beauchemin		
Cherry Hill Construction, Inc.		
Name of Firm		

3.2.7: Certification Regarding Debarment Form Primary Covered Transactions – Clarification of False Claim Issue

Tutor-Saliba-Perini, Joint Venture v. Los Angeles County Metropolitan Transportation Authority CA Superior Court, (Los Angeles County, 1995), CA (LASC Case No. BC123559 consolidated with BC132928)

During 1995, a joint venture of Tutor-Saliba-Perini, or the Joint Venture, in which Perini Corporation, or Perini, was the 40% minority partner and Tutor-Saliba Corporation, or Tutor-Saliba, of Sylmar, California was the 60% managing partner, filed a complaint in the Superior Court of the State of California for the County of Los Angeles against the Los Angeles County Metropolitan Transportation Authority, or LAMTA, seeking to recover costs for extra work required by LAMTA in connection with the construction of certain tunnel and station projects. In 1999, LAMTA countered with civil claims under the California False Claims Act (“CFCA”) against the Joint Venture, Tutor-Saliba and Perini jointly and severally (together, “TSP”). In September, 2008, Tutor-Saliba merged with Perini.

Claims concerning the construction of LAMTA projects were tried in 2001. During the trial, based on the Joint Venture’s alleged failure to comply with the court’s discovery orders, the judge issued terminating sanctions that resulted in a substantial judgment against TSP.

TSP appealed and, in January 2005, the State of California Court of Appeal reversed the trial court’s entire judgment and found that the trial court judge had abused his discretion and had violated TSP’s due process rights, and had imposed impermissibly overbroad terminating sanctions. The Court of Appeal also directed the trial court to dismiss LAMTA’s claims that TSP had violated the Unfair Competition Law (“UCL”) because LAMTA lacked standing to bring such a claim, and remanded the Joint Venture’s claims against LAMTA for extra work required by LAMTA and LAMTA’s counterclaim under the CFCA against TSP to the trial court for further proceedings, including a new trial.

In December 2006, in the trial of the first issue, which arose out of a 1994 change order involving a Disadvantaged Business Enterprise (“DBE”) subcontractor pass-through claim, the jury found that the Joint Venture had submitted two false claims for payment and had breached its contract with LAMTA and awarded LAMTA \$111,651 in direct damages. The court has awarded penalties of \$10,000 for each of the two claims and will treble the damages awarded by the Jury. A final judgment with respect to these claims will not be entered until the entire case has been resolved and is subject to appeal.

In February 2007, the court granted a Joint Venture motion and precluded LAMTA in future proceedings from presenting its claims that the Joint Venture breached its contract and violated the CFCA.

After a series of motions and hearings, LAMTA conceded some of TSP’s affirmative claims; LAMTA’s four categories of remaining alleged false claims were all claims associated with certification language in progress payments that could carry penalties only.

On September 2, 2010, the LAMTA filed a unilateral withdrawal of three of its claims, including for: (1) liquidated damages claim, for alleged delays in the Contractors completing a milestone in the building of a

power room on the project in 1994, which was the only remaining claim against the bonding companies; (2) LAMTA's allegations under the False Claims Act for purported failure to provide proper Quality Control services on the project and certifying billings for the services; and (3) claims under the California Unfair Competition Law for disgorgement of profits on the project.

Then, on September 14, 2010, the LAMTA filed a unilateral Notice of Disposition of Remaining Claims, where the LAMTA: (1) withdrew its two remaining claims scheduled for trial under the False Claims Act for Buy America violations and Disadvantaged Business Enterprises program violation, which LAMTA sought penalties under the False Claims Act and Unfair Competition Law; and (2) LAMTA agreed to have judgment entered in favor of TSP for TSP's remaining two claims set for trial.

As a result of the above filings, on September 14, 2010, the Court vacated the trial date.

On October 14, 2010, the LAMTA stipulated the interest would be added to the judgment to be financially in favor of TSP. The LAMTA has stipulated that \$1.8 million will be added in interest in favor of those claims to be included in the judgment in favor of TSP.

On February 9, 2011, the Court entered judgment in favor of TSP and against LAMTA in the amount of \$3,015,362.36. This amount is after deducting the amount of \$526,957.64, representing the tunnel handrail verdict plus accrued interest against TSP. In addition, the judgment includes a judgment in favor of the People and against TSP, TSC and Perini, collectively, in the amount of \$2,500 for a statutory penalty on the tunnel handrail claims. The parties have filed post-trial motions for costs and fees. The Court denied any right to attorney's fees in this case. The parties resolved the issue of court costs, where the parties filed a stipulation and agreed not to appeal the cost issue.

Both parties have appealed prior rulings on the case including an appeal by TSP of the tunnel handrail verdict. LAMTA's withdrawals of its claims are permanent and are not subject to appeal by LAMTA. The appeal remains pending.

This entire matter relates to events that transpired over 17 years ago. The events involved Tutor Perini Corporation (formerly known as Perini Corporation) as a participant in a joint venture. Tutor Perini Corporation acquired Cherry Hill Construction in 2005, some 10 years after the events occurred, and became its sole shareholder. None of the aforementioned related to any actions by or on behalf of Cherry Hill Construction, Inc.. However, when responding to RFQ Section 3.2.7, Tutor Perini Corporation was interpreted to be a principal of Cherry Hill and the aforementioned events were disclosed pursuant to that interpretation.

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 6007-053-133, R201, C501

- 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.

Simon Simon 1/9/2013

Signature

Date

Senior Principal

Title

Greenhorne & O'Mara, now Stantec

Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 6007-053-133, R201, C501

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

Date

12/20/2012

Associate Vice President
Title

The Louis Berger Group, Inc.
Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 6007-053-133, R201, C501

- 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.

	<u>1/2/2013</u>	<u>Aris Mowagen</u>
Signature	Date	Title
<u>AMEC E&I, INC.</u>		
Name of Firm		

ATTACHMENT NO. 3.2.7(b)

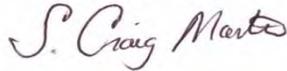
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

(To be completed by a sub-consultant)

Project No.: 6007-053-133, R201, C501

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

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



<hr/>	<hr/>	<hr/>
Signature	December 21, 2012	President
	Date	Title

Accumark, Inc.
Name of Firm

ATTACHMENT NO. 3.2.7(b)

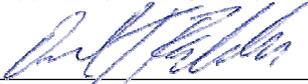
**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 6007-053-133, R201, C501

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.

	1/3/13	President
Signature	Date	Title

Belstar, Inc.
Name of Firm

ATTACHMENT NO. 3.2.7(b)

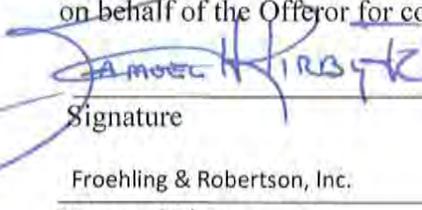
**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 6007-053-133, R201, C501

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.

 1/9/2013 President
Signature Date Title

Froehling & Robertson, Inc.
Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 6007-053-133, R201, C501

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

Date

Title

Name of Firm



Appendix D

Contractor Prequalification Certificate (ATTACHMENT 3.2.7 a & b)



COMMONWEALTH OF VIRGINIA



CERTIFICATE OF QUALIFICATION

CHERRY HILL CONSTRUCTION, INC.

Vendor Number: **C090**

In accordance with the Regulations of the Virginia Department of Transportation, you are hereby notified that the following Rating and Classifications have been assigned to your firm:

Prequalified (Currently Inactive)

Work Classes: GRADING; MAJOR STRUCTURES; PORTLAND CEMENT CONCRETE PAVING; MINOR STRUCTURES; UNDERGROUND UTILITIES

Issue Date: 04/30/2012

This Rating and Classification will Expire: 03/31/2013


Suzanne FR Lucas Prequalification Officer


Don E. Silles, State Contract Officer



Appendix E

Evidence of Bonding/Surety

TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA
FIDELITY AND DEPOSIT COMPANY OF MARYLAND
LIBERTY MUTUAL INSURANCE COMPANY
FEDERAL INSURANCE COMPANY

November 29, 2012

Mr. Ian Millikan
Alternate Project Delivery Office
Virginia Department of Transportation
1401 East Broad Street
Richmond, VA 23219

Re: Cherry Hill Construction, Inc.
Contractor's Prequalification
A Design Build Project – Route 7 – Westbound Truck Climbing Lane From: Route 9 To: West Market
Street, Loudoun County, Virginia

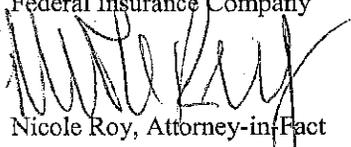
Dear Mr. Millikan

This letter confirms that Cherry Hill Construction, Inc., a Tutor-Perini Company, is a highly regarded and valued bonding client of Travelers Casualty and Surety Company of America, Federal Insurance Company, Fidelity and Deposit Company of Maryland and Safeco Insurance Company of America (herein after referred to as "co-surety"). Each of the co-surety companies has an A.M. Best's Rating of "A" or better, and each with a Financial Size Rating of "XV" or better. All of the co-surety partners are listed in the Department of the Treasury's Listing of Approved Sureties (Department Circular 570) dated July 1, 2012.

Cherry Hill Construction, Inc. has a long and successful track record of completing complex road and bridge projects on time and within the available budget. As respects to bonding capacity, the co-surety will consider supporting Cherry Hill Construction, Inc. on individual projects up to \$500,000,000 with an aggregate backlog approaching \$5,000,000,000. Cherry Hill Construction, Inc. is capable of obtaining 100% Performance Bond and 100% Labor and Materials Payment Bond in the amount of the anticipated cost of construction, and said bonds will cover the Project and any warranty periods as provided for in the Contract Documents on behalf of the Contractor, in the event that such firm be the successful bidder and enter into a contract for this project.

Naturally, as is customary within the surety industry, the issuance of any bid or final bonds is always contingent upon a favorable underwriting review to include, but not limited to, a satisfactory review of contract terms, conditions, documents, and confirmation of an acceptable financing source to Cherry Hill Construction, Inc. and its co-surety at the time a request for bonds is made. It should be understood that any arrangement for the issuance of bonds is a matter strictly between Cherry Hill Construction, Inc. and its co-surety. We assume no liability to third parties or to you by issuance of this letter.

Sincerely,
Travelers Casualty and Surety Company of America
Fidelity and Deposit Company of Maryland
Liberty Mutual Insurance Company
Federal Insurance Company


Nicole Roy, Attorney-in-Fact



POWER OF ATTORNEY

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
St. Paul Fire and Marine Insurance Company
St. Paul Guardian Insurance Company

St. Paul Mercury Insurance Company
Travelers Casualty and Surety Company
Travelers Casualty and Surety Company of America
United States Fidelity and Guaranty Company

Attorney-In Fact No. 225311

Certificate No. 005227874

KNOW ALL MEN BY THESE PRESENTS: That Farmington Casualty Company, St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company are corporations duly organized under the laws of the State of Connecticut, that Fidelity and Guaranty Insurance Company is a corporation duly organized under the laws of the State of Iowa, and that Fidelity and Guaranty Insurance Underwriters, Inc., is a corporation duly organized under the laws of the State of Wisconsin (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint

Michael J. Cusack, John J. Gambino, Nicole Roy, Natalie Coney, Donald H. McCarter, Sandra C. Lopes, and Jean M. Feeney

of the City of Boston, State of Massachusetts, their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory 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, the Companies have caused this instrument to be signed and their corporate seals to be hereto affixed, this 11th day of October, 2012.

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
St. Paul Fire and Marine Insurance Company
St. Paul Guardian Insurance Company

St. Paul Mercury Insurance Company
Travelers Casualty and Surety Company
Travelers Casualty and Surety Company of America
United States Fidelity and Guaranty Company



State of Connecticut
City of Hartford ss.

By: [Signature]
Robert L. Raney, Senior Vice President

On this the 11th day of October, 2012, before me personally appeared Robert L. Raney, who acknowledged himself to be the Senior Vice President of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, and that he, as such, being authorized so to do, executed 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 hereunto set my hand and official seal. My Commission expires the 30th day of June, 2016.



[Signature]
Marie C. Tetreault, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice 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 Resident Vice Presidents, Resident 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 on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kevin E. Hughes, the undersigned, Assistant Secretary, of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 29th day of November, 2012.


Kevin E. Hughes, Assistant Secretary



To verify the authenticity of this Power of Attorney, call 1-800-421-3880 or contact us at www.travelersbond.com. Please refer to the Attorney-In-Fact number, the above-named individuals and the details of the bond to which the power is attached.

**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 **JAMES M. CARROLL, Vice President**, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint **Michael J. CUSACK, John J. GAMBINO, Sandra C. LOPES, Nicole ROY, Natalie CONEYS, Donald H. MCCARTER and Jean M. FEENEY, all of Boston, Massachusetts, EACH** its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: **any and all bonds and undertakings**, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

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

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said **ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND**, this 27th day of July, A.D. 2012.

ATTEST:

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



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

James M. Carroll
Vice President
James M. Carroll

State of Maryland
City of Baltimore

On this 27th day of July, A.D. 2012, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **JAMES M. CARROLL, 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.

Maria D. Adamski

Maria D. Adamski, Notary Public
My Commission Expires: July 8, 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 29th day of November, 2012.



Geoffrey Delisio

Geoffrey Delisio, Vice President

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. 5802484

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

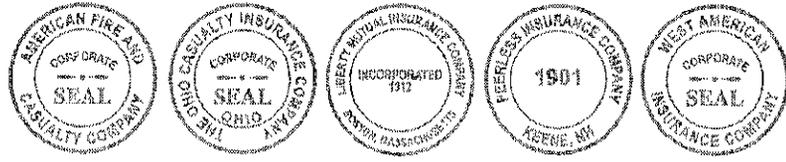
Liberty Mutual Insurance Company
Peerless Insurance Company

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 Ohio, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, that Peerless Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, 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, Donald H. McCarter; Jean M. Feeney; John J. Gambino; Kathleen M. Flanagan; Michael J. Cusack; Natalie Coneys; Nicole Roy; Richard A. Leveroni; Sandra C. Lopes

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

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 9th day of October, 2012.



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

By: Gregory W. Davenport
Gregory W. Davenport, Assistant Secretary

STATE OF WASHINGTON ss
COUNTY OF KING

On this 9th day of October, 2012, before me personally appeared Gregory W. Davenport, who acknowledged himself to be the Assistant Secretary of American Fire and Casualty Company, Liberty Mutual Insurance Company, The Ohio Casualty Company, Peerless 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 Seattle, Washington, on the day and year first above written.



By: KD Riley
KD Riley, 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, West American Insurance Company and Peerless 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 Gregory W. Davenport, Assistant Secretary to appoint such attorney-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, David M. Carey, the undersigned, Assistant Secretary, of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, West American Insurance Company and Peerless 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 29th day of November, 2012.



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

Not valid for mortgage, note, loan, letter of credit, bank deposit, 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.



**Chubb
Surety**

**POWER
OF
ATTORNEY**

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

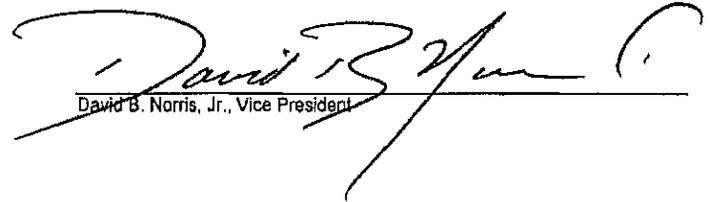
**Attn: Surety Department
15 Mountain View Road
Warren, NJ 07059**

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 Natalie Coneys, Michael J. Cusack, Jean M. Feeney, John J. Gambino, Sandra C. Lopes, Donald H. McCarter and Nicole Roy of Boston, Massachusetts -----

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 **9th** day of **July, 2012**.


Kenneth C. Wendel, Assistant Secretary


David B. Norris, Jr., Vice President

STATE OF NEW JERSEY
County of Somerset ss.

On this **9th** day of **July, 2012** before me, a Notary Public of New Jersey, personally came Kenneth C. Wendel, 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 Kenneth C. Wendel, 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 16, 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, Kenneth C. Wendel, 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 **29th** day of **November, 2012**




Kenneth C. Wendel, 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



Appendix F

SCC & DPOR Data & Certificates (ATTACHMENT 3.2.10)

Commonwealth of Virginia



State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That CHERRY HILL CONSTRUCTION, INC., a corporation incorporated under the law of MARYLAND, is authorized to transact business in the Commonwealth of Virginia;

That it obtained a certificate of authority to transact business in Virginia from the Commission on March 04, 1975; and

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

Nothing more is hereby certified.



*Signed and Sealed at Richmond on this Date:
March 30, 2012*

Joel H. Peck

Joel H. Peck, Clerk of the Commission

Commonwealth OF Virginia



State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That GREENHORNE & O'MARA, INC., a corporation incorporated under the law of Maryland, is authorized to transact business in the Commonwealth of Virginia;

That it obtained a certificate of authority to transact business in Virginia from the Commission on May 30, 1986; and

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

Nothing more is hereby certified.



Signed and Sealed at Richmond on this Date:

June 7, 2012

Joel H. Peck

Joel H. Peck, Clerk of the Commission

Commonwealth of Virginia



STATE CORPORATION COMMISSION

Richmond, September 20, 1999

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

The Louis Berger Group, Inc.

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



State Corporation Commission

Attest:

Joel H. Peck

Clerk of the Commission

Commonwealth OF Virginia



State Corporation Commission

I Certify the Following from the Records of the Commission:

The Louis Berger Group, Inc., a corporation existing under the laws of NEW JERSEY, holds a certificate of authority to transact business in Virginia, and is in good standing.

The certificate was issued on September 20, 1999.

Nothing more is hereby certified.



*Signed and Sealed at Richmond on this Date:
August 7, 2009*

Joel H. Peck

Joel H. Peck, Clerk of the Commission

Commonwealth OF Virginia



State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That BEL-STAR, INC. is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is January 10, 1985;

That the period of its duration is perpetual; and

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

Nothing more is hereby certified.



*Signed and Sealed at Richmond on this Date:
January 10, 2012*

Joel H. Peck

Joel H. Peck, Clerk of the Commission

Commonwealth OF Virginia



State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That AMEC Environment & Infrastructure, Inc., a corporation incorporated under the law of Nevada, is authorized to transact business in the Commonwealth of Virginia;

That it obtained a certificate of authority to transact business in Virginia from the Commission on September 20, 2000; and

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

Nothing more is hereby certified.



Signed and Sealed at Richmond on this Date:

November 15, 2011

Joel H. Peck

Joel H. Peck, Clerk of the Commission

Commonwealth OF Virginia



State Corporation Commission

I Certify the Following from the Records of the Commission:

ACCUMARK, INC. is a corporation existing under and by virtue of the laws of Virginia, and is in good standing.

The date of incorporation is January 30, 1995.

Nothing more is hereby certified.



*Signed and Sealed at Richmond on this Date:
August 7, 2009*

Joel H. Peck

Joel H. Peck, Clerk of the Commission

Commonwealth of Virginia



State Corporation Commission

I Certify the Following from the Records of the Commission:

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

The date of incorporation is October 11, 1924.

Nothing more is hereby certified.

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



Joel H. Peck

Joel H. Peck, Clerk of the Commission

Commonwealth of Virginia



State Corporation Commission

I Certify the Following from the Records of the Commission:

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

The date of incorporation is September 30, 1975.

I further certify that the following is a list of all documents constituting the charter of Siddall, Inc. as of this date.

ARTICLES OF INCORPORATION	September 30, 1975
ARTICLES OF AMENDMENT	January 09, 1976
ARTICLES OF AMENDMENT	October 18, 1984
ARTICLES OF MERGER	March 30, 1988
ARTICLES OF AMENDMENT	August 10, 1998
ARTICLES OF AMENDMENT	February 26, 2001

Nothing more is hereby certified.

*Signed and Sealed at Richmond on this Date:
May 10, 2001*



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

**COMMONWEALTH OF VIRGINIA
STATE CORPORATION COMMISSION**

AT RICHMOND, OCTOBER 26, 2010

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

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

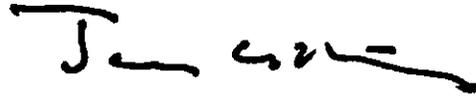
to comply with the requirements of law, and confirms payment of all required fees. Therefore, it
is ORDERED that this

CERTIFICATE OF AMENDMENT

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

STATE CORPORATION COMMISSION

By

A handwritten signature in black ink, appearing to read "James C. Dimitri", written over a horizontal line.

James C. Dimitri
Commissioner

FIRM DPOR REGISTRATION CERTIFICATES

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

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

EXPIRES ON
05-31-2013

NUMBER
2701 014225A

**BOARD FOR CONTRACTORS
CLASS A CONTRACTORS LICENSE**

CHERRY HILL CONSTRUCTION INC
8211 WASHINGTON BLVD
JESSUP MD 20794

***CLASSIFICATIONS* H/H**


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)

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

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

EXPIRES ON
12-31-2013

NUMBER
0407003926

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

PROFESSIONS: ENG

THE LOUIS BERGER GROUP INC
ATTN: LUCY SHUSTER
801 E MAIN ST. SUITE 500
RICHMOND, VA 23219


Gordon N. Dixon
Gordon N. Dixon, Director

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

(POCKET CARD)

COMMONWEALTH OF VIRGINIA
BOARD FOR APELSCIDLA
BUSINESS ENTITY REGISTRATION
NUMBER: 0407003926 EXPIRES: 12-31-2013
PROFESSIONS: ENG
THE LOUIS BERGER GROUP INC
ATTN: LUCY SHUSTER
801 E MAIN ST. SUITE 500
RICHMOND, VA 23219



(DETACH HERE)

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

(FOLD)

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
02-28-2014

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

NUMBER
0411000655

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

PROFESSIONS: ENG

THE LOUIS BERGER GROUP INC
1001 WADE AVE.
SUITE 400
RALEIGH, NC 27605



Gordon N. Dixon
Gordon N. Dixon, Director

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

(POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR APELSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000655 EXPIRES: 02-28-2014
PROFESSIONS: ENG
THE LOUIS BERGER GROUP INC
1001 WADE AVE.
SUITE 400
RALEIGH, NC 27605



(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
02-28-2014

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

NUMBER
0411000611

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

PROFESSIONS: ENG

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



Gordon N. Dixon
Gordon N. Dixon, Director

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

(POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR APELSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000611 EXPIRES: 02-28-2014
PROFESSIONS: ENG
GREENHORNE & O'MARA, INC.
10800 MIDLOTHIAN TNPK STE 310
RICHMOND, VA 23235



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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

12-31-2013

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

NUMBER

0407005511

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

PROFESSIONS: ENG

BEL-STAR INC
8408 ARLINGTON BLVD SUITE 200
FAIRFAX, VA 22031



Gordon N. Dixon
Gordon N. Dixon, Director

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

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
02-28-2014

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

NUMBER
0411000909

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

PROFESSIONS: ENG

AMEC ENVIRONMENT & INFRASTRUCTURE, INC.
3705 SAUNDERS AVENUE
RICHMOND, VA 23227



Gordon N. Dixon
Gordon N. Dixon, Director

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(POCKET CARD)

COMMONWEALTH OF VIRGINIA
BOARD FOR AP/ELSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000909 EXPIRES: 02-28-2014
PROFESSIONS: ENG
AMEC ENVIRONMENT & INFRASTRUCTURE, INC.
3705 SAUNDERS AVENUE
RICHMOND, VA 23227



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

(DETACH HERE)

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
02-28-2014

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

NUMBER
0411000562

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

PROFESSIONS: LS

PRECISION MEASUREMENTS INC
4215 LAFAYETTE CENTER DR
SUITE 2A
CHANTILLY, VA 20151



Gordon N. Dixon
Gordon N. Dixon, Director

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

(POCKET CARD)

COMMONWEALTH OF VIRGINIA
BOARD FOR AP/ELSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000562 EXPIRES: 02-28-2014
PROFESSIONS: LS
PRECISION MEASUREMENTS INC
4215 LAFAYETTE CENTER DR
SUITE 2A
CHANTILLY, VA 20151



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

(DETACH HERE)

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
12-31-2013

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

NUMBER
0407005172

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

PROFESSIONS: ENG

ACCUMARK INC
9500 KING AIR CT
ASHLAND, VA 23005



Gordon N. Dixon
Gordon N. Dixon, Director

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

(POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR APELSCIDLA
BUSINESS ENTITY REGISTRATION
NUMBER: 0407005172 EXPIRES: 12-31-2013
PROFESSIONS: ENG
ACCUMARK INC
9500 KING AIR CT
ASHLAND, VA 23005



(FOLD)

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

(DETACH HERE)

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
12-31-2013

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

NUMBER
0407000098

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

PROFESSIONS: ENG

FROEHLING & ROBERTSON, INC
3015 DUMBARTON ROAD
RICHMOND, VA 23228



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

BOARD FOR APELSCIDLA
BUSINESS ENTITY REGISTRATION
NUMBER: 0407000098 EXPIRES: 12-31-2013
PROFESSIONS: ENG
FROEHLING & ROBERTSON, INC
3015 DUMBARTON ROAD
RICHMOND, VA 23228



(FOLD)

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

(DETACH HERE)

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.

POST IN PUBLIC VIEW

POST IN PUBLIC VIEW
Expires: 12/31/2012

2012 BUSINESS LICENSE

CITY OF RICHMOND
CITY HALL, ROOM 103
RICHMOND VA 23219
(804) 646-7000

ACCOUNT NO. 1014387

SIDDALL INC
830 E MAIN ST 24TH FL
700 ROSS BLDG
RICHMOND, VA 23219

BUSINESS LOCAL ADDRESS:
830 E MAIN ST 24FL
RICHMOND, VA 23219

VALID BUSINESS LICENSE(S)

BUSINESS TYPE DESCRIPTION

CAT

TYPE

LICENSE #

ADVERTISING

15

1801

18457

LICENSE(S) MUST BE RENEWED BY
MARCH 1, 2013

THIS LICENSE CERTIFICATE MUST BE
SURRENDERED UPON DEMAND

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION COMMONWEALTH OF VIRGINIA

EXPIRES ON

12-31-2013

9980 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
15709 SPYGLASS HILL LOOP
GAINESVILLE, VA 20155



Gordon N. Dixon
Gordon N. Dixon, Director

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FAIRFAX, VA 22032



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MOOREFIELD, WV 26836



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JOHN ANDREW VANDERGRUFF
3329 WHITE CHIMNEYS COURT
GLEN ALLEN, VA 23060



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SIMON SIMON
9214 MINTWOOD STREET
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SILVER SPRING, MD 20901

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**JOHN M CHRISTMAN
10810 TOPBRANCH LANE
COLUMBIA, MD 21044**

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6153 STRONGHOLD DR
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DANIEL GENE GREY
1030 17TH STREET SOUTH
ARLINGTON, VA 22202



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STEPHEN DARRYL COOK
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RALEIGH, NC 27606



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MARK DOUGLAS MCGONIAGLE
525 ALDENGATE TERRACE
MIDLOTHIAN, VA 23114



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2418 MOUNTAINBROOK DRIVE
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Appendix G

Key Personnel Resumes

(ATTACHMENT 3.3.1)

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title:	Gregory Andricos, PE, Vice President/General Manager
b. Project Assignment:	Design-Build Project Manager
c. Name of Firm with which you are now associated:	Cherry Hill Construction, Inc.
d. Years experience: With this Firm <u>20</u> Years with Other Firms <u>0</u> Years Please list chronologically (most recent experience first) your employment History, position and general experience or field of practice for the last fifteen (15) years. (NOTE: If you have less than 5 years of experience, please list all of your experience for those you have worked.):	Cherry Hill Construction, Inc., A Tutor Perini Company, Jessup MD, Vice President/General Manager, January 1992-Present; Mr. Andricos is responsible for management of design-build projects and construction.
e. Education: Name and Location of Institution(s)/Degree(s)/Year/Specialization:	Virginia Military Institute/Lexington, Virginia/BS/1992/Civil Engineering
f. Active Registration: Year First Registered/Discipline/VA Registration #:	1998/Professional Engineer/VA/#032211 2009/Registered Land Distributor/VA/#31805 2008/ Certified Erosion and Sediment Control/VA/#45441C
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your specific responsibilities and authorities for each assignment, 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 assignment.</i> (List at least three (3) but no more than five (5) relevant projects for which you have performed a similar function.)	FHWA – Eastern Federal Lands Highway Division, “Award Winning” Fairfax County Parkway, Phases I, II & IV D/B, Springfield, VA. Current firm - Cherry Hill Construction. D/B project manager responsible for coordinated efforts of numerous engineering and construction disciplines on the \$111.5M competitively bid project that provided design for seven bridge structures, two noise and multiple retaining walls, roadways, signing and lighting, SWM, multi-use trails, ESC measures and devices, and utilities. Also directed efforts of the construction forces to ensure safety, quality, and timeliness of all elements. The project included special considerations for Hazardous and/or Contaminated Materials identification and removal, and plans and contingencies for Unexploded Ordnance and MEC. The project also included widening of I-95 to accommodate a new exit lane that provides direct access to the NGA via West South Loop Road and provided coordination to address concerns of property owners and the traveling public through attendance at Citizen Information Meetings. Directly oversaw the independent QA program and QAM to ensure all aspects of design and construction met project specifications inclusive of a low impact crossing of environmentally sensitive Accotink Creek. All design submission milestones were achieved, final design and permits were received, physical construction started on schedule, and the Phase I and II main line roadway opened on September 20, 2010, nearly a month ahead of schedule. <i>Project Duration: Phase I and II –2008- 2010, Phase IV –2008-2011.</i>

“Award Winning” I-95 Express Toll Lanes; Section 100, Segment 1, Baltimore City/County, MD, Maryland Transportation Administration. GEC Partners, MDTA, I-95, Section 100 KH1501-00-006, Baltimore, Maryland. Current firm - Cherry Hill Construction. **Operations manager** for \$151.5M of construction requiring the reconstruction and widening of 3.6 miles of I-95/I-895, the I-95/I-895 Interchange, replacement of three bridges, partial reconstruction of Chesaco Avenue Bridge, and more than five miles of retaining/noise walls. These projects involved complex MOT (dealing with 178,000 ADT), use of best managed erosion and sediment control practices, coordination with impacted utilities, adjacent contracts, and negotiating temporary easements with impacted homeowners. *Project Duration: 2006- 2011*

FHWA – Eastern Federal Lands Highway Division, 9th Bridge Replacement Design-Build, Washington, DC. Current firm - Cherry Hill Construction. **D/B project manager and primary point of contact** and supervising a staff consisting of engineers, P.R. professionals, context sensitive artisans, R/W specialists, utility coordinators, inspectors, managers and field personnel for this \$58.4M project. Responsible for managing this project from the proposal that provided the overall best value through all phases of permitting, design and construction. Project required multi-disciplined design efforts to facilitate the phased removal and complete reconstruction of an existing structure spanning N.Y. Ave as well as active CSXT and AMTRAK Railroads and related interchange and infrastructure improvements. Context sensitive means and methods were used in the design of the bridge structure, which resulted in numerous enhancements including widened sidewalks and bicycle lanes and architectural elements including ornamental fencing and traffic railing, parapet and substructure treatments, and upgraded lighting fixtures. This project involved LID components, including bioretention stormwater management facilities. The 100% design submission of this project was made approximately three months ahead of schedule due to a partnership established between all project shareholders including the FHWA-EFLHD, DDOT, AMTRAK, CSXT, USPS and JMT. *Project Duration: 2006-2011*

FHWA – Eastern Federal Lands Highway Division, Taylor Street Bridge Replacement D/B, Washington, DC. Current firm - Cherry Hill Construction. **D/B project manager and primary point of contact** for \$10.9M D/B Project. Responsible for overseeing the estimate, design, construction, and QA/QC efforts. Worked to develop a cost-efficient design that used state-of-the-art means and methods, including HPC and fabricated structural steel girders using Grade 50 webs and Grade 70 flanges to provide the overall best value to the FHWA-EFLHD. A formal partnering program was instrumental to the successful completion of this bridge replacement and interchange reconstruction project within the allotted contract duration and budget while working over two railroad entities. *Project Duration: 2003-2006*

GSA, FDA Consolidation, East Access Road, White Oak, MD. Current firm - Cherry Hill Construction. **Operations manager.** Prepared the cost competitive proposal and oversaw all elements required for the fast track construction of the three-span, 580-ft. long bridge spanning environmentally sensitive Paint Branch. The completed bridge showcased numerous context sensitive design elements, inclusive of gateway entry columns, ornamental lighting, and architectural concrete treatments. *Project Duration: 2008-2009*

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title:	Roger Lant, Project Manager
b. Project Assignment:	Construction Manager
c. Name of Firm with which you are now associated:	Cherry Hill Construction, Inc.
d. Years experience: With this Firm 10 Years with Other Firms 9 Years Please list chronologically (most recent experience first) your employment History, position and general experience or field of practice for the last fifteen (15) years. (NOTE: If you have less than 5 years of experience, please list all of your experience for those you have worked.):	Cherry Hill Construction, Inc., A Tutor Perini Company, Jessup, MD, Project Manager/Civil Engineer. 1992-Present. Mr. Lant is a Project Manager responsible for design, permitting and construction of design-build projects.
e. Education: Name and Location of Institution(s)/Degree(s)/Year/Specialization:	Herriot Watt University, Edinburg, United Kingdom / BS/1998/Civil Engineering with Honors
f. Active Registration: Year First Registered/Discipline/VA Registration #:	2008 / VA Registered Land Disturber / #37622 2008 / VA Erosion and Sediment Control Certification / #4543C
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your specific responsibilities and authorities for each assignment, 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 assignment.</i> (List at least three (3) but no more than five (5) relevant projects for which you have performed a similar function.)	FHWA – Eastern Federal Lands Highway Division, “Award Winning” Fairfax County Parkway, Phases I, II & IV D/B, Springfield, Virginia. Current firm - Cherry Hill Construction. Construction manager responsible for the design, permitting and construction of the Fairfax County Parkway from I-95 to Hoes Road, which include 1.8 miles of 6-lane divided Fairfax County Parkway, 0.7 miles of Barta Road, and 1-mile of I-95 improvements with a duration of 750 calendar days. The improvements included design and construction of 2 grade separated interchanges, widening of I-95 ramps, and construction of 6 new bridges, 1 bridge widening and extensive MSE Walls. Through design the planned disposal of 1.1 million yards of excess material was eliminated, methods of eliminating export included blasting, crushing and processing rock for beneficial use, which eliminated approximately 750,000 truck axles from the areas roads. In addition six storm water management ponds, 20,000 feet of storm drain, 500 feet of 48” diameter sewer lining, which included a 17MGD temporary pump around and 1200 feet of waterline was installed. <i>Project Duration: Phase I and II – 2008-2010, Phase IV – 2008-2011</i>

MDSHA, MD 5 Branch Avenue Metro Access Phase I, Prince Georges County, Maryland. Current firm - Cherry Hill Construction. Project manager responsible for the reconstruction and relocation of major ramps connecting I495/I95 and MD 5, which included improvements of 1.75 miles of MD 5 and I495/I95. The project included the import of 300,000CY of borrow, placement of a 65ft tall reinforced earth slope, which were constructed adjacent to major wetlands and waters of the US, with access from existing Ramps. Embankment construction included settlement and inclinometer monitoring programs that permitted reductions of the quarantine periods. The ramp scheme required construction of 5 new bridges, which included the construction of 2 two-span bridges over I-495/I-95 and MD 5 that included full shutdowns of I-495/I-95 and MD 5 for accelerated steel erections. Deep storm drain installation was value engineered to mitigate traffic impacts, reduce environmental impacts and assist the schedule. Cherry Hill Partnered with MDSHA to minimize the Projects impact environmentally and to the public, while finishing 9 months early. *Project Duration: 2006 – 2008*

MD-MTA, “Award Winning” MTA Light Rail Double Track, Baltimore, Maryland. Current firm - Cherry Hill Construction. Project manager responsible for the installation of 5.4 miles of ballasted track adjacent to existing single track, which included installation of all underground electrical facilities. Through acceleration, Cherry Hill worked directly alongside and coordinated track possession with MASS Electric, who was performing the catenary and traction power installation. The project was undertaken to allow MTA to provide a higher frequency of trains and allow for scheduled maintenance with minimal disruptions to service. Cherry Hill worked with PRW Consultants and MTA to schedule an extended shut down of the live rail, which accelerated Project completion by 9 Months. *Project Duration: 2003-2005*

MDSHA, MD 450 from MD 193 to East of Stoneybrook Drive, Prince Georges County, Maryland. Current firm - Cherry Hill Construction. Project manager responsible for the construction of 3.6 miles of divided highway, which included major MOT phasing, mass excavation of 270,000CY through significant wetlands, demolition of 3.1 miles of existing roadway, extensive utility relocations, and electrical/signal systems, extensive MSE Walls and a bridge over CSXT Rail Road. *Project Duration: 2002-2005*

MDSHA, MD 5 Hughesville Bypass – Hughesville, Maryland. Current firm - Cherry Hill Construction. Project superintendent responsible for the final phase of this \$33.4M project which was performed in 2007. This 3.2 mile divided highway relocation formally partnered project required; multiphase MOT, approximately 800,000 CY of excavation and embankment, storm drain improvements, full depth pavement construction, signing and pavement markings, two new multi-span bridge structures, noise walls, and roadway lighting. *Project Duration 2004-2007*

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title: Simon Simon, PE, Senior Principal
b. Project Assignment: Design Manager
c. Name of Firm with which you are now associated: Greenhorne & O'Mara, Inc., now Stantec
d. Years experience: With this Firm 14 Years with Other Firms 20 Years Please list chronologically (most recent experience first) your employment History, position and general experience or field of practice for the last fifteen (15) years. (NOTE: If you have less than 5 years of experience, please list all of your experience for those you have worked.): Greenhorne & O'Mara, Inc., now Stantec; Laurel, MD; Senior Vice President (G&O), Senior Principal (Stantec), Transportation Services & Design-build Projects; January 1999-Present. Sverdrup Civil, Inc.; Falls Church, VA; Project Manager/Department Head; Structural & Transportation-related Complex Project Management & Engineering; December 1978-January 1999
e. Education: Name and Location of Institution(s)/Degree(s)/Year/Specialization: University of Maryland/College Park, MD/BS/1978/Structural Engineering University of Maryland/College Park, MD/BS/1977/Civil Engineering
f. Active Registration: Year First Registered/Discipline/VA Registration #: 2000/Professional Engineer/VA #0402-034452; Also in MD, DC, DE, WV, NC, SC, GA & FL
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your specific responsibilities and authorities for each assignment, 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 assignment.</i> (List at least three (3) but no more than five (5) relevant projects for which you have performed a similar function.) Route 1 Widening, PPTA; Prince William Co., VA; Lane Construction Co. c/o PWCDOT. Project Principal – Stantec - responsible for audits and ensuring implementation of design QA/QC procedures, review of the deliverables prior to submittals for adherence to contract terms and design guidelines, and allocation of resources to meet the contract schedule. The project involves widening design & construction of over 2 miles of Route 1. <i>Project Duration: 7/2012-07/2013</i> I-895 Connector Design-Build, Henrico Co., VA, FD/MK, LLC c/o VDOT. Design Manager – Stantec - for the new Britton Rd and a 270-foot-long, two-lane bridge over I-895. Coordinated activities between the design and construction teams, investigated various bridge types and roadway fill vs. structures, and performed final QA/QC of the construction plans. Work included design for Britton Rd reconstruction, drainage, sediment and erosion control, stormwater management, maintenance of traffic & right-of-way plans, and all related roadway design tasks. <i>Project Duration: 11/2000-02/2002</i> “Award Winning” I-95 Express Toll Lanes; Section 100, Segment 1; Baltimore City/County, MD; MDTA. Joint Venture’s Project Manager – Stantec - responsible for administration and coordination of all design activities for this \$230M construction project. Work included design for reconstruction and widening of 3.6 miles of I-95/I-895; the I-95/I-895 Interchange; replacement of 3 bridges; partial reconstruction of two bridges on I-95; and over 5 miles of retaining/noise walls. Included were design of complex MOT, 5 SWM ponds, drainage structures & utility relocations; obtaining permits from MDE; public involvement; construction scheduling; and coordination with adjacent contracts. Led the design team’s partnership efforts with Cherry Hill Construction during construction. <i>Project Duration: 5/2004 – 12/2011</i>

“Award Winning” MD 32-Airfield Rd Interchange Design-Build, Anne Arundel Co., MD, Cherry Hill Construction c/o MDSHA. **Design-build Coordinator & Lead Str. Engineer** – *Stantec* – led the coordination efforts between the design and construction teams; and managed the design of the structures for the project. Work included design and construction of relocated MD 198/Airfield Road, four ramps from MD 32 to relocated MD 198, two roundabouts, and elimination of 2 existing at-grade intersections of MD 32 with MD 198 and Mapes Road. *Project Duration: 6/2001 – 6/ 2002*

I-595 Express Toll Lanes Design-Build/3P, AECOM c/o ACS/Dragados for FDOT, Broward Co. FL. Subconsultant’s **Lead Engineer** for preliminary and final design and preparation of plans for Zone 6 (1.8 miles) including 3 bridges and the interchange at University Drive within this \$1.2B, 10-mile-long project. Work included surveys, all associated roadway design, modifications to and partial reconstruction of Ramp N over University Drive, a 977’ third-level steel box-girder flyover bridge, coordination with the lead designer and the contractor, and services during construction. *01/2009 – 06/2013*

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title:	Daniel Grey, PE
b. Project Assignment:	Quality Assurance Manager
c. Name of Firm with which you are now associated:	The Louis Berger Group, Inc.
d. Years experience: With this Firm <u>3</u> Years With Other Firms <u>27</u> Years Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):	<p>The Louis Berger Group, Inc., Vice President and Program Manager. Responsible for the Company's Contingency Construction Programs with primary focus on Transportation Infrastructure. In charge of all aspects of the construction to ensure projects are accomplished on time within budget and to the highest quality. June 2009 – Present</p> <p>U.S. Army</p> <ul style="list-style-type: none">– Faculty, US Army War College, PA. Provided engineer and construction subject matter expertise for the War College curriculum and exercises. August 2008 – June 2009– Chief of Staff, Maneuver Support Center and Ft Leonard Wood, MI. Oversaw all operations for a 30,000 person installation with an emphasis on coordinating all construction activities. August 2006 – August 2008– US Central Command Engineer, Tampa, FL. Senior engineer staff officer for US Central Command. Responsible for all military engineering and construction operations in the Middle East and for the headquarters in Tampa. July 2004 - July 2006– Commander, 20th Engineer Brigade, Fort Bragg, NC. Commanded an Army Engineer unit consisting of 1,600 personnel and all of its Construction equipment and capability. Overall supervision for quality of all projects. July 2002 - July 2004– Student, U.S. Army War College, PA. June 2001 – June 2002– Executive Officer to the Deputy Commander (3 star General) and Chief Geospatial Engineer, Heidelberg, Germany. The principal advisor to the Deputy Commander with an emphasis on all Engineering and Construction activities. June 1998 – June 2001– Commander, 30th Battalion, Fort Bragg, NC Commanded a 560-person engineer unit with significant construction and bridge assets. Responsible for all construction activities on Fort Bragg and abroad with emphasis on quality. June 1996- June 1998
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:	<p>U.S. Military Academy, West Point, New York / BS / 1980 / Engineering Stanford University, California / MS / 1989 / General Engineering Stanford University, California / MS / 1989 / Structural Engineering, U.S. Army War College / Master of Strategic Studies / 2002 / Strategic Studies</p>
f. Active Registration: Year First Registered/ Discipline/VA Registration #:	1991 / Professional Engineer / VA Reg. #0402021836
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your specific responsibilities and authorities for each assignment, 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 assignment.</i> (List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)	<p>USAID, Afghanistan Infrastructure Rehabilitation Program. IQC Manager. Under this LBG contract, Mr. Grey is in charge of all home-office-based support and provides oversight to all in-country operations for a USAID IQC valued at up to \$1.4 billion. Ensures effective and efficient management of all staff resources, including staff and budgets. Within wartime constraints, ensures projects in both the energy and transport sectors are completed on time, within budget, to the proper quality, and when possible, building Afghan capacity. Signature transportation projects include building a 103 kilometer</p>

paved road connecting the cities of Keshim and Faizabad, designing and building building a 101 kilometer paved road connecting the cities of Gardez and Khost, and constructing numerous bridges throughout the country. Both of these roads were built to ASHTO standards and with excellent quality despite the challenges associated with infrastructure projects in the war zone environment of Afghanistan. Oversaw the quality management program. *Project Duration: 09/2010 – 12/2012.*

USAID, Sudan Infrastructure & Services Program, South Sudan. Vice President/IQC Manager.

Under this LBG contract, Mr. Grey provides management and oversight of all project activities for this \$700 million Indefinite Quantity Contract (IQC) with USAID to support construction, reconstruction and rehabilitation of critical infrastructure in South Sudan. Manages home office staff and Sudan field team that provides technical assistance, procurement support for infrastructure projects in transport, urban development/water and sanitation, public buildings and energy and natural resource sectors. The signature project was a 192 kilometer DBST road that was completed to ASHTO standards with excellent quality. Mr. Grey's personal emphasis on the quality management program resulted in excellent outcomes for all projects. Allocates staff resources to support the project. *Project Duration: 09/2010 -2015.*

Maneuver Support Center and Fort Leonard Wood, Chief of Staff. Prior to joining LBG, Mr. Grey was responsible for integrating a diverse staff composed of the Military Police, Chemical School, and Engineer School into the Maneuver Support Center of Excellence. Developed a new structure that accomplished all missions with 8% fewer personnel by consolidating similar functions from the three subordinate schools while gaining their support by making them part of the process. Oversaw daily operations and strategic planning of an Army installation with a daytime population of 30,000 and an annual budget of \$220 million. Implemented a monthly working group with the four local city planners to ensure synchronization of all military and community master planning activities. Was the primary military interface for all city, county and state infrastructure projects around Fort Leonard Wood. Provided engineering advice/expertise to the Commanding General on all installation construction projects, which included vertical structures, roads, and bridges. Worked with the installation master planners and subsequently with the Kansas City District of the U.S. Corps of Engineers to synchronize the construction of all projects while keeping the installation fully functional to accomplish all missions while the projects were ongoing. *Project Duration: 06/2006 – 08/2008*

U.S. Central Command. Engineer. As senior engineer staff officer for U.S. Central Command (USCENTCOM), Mr. Grey was responsible for all military engineering and construction operations in the Middle East as well providing the quality management and oversight for the construction of the new headquarters building and supporting infrastructure at MacDill Air Force Base, FL. Managed a military construction budget of more than \$1 billion and oversaw construction efforts in both Iraq and Afghanistan. Traveled throughout Afghanistan on three different occasions with the Commander of the Afghanistan Engineer District to assess the quality of the construction program and ensure the program was coordinated with other efforts. Escorted a congressional staff visit to Iraq and Afghanistan, which resulted in increased funding for construction and reconstruction efforts. Led the development of the USCENTCOM master plan to support the basing strategy in the region for the next 10 years. Oversaw the design of the new USCENTCOM Forward Headquarters in Qatar and was the principal representative at bilateral meetings to successfully get the Qataris to fund the construction. Served as the command's expert on various construction funding methods and quality management of all construction. *Project Duration: 06/2004–06/2006*

20th Engineer Brigade, Fort Bragg, North Carolina, Engineer Brigade Commander. Prior to joining LBG, Mr. Grey commanded 1,600 personnel with an annual budget of \$5 million. Increased productivity of diverse engineering organizations with emphasis on construction capabilities by ensuring training was done while building needed projects, yet ensured they were built to the requisite quality standards. Trained and deployed all subordinate units to Iraq or Afghanistan while providing engineer support to Fort Bragg, which saved the installation more than \$1 million in construction costs. Oversaw the construction of a road around McKellars Pond that served to connect newly constructed barracks with the remainder of the installation and which was accomplished as a training project for Soldiers getting ready to deploy. Implemented and chaired a monthly luncheon with all 20 of the senior commanders on Fort Bragg to discuss issues and solve common problems. Was the principal advisor to the Commanding General on all construction activities. *Project Duration: 06/2002–06/2004*



Appendix H

**Lead Contractor
Work History Form** (ATTACHMENT 3.4.1a)

ATTACHMENT 3.4.1

LEAD CONTRACTOR – WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name and 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)	d. Contract Completion date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the lead Contractor for this procurement (in thousands).
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: I-66 Improvements from Compton Rd to Waples Mill Rd VDOT Project No.s 200-93A & 201-93A Location: Fairfax County, VA	Lead Designer: Wilbur Smith and Associates	Name of Client/Owner: VDOT/Fairfax Residency Phone: (702) 259-2759 Project Manager: Mr. Venugopal Eagala/Mahmud Hussain Phone: (703) 259-2759 Email: Mahmud.hussain@dot.virginia.gov	1997	1997	\$54,612	\$67,257	\$67,257

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. Indicate whether each project listed was Design-Build, Design-Bid-Build, etc.

Cherry Hill Construction, Inc. (CHC) completed widening of Interstate 66 in Fairfax County Virginia as the Prime Contractor on this design-bid-build project. Programmed as two adjacent projects (Reference VDOT Project Number 0066-029-F19, Sections 200-93A and 20193A), the total length of the widening along this heavily traveled interstate in Fairfax County was 7.52 miles. The scope of the project(s) included addition of two new travel lanes in each direction beginning near Compton Road (Rt. 658) thru Stringfellow Road (Route 645) and ending near Waples Mill Road (Rt. 665). The project included complex maintenance of traffic & sequence of construction as well as standard widening work activities such as E&S, clearing, substantial grading, and storm drainage. CHC self-performed on-site batching of and placement of hydraulic cement concrete paving. CHC also constructed sound walls, performed utility relocations, signage, signalization, and lighting. An open graded asphalt drainage layer as well as cement treated aggregate base was required and constructed by CHC. CHC also widened the following bridges: B682, B683, B684, B685, B686, and B687.

These projects had the following similarities to the I-64 Widening: Competitively bid project for roadway widening of I-66 constructing two new travel lanes in each direction. Involved reconstruction of interchanges, survey, bridges, environmental compliance, installation of storm water management facilities (ponds, storm piping, box culverts, and roadway under-drain), roadway section (comprised of aggregate base, open graded asphalt drainage layer, and finish paving), multi-phase MOT coordinated with Regional TMP, utility identification and relocation, MBE participation, coordination with adjacent contracts, and complete management of the project. In addition to an early completion award, these projects won the ACPA National Award for Excellence – Divided Highways in 1995.



ATTACHMENT 3.4.1

LEAD CONTRACTOR – WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name and 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)	d. Contract Completion date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the lead Contractor for this procurement (in thousands).
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: 9th Street Bridge Replacement over New York Avenue and AMTRAK and CSXT Railways Design – Build Location: Washington, DC	Name: The Federal Highway Administration Eastern Lands Highway Division	Name of Client/Owner: FHA EFLHD Phone: 703.404.6302 Project Manager: Mr. Robert Morris Phone: 703.404.6302 Email: Robert.Morris@dot.gov	July 2010	June 2011 (inclusive of all change orders)	\$43,960	\$58,288	\$39,052

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. Indicate whether each project listed was Design-Build, Design-Bid-Build, etc.

The Federal Highway Administration-Eastern Federal Lands Highway Division (EFLHD), representing the District Department of Transportation (DDOT), selected Tutor Perini Corporation (TPC), wholly and subsidiary of Cherry Hill Construction, Inc. (CHC) as the D/B contractor for this challenging \$5M D/B project. The project required the design and construction of a completely new 4-span structure over CSXT and Amtrak rail facilities and New York Avenue on a parallel alignment with the existing 7-span structure. The project also required the full-depth reconstruction and widening of 1,700 ft. of New York Avenue along with the realignment and construction of three new signalized intersections, associated stormwater management facilities, and reconstruction of utilities. Complete removal of the existing structure occurred after the traffic was set in its final configuration. Project phasing allowed vehicular and pedestrian traffic free movement throughout the project, during both construction and demolition, which was an important goal of the Owner.



The Team was issued Notice to Proceed on September 6, 2006 and completed its 100% design milestone approximately one month ahead of schedule. Construction was able to begin in advance of the August 2009 scheduled date. The project mandated a community outreach program, which the TPC D/B team had embraced through the establishment of a project website, community meetings, and context sensitive design elements resulting in extensive aesthetic improvements. The TCP D/B team established a partnering agreement with DDOT, EFLHD, CSXT, the United States Postal Service, Amtrak, and DC Water as significant stakeholders. These stakeholders were essential to the acquisition of easements and property transfers for the construction of the project. In support of DDOT’s property needs, and as betterment to the project, the TCP B/D team performed all Title Searches, Assessments, Plat preparations, and assisted with the assembly of agreements and closing services. DDOT was also concerned with the aesthetic design of the structure and minimizing impacts to the community by reducing construction time. To address these critical concerns, the TPC D/B team focused on achieving an elegant, streamlined bridge with numerous architectural enhancements along with an aesthetic development program lead by a local area artist specializing in urban streetscape design. The program allowed the DDOT to work with the artist to develop a design, adding or deducting elements at will, all the while maintaining their budget. TPC’s knowledge of Amtrak operations minimized time impacts by successfully integrating key elements of AMTRAK’s electric traction system with our civil design. The Team’s experience with Amtrak procurement regulations gave early recognition to the relocation of electrical traction facilities attached to the existing bridge girders. To advance construction, TPC accelerated the project schedule by acquiring the necessary Amtrak materials without profit. In addition, a creative demolition sequence allowed the girder span holding the electrical traction elements to remain in place during the construction of all piers and abutments, thereby allowing construction to commence in advance of the one-year duration Amtrak quoted to perform the relocations.

A project of this magnitude involved ongoing and interactive coordination with all utilities and public traffic. Along with utilities within the right-of-way (ROW), such as DC Water, Washington Gas, PEPCO, MCI, and Amtrak and CSXT Railroads, the project saw an ADT of 60,000 vehicles on New York Avenue and ADT of 24,000 vehicles on 9th Street. Maintaining this volume of traffic mandated seven major traffic phases to accommodate peak rush hour volumes without impact.

During the performance of the project by the TPC D/B Team, DDOT added two major scope of work items to the contract. The first required the TPC D/B Team to perform services necessary for DDOT to acquire the right-of-way needed for the project. This required the TPC D/B Team to perform all title services, draft agreements, and make direct payment to all property owners for the physical acquisitions. It is important to note that our design and construction was within the proposed ROW; however, DDOT recognized that the TPC D/B Team was capable of acquiring the ROW in an expedited manner. The second major change included the Owner adding the Permanent Amtrak ET Modifications as well as management of the watchperson and inspection services provided by Amtrak and CSXT.

Throughout the performance of this project, the TCP D/B team gained significant experience that will be relevant to the St. Elizabeths East Campus project, including, but not limited to, providing a turn-key QA/QC program, developing and installing systems to manage quantity and quality of stormwater in an urban interchange with limited ROW, establishing a formal public outreach program, coordinating the relocation of significant utilities and constructing major infrastructure improvements within a highly traveled urban interchange while minimizing the impact to local residents and the traveling public.



ATTACHMENT 3.4.1

LEAD CONTRACTOR – WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name and 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)	d. Contract Completion date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the lead Contractor for this procurement (in thousands).
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: Fairfax County Parkway (FCP) Phase I/II and IV Design – Build Location: Springfield, VA	Name: The Federal Highway Administration, Eastern Lands Highway Division	Name of Client/Owner: FHWA EFLHD Phone: 703.404.6302 Project Manager: Mr. Robert Morris Phone: 703.404.6302 Email: Robert.Morris@dot.gov	July 2011 (Phases I & II)	July 2012 (inclusive of Phase IV)	\$73,755 (Phases I & II)	\$112,500 (inclusive of Phase IV)	\$54,000

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. Indicate whether each project listed was Design-Build, Design-Bid-Build, etc.

The EFLHD, as the representative for VDOT/U.S. Army Garrison Fort Belvoir, selected Tutor Perini Corporation’s (TPC) wholly-owned subsidiary Cherry Hill Construction (CHC) as providing overall best value for this D-B project. The TPC D/B Team used innovative construction and design methods during the Phase I/II bid procurement that resulted in savings to VDOT of approximately \$20M when compared to design and construction cost submitted by other offerors based on their less innovative designs. Our team provided full QA/QC Services for this Project. The 4-lane divided limited access highway completed the missing connection of the Fairfax County Parkway to I-95 and provides critical access to the National Geospatial-Intelligence Agency’s (NGA) facility at Fort Belvoir EPG. To meet the requirements of BRAC the Fairfax County Parkway project had an extremely aggressive schedule of 750 calendar days to design, permit, relocate utilities, characterize and dispose of contaminated materials, and construct the parkway. The TPC D/B 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. Full plan approval for the remainder of the contract was received on August 2009, approximately 3 months ahead of schedule. This accelerated design expedited the initial construction operations, enabling the opening of Phases I/II on September 20, 2010, nearly a month ahead of scheduled. The project corridor began at Rolling Road/Franconia-Springfield Parkway and proceeded southeastward on a new alignment and ends just east of Fullerton Road. The design included a new interchange at Fairfax County Parkway and Barta Road for access to West North Loop Rd (NGA interior roadway network) within the new NGA facility.



Extensive design collaboration/coordination with the U.S. Army for this access point was required and included coordination for security lighting, over height vehicle detection, geometry/utility connections. A majority of this roadway was located on the southern portion of the EPG. The work involved in the Parkway included: grading, drainage and paving, six new bridges, one bridge widening, two noise walls, lighting, traffic signals, landscaping, signing/stripping and extensive environmental services.

The environmental challenges were further complicated by the fast-track schedule, involvement of multiple stakeholders, and complex environmental and regulatory issues. The Fairfax County Parkway alignment cut through EPG and crossed five former firing ranges and testing sites including three Resource Conservation and Recovery Act (RCRA) sites that had significant groundwater and 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 investigation of the nature and extent of the contamination on several of these areas, including groundwater modeling to evaluate the impact of construction on the fate and transport of multiple contaminated groundwater plumes. The project also included widening of I-95 to accommodate a new exit lane designed as a certified Defense Access Road (DAR) that provides direct access to the NGA. The TPC D/B Team completed the following work, as directed by the EFLHD:

Base Option – Design of a 4-lane divided, limited access highway, designed to facilitate future widening to 6-lanes within the project ROW; Relocation of portions of Rolling Rd; Interchange at Fairfax County Parkway with Barta Road; New Bridges at Fullerton Road, Accotink Creek/Barta Road; and multipurpose trail alongside a portion of the road.

Option No. 1 - Construction of Ramp A/Loop D at the Barta Road Interchange.

Option No. 2 - Provided an access road 1 mile in length beginning at the existing exit ramp connecting Southbound I-95 to Westbound Fairfax County Parkway to a new alignment to the West South Loop Road, included widening of existing Bridge 675.

Option No. 3 - Consisted of constructing Ramp C of the Boudinot Drive interchange. This ramp was approximately 0.3 miles long and provides access from Fullerton Road to Southbound Fairfax County Parkway.

Phase IV was completed in July 2011 and provides access to Northbound Fairfax County Parkway from Boudinot Drive by extending Boudinot Drive beneath the Parkway and constructing Loop B. This project also provides a connection from Fairfax County Parkway Northbound to Boudinot Drive via Ramp B; and access from Southbound Fairfax County Parkway to Boudinot Drive via Ramp D and a new bridge crossing Accotink Creek. It is important to note that our change management systems enabled our D-B Team to expeditiously provide VDOT and the EFLHD the necessary information (designs, cost estimates, and schedule analysis) that resulted in the project to securing \$22.8 M of ARRA funds to add Phase IV.

Throughout the performance of this project, the TPC D/B Team gained significant experience that will be relevant to the St. Elizabeths East Campus Project including but not limited to: using over the shoulder meetings with utility owners to expedite submission and approvals, coordination of designs where interfacing I-95 with FHWA, obtaining DCR waiver for construction access of regulated waterway, performing public outreach including working with VDOT and impacted communities to resolve sensitive issues (such as revising a planned detour routes), coordination of design, construction, and MOT closures with the regional traffic master plan, coordination for the relocation of impacted utilities, and participated in VDOT Mega Projects Community Resource Board. This project required our team to provide full QA/QC services. As a part of lessons learned, our QA/QC program for St. Elizabeths East Campus Project will include appropriate hold points including interim inspections of underground improvements prior to installation of permanent road way surface. Additionally the TPC D/B exceeded all the VDOT DBE and SWaM goals for the project by ultimately awarding over 40% of all subcontract dollars to such certified firms. Based on their successful performance on the Parkway Project are proposing Soil and Land Use Technology (SaLUT) as members of our Team the St. Elizabeths East Campus Project.



Appendix H

**Lead Designer
Work History Form** (ATTACHMENT 3.4.1b)

ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract 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)	
Name: Jefferson Davis Highway, Route 1 Widening, PPTA Location: Prince William County, VA	Lead Contractor: Lane Construction Company Lead Designer: Greenhorne & O'Mara, Inc., now Stantec	Name of Client.: Prince William County Department of Transportation Project Manager: Mr. Khattab Shammout, Capital Projects Division Chief Phone: (703) 792-6825 Email: kshammout@pwcgov.org	04/2016	04/2016	\$30,597	\$30,597	Stantec Fee: \$2,100

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.

Greenhorne & O'Mara, Inc., now Stantec is the Lead Designer in a design-build partnership with Lane Construction Company to prepare plans for the improvement of Jefferson Davis Highway (Route 1) from its intersection with Neabsco Mills Road to its intersection with Featherstone Road. The project is located in Prince William County, Virginia. The project is approximately 10,800 feet in length. Jefferson Davis Highway functions as a multi-modal principal arterial carrying both intra and inter-county traffic. This project is being performed for Prince William County Department of Transportation under the VDOT Locally Administered Projects program.

This project consists of three major elements.

Element #1 consists of the design, construction, right-of-way acquisition; utility relocation, environmental mitigation, and permitting associated with the widening of Jefferson Route 1. The widening will consist of the addition of a third through lane in both the northbound and southbound directions of the highway as well as the introduction of a raised median throughout the length of the project. The project limits will be from the intersection of Jefferson Davis Highway and Neabsco Mills Road to the intersection of Jefferson Davis Highway and Featherstone Road for a distance of approximately 2.06 miles.

Element #2 consists of the design, construction, easement acquisition, utility relocation, environmental mitigation, and permitting for the provision of underground utility duct banks along Route 1. The limits of duct bank installation will be from the intersection of Jefferson Davis Highway and Neabsco Mills Road to the intersection of Jefferson Davis Highway and Featherstone Road for a distance of approximately 2.06 miles. The duct banks will serve Dominion Virginia Power, Verizon and Comcast. Duct banks will be located within easements to be acquired as part of this project outside of the proposed Jefferson Davis Highway right-of-way along both the northbound and southbound lanes.

Element #3 consists of the design, construction, right-of-way acquisition, utility relocation, environmental mitigation and permitting for the provision of certain Prince William County Service Authority (PWCSA) betterments within the limits of the Jefferson Davis Highway project. Those improvements include approximately 2,225 linear feet of new 36" DIP watermain, 1,300 linear feet of new 12" DIP watermain, 5,875 linear feet of new 16" DIP watermain and approximately 945 linear feet of relocated sanitary sewer main.



ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract 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)	
Name: I-95 Express Toll Lanes; Section 100, Segment 1 Design Location: Baltimore City/County, MD	Contracts Nos. KH-1501 & KH-1503 Lead Contractor: Cherry Hill Construction, Inc. Contract No. KH-1502 Lead Contractor: Concrete General, Inc. Lead Designer: Greenhorne & O'Mara, Inc., now Stantec	Name of Client.: Maryland Transportation Authority Project Manager: David LaBella, P.E., Engineering Manager – I-95 ETL Phone: (410) 931-0808 Email: dlabela@mdta.md.us	11/15/2011	11/15/2011	\$226,000	\$224,000	Stantec Fee: \$5,000 JV Fee: \$18,000

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant.

The Section 100 project is one of four independent projects identified in the I-95 Master Plan Study, which was adopted by the Maryland Transportation Authority (MDTA) in April of 2003. The Section 100 project begins in Baltimore City south of the I-95/I-895 Interchange and ends approximately 2.7 miles north of the I-95/MD 43Interchange.

Segment 1 Design - The Greenhorne & O'Mara, Inc., *now Stantec* led Joint Venture (JV) Design Team was one of the four firms selected to provide comprehensive engineering and design services for the Section 100 project. The JV Team was responsible for design of the Segment 1 starting south of the I-95/I-895 Interchange and extending to south of Kenwood Avenue over I-95. The Segment 1 work included reconstruction of approximately 3.6 miles of I-95/I-895 including the I-95/I-895 interchange having a 1450-foot-long I-895 General Purpose Lane (GP) steel curved girder ramp structure; dual, 1900-foot-long ETL structures carrying I-895 over I-95 and Moores Run; replacement of I-895 GP bridge over Moores Run; replacement of Moravia Road and Moravia Park bridges over I-895; partial reconstruction of Chesaco and Hazelwood Avenue bridges over I-95; and over five miles of retaining and noise walls along the 3.6-mile segment.

The JV Team was responsible for three (3) construction contracts for Segment 1. The work on initial contract (Contract KH-1501) was performed on an accelerated basis and included the I-895 GP curved steel girder ramp; replacement of Moravia Road and Moravia Park bridges over I-895 with two-span steel girder structures; a steel-pile-supported retaining wall; and over a mile of NB General Purpose Lanes of I-895/I-95 widening. The design of this contract containing over 680 drawings was completed for advertisement in seven (7) months. The Engineer's Estimate for this contract was in-between the two low bids at \$54.1M. The low bid was \$53.7 and second low bid was at \$55.6. The two other contracts were for reconstruction of I-95 north of the I-895/I-95 split to south of Kenwood Avenue (Contracts KH 1503) including modifications to the Chesaco and Hazelwood Avenue bridges; and the I-895/I-95 Interchange and associated roadway work (Contract KH 1502). Engineer's Estimate for both of these contracts were also in-between the two low bids. ***The JV Team partnered with Cherry Hill Construction, Inc. on contracts KH-1501 and KH-1503 providing engineering services during construction. Contract KH-1501 was awarded 2010 Structures Design and Partnership Awards by the Maryland Quality Initiative.***



Stantec's Role in this Project – *Stantec* was the lead firm for the JV providing project administration, project management and scheduling including management of fourteen Subconsultants, liaison with the MDTA, studies, design and preparation of construction plans and documents for the project. Specific design services provided by the *Stantec* forces include: Contract KH-1501: MOT design and plans, Signing & Marking design and plans, independent QA/QC of the NB GP curved steel girder bridge design, and peer review of all designs and plans; Contracts KH 1503: design for extension of the Chesaco Avenue Bridge, modifications to Hazelwood Avenue Bridge (soil nail wall), highway design for reconstruction of I-95 from N. of the I-895/I-95 split to S. of Kenwood Avenue, MOT design and plans, signing and ITS design, and peer review of all designs and plans; Contract KH-1502t: bridge and structure design for the ETL Bridges carrying I-895 over I-95 and Moores Run, retaining walls/noise walls south of the ETL bridges, MOT design and plans, and peer review of all designs and plans.

Also, *Stantec* was responsible for all environmental services for the project. Work performed included identifying measures to avoid and minimize impacts to existing resources which ultimately resulted in a net decrease in resource impacts. *Stantec* conducted wetland delineations, forest stand delineations, and developed permit impact plates, tracked total resource impacts and prepared permit modifications for Segment 1. In addition, *Stantec* conducted historical research, well monitoring, and responded to issues related to contaminated soils for proper disposal within the project area during construction. This included multiple sampling events, both composite and discrete, while providing GEC partners with written documentation regarding test results and recommendations.

ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract 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)	
Name: MD 32 at MD 198/Airfield Road Design Build Location: Anne Arundel County, MD	Lead Designer: Greenhorne & O'Mara, Inc., now Stantec Lead Contractor: Cherry Hill Construction, Inc.	Name of Client.: Maryland State Highway Administration Project Manager: Darrell B. Mobley Phone: (410) 865-1002 Email: dmobley@mdot.state.md.us	December 2002	September 2002	\$9,996,188	\$10,005,000	Stantec Fee: \$999,999

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant.

The Design-Build Team of Cherry Hill Construction Inc., and Greenhorne & O'Mara, Inc., *now Stantec* provided design and construction services for this \$10M Design-Build project. The work involved reconstruction of the signalized intersections along MD 32 at MD 198 and Mapes Road with a diamond interchange using the existing Airfield Road bridge.

Within the project limits, MD 32 is an suburban arterial roadway that is located within Fort Meade. MD 32 ultimately connects the Baltimore-Washington Parkway with I-97. To accommodate and maintain the flow of traffic along MD 32 and MD 198, double urban roundabouts were designed at each end of the existing Airfield Road bridge. MD 198 and Mapes Road were then relocated connecting to the roundabouts at this interchange. This new configuration improved safety and allowed for free-flow of traffic at this busy interchange along MD 32.

Stantec, as the Lead Designer, was responsible for the final design and preparation of the plans that included:

- Roadway and roundabouts
- Drainage
- Stormwater management
- Erosion and sediment control
- Maintenance of traffic lighting
- A guardhouse
- Utility relocation
- Triple 84-inch Culvert structure
- Cantilever sign structures
- wetland delineation and analysis
- permits and permit modifications including wetland delineation and analysis

In partnership with SHA and the Design-Build Team, a rolling design-construction schedule was implemented whereby separate phases of the project were designed, approved, and constructed concurrently. Using this method, the project was completed on time and on budget. The project was open to traffic September 14, 2002. Partnering and close coordination of the design and construction activities with SHA, utility companies, reviewing agencies and personnel at Ft. Meade was a key factor in success and timely completion of this fast-track project.

The Design-Build Team was awarded the 2004 Maryland Quality Initiative's "Consultant Highway Design – Large Project" Award as well as DBIA's Award in Civil Category.





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