Original

VDOT

Statement of Qualifications

A Design-Build Project

I-64 Widening Exit 200 to 205

From: Interstate 295
To: Exit 205 (Bottom Bridge)

Henrico and New Kent Counties, Virginia

State Project No.:0064-043-602
Federal Project No.: NHPP-064-3 (499)

Contract ID Number: C00107458DB95

WAGMAN | JMT

A DESIGN-BUILD TEAM

December 15, 2016

3.2 Letter of Submittal

WAGMAN | JMT

A DESIGN-BUILD TEAM

WAGMAN

General Construction | Heavy Civil | Geotechnical

Wagman Heavy Civil, Inc.
26000 Simpson Road
North Dinwiddie, VA 23803-8943

December 15, 2016

Mr. Joseph A. Clarke, PE, Alternative Project Delivery Division
Virginia Department of Transportation
1401 East Broad Street
Richmond, Virginia 23219

RE: **Statement of Qualifications (SOQ)**
I-64 Widening Exit 200 to 205
Henrico and New Kent Counties, Virginia
A Design-Build (DB) Project
Contract ID/RFQ No: C00107458DB95

Dear Mr. Clarke:

Wagman Heavy Civil, Inc. (Wagman) is pleased to submit our SOQ for the I-64 Widening Exit 200 to 205 in Henrico and New Kent Counties, VA. In accordance with the Letter of Submittal requirements for Section 3.2 we offer the following additional information for review:

3.2.1/3.2.2 Authorized Representative/Point of Contact
David Lyle, Vice President, D-B/Major Pursuits
26000 Simpson Road, North Dinwiddie, VA 23803-8943
P. 804.631.0003 | F. 804.733.6281
Email. dwlyle@wagman.com

3.2.3 Principal Officer Information.
Greg Andricos, President/COO
3290 N. Susquehanna Trail, York, PA 17406-9754
P. 717.767.8292 | F. 717.767.5546
Email. gmandricos@wagman.com

3.2.4 Offeror's Structure, Financial Responsibility, and Bonding Approach. Wagman Heavy Civil, Inc. is a corporation and will take financial responsibility for this project; we have no liability limitations. A single 100% performance bond and 100% payment bond shall be provided for the total Design-Build contract value.

3.2.5 Full Legal Name of Lead Contractor is Wagman Heavy Civil, Inc. and Lead Designer is Johnson, Mirmiran & Thompson, Inc. (JMT).

3.2.6 Affiliated and Subsidiary Companies. The full legal name and address of all affiliated and/or subsidiary companies are provided on Attachment 3.2.6 in the Appendix.

3.2.7 Certificates Regarding Debarment. Certificates Regarding Debarment for the Primary firm (Attachment 3.2.7 (a)) and the Lower Tier firms (Attachment 3.2.7 (b)) are included in the Appendix.

3.2.8 VDOT Prequalification Certifications. Wagman's VDOT prequalification number is W002, and our status is active and in good standing; the prequalification and certifications are included in the Appendix.

3.2.9 Evidence of Obtaining Bonding. Evidence of a letter of surety is found in the Appendix stating Wagman is capable of obtaining a performance and payment bond based on the current estimated Design-Build contract value referenced. This bond will cover the project and any warranty period.

3.2.10 Compliance with Laws and Required Registration. Current SCC Certificates, DPOR licenses, and staff licenses are included in the Appendix.

3.2.11 Achieving a Ten Percent (10%) DBE Participation Goal. Wagman is committed to achieving a ten percent (10%) DBE participation goal for the entire value of the contract.

Wagman has a long and successful history serving Virginians on numerous projects. As a single, integrated Design-Build Team, we will design and construct the I-64 Widening Design-Build Project in a manner to ensure the greatest opportunity for success. We will create a transparent working relationship with VDOT and third party stakeholders to promote trust, confidence, and collaboration. Thank you for the opportunity to submit our Statement of Qualifications.

Respectfully,
Wagman Heavy Civil, Inc.

David W. Lyle
Vice President, Design-Build/Major Pursuits

3.3 Offeror's Team Structure

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A DESIGN-BUILD TEAM

The Wagman Team will provide the Virginia Department of Transportation (VDOT) with an experienced and integrated Design-Build Team (DBT) for the I-64 Widening Exit 200 to 205 Design-Build (DB) Project. Wagman has carefully selected individuals with relevant expertise from a number of regionally acclaimed firms and the respective individuals from these organizations to provide the most robust team for this Project. These individuals will ultimately report to executive management of Wagman throughout construction.

Our **Team** members have **collaborated** together on **numerous projects** developing **cohesive working relationships** that will **provide** the Virginia Department of Transportation tremendous value on this Project.

Offeror / Legal Entity / Prime / General Contractor - Wagman, founded in 1902, continues today as a fourth generation, private family-owned heavy civil contractor specializing in transportation infrastructure and has grown to become a nationally recognized leader within the industry. Wagman is an experienced DB Contractor who has partnered to complete the design and construction of over $1 Billion of transportation projects in the Mid-Atlantic Region.

In 2013, Wagman acquired Key Construction Company, Inc. (Key) and D.W. Lyle Corporation (D.W. Lyle). These acquisitions provided Wagman with an additional 50+ years of heavy construction experience in Virginia. Wagman retained the key personnel from these acquisitions whose knowledge, resources, and experience strengthen Wagman's Team. With the acquisition of Key and D.W. Lyle, both of whom have an extensive history as VDOT contractors, **Wagman has fully integrated its presence in Virginia.** Furthermore, in February 2015 Wagman consolidated two Virginia offices into a new office in Dinwiddie, Virginia. **With innovative engineering experience and a large fleet of heavy equipment, we are well-positioned to manage this project and can ensure a successful end result.** This integration of D.W. Lyle Corp, Key Construction, and Wagman Heavy Civil, Inc. has allowed the completion of hundreds of VDOT projects in the Richmond District on time and within budget. Wagman's ability to self-perform roadway, bridge, drainage, geotechnical, foundation, latex overlay and grooving and grinding is unique in the industry. These abilities allow Wagman to investigate, engineer and provide alternative construction techniques to achieve innovative solutions.

Wagman is nationally recognized for our innovative program to promote worker safety and health as core values of the transportation design and construction industry. The American Road and Transportation Builders Association (ARTBA) awarded Wagman Heavy Civil, Inc. the **2016 Contractor Safety Award** as recognition for our outstanding safety programs and performance.

Lead Designer / Project Management / Highway / Structural Design / Traffic Engineering / MOT / Environmental Permitting / Geotechnical / Hydraulics / Utilities / Surveying / SUE / Right-of-Way (VDOT Prequalified ROW Consultant) - JMT is a multi-disciplined, A/E employee-owned company that offers a full array of consulting and technology services for infrastructure projects (including DB) throughout the United States. JMT is currently ranked No. 67 in *Engineering News-Record's (ENR)* Top 500 Design Firms. JMT has completed thousands of highway and bridge projects ranging in complexity from local intersection improvements to the most multiphase interstate projects. They have a documented reputation for the development of innovative solutions for DB projects, delivery of projects on-time and within budget for a variety of project delivery methods including DB and Public-Private-Partnerships (P3). JMT has been the Lead Designer or Quality Control Manager on several DB projects and one P3 project throughout Virginia with total design and construction dollars exceeding $1 Billion.

Wagman and JMT and the proposed individual staff members have a solid, long-term, work history of teaming and partnering on transportation and, in particular, roadway and bridge projects over the past 25 years. More than 85% of the Wagman/JMT DBT's current work is being performed for repeat clients, illustrating our ability to

deliver a safe, quality, and cost-effective project to our customers. The DBT takes pride in our total commitment to schedule and budget goals, particularly our ability to offer creative and innovative solutions to any design and/or construction obstacle.

Assisting the DBT is a hand-picked group of highly-qualified subconsultants that are adept in their field of expertise. These subconsultants include:

Construction Subconsultants	
CES Consulting, LLC	QC Management and Inspection *DBE #690040*
Design Subconsultants	
Schnabel Engineering, Inc.	Geotechnical Engineering
T3 Design Corporation	Maintenance of Traffic *DBE#652912*
Harris Miller Miller & Hanson Inc.	Noise Analysis *SWaM#665488*

3.3.1 IDENTITY OF AND INFORMATION ABOUT THE KEY PERSONNEL

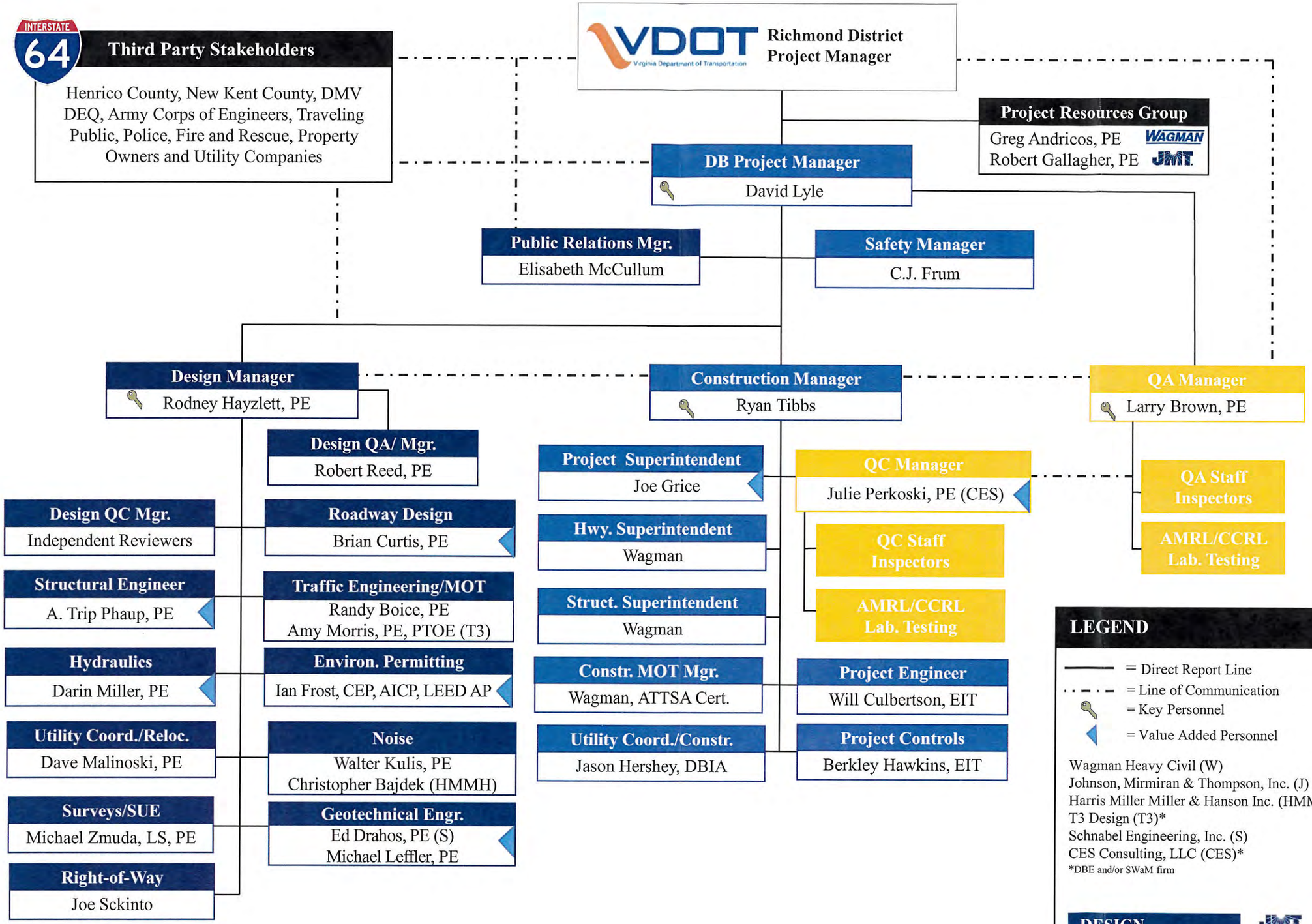
The DBT is led by qualified and capable professionals with local-area knowledge and strong DB experience. The DBT's identified personnel have relevant experience on transportation projects (including DB) in roles similar to those proposed on this project team. The DBT structure employs best management practices, emphasizes intra-team communications, and empowers team members to solve issues at the most appropriate organizational level. Our proposed key staff members consist of **a Design-Build Project Manager, Quality Assurance Manager, Design Manager, and Construction Manager** with a combined total of 73 years of design and construction knowledge, which includes significant experience with VDOT and innovative project delivery methods.

The chart below introduces our Key Personnel who will remain on the team throughout the duration of procurement and construction. Resumes showcasing their individual experience are included in Attachments 3.3.1 of the Appendix. These staff members have the requisite experience to fulfill their individual responsibilities as outlined in Section 3.3 of the RFQ, and are employed full-time by their respective firms.

Key Personnel Name	Key Personnel Position	Company Name
David Lyle	**Design-Build Project Manager (DBPM)**	Wagman Heavy Civil, Inc.
Larry Brown, PE	**Quality Assurance Manager (QAM)**	Johnson, Mirmiran & Thompson, Inc.
Rodney Hayzlett, PE	**Design Manager (DM)**	Johnson, Mirmiran & Thompson, Inc.
Ryan Tibbs	**Construction Manager (CM)**	Wagman Heavy Civil, Inc.

3.3.2 ORGANIZATIONAL CHART

The organizational chart image provided on the next page shows the "chain of command" while identifying major functions to be performed by the DBT. The organizational chart also shows the reporting relationships of Key Personnel responsible for the management of design, construction, and QA/QC activities. The DBT has clearly defined roles and relationships.


INTERSTATE 64
Third Party Stakeholders
Henrico County, New Kent County, DMV DEQ, Army Corps of Engineers, Traveling Public, Police, Fire and Rescue, Property Owners and Utility Companies
VDOT Virginia Department of Transportation
Richmond District Project Manager
Project Resources Group
Greg Andricos, PE WAGMAN
Robert Gallagher, PE JMT
DB Project Manager
David Lyle
Public Relations Mgr.
Elisabeth McCullum
Safety Manager
C.J. Frum
Design Manager
Rodney Hayzlett, PE
Construction Manager
Ryan Tibbs
QA Manager
Larry Brown, PE
Design QA/ Mgr.
Robert Reed, PE
Project Superintendent
Joe Grice
QC Manager
Julie Perkoski, PE (CES)
QA Staff Inspectors
AMRL/CCRL Lab. Testing
Design QC Mgr.
Independent Reviewers
Roadway Design
Brian Curtis, PE
Hwy. Superintendent
Wagman
QC Staff Inspectors
Structural Engineer
A. Trip Phaup, PE
Traffic Engineering/MOT
Randy Boice, PE
Amy Morris, PE, PTOE (T3)
Struct. Superintendent
Wagman
AMRL/CCRL Lab. Testing
Hydraulics
Darin Miller, PE
Environ. Permitting
Ian Frost, CEP, AICP, LEED AP
Constr. MOT Mgr.
Wagman, ATTSA Cert.
Project Engineer
Will Culbertson, EIT
Utility Coord./Reloc.
Dave Malinoski, PE
Noise
Walter Kulis, PE
Christopher Bajdek (HMMH)
Utility Coord./Constr.
Jason Hershey, DBIA
Project Controls
Berkley Hawkins, EIT
Surveys/SUE
Michael Zmuda, LS, PE
Geotechnical Engr.
Ed Drahos, PE (S)
Michael Leffler, PE
Right-of-Way
Joe Sckinto
LEGEND
= Direct Report Line
= Line of Communication
= Key Personnel
= Value Added Personnel
Wagman Heavy Civil (W)
Johnson, Mirmiran & Thompson, Inc. (J)
Harris Miller Miller & Hanson Inc. (HMMH)*
T3 Design (T3)*
Schnabel Engineering, Inc. (S)
CES Consulting, LLC (CES)*
*DBE and/or SWaM firm
DESIGN
CONSTRUCTION
INDEP. QA/QC
JMT
WAGMAN

3.3.2 ORGANIZATIONAL CHART NARRATIVE

Reporting Relationships of Key Personnel - The DBT organizational structure is a successful, integrated team implemented by Wagman and JMT on previous DB projects optimized to present clear, logical, reporting relationships to manage the design and construction of the I-64 Widening project, while maintaining distinct responsibilities and project controls. The project organization is structured to facilitate timely and effective communication among all personnel, regardless of position. Practical lines of communication running between design, construction, and the independent QA/QC support staff, along with direct reporting to the DBPM allows all levels to function as a team.

The DBT organizational chart starts with VDOT at the pinnacle of the hierarchy. The DBT recognizes that all final decisions rest with VDOT. The DBT's primary interface with VDOT will be through the **DBPM, Mr. David Lyle.** The DM, the CM, and the QAM will support and report to the DBPM in their respective areas of expertise. The DBPM will rely on the DM, the CM, and the QAM to effectively coordinate their individual Team elements and will use these Key Personnel to communicate to all Team members during design and construction. Details of the roles of each of Key Personnel and reporting relationships are listed below:

Design-Build Project Manager (DBPM) - In accordance with sound management practices and VDOT guidance, the DBPM serves in the most crucial role, one that defines success for all aspects of the project. **Mr. David Lyle** will institute and lead an integrated Design-Build team approach to collaboratively meet DBT obligations under the contract while avoiding and resolving any disputes. He is the principal conduit for communication with VDOT, and exercises direct control over the integrated DBT including design, construction, quality assurance, quality control, contract administration and public outreach.

Independent Quality Assurance Manager (QAM) – Mr. Larry Brown, PE is the independent QAM and will report directly to the DBPM. Direct reports include segment quality assurance inspectors, the off-site materials sampling and testing laboratory, and other QA staff. The QAM organization will, through the DBPM, establish communication paths to the construction quality control and construction organization to ensure that the QAM is apprised of activities and to ensure that corrective activities and remediations are implemented as quickly as possible.

Design Manager (DM) - The DBT organizational chart clearly defines that all design disciplines for the project will report to the **DM, Mr. Rodney Hayzlett, PE.** The approach to staffing these disciplines hinges on the concept of matching the requirements of this project to the experience and depth of knowledge of staff best suited to fulfill these specific requirements. While the majority of the disciplines will be covered by JMT professionals, the Design Team does include several specialty subconsultants who will augment JMT and report directly to the DM. During the design phase of the project, the DM will interface directly with each of the discipline leaders, whether that individual is a JMT staff member or a subconsultant contracted with JMT. Mr. Hayzlett will also establish and oversee the QA/QC program for design. The responsibilities of the Design QA/QC Team will be separated between QA and QC.

Construction Manager (CM) – Mr. Ryan Tibbs is the CM for the project who will oversee all major construction activities and will manage the Construction QC program, Construction MOT Manager, Field Superintendents, Subcontractors, Scheduler and Project Controls, and Construction Quality Control Manager (QCM) will all report directly to the CM. His tasks will include CPM schedule development and updating, resource planning and allocation, budgetary and cost control, subcontractors scheduling, MOT, ESC, and shop drawing review. The CM will report directly to the DBPM.

3.4 Experience of Offeror's Team

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RELATIONSHIP OF WAGMAN AND JMT

Wagman and JMT have a solid and long-term work history of teaming and partnering on transportation and, in particular, roadway and bridge projects including DB. The proposed individuals share the same history of working as a team. The successful completion of the following projects demonstrates the synergy of the team as well as the skills and knowledge they possess to provide VDOT with an exceptional team for the design and construction of the I-64 Widening project.

Recent DB projects that Wagman and JMT have worked on together as a DBT include:

- **VDOT, Route 61 (MacArthur Ave) over New River, Route 460, and Old Virginia Avenue Bridge Replacement and Approaches (DB), Narrows, VA ($17M) -** The DBT designed/constructed a 1,200-ft. long jointless replacement bridge/approaches. The scope included preliminary/final design for bridge, road and utilities; acquiring all environmental permits/approvals; providing QA/QC for design/construction; acquiring all required R/W; and performing multiphase MOT and overall project management. The DBT incorporated context sensitive solutions including overlooks along the bridge over the river, a Park & Ride facility, a bioretention facility, sidewalks, bike lanes and lighting. ***Recipient of the 2017 VTCA Transportation Engineering Awards and the ACEC 2017 Engineering Excellence Merit Award.***

- **PWCDOT/VDOT James Madison Highway (Route 15) Improvements (PPTA), Prince William County, VA ($52M) -** JMT as a subconsultant, designed two river crossing structures constructed by Wagman (D.W. Lyle). JMT also provided Stage II services for an additional bridge designed by others, ROW services, and utility designating services.

- **MD 404 – US 50 to East of Holly Road Design-Build, Caroline, Queen Anne's, and Talbot Counties, MD ($105M) -** Wagman Heavy Civil, Inc. is the managing JV Partner on a Maryland SHA Design-Build. Work consists of nine miles of upgrades to a divided highway with additional lanes, shoulder improvements, bridge replacements and other safety improvements. The Design JV Team includes JMT. This high-profile project with unprecedented project acceleration and schedule is further driving the Wagman and JMT teams to heightened levels of Design-Build integration and collaboration.

VALUE ADDED PERSONNEL

To mitigate risks, our Team is ***exceeding the Statement of Qualifications (SOQ) requirements*** by committing the ***Value Added*** personnel below to the Project. These individuals will play an important role in our ability to complete the work ahead of schedule, under budget, and in a safe, quality manner with minimal resource requirements from VDOT.

Value Added Position	Name	Firm
Lead Roadway Engineer	Brian Curtis, PE	Johnson, Mirmiran & Thompson, Inc.
Lead Hydraulics Engineer	Darin Miller, PE	Johnson, Mirmiran & Thompson, Inc.
Lead Structural Engineer	Trip Phaup, PE	Johnson, Mirmiran & Thompson, Inc.
Lead Environmental Manager	Ian Frost, CEP, AICP, LEED AP	Johnson, Mirmiran & Thompson, Inc.
Lead Geotechnical Engineer	Ed Drahos, PE	Schnabel Engineering, Inc.
Project Superintendent	Joe Grice	Wagman Heavy Civil, Inc.
Quality Control Manager	Julie Perkoski, PE	CES Consulting, Inc.

The DBT includes **added value personnel who provide further depth and breadth to our Team as well as contribute to the accomplishment of schedule and delivery certainty**. Their responsibilities and reporting relationships are described in the narrative below.

- ***Lead Roadway Engineer (Brian Curtis, PE)*** reports directly to the Design Manager and is responsible for the roadway design for the project. Mr. Curtis will ensure the overall project design is completed in accordance with the requirements of the Contract Documents. He will provide VDOT with design plans, reports and other design documents for review and approval. He was instrumental in this role on the Odd Fellows Road Integrated Design-Build project with Wagman and has been identified as a ***Value Added*** position.

- ***Lead Hydraulics Engineer (Darin Miller, PE)*** reports directly to the Design Manager and is responsible for all of the drainage and stormwater management design. Our concern over the ability to re-use the existing drainage facilities is one of our DBT's critical risks and the Lead Hydraulics Engineer has been identified as a ***Value Added*** position to address the risk and the challenge that it presents during design and construction.

- ***Lead Structural Engineer (Trip Phaup, PE)*** reports directly to the Design Manager and is responsible for the structural design of the bridge widening, culverts, and miscellaneous structures. Mr. Phaup will review designs and verify and modify designs, if necessary, based on field conditions and construction activities. As a ***Value Added*** position, he will also review and make recommendations on the pipe video inspections of existing culverts/pipes intended to be re-used.

- ***Lead Environmental Manager (Ian Frost, CEP, AICP, LEED AP)*** reports directly to the Design Manager and is responsible for the environmental coordination and permitting for the project. Mr. Frost will implement proactive environmental strategies to ensure the environmental permitting process is completed in the anticipated timeline. We have identified the timely approval of the environmental permits as one of the DBT's critical risks and Mr. Frost has been identified as a ***Value Added*** position to address this risk.

- ***Lead Geotechnical Engineer (Ed Drahos, PE)*** reports directly to the Design Manager and lead roadway and structural staff. He will develop the geotechnical investigation plan to ensure borings are identified in accordance with the VDOT Manual of Instructions and provide recommendations for all elements of design and construction. Based on the potential geotechnical challenges outlined as one of our critical risks, we have included this ***Value Added*** position to address these concerns early in the design process.

- ***Project Superintendent (Joe Grice)*** Mr. Grice reports directly to the Construction Manager and will be on the site full-time for construction activities. He has 26 years of progressive experience serving in a supervisory role for highway construction projects. Mr. Grice has acquired experience in highway and bridge construction, storm drainage, jacking and boring, utility construction, schedule management, personnel supervision, sound walls, utility relocation, and geotechnical construction. Mr. Grice has experience leading a team of construction professionals in an integrated Design-Build environment, most recently in high traffic volume limited access roadways in Northern Virginia such as Route 28 and Route 7. We have included this ***Value Added*** position for Mr. Grice because he has a proven track record of delivering safe, quality, on time construction projects including recent work in the Richmond District.

- ***Quality Control Manager (Julie Perkoski, PE)*** reports directly to the Construction Manager and has a significant amount of experience working with Quality Assurance and Quality Control on VDOT projects. Her experience as Quality Assurance Manager on small roadway Design-Build projects such as the $8.5M Route 60 Widening in Chesterfield County and large projects such as Design Construction Services Manager on the $2.1B Elizabeth River Tunnels Project bring invaluable experience to the integrated DBT. We have included this ***Value Added*** position with Mrs. Perkoski's ability to successfully manage construction inspection services and because she also served as a construction manager for the VDOT Richmond District.

3.4.1 WORK HISTORY FORMS

The table below is comprised of the six (6) Work Histories that our Team is submitting for the I-64 Widening project. It demonstrates that each project shares similar relevant features with the I-64 project.

Work History Projects	Design-Build	Innovative Design and/or Construction	Minimize MOT Impacts	Met or Exceeded DBE Commitment	VDOT Coordination	Roadway Construction or Widening	Hydraulic Analysis	Bridge Construction or Widening	Stakeholder Public Involvement	Challenging Geotech Conditions	High Traffic Volume	Innovative SWM
I-95/I-495/I-295 Interchange, Inner Loop Local & Inner Loop Express	■	■	■	■	■	■	■	■	■	■	■	■
Intercounty Connector, Contract A	■	■	■	■	■	■	■	■	■	■	■	■
Intercounty Connector, Contract B	■	■	■	■	■	■	■	■	■	■	■	■
Odd Fellows Road Interchange at U.S. Route 29/460 and Roadway Improvements	■	■	■	■	■	■	■	■	■	■	■	■
Route 7 (Leesburg Pike) Corridor Improvements		■	■	■	■	■	■	■	■	■	■	■
Fairfax County Parkway (FCP – Route 286) Ext.	■	■	■	■	■	■	■	■	■	■	■	■

The projects above illustrate the key elements of the I-64 Widening project, including innovation, complexity, and strategies for limiting impacts to the traveling public/MOT.

Work History Forms (Attachments 3.4.1(a) and (b) as required for Wagman Heavy Civil (Lead Contractor) and Johnson, Mirmiran and Thompson, Inc. (Lead Designer) are included in the Appendix of this submission.

3.5 Project Risks

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The Project will widen I-64 from four to six lanes, adding one lane in both eastbound and westbound directions within the median between I-295 and Exit 205 at Bottom's Bridge. The Project would increase traffic capacity for this critical hurricane evacuation corridor and relieve congestion during summer months. However along with these benefits, the implementation of the Project introduces corresponding risks from the viewpoints of multiple stakeholders: roadway users, DMV, VDOT, two counties, the DBT, and others.

The DBT conducted a Risk Workshop modeled on the system utilized by VDOT to assess and assign risks. Although all viewpoints of risk were considered, the DBT concentrated more on risks the team considers the most relevant and critical to the success of the project.

The Risk Workshop identified 62 individual risks in 13 categories. These risks were evaluated by degree of impact (1 to 3) and probability of occurrence (1 to 3). The 14 risks with the highest combined risk factor (= *impact x probability*) were developed further in regards to mitigation measures, who manages the risk best, and other factors. Some risks are common to most construction jobs and have long-established and well-developed mitigation measures (issues like maintenance of traffic and right-of-way acquisition, for example); from that standpoint, they were not deemed to be critical. From our risk evaluation process, the following three risks were determined to be the most critical to the success for the I-64 Widening project from the view point of the DBT: (1) **Environmental Permits** (2) **Geotechnical** and (3) **Ability to Re-Use Existing Storm Water Sewer Pipes.**

RISK NO. 1 – ENVIRONMENTAL PERMITS

Risk Identification. One of the risks for the Project is the potential scheduling delay due to the length of time needed to secure the environmental/water quality permits. Water quality permits will be needed from the DEQ (Water Protection Program Permit), the US Army Corps of Engineers (USACE) (Section 404 Permit), and the Virginia Marine Resources Commission (VMRC) (Sub-aqueous Bed Permit) for the Project's impacts to jurisdictional streams and wetlands. The FEIS and Natural Resources Technical Report identify the approximate impacts to jurisidictional streams and wetlands based on the preliminary road plans. Based on this information, it appears that at least two wetland impact areas (Boar Swamp and Chickahominy Swamp) may exceed the maximum threshold for a State Programmatic General Permit (SPGP) impact from the USACE. Therefore, it is likely that a Section 404 Individual Permit (IP) will be needed from the USACE, which has taken 9-12 months to secure on other projects from the time that the Joint Permit Application (JPA) is filed. In addition, there is some potential that special status species surveys may be needed for the Small Whorled Pogonia and/or swamp pink, which could delay the permitting if they are not scheduled appropriately. According to the information in the EIS, there are three habitat areas of moderate potential for the Small Whorled Pogonia near Exit 205 and the August 26, 2016 request for Record of Decision indicates that swamp pink habitat surveys may be needed. The environmental permits will not be issued by the regulatory agencies until endangered species issues under Section 7 of the Endangered Species Act are resolved and the US Fish and Wildlife Service has concurred with a no effect or may effect, but not likely to adversely effect determination.

Why This Risk Is Critical. Issuance of the environmental permits is a critical milestone for this project. Schedule delays could result for the project if environmental permitting takes longer than about 7-10 months because the total project schedule is only about 25 months and about 15-18 months is needed for the construction.

Impact of the Risk. The project completion date could be delayed if securing the environmental permits takes longer than about 7-10 months because there might not be sufficent time to complete the construction within the 25 month project schedule.

Risk Mitigation Strategies. The DBT will use successful environmental strategies that we have implemented on other Design-Build projects in Virginia including the Odd Fellows Interchange Improvement DB project. Using the same mitigation strategies we are proposing for the I-64 DB project, the Wagman/JMT Team secured an Individual Permit from the USACE and an Individual Permit from the DEQ in six months. We are confident that we can utilize similar strategies as those utilized at Odd Fellows Road to minimize the permit acquisition schedule to keep the project schedule on track. The specific strategies that the Wagman Team proposes to use to mitigate this environmental permitting risk are summarized below:

- **Complete Environmental Resource Surveys/Analysis Early**. Immediately upon NTP and receiving right of access, environmental field work will be initiated to identify and confirm environmental resources, including wetland and Waters of the US delineation and stream assessment. Any additional special status species surveys (if required) will be scheduled as early as possible. Early coordination on this issue will be important because some species surveys, such as the Small Whorled Pogonia and swamp pink, have a limited survey window in the spring/summer.

- **Employ Avoidance and Minimization Measures Early**. Our Environmental Manager will review the conceptual design and collaborate with the designers to avoid and minimize impacts to important environmental resources, especially jurisdictional wetlands and streams. Members of the environmental staff will attend design workshops/meetings with the roadway engineers to help identify avoidance and minimization measures early in the design process. This will help to streamline the environmental permitting process. In addition, we will evaluate whether wetland impacts can be reduced at the impact sites in order to reduce the impacts below the level that would require an IP from the USACE.

- **Seek Regulatory Agency approval to initiate work outside the jurisidictional areas**. For widening, non-controversial projects, the USACE and DEQ will sometimes allow construction to start outside of the jurisidictional areas (wetlands and streams) prior to the issuance of the permits. Therefore, the Wagman/JMT DBT will seek agency and VDOT approval to initiate construction in non-jurisidictional areas, thereby accelerating the start of construction and reducing the risk of delays to the project completion.

- **Early Agency Involvement.** We would begin agency coordination with the permitting agencies and consulting agencies immediately upon NTP to engage the agencies early and secure regulatory agency "buy-in" to impacts and compensation. One advantage on this project is that the USACE supported alternative 1 in the FEIS, so they should be a "partner" in the permitting.

- **Identify Suitable Mitigation Early.** The DBT will work with the regulatory agencies to find acceptable compensation for unavoidable impacts to jurisdictional wetlands and waters. In our experience, the best method to expedite permit acquisition is to purchase credits from an approved mitigation bank, of which there are several for this watershed.

- **Environmental Training**. Before construction begins, our environmental team will conduct a half day training session for contractor staff to discuss compliance with the environmental permits such as the VPDES Stormwater General Permit for construction, the Section 404, WPP, and SBP and any NEPA commitments.

Role of VDOT and Other Agencies. The DBT will do everything possible to reduce the workload on VDOT but specific actions will require assistance from VDOT and other agencies. VDOT will need to complete expeditious review on our delineation report, JPA applications, plans, design submissions and construction plans; thereby helping to expedite the environmental process. All environmental agencies would be brought into the process early and quick responses would be requested. Exepditious reviews and streamlined cooperation with the environmental regulatory agencies will be essential to ensure the environmental permitting schedule is not delayed (i.e USACE, DEQ, VMRC, DGIF, DCR, USFWS, and DHR).

RISK NO. 2 – GEOTECHNICAL

Risk Identification. The opportunity for roadway, storm drainage and structure geotechnical risks are high throughout the Project. The Project will include widening I-64 in the existing median in both the westbound and eastbound directions between approximate MM 201 and 205. The Project will also include extending deceleration and acceleration lanes to and from the existing truck weigh stations, and widening the two I-64 Mainline Bridges over the Chickahominy River. There are also several culverts below I-64 that may need to be extended or replaced. The existing Meadow Road (Route 156) Bridge may need to be upgraded with pier protection but not replaced. The DBT has a proven record of providing solutions to known risks and unknown conditions that could impact the Project. We are able to address these risks because of our unique skill set of geotechnical engineering and construction. The DBT has chosen to focus on a singular geotechnical risk.

The RFQ information package did not include a geotechnical data report. However, Schnabel has provided geotechnical engineering services for several projects along this section of I-64 and has referenced the subsurface data developed for those projects to identify this risk. Schnabel has also been working in Henrico and New Kent Counties for more than 40 years which has resulted in a thorough understanding of the local geologic conditions.

Much of the construction on this project will consist of earthwork for support of new pavements, both inside and outside the median. The DBT has identified unsuitable soils as one of the three unique potential risks on this project.

The project site crosses several geologic units including the following:

- Bacons Castle Formation. These soils are generally encountered above El 120 to 140 in the western 2/3 of the site, and include layers of stiff clay and firm sand. Much of the clay in this formation could be considered unsuitable where it exhibits high plasticity, medium to high shrink-swell potential, high moisture content, and low California Bearing Ratio (CBR).
- Chesapeake Formation. These soils are generally encountered below El 120 to 140 in the eastern 1/3 of the site, and include medium stiff clay and loose to firm sand. Much of the clay in this formation could also be considered unsuitable where it exhibits high plasticity, medium to high shrink-swell potential, high moisture content and low CBR.
- Holocene Age Alluvium. These soils are generally encountered above the Chesapeake Formation in the Chickahominy River swamp below approximate El 60, and include soft clay and loose sand with some organic matter. These soils appear to extend about 2,500 to 3,000 feet west and east of the existing mainline bridges, respectively, which is about 25% of the total project length. Additional Holocene alluvial soils are likely present in the area of Boar Swamp just west of the Meadow Road Bridge over I-64. The alluvial soils may be considered unsuitable due to low strength, high compressibility, high plasticity, high shrink-swell potential, high moisture content, high organic content and low CBR. The ground water table is also shallow in the area of the swamp which could increase the volume of unsuitable soils in the area.

The Chesapeake and Bacons Castle Formations are of Tertiary geologic age, and as such, may include acid sulfate soils that would also be considered unsuitable. Remediation would be necessary to promote plant growth, and minimize acidic surface water, the formation of iron-stained surfaces and degradation of concrete structures. There is also some risk of increased acidity for shallow ground water and wells in the Tertiary sediments, and these soils may also be corrosive to buried metal structures.

Finally, soils considered unsuitable during the original construction of I-64 may have been wasted in the median. These soils are considered "false cut" and if present would likely have to be excavated and disposed of offsite.

Why the Risk is Critical. This risk is considered critical for the following reasons:

- Unsuitable soils will likely require undercut and replacement or chemical treatment in place. Chemical treatment could include cement or lime stabilization for high-plasticity soils, and lime treatment for acid-sulfate soils.
- Unanticipated settlement could occur in fill areas if the unsuitable soils are not identified and removed or properly treated in place.
- The unknowns of the subsurface conditions place financial and schedule risk on the DBT and therefore the project.

Impact of the Risk. The impacts on the project from this risk include the following:

- The presence of unsuitable soils will be difficult to predict without additional boring data. Even if a geotechnical data report (GDR) is completed prior to the RFP being issued, predicting lateral and vertical extent of these soils could be difficult since not all of the borings required for a final study will be included in the GDR.
- The impacts on the Project from the potential geotechnical issues include additional cost and time for the Design-Builder to complete the Project.

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

- Perform additional subsurface exploration and soil laboratory testing to better delineate the risk. The additional exploration would include the number of borings and types of sampling to meet or exceed the requirements of the VDOT Materials Manual of Instructions, Chapter III.
- The additional geotechnical exploration will likely include in-situ cone penetrometer testing (CPT) and dilatometer testing (DMT) to better delineate the potentially unsuitable soils. CPT soundings can also be used for bridge and culvert foundation design and seismic site class calculations if shear wave tests are performed. Dilatometer testing can also be used to evaluate embankment settlement.
- Provide additional analysis and testing to evaluate the presence and remediation of acid-sulfate soils including the following:
  - Perform a thorough evaluation of the geologic conditions on site to identify Tertiary soils that are potentially acidic.
  - Perform pH and total sulfur tests to screen for potential acidity. Acid-sulfate soils typically have low pH and/or total sulfur greater than 0.2%.
  - Perform acid-base accounting tests to evaluate potential acidity and lime demand to neutralize acidity.
  - Evaluate the potential of designing the project to avoid excavations in acid-sulfate soils as much as possible to reduce the volume of soils that may have to be treated with agricultural lime.
  - Establish standard acid soil remediation procedures into the design and construction of this project. This would include soils in cut areas to be treated in place along with any soils that are to be used as fill.

- Provide pH, resistivity, sulfate and chloride tests to evaluate corrosion potential for buried metal and concrete structures.
- Provide consolidation tests on soft soils to evaluate their stress history and whether they are compressible enough to require undercut and replacement.
- Provide a sufficient amount of soil laboratory testing including Atterberg Limits for plasticity, moisture content for compaction, Standard Proctor tests for evaluating relative compaction, and CBR tests for pavement design.
- Provide a thorough evaluation of the subsurface conditions in order to properly characterize the subsurface conditions, and perform the necessary calculations to decide if the potential risk described herein is likely to occur.
- Include standardized remedial design information on the plans to illustrate how the impacts should be mitigated during construction.

During the design phase, the team will identify issues and options to work towards an optimal solution for any of the risks encountered. Appropriate contingencies will be included in the bid to cover the anticipated risks.

Role of VDOT or Other Agencies. VDOT will provide review and oversight during design and construction.

RISK NO. 3 – ABILITY TO RE-USE EXISTING STORM WATER SEWER PIPES

Risk Identification. As part of the Project, the DBT is responsible for collecting, storing, treating, and releasing storm water within the project limits to adequate outfalls. To successfully accomplish this task in a cost-effective manner, the DBT will design a storm water system that relies on utilizing all or a majority of the existing storm sewer system in place. This includes the 18 culverts/pipes that cross I-64. At this time, the DBT does not know whether:

1) The culverts/pipes are in good structural condition for adequate re-use, with the potential for the presence of acid sulfate soils which are known to be problematic to concrete structures;
2) The culverts/pipes are hydraulically sufficient to handle the increase in storm water associated with the increase in impervious surface proposed for the project.

The ability to re-use the existing culverts/pipes is considered a risk on this Project at this time.

Why the Risk is Critical. Replacing the culverts/pipes will require jack and boring the pipes under existing and proposed pavement; an effort that is both expensive and time consuming. Since there are 18 culverts/pipes that cross I-64, that were likely installed at the same time, the impact to the Project may be substantial. Acquisition of additional right-of-way or easements required for the jacking and receiving pits could also impact the cost and schedule, since these additional potential property acquisitions do not appear to be accounted for in the project schedule or identified in the environmental documents currently being completed.

Risk Impact on the Project. If the existing culverts/pipes are determined to be inadequate for re-use on this Project, the following impacts could be introduced to the project:

Need to Acquire Right-of-Way or Easements: In many locations throughout the Project the existing culverts/pipes are close to the limits of existing right-of-way/limited access which may require additional right-of-way or easements to install the jacking and receiving pits. Acquisition of right-of-way or easements

would also impact cost due to the addition of appraisals, right-of-way oversight and negotiations, and property values.

Additional Environmental Impacts: It is our understanding that VDOT is currently finalizing the environmental documents and coordination with the permitting agencies for the impacts identified on the RFQ plans. There would be additional impacts as a result of replacing the culverts/pipes including the impacted footprint from the jacking and receiving pits that have not been accounted for. This would require additional coordination with the permitting agencies to document avoidance and minimization measures. This could require additional review times by the permitting agencies prior to permit approval, potentially delaying construction.

Schedule Impacts: Installation of new culverts/pipes will slow down the earth moving activities in the median reducing the efficiency of the scheduling of construction activities, increasing the cost of the Project. Additional submittals will need to be approved for the jack and bore activities. Installation time for the new pipes will be greater than that required to connect to existing facilities. If additional right-of-way or easements are required, the overall project schedule could be impacted to account for the proper environmental coordination and right-of-way process.

Increased Construction Costs: Installation of new culverts/pipes will be more costly than re-use of existing facilities as noted above including the additional right-of-way and environmental coordination efforts.

Maintenance of Traffic: Additional MOT may be required for the jacking and receiving pits, especially in the areas on the outside of the roadway where currently no construction activities are anticipated.

Risk Mitigation Strategy. The DBT will undertake the following steps during the proposal preparation to minimize or eliminate the risk to schedule and cost:

1) The DBT will prepare a preliminary drainage analysis of the culverts/pipes within the project limits to determine the hydraulic adequacy of the existing culverts/pipes and determine if adequate for re-use.
2) One of the DBT's first activities will be to perform video inspections of the existing culverts/pipes following the methodology as prescribed in the VDOT pipe video inspection supplemental specification 30203 to confirm that the culverts/pipes are in good structural condition for re-use.
3) The results of the videos will be shared with VDOT, and where mitigation, repair, or replacement is necessary, we will determine the best approach so that schedule and cost impacts are minimized, and right-of-way and easement acquisitions avoided.
4) Potential environmental impacts will be mitigated through early coordination with VDOT and the permitting agencies. Field identification of locations of wetland and streams will be completed to refine the design to avoid impacts to the best extent possible. Avoidance and minimization efforts will be documented to assist in permit approvals.
5) Additional right-of-way staff stand ready to assist in the event that additional right-of-way or easements are needed to be acquired.

Role of VDOT and other Agencies: The role of VDOT concerning this risk item is to review and approve the pipe video inspection reports, drainage computation, and plan designs. As previously stated, upon completion of the video inspections the DBT will meet with VDOT to determine the appropriate mitigation procedures for any deficient or deteriorated culverts/pipes. Once incorporated into the final plan design, then VDOT would issue plan approval for construction.

We also anticipate that VDOT will identify how existing culverts/pipes are to be accounted for in the bidding phase of the project once the final RFP is released to the shortlisted offerors.

Appendices

ATTACHMENT 3.1.2

Statement of Qualifications Checklist and Contents

WAGMAN | JMT

A DESIGN-BUILD TEAM

ATTACHMENT 3.1.2

Project: 0081-095-038, Contract ID#: C00107116DB85
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
Acknowledgement of RFQ, Revision and/or Addenda	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	Appendix
Letter of Submittal (on Offeror's letterhead)				
Authorized Representative's signature	NA	Section 3.2.1	yes	Page 1
Offeror's Point of Contact information	NA	Section 3.2.2	yes	Page 1
Principal Officer information	NA	Section 3.2.3	yes	Page 1
Offeror's corporate structure	NA	Section 3.2.4	yes	Page 1
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	Page 1
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	Appendix
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	Appendix
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	Page 1/Appendix
Evidence of obtaining bonding	NA	Section 3.2.9	no	Page 1/Appendix

ATTACHMENT 3.1.2

Project: 0081-095-038, Contract ID#: C00107116DB85
STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
SCC and DPOR registration documentation (Appendix)	Attachment 3.2.10	Section 3.2.10	no	Appendix
Full size copies of SCC Registration	NA	Section 3.2.10.1	no	Appendix
Full size copies of DPOR Registration (Offices)	NA	Section 3.2.10.2	no	Appendix
Full size copies of DPOR Registration (Key Personnel)	NA	Section 3.2.10.3	no	Appendix
Full size copies of DPOR Registration (Non-APELSCIDLA)	NA	Section 3.2.10.4	no	Appendix
DBE statement within Letter of Submittal confirming Offeror is committed to achieving the required DBE goal	NA	Section 3.2.11	yes	Page 1
Offeror's Team Structure				Pages 2-5
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	Appendix
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.2	no	Appendix
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.3	no	Appendix
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.4	no	Appendix
Organizational chart	NA	Section 3.3.2	yes	Page 4
Organizational chart narrative	NA	Section 3.3.2	yes	Page 5
Experience of Offeror's Team				Pages 6-8
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	Appendix

ATTACHMENT 3.1.2

Project: 0081-095-038, Contract ID#: C00107116DB85
STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
Lead Designer Work History Form	Attachment 3.4.1(b)	Section 3.4	no	Appendix
Project Risk				
Identify and discuss three critical risks for the Project	NA	Section 3.5.1	yes	Pages 9-14

ATTACHMENT 2.10

Form C-78-RFQ

Acknowledgment of RFQ, Revisions and/or Addenda

WAGMAN | JMT
A DESIGN-BUILD TEAM

ATTACHMENT 2.10

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

RFQ NO. C00107458DB95

PROJECT NO.: 0064-043-602

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 – November 3, 2016 (Date)
2. Cover letter of RFQ Addendum No. 1 – November 30, 2016 (Date)
3. Cover letter of _____ (Date)

David W. Lyle
SIGNATURE

12/15/2016
DATE

David W. Lyle
PRINTED NAME

Vice President,
Design-Build/Major Pursuits
TITLE

ATTACHMENT 3.2.6

Affiliated/Subsidiary Companies

WAGMAN | JMT
A DESIGN-BUILD TEAM

ATTACHMENT 3.2.6

State Project No. 0064-043-602, C00107458DB95

Affiliated and Subsidiary Companies of the Offeror

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

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

Relationship with Offeror (Affiliate or Subsidiary)	Full Legal Name	Address
Affiliate (Parent)	Wagman, Inc.	3290 North Susquehanna Trail, York, PA 17406
Affiliate	Wagman Construction, Inc.	3290 North Susquehanna Trail, York, PA 17406
Affiliate	Wagman Investments, Ltd.	3290 North Susquehanna Trail, York, PA 17406

ATTACHMENT 3.2.7

Debarment Forms

WAGMAN | JMT

A DESIGN-BUILD TEAM

ATTACHMENT NO. 3.2.7(a)

CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS

Project: **I-64 Widening Exit 200 to 205**
Project No.: **0064-043-602**

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

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

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

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

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

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

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

David W. Lyle 12/15/2016

Signature Date

Vice President,
Design-Build/Major Pursuits

Title

Wagman Heavy Civil, Inc.

Name of Firm

ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project: **I-64 Widening Exit 200 to 205**
Project No.: **0064-043-602**

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.

/Robert Gallagher/ 12/15/16 Senior Vice President

Signature Date Title

Johnson, Mirmiran & Thompson, Inc.

Name of Firm

ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project: **I-64 Widening Exit 200 to 205**
Project No.: **0064-043-602**

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.


12/8/2016 President

Signature Date Title

CES CONSULTING LLC

Name of Firm

ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project: **I-64 Widening Exit 200 to 205**
Project No.: **0064-043-602**

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	12/12/16 Date	President & CEO Title

Harris Miller Miller & Hanson Inc.
Name of Firm

ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project: **I-64 Widening Exit 200 to 205**
Project No.: **0064-043-602**

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

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

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

Edward G. Dreher December 8, 2016 Senior Vice President
Signature Date Title

Schnabel Engineering , LLC
Name of Firm

ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project: **I-64 Widening Exit 200 to 205**
Project No.: **0064-043-602**

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] 12-13-16 PRESIDENT
Signature Date Title

T3 DESIGN CORPORATION
Name of Firm

OFFEROR'S VDOT PREQUALIFICATION EVIDENCE

WAGMAN | JMT

A DESIGN-BUILD TEAM

Vendor ID: W002
Vendor Name: WAGMAN HEAVY CIVIL, INC.
Prequal Exp: 10/31/2017

-- PREQ Address --
3290 NORTH SUSQUEHANNA TRAIL
YORK, PA 17406-9754
Phone: 717-764-8521
Fax: 717-764-2799

Work Classes (Listed But Not Limited To)
003 - MAJOR STRUCTURES
007 - MINOR STRUCTURES
011 - CLEARING AND GRUBBING
080 - DEMOLITION OF STRUCTURES
101 - EXCAVATING

Bus. Contact: BECKER, TODD EUGENE
Email: ESTIMATING@WAGMAN.COM

-- DBE Information --

DBE Type: N/A
DBE Contact: N/A

EVIDENCE OF OBTAINING BONDING

WAGMAN | JMT

A DESIGN-BUILD TEAM

CNA SURETY

333 S. Wabash Avenue, 41st Floor, Chicago, IL 60604

November 16, 2016

Virginia Department of Transportation
1401 E. Broad Street
Richmond, VA 23219

Re: A Design-Build Project
RFQ No.: C00107458DB95
I-64 Widening Exit 200 to 205
From: Interstate 295 To: Exit 205 (Bottom Bridge)
Henrico and New Kent Counties, Virginia
State Project No: 0064-043-602
Federal Project No.: NHPP-064-3 (499)
Contract ID Number: C00107458DB95

Dear Sirs:

As surety for Wagman Heavy Civil, Inc., Continental Casualty Company , with A.M. Best Financial Strength Rating "A" and Financial Size Category "XV", is capable of obtaining 100% Performance and 100% Labor and Materials Payment Bonds in the amount of $55,000,000 (estimated contract value) 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.

Sincerely,
Continental Casualty Company

By: Patricia C Robinson
Patricia C. Robinson
Attorney-in-Fact

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

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

James R Gould, Joseph G Buyakowski, Alson O Wolcott Jr, Eugene M Fritz, Patricia C Robinson, Kathy R Reisinger, Donald R Wert, Individually

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

- In Unlimited Amounts -

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

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

In Witness Whereof, the CNA Companies have caused these presents to be signed by their Vice President and their corporate seals to be hereto affixed on this 6th day of October, 2015.

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

Paul T. Bruflat — Vice President

State of South Dakota, County of Minnehaha, ss:

On this 6th day of October, 2015, before me personally came Paul T. Bruflat to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is a Vice President of Continental Casualty Company, an Illinois insurance company, National Fire Insurance Company of Hartford, an Illinois insurance company, and American Casualty Company of Reading, Pennsylvania, a Pennsylvania insurance company described in and which executed the above instrument; that he knows the seals of said insurance companies; that the seals affixed to the said instrument are such corporate seals; that they were so affixed pursuant to authority given by the Boards of Directors of said insurance companies and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said insurance companies.

S. EICH
NOTARY PUBLIC
SOUTH DAKOTA

My Commission Expires February 12, 2021

S. Eich — Notary Public

CERTIFICATE

I, D. Bult, Assistant Secretary of Continental Casualty Company, an Illinois insurance company, National Fire Insurance Company of Hartford, an Illinois insurance company, and American Casualty Company of Reading, Pennsylvania, a Pennsylvania insurance company do hereby certify that the Power of Attorney herein above set forth is still in force, and further certify that the By-Law and Resolution of the Board of Directors of the insurance companies printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said insurance companies this 10th day of November, 2016.

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

D. Bult — Assistant Secretary

Form F6853-4/2012

ATTACHMENT 3.2.10

SCC and DPOR Registration Documentation

WAGMAN | JMT
A DESIGN-BUILD TEAM

ATTACHMENT 3.2.10

State Project No. 0064-043-602, C00107458DB95

SCC and DPOR Information

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

SCC & DPOR INFORMATION FOR BUSINESSES (RFQ Sections 3.2.10.1 and 3.2.10.2)							
Business Name	SCC Information (3.2.10.1)			DPOR Information (3.2.10.2)			
	SCC Number	SCC Type of Corporation	SCC Status	DPOR Registered Address	DPOR Registration Type	DPOR Registration Number	DPOR Expiration Date
Wagman Heavy Civil, Inc.	F019898-8	Foreign Corporation	Active	3290 North Susquehanna Trail York, PA 17406	Class A Contractors	2701015887	01-31-2017
Johnson, Mirmiran & Thompson, Inc.	F149901-3	Foreign Corporation	Active	9201 Arboretum Pkwy., Suite 310 Richmond, VA 23236	ENG, LS	0411000029	02-28-2018
Johnson, Mirmiran & Thompson, Inc.	F149901-3	Foreign Corporation	Active	72 Loveton Circle Sparks, MD 21152	ENG, LA, ARC, LS	0407001314	12-31-2017
Johnson, Mirmiran & Thompson, Inc.	F149901-3	Foreign Corporation	Active	13921 Park Center Rd., Suite 140 Herndon, VA 20171	ENG, LS	0411000441	02-28-2018
Johnson, Mirmiran & Thompson, Inc.	F149901-3	Foreign Corporation	Active	272 Bendix Road Suite 260 Virginia Beach, VA 23452	ENG, LS	0411000440	02-28-2018
CES Consulting, LLC	S3416007	LLC	Active	317 Office Square Lane, Suite 101A Virginia Beach, VA 23462	ENG	0411001331	02/28/2018
Harris Miller Miller & Hanson Inc.	F1451857	Foreign Corporation	Active	N/A	N/A	N/A	N/A
Schnabel Engineering, LLC	S0889123	LLC	Active	9800 JEB Stuart Parkway, Suite 100 Glen Allen, VA 23059	ENG	0411000322	02-28-2018
T3 Design Corporation	06585392	Corporation	Active	10340 Democracy Lane, Suite 305 Fairfax VA 22030	ENG	0405001624	12-31-2017

ATTACHMENT 3.2.10

State Project No. 0064-043-602, C00107458DB95

SCC and DPOR Information

DPOR INFORMATION FOR INDIVIDUALS (RFQ Sections 3.2.10.3 and 3.2.10.4)						
Business Name	**Individual's Name**	**Office Location Where Professional Services will be Provided (City/State)**	**Individual's DPOR Address**	**DPOR Type**	**DPOR Registration Number**	**DPOR Expiration Date**
Johnson, Mirmiran & Thompson, Inc.	Lawrence Weir Brown	Richmond, VA	12213 Chiasso Way Chesterfield, VA 23838	Professional Engineer	0402047134	06-30-2018
Johnson, Mirmiran & Thompson, Inc.	Rodney Nelson Hayzlett	Richmond, VA	5048 Long Creek Lane Chester, VA 23831	Professional Engineer	0402032936	01-31-2017

DPOR License Lookup License Number 2701015887

License Details

Name	WAGMAN HEAVY CIVIL INC
License Number	2701015887
License Description	Contractor
Firm Type	Corporation
Rank [1]	Class A
Address	3290 NORTH SUSQUEHANNA TRAIL, YORK, PA 17406
Specialties [2]	Highway / Heavy (H/H)
Initial Certification Date	1976-10-29
Expiration Date	2017-01-31

DPOR License Lookup License Number

0411000029

License Details

Name	JOHNSON, MIRMIRAN & THOMPSON, INC.
License Number	0411000029
License Description	Business Entity Branch Office Registration
Business Type	Corporation
Rank	Business Entity Branch Office
Address	9201 ARBORETUM PKWY SUITE 310, RICHMOND, VA 23236
Initial Certification Date	1992-03-24
Expiration Date	2018-02-28

DPOR License Lookup License Number

0407001314

License Details

Name	JOHNSON MIRMIRAN & THOMPSON INC
License Number	0407001314
License Description	Business Entity Registration
Rank	Business Entity
Address	72 LOVETON CIRCLE, SPARKS, MD 21152
Initial Certification Date	1982-08-30
Expiration Date	2017-12-31

DPOR License Lookup License Number

0411000441

License Details

Name	JOHNSON MIRMIRAN & THOMPSON INC
License Number	0411000441
License Description	Business Entity Branch Office Registration
Rank	Business Entity Branch Office
Address	13921 PARK CENTER RD SUITE 140, HERNDON, VA 20171
Initial Certification Date	2006-03-06
Expiration Date	2018-02-28

DPOR License Lookup License Number 0411000440

License Details

Name	JOHNSON MIRMIRAN & THOMPSON INC
License Number	0411000440
License Description	Business Entity Branch Office Registration
Rank	Business Entity Branch Office
Address	272 BENDIX ROAD SUITE 260, VIRGINIA BEACH, VA 23452
Initial Certification Date	2006-03-06
Expiration Date	2018-02-28

DPOR License Lookup License Number

0411001331

License Details

Name	CES CONSULTING LLC
License Number	0411001331
License Description	Business Entity Branch Office Registration
Business Type	LLC - Limited Liability Company
Rank	Business Entity Branch Office
Address	317 OFFICE SQUARE LN STE 101A, VIRGINIA BEACH, VA 23462
Initial Certification Date	2016-12-06
Expiration Date	2018-02-28

DPOR License Lookup License Number

0411000322

License Details

Name	SCHNABEL ENGINEERING, LLC
License Number	0411000322
License Description	Business Entity Branch Office Registration
Business Type	LLC - Limited Liability Company
Rank	Business Entity Branch Office
Address	9800 JEB STUART PKWY STE 100, GLEN ALLEN, VA 23059
Initial Certification Date	2003-04-16
Expiration Date	2018-02-28

DPOR License Lookup License Number 0405001624

License Details

Name	T3 DESIGN CORPORATION
License Number	0405001624
License Description	Professional Corporation Registration
Firm Type	PC - Professional Corporation
Rank	Professional Corporation
Address	10340 DEMOCRACY LN STE 305, FAIRFAX, VA 22030
Initial Certification Date	2007-12-19
Expiration Date	2017-12-31

SCC eFile

Business Entity Details

Help

Wagman Heavy Civil, Inc.

General

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

Principal Office

3290 NORTH SUSQUEHANNA TRAIL
YORK PA17406

Registered Agent/Registered Office

CORPORATION SERVICE COMPANY
BANK OF AMERICA CENTER
16TH FLOOR, 1111 EAST MAIN STREET
RICHMOND VA 23219
RICHMOND CITY 216
Status: Active
Effective Date: 9/11/2012

Select an action

File a registered agent change
File a registered office address change
Resign as registered agent
File an annual report
Pay annual registration fee
Order a certificate of good standing
View eFile transaction history
Manage email notifications

New Search | Home

SCC eFile

Business Entity Details

Help

Johnson, Mirmiran & Thompson, Inc.

General

SCC ID: F1499013
Entity Type: Foreign Corporation
Jurisdiction of Formation: MD
Date of Formation/Registration: 10/17/2006
Status: Active
Shares Authorized: 1000

Principal Office

72 LOVETON CIRCLE
SPARKS MD21152

Registered Agent/Registered Office

ROBERT GALLAGHER
9201 ARBORETUM PKY STE 140
RICHMOND VA 23236
CHESTERFIELD COUNTY 120
Status: Active
Effective Date: 9/6/2007

Select an action

File a registered agent change
File a registered office address change
Resign as registered agent
File an annual report
Pay annual registration fee
Order a certificate of good standing
View eFile transaction history
Manage email notifications

New Search | Home

SCC eFile

Business Entity Details

Help

CES Consulting, LLC

General

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

Principal Office

23475 ROCK HAVEN WAY
SUITE 255
DULLES VA20166

Registered Agent/Registered Office

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

Select an action

File a registered agent change
File a registered office address change
Resign as registered agent
File a principal office address change
Pay annual registration fee
Order a certificate of fact of existence
Submit a PDF for processing (What can I submit?)
View eFile transaction history
Manage email notifications

New Search | Home

SCC eFile

Business Entity Details

Help

Harris Miller Miller & Hanson Inc.

General

SCC ID: F1451857
Entity Type: Foreign Corporation
Jurisdiction of Formation: MA
Date of Formation/Registration: 12/6/2000
Status: Active
Shares Authorized: 300000

Principal Office

77 SOUTH BEDFORD ST
BURLINGTON MA01803

Registered Agent/Registered Office

C T CORPORATION SYSTEM
4701 COX RD STE 285
GLEN ALLEN VA 23060
HENRICO COUNTY 143
Status: Active
Effective Date: 6/12/2015

Select an action

File a registered agent change
File a registered office address change
Resign as registered agent
File an annual report
Pay annual registration fee
Order a certificate of good standing
View eFile transaction history
Manage email notifications

New Search | Home

SCC eFile

Business Entity Details

Help

Schnabel Engineering, LLC

General

SCC ID: S0889123
Entity Type: Limited Liability Company
Jurisdiction of Formation: VA
Date of Formation/Registration: 12/19/2002
Status: Active

Principal Office

9800 JEB STUART PARKWAY
SUITE 200
GLEN ALLEN VA23059

Registered Agent/Registered Office

CT CORPORATION SYSTEM
4701 COX ROAD, SUITE 285
GLEN ALLEN VA 23060
HENRICO COUNTY 143
Status: Active
Effective Date: 10/4/2013

Select an action

File a registered agent change
File a registered office address change
Resign as registered agent
File a principal office address change
Pay annual registration fee
Order a certificate of fact of existence
Submit a PDF for processing (What can I submit?)
View eFile transaction history
Manage email notifications

New Search | Home

SCC eFile

Business Entity Details

Help

T3 Design Corporation

General

SCC ID: 06585392
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 5/18/2006
Status: Active
Shares Authorized: 5000

Principal Office

10340 DEMOCRACY LANE STE 305
FAIRFAX VA22030

Registered Agent/Registered Office

PATRICIA TIMBROOK
10340 DEMOCRACY LANE STE 305
FAIRFAX VA 22030
FAIRFAX CITY (FILED IN FAIRFAX COUNTY)
303
Status: Active
Effective Date: 7/30/2013

Select an action

File a registered agent change
File a registered office address change
Resign as registered agent
File an annual report
Pay annual registration fee
Order a certificate of good standing
Submit a PDF for processing (What can I submit?)
View eFile transaction history
Manage email notifications

New Search | Home

DPOR License Lookup License Number

0402047134

License Details

Name	BROWN, LAWRENCE WEIR
License Number	0402047134
License Description	Professional Engineer License
Rank	Professional Engineer
Address	CHESTERFIELD, VA 23838
Initial Certification Date	2010-06-17
Expiration Date	2018-06-30

DPOR License Lookup License Number 0402032936

License Details

Name	HAYZLETT, RODNEY NELSON
License Number	0402032936
License Description	Professional Engineer License
Rank	Professional Engineer
Address	CHESTER, VA 23831
Initial Certification Date	1999-01-25
Expiration Date	2017-01-31

Appendices

ATTACHMENT 3.3.1

Key Personnel Resume

WAGMAN | JMT

A DESIGN-BUILD TEAM

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: **David Lyle, Vice President Design-Build/Major Pursuits**

b. Project Assignment: **Design-Build Project Manager (DBPM)**

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

d. Employment History: With this Firm 3* Years With Other Firms 25 Years

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

Wagman Heavy Civil, Inc., (Formerly G.A. & F.C. Wagman, Inc.)
Start Date: June 2013 **End Date:** Present **Position:** ***Vice President Design-Build/Major Pursuits***
Responsibilities: *In June of 2013, G.A. & F.C. Wagman, Inc. acquired Key Construction Company, Inc. and D.W. Lyle Corporation. Both firms operated under the Wagman name for a period of time. Although Mr. Lyle has only worked for Wagman Heavy Civil, Inc. for three years, he was with the acquired firms for 25 years.

Key Construction Company, Inc.
Start Date: January 2006 **End Date:** June 2013 **Position:** ***Vice President and President***
Responsibilities: In January of 2006, D.W. Lyle Corporation became a subsidiary of Key Construction Company, Inc.

D.W. Lyle Corporation (Subsidiary of Key Construction Company, Inc.)
Start Date: February 2006 **End Date:** June 2013 **Position: Project Superintendent, Project Manager, VP-Construction, Executive VP and President**

Mr. Lyle is a third generation heavy/highway contractor who served the company in roles of progressive responsibility in operations, estimating, project management and administration. 26 years in Construction Management of structures, foundations and grading operations successfully delivering projects in 8 of VDOT's 9 construction districts. Those projects include 10 different Design-Build DOT projects. Mr. Lyle has been a member of VTCA (Board of Directors, 2003), VTCA Contractor Leadership Committee (2004-06, Chairman, 2006) and currently serves on the VTCA Structure and Bridge Committee (1996-Present, Past Chairman, Vice Chairman 2014-present), VTCA Design Build Committee, (2014 to Present, Vice Chair 2016-present). He is the Wagman representative to HCCA. He received the VDOT Commissioner's Award for Outstanding Achievement in 2006 for work accomplished in the Richmond District.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
Virginia Polytechnic Institute and State University, Blacksburg, VA/Bachelor of Science/1988/Building Construction

f. Active Registration: Year First Registered/ Discipline/VA Registration #:
OSHA30 #16834351 9/5/16, DEQ Responsible Land Disturber #42581 Exp. 8/8/17
Mr. Lyle has recently met all requirements for DBIA Certification, and official certification is pending.

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

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

VDOT - Odd Fellows Road over Route 29/460, Lynchburg, VA (Design-Build) - $30M

Name of Firm: Wagman Heavy Civil	**Project Role:** Design-Build Project Manager
Beginning Date: January 2015	**End Date:** Present

Specific Responsibilities: As Design-Build Project Manager, Mr. Lyle has been responsible for managing the pursuit, estimating, design, and coordination with VDOT and City of Lynchburg. **Working with the JMT Design Team** and Wagman's construction team to provide an integrated Design-Build project management approach to the design, permitting, utility relocation, Quality Assurance, Quality Control and construction to ensure safety, constructability, quality and accountability to achieve the project goals within schedule and budget requirements for both VDOT and Wagman. This effort has included project specific integrated Design-Build team efforts in Scope Validation, Design

Validation, Design Alternatives, Value Engineering, betterments, and executing project construction. Significant Public Involvement and Outreach have been successfully accomplished and continues to have this project begin on time and scheduled to be complete within contract requirements. Mr. Lyle is the primary point of contact for VDOT and all Third Party stakeholders.

Similar Challenges & Resolution:

Interstate Interchange	ROW Coordination	Third Party Stakeholder Coordination
Multiple Segments	Stormwater Management	Environmental Mitigation
Roadway Widening	Bridge Construction	Public Utility Impacts
Design-Build Management	Lighting/Landscaping	Innovative TMP to relieve Public Mobility Impacts

VDOT - Route 61 Bridge Replacement and Approaches over New River, Giles County, VA (Design-Build) - $16.8M

Name of Firm: Wagman Heavy Civil	**Project Role:** Design-Build Project Manager
Beginning Date: October 2010	**End Date:** November 2014

Specific Responsibilities: As Design-Build Project Manager, Mr. Lyle managed the original SOQ and successful short-listing by VDOT. He managed the design team and estimating team to provide the winning Design-Build combination of Technical and Price Proposal. As the DBPM, he successfully instituted an integrated Design-Build approach **with JMT**, VDOT District Staff, Third Parties and Construction Team to deliver an economical and high quality project that **won the 2016 ACEC Design Award**. Mr. Lyle led the integrated Design-Build team to resolve difficult and highly variable geotechnical conditions using a variety of foundation options that included driven pile, large diameter drilled shafts, small diameter drilled shafts and rock socketed h-pile. Mr. Lyle also led the integrated Design-Build Team to meet or exceed Quality Assurance/Quality Control project requirements. The Design-Build Team, VDOT and third party stakeholders collaborated to provide ARRA funded project enhancements that included context sensitive solutions, increased user functionality with scenic overlooks and landscaped park-and-ride facility. This project executed significant utility relocation and coordination efforts to move power, water, sewer, gas, cable TV, fiber optic and telephone facilities without service interruption. The Design-Build Team worked with Town of Narrows, local emergency response, service authorities and the local school system to design and execute a Traffic Management Plan that met both project requirements and community needs. The Design-Build Team also designed and successfully executed an environmental/erosion prevention plan in one of the most pristine and historic riverine environments in the United States.

Similar Challenges & Resolution:

Structure/Bridge	Context Sensitive Solutions	Third Party Stakeholder Relations
Integrated Design-Build Management	Utility Relocations	TMP/MOT
Environmental Aspects	Utility Coordination	ROW Acquisition
Phased Construction	Geotechnical Solutions	Roadway & Storm Drainage

VDOT – Route 288 PPTA, Chesterfield, Goochland and Powhatan Counties, VA (Design-Build) – Project Value: $200M+ (DWL Contract Value 19.9M)

Name of Firm: D.W. Lyle Corporation	**Project Role:** Contract Manager/Co-Coordinator
Beginning Date: October 2000	**End Date:** June 2004

Specific Responsibilities: Mr. Lyle served as Contract Manager/Co-Coordinator for D.W. Lyle Corporation and United Contractors, Inc. On behalf of that construction team (and similar to a DBPM role), Mr. Lyle participated in the integrated Design-Build Team's (including current members of JMT Design Team) initial bridge and roadway scoping, bridge and roadway design reviews, constructability reviews, value engineering, estimating, project negotiation, project Q/C team, and project scheduling. Mr. Lyle also actively participated in a wide variety of innovative project solutions during design and construction. Examples of these were weak subgrade soils, slope failures, bridge approach fill settlement remediation and development of early work package approvals to achieve streamlined permitting and early construction activities. In addition to these integrated Design-Build Team responsibilities, Mr. Lyle managed the estimating, contract negotiation, budget and cost controls for D.W. Lyle Corporation. He supervised a work force that included one project manager, two project engineers, one survey party chief, five bridge superintendents and one grade superintendent to complete 16 bridges, MSE retaining walls, and bridge approach fills and approximately eight lane miles of roadway excavation grading and storm drainage. The excavation, grading and storm drainage work was associated with widening existing portions of Route 288 in Chesterfield and Goochland Counties. The project was completed ahead of time and under budget, including a project safety achievement of over one million man hours without a lost time incident.

Similar Challenges & Resolution:

Structure/Bridge Construction	Roadway Construction	Traffic Control
Integrated Design-Build	Storm Drainage	Innovative Geotechnical Solutions
Overall Project Management	In-stream Phased Construction	Interstate Type Roadway Widening

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

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment. Not required for Design-Build Project Manager.

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: **Lawrence (Larry) W. Brown, P.E., Construction Manager**

b. Project Assignment: **Quality Assurance Manager (QAM)**

c. Name of all Firms with which you are employed at the time of submitting SOQs. In addition, please denote the type of employment (Full time/Part time): **Johnson, Mirmiran & Thompson, Inc., Full time**

d. Years experience: With this Firm 2 Years With Other Firms 10 Years

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

Johnson, Mirmiran & Thompson, Inc.

Start Date: August 2014 **End Date:** Present **Position:** ***Senior Associate – CM Division***

Responsibilities: Mr. Brown is the Construction Management lead for JMT out of the Richmond office. In his two years with the firm Mr. Brown has fulfilled multiple tasks assignments for localities and VDOT including: Owner's representative for Chesterfield County on the Route 60 widening project, their first locally administered Design-Build project; VDOT's representative for a Design- Build project to widen I-64 from four lanes to six lanes for approximately 3 miles west of Richmond; acting as the Area Construction Engineer in the Richmond District, north of the James River; and acting as the District Materials Engineer in the Richmond District. Currently Mr. Brown is serving as the Quality Assurance Manager for the Midtown Tunnel P3 project connecting the cities of Portsmouth and Norfolk.

Michael Baker, Jr., Inc.

Start Date: October 2011 **End Date:** July 2014 **Position:** ***Construction Manager/Construction Inspection Coordinator***

Responsibilities: Mr. Brown was assigned to the I-95 Bridges Rehabilitation project in Richmond. His duties included: scheduling/oversight of inspection staff; schedule and budget reviews; MOT coordinator; coordination with Public Affairs; reviewing and approving monthly estimates; providing engineering support to field staff; processing and tracking all RFIs, submittals and correspondence; interpreting contract ambiguities; ensuring contractor was abiding by contact, plans, specifications and standards; developing and prosecuting work orders; and facilitating project meetings as needed.

NXL Construction Services, Inc.

Start Date: March 2011 **End Date:** October 2011 **Position:** ***Quality Assurance Manager (QAM)***

Responsibilities: Mr. Brown worked statewide serving as the QAM on DB projects certifying the contractor was performing their role as outlined in the contract and materials. Also, worked in conformance with the contract, specs. and project controls performing constructability reviews and CPM schedules.

Virginia Department of Transportation

Start Date: September 2010 **End Date:** March 2011 **Position:** ***Area Construction Engineering (ACE)***

Responsibilities: Mr. Brown managed CM/I staff during project delivery for DB and DBB projects. Used Primavera for manpower planning and project critical path evaluations and approvals. Coordinated with project controls staff on constructability reviews, project duration, CEI budgets and project close out. Worked with FHWA representatives to ensure cost effective delivery of projects and compliance with safety and other federal/state standards. Coordinated QA with CM, inspection staff and material division. Provided oversight to locally administered projects and technical assistance to construction/design staff. Worked with various entities on problem resolution to avoid delays or NOIs.

Virginia Department of Transportation

Start Date: September 2007 **End Date:** September 2010 **Position:** ***Construction Manager-QAM***

Responsibilities: Mr. Brown managed the administration of construction/maintenance contracts. Planned and conducted pre-construction conferences and progress meetings on contracts, monitored contract expenditures, reviewed work in progress and project records prepared by field forces to assure compliance with the contract documents, plans and environmental regulations set by all agencies. Managed, supervised and reviewed performance for inspection staff. Solved problems and communicated with various entities including public, contractors, landowners, and various agencies. Prepared reports, correspondence and documents and attended meetings for scheduling, safety, project progress, public information and field inspections.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
NC State University, Raleigh, NC/ME/2009/Engineering (Concentration in Construction)
University of Arizona, Tucson, AZ/BS/1996/Civil Engineering

f. Active Registration: Year First Registered/ Discipline/VA Registration #:
2010/Virginia Registered Professional Engineer No. 0402047134

Certifications include OSHA-30 Hours; Confined Space; Fall Protection; Nuclear Gauge; and ASBO Grout

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

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

Elizabeth River Tunnels, Downtown – Midtown Tunnel, MLK Extension Project, Norfolk, VA

Name of Firm: Johnson, Mirmiran & Thompson, Inc. | **Project Role:** Quality Assurance Manager

Beginning Date: September 2012 | **End Date:** Ongoing

Specific Responsibilities: As Quality Assurance Manager for this project, Mr. Brown's duties include overall assurance that the quality assurance and quality control program are being adhered to in accordance with the Quality Management System Plan (QMSP). Day to day activities include attending or facilitating, as needed, meetings to coordinate between contractor, VDOT and Elizabeth River Crossing concerns with quality on the project; review of monthly schedule and review and approval of monthly pay applications; attending outstanding work inspections, pre-inspection meetings, inspections of various assets and post inspection meetings; and closing out of punch list items once the assets have successfully reached interim substantial completion. The QAM is also responsible for review and approval of dispositions for non-compliance reports (NCR) and closing of NCRs as they are mitigated with appropriate stakeholders.

Similar Challenges & Resolution:

Heavily Traveled Highway	Utility	Stakeholder Coordination
Coordination/Relocation	Roadway/Survey	Milling/Overlay
Phased Construction	Quality Control	Guardrail/Retaining Wall
Safety of Traveling Public	Overall Project Management	Geotechnical
Traffic Management Plan	Structures/Bridges	

VDOT, Construction Management and Inspection Services for I-95 Bridge Rehabilitation Project, Henrico County, VA

Name of Firm: Michael Baker, Jr., Inc. | **Project Role:** Construction Manager

Beginning Date: October 2011 | **End Date:** August 2014

As Construction Manager, Mr. Brown developed and managed the project control and document control systems, responded to contractor requests for information, and conducted change-order reviews. Other responsibilities included claims avoidance, utility coordination, developing health and safety plans, partnering, public involvement, scheduling of inspection staff, environmental compliance reviews, maintenance of traffic coordination, review and approval of pay estimates.

Similar Challenges & Resolution:

Heavily Traveled Highway	Utility	Stakeholder Coordination
Coordination/Relocation	Roadway/Survey	Milling/Overlay
Phased Construction	Quality Control	Guardrail/Retaining Wall
Safety of Traveling Public	Overall Project Management	Structures/Bridges
Traffic Management Plan	Geotechnical	

VDOT, Route 36 Improvements (DB), City of Hopewell, Prince George County, VA

Name of Firm: NXL Construction Services, Inc | **Project Role:** Quality Assurance Manager

Beginning Date: March 2011 | **End Date:** October 2011

Specific Responsibilities: As Quality Assurance Manager for this Design-Build project, Mr. Brown was responsible for preparation of the project's QA/QC plan; oversight of project QA procedures; the planning, performance and coordination of QA testing and inspection in accordance with VDOT's DB guidelines throughout the project; monitoring of contractor's QC program; monitoring IA/IV testing; and serving as the liaison with the Department in respect to project compliance. He was also responsible for approving QC inspection staff assignment to the project; preparing the QC frequency testing plan for submission to VDOT; the preparation, maintenance, and submission of associated project documentation including but not limited to diaries, EEO, ARRA, materials notebook/documentation, as-built sketches, and monthly pay packages; preparation and submission of final records; and managing the project QA staff to ensure that there was sufficient staffing to maintain compliance with contract, plans, and specifications.

Similar Challenges & Resolution:

Heavily Traveled Highway	Utility	Stakeholder Coordination
Coordination/Relocation	Roadway/Survey	Guardrail/Retaining Wall
Quality Control	Milling/Overlay	Safety of Traveling Public
Overall Project Management	Traffic Management Planontrol	
Plan	Milling/	Traffic Management

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment. **Mr. Brown does not have any current project obligations and is committed to be on-site full-time for the duration of construction.**

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: **Rodney Hayzlett, PE, Vice President**

b. Project Assignment: **Design Manager (DM)**

c. Name of Firm with which you are now associated: **Johnson, Mirmiran & Thompson, Inc. (JMT)**

d. Employment History: With this Firm **15** Years With Other Firms **8** Years

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

Johnson, Mirmiran & Thompson, Inc.

Start Date: March 2013 **End Date:** Present **Position:** ***Vice President***

Responsibilities: Mr. Hayzlett was promoted to Vice President in March of 2013 and serves as the Section Head for Virginia Highways Group. He has been instrumental in the successful management and design of many VDOT, Federal, county and municipal transportation projects including Design-Build procurements. Project responsibilities include signing and sealing plans for ROW acquisition and construction; management of design sub-consultants; internal coordination between discipline leaders; implementation and monitoring of the design QA/QC process; and coordination with construction staff and QA/QC staff. Also serves as a single point of contact between the client and DBPM during design and construction of DB projects, and oversees the construction support services provided by engineering staff.

Johnson, Mirmiran & Thompson, Inc.

Start Date: Dec. 2001 **End Date:** March 2013 **Position:** ***Senior Associate/Civil Engineer***

Responsibilities: Mr. Hayzlett worked on numerous transportation projects including public involvement policy, environmental documentation and permitting preparation, along with roadway and hydraulic design. Clients have included federal, state and local agencies throughout Virginia including the FHWA (Eastern Federal Lands Highway Division), VDOT, Metropolitan Washington Airports Authority, Chesterfield County, Henrico County, James City County, Loudoun County, Prince William County, Spotsylvania County, City of Newport News, City of Norfolk, City of Poquoson, City of Richmond, City of Suffolk, City of Virginia Beach and Town of Herndon. He is well versed in AASHTO design standards and specifications.

Stantec Consulting, Inc.

Start Date: March 1994 **End Date:** Dec. 2001 **Position:** ***Project Manager***

Responsibilities: Mr. Hayzlett managed and designed advanced technical urban and rural roadway and drainage projects for Virginia Transportation projects using MicroStation, GEOPAK, and AutoCAD software. Projects varied in scope from minor improvements to interstate-type roadways on new locations, reconstruction and widening, and major drainage improvements.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
Virginia Polytechnic Institute and State University, Blacksburg, VA/Bachelor of Science/1993/ Civil Engineering

f. Active Registration: Year First Registered/ Discipline/VA Registration #:
1999/Virginia Registered Professional Engineering No. 0402 32936
Work Zone Traffic Control Certification No. 121609006
VDOT Guardrail Inspection No. ISP-1116100-20

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

(List only three (3) relevant projects* for which you have performed a similar function. If additional

VDOT, Odd Fellows Road Interchange at US Route 29/460 and Road Improvements, Lynchburg, VA (Design Build)

Name of Firm: JMT	**Project Role:** Design Manager
Beginning Date: November 2015	**End Date:** August 2018

Specific Responsibilities: As Design Manager, Mr. Hayzlett was responsible for the professional engineering services to upgrade and extend Odd Fellows Road to US 460/29 in Lynchburg, VA. The project is being implemented as a Design-Build Project. JMT is teamed with Wagman Heavy Civil, Inc. construction firm and serving as the prime design firm on the project. The project includes the design/construction of a new tight diamond interchange between Odd Fellows Road and US 460/29; widening and reconstruction of 1.5 miles of Odd Fellows Road to a three-lane typical section with a two-way left turn lane, curb and gutter, sidewalk and a 10-foot shared use path; reconstruction and widening of a bridge

over the Norfolk Southern Railroad; and construction of three roundabouts along Odd Fellows Road. The project is being designed under a very aggressive design-build schedule, which requires the close weekly coordination between VDOT, the City, FHWA, and Wagman Heavy Civil, Inc. He was responsible for signing and sealing plans for ROW acquisition and construction; management of design sub-consultants; internal coordination between discipline leaders; implementation and monitoring of the design QA/QC process; and coordination with construction staff and QA/QC staff.

Similar Challenges & Resolution

Heavily Traveled Highway	Phased Construction	Quality Control
Safety of Traveling Public	Utility Coordination/Relocation	Overall Project Management
Traffic Management Plans	ROW Coordination	Roadway Widening

FHWA-EFLHD/VDOT, Fairfax County Parkway Extension, Springfield, VA (Design-Build)

Name of Firm: JMT | **Project Role:** Highway Design Manager

Beginning Date: October 2008 | **End Date:** July 2011

Specific Responsibilities: As Highway Design Manager, Mr. Hayzlett was responsible for the design and roadway construction of a $120 million segment of the Parkway between Rolling Road (Route 638) on the north and Fullerton Road on the south including feasibility studies and 30% design for a commuter parking lot. This project was the final segment required to complete the Parkway, and included construction of a four-lane divided, limited access highway, designed to facilitate future widening to 6 lanes within the project right-of way. The project included relocation of portions of Hooes Rd. and Rolling Rd.; a multipurpose trail along a portion of the road; interchanges at Rolling Rd. and the EPG access road; and bridges at Fullerton Road and Accotink Creek. *Mr. Hayzlett received a "Star Partner" award for his exceptional dedication, teamwork, and professionalism in support of the project's goals by the NGA & USACE.* In addition to the NGA Star Partnering Award, this project has received the DBIA National/Merit Award; DBIA Mid-Atlantic/Transportation Award; ACEC-MW/Honor Award for Excellence; VTCA/Transportation Engineering Award; ACEC-MD/Honor Award; and the ACEC-VA/Merit Award.

Similar Challenges & Resolution

Heavily Traveled Highway	Phased Construction	Quality Control
Safety of Traveling Public	Utility Coordination/Relocation	Overall Project Management
Traffic Management Plans	ROW Coordination	Roadway Widening

VDOT, Route 7 (Leesburg Pike), 0007-029-128, Pe-102, Fairfax County, VA

Name of Firm: JMT | **Project Role:** Project Manager

Beginning Date: October 2008 | **End Date:** Late 2025 (DB Contract)

Specific Responsibilities: As Project Manager, Mr. Hayzlett led the JMT design team in delivery of public hearing plans to increase capacity, safety and mobility to the congested Route 7 corridor between Reston Avenue and Jarrett Valley Drive in Fairfax County; (6.9 miles). The project includes widening the roadway from a four to six lane divided facility with a 28' raised grass median on the western half and 16' raised median on the eastern half of the project, and adds 10' shared use paths on both sides of the roadway to enhance mobility for cyclists and pedestrians. Improvements to 10 signalized intersections and locations where existing full access intersections existed along this corridor that did not meet signal warrant criteria. Access management techniques were implemented to either provide a left turn in / right in / right out or simply a right in / right out access promoting Median U-Turns to improve safety at the uncontrolled access points. All intersections included improvements to auxiliary turn lanes for the added capacity for left and right turning movements.

The presented design included the numerous commitments that VDOT agreed to during an aggressive and robust public involvement Program with the local civic associations, elected officials, and impacted landowners. Mr. Hayzlett was the key presenter to elected officials and home owner associations (up to 60 meetings) and the general public in dealing with issues on neighborhood access, difficult hydraulic design, sound walls and opposed storm water management basins. Numerous alternatives were evaluated to address the public's concerns and requests.

There are 3 proposed bridge structures; one for the partial interchange at Baron Cameron, and two new bridge structures at the Difficult Run crossing where the roadway alignment has been shifted to the south to allow construction of the proposed Route 7 EB bridge in the clear to allow for all 4 lanes of Route 7 to be shifted to the new structure during the maintenance of traffic. The shifted alignment accommodates a 5' raise in vertical profile to pass the design year storm to prevent routine flooding events that occur today. As a result of the alignment shift, approximately 1750 LF of Colvin Run is being relocated with natural stream channel design. Mr. Hayzlett assisted VDOT with early coordination with ACOE, DEQ, and EPA by walking the agencies through the teams efforts on avoidance and minimization of the impacts that resulted in getting concurrence on the proposed solution.

He will continue to lead the JMT team in finalizing these plans as RFP plans for the upcoming design build procurement.

Similar Challenges & Resolution

Heavily Traveled Highway	Phased Construction	Quality Control
Safety of Traveling Public	Utility Coordination/Relocation	Overall Project Management
Traffic Management Plans	ROW Coordination	Roadway Widening

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

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment. **Not required for Design Manager.**

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: **Ryan Tibbs, Project Manager**

b. Project Assignment: **Construction Manager (CM)**

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

d. Employment History: With this Firm 1+Years With Other Firms 9 Years

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

Wagman Heavy Civil, Inc., (Formerly G.A. & F.C. Wagman, Inc.)

Start Date: June 2015 **End Date:** Present **Position:** ***Project Manager***

Responsibilities: Mr. Tibbs currently serves as Project Manager responsible for overall daily supervision and coordination of all aspects of Wagman highway construction projects. This includes active and intense management of the contract, schedule, quality control, subcontractor, labor and equipment requirements to deliver high quality, safe, on time projects to the owner.

Shirley Contracting Company, LLC

Start Date: 2006 **End Date:** June 2015 **Position:** ***Project Manager, Assistant Project Manager, Project Engineer***

Responsibilities: Mr. Tibbs served as Project Manager, Assistant Project Manager, and Project Engineer on a variety of projects throughout Virginia. His Design-Build experience in these roles included interchanges, interstate and limited access highways, road, roundabouts, and bridges. He also managed construction on spillway and soundwall projects. He drafted and managed Site Safety Plans, Environmental Plans, provided design constructability reviews, maintained project schedules and budgets, maintained communication among the owner and all involved parties, and managed teams performing Quality Control inspections.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
Virginia Military Institute, Lexington, VA/Bachelor of Science/2006/Biology

f. Active Registration: Year First Registered/ Discipline/VA Registration #:
2008/ESCCC Certification/#3204C; 2013/DCR Responsible Land Disturber Certification/#04878;
2013/VDOT Intermediate Work Zone Traffic Control Certification/#091813751; OSHA 30;
2010/CSX/Norfolk Southern Roadway Worker Certification;
2010/USACE Quality Control Contractor Certification

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

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

Dominion Virginia Power, Chesterfield Power Station Ash Haul Road and Bridge, Chester, VA (Design-Bid-Build) - $20.9M

Name of Firm: Wagman Heavy Civil, Inc.	**Project Role:** Project Manager
Beginning Date: June 2015	**End Date:** Substantial Completion July 2016 – Additional work & project closeout December 2016

Specific Responsibilities: As Project Manager, (similar to a Construction Manager role) Mr. Tibbs is responsible for the overall day-to-day project management and construction operations performed on this 15-month project. Chesterfield Power Station project was built to VDOT specifications and standards and includes road, bridge, retaining walls, realignment and widening of existing roads, new utility facilities, utility relocations and extensive protection of existing utilities. Storm pipe, structures and stormwater management facilities were constructed early to best manage stormwater. The Proctor's Creek and adjacent swamp (an extremely sensitive wetlands) was protected by Wagman's innovative geotechnical approach to access. Mr. Tibbs' integrated Design-Build experience served him well on this project. This project was extremely dynamic due to the fast paced project delivery required by the owner. Design

changes were not unusual and Wagman embraced the project with an integrated Design-Build approach, working with the owner and designer to manage all potential changes before they affected the project's critical path. Despite numerous changes, significant environmental challenges and extremely poor geotechnical conditions, Mr. Tibbs led Wagman's team to overcome any perceived obstacles and deliver the project to the owner on the original substantial completion date with an impressive quality and safety record.

Similar Challenges & Resolution:

Aggressive Timeline	Utilities	Safety of Traveling Public
Significant Geotechnical Conditions	Water and Gas Lines	Value Engineering
Environmental Compliance	Coordination Among Multiple Parties	Stormwater Management

VDOT, I-64 Exit 91 Interchange Improvement, Fishersville, VA (Design-Build) – $21.1M

Name of Firm: Shirley Contracting Company, LLC	**Project Role:** Project Manager
Beginning Date: January 2013	**End Date:** June 2015

Specific Responsibilities: As Project Manager, (similar to a Construction Manager role) Mr. Tibbs was responsible for the overall day-to-day project management and construction operations. He drafted and managed the Site Safety Plan, which included holding weekly project safety meetings. His responsibilities included constructability reviews during design phase, maintaining project budget utilizing HCSS HeavyJob, creating baseline Primavera P6 CPM schedule, maintaining Primavera P6 CPM schedule, subcontractor coordination for submittals/shop drawings and scheduling for construction, material acquisition and C25 submission to QA/QC, submittal register, 6-week look ahead schedules and conducting the bi-weekly progress meetings with VDOT, FHWA, QA/QC, and Shirley. Mr. Tibbs coordinated utility relocations including Dominion Virginia Power overhead, Shenandoah Valley Electric Cooperative overhead, Verizon, and Lumos Communications underground. He coordinated with the Shirley ROW team during construction while acquiring 24 parcels for road widening and utility relocations. He was responsible during construction for coordinating with the Design Engineer and VDOT with RFIs on multiple conflicts to maintain project schedule. The project included construction of four signalized intersections, road and highway construction, demolition and replacement of the existing two-lane bridge over I-64 and phased construction of a new four-lane bridge and roadway. He was responsible for coordinating with road crews, bridge crews and subcontractors on the project for highway and road widening, geotechnical, bridge substructure, MSE wall and bridge superstructure construction. The work also included widened acceleration/deceleration lanes for approaches to/from the ramps and widening I-64 shoulders.

Similar Challenges & Resolution

Heavily Traveled Highway (I-64)	Interchange Improvements	Quality Control
Safety of Traveling Public	Utility Coordination/Relocation	Overall Project Management
Traffic Management Plans	ROW Coordination	Bridge Construction

Federal Highway Administration Eastern Federal Lands Highway Division, Fort Lee A Gate Roundabout, Fort Lee, VA (Design-Build) - $2.3M

Name of Firm: Shirley Contracting Company, LLC	**Project Role:** Project Manager
Beginning Date: July 2011	**End Date:** February 2013

Specific Responsibilities: As Project Manager, (similar to a Construction Manager role) Mr. Tibbs was responsible for overall management and oversight of the 7-month, $2.3M Roundabout Project for Federal Highway Administration. The project involved realignment of the highly traveled Jefferson Park Road, Allin Road, Bull Hill Road and Adams Avenue which connects the I-295 corridor to Route 460 and Interstate 95. During the Right-of-Way phase Mr. Tibbs coordinated with VDOT Right-of-Way Richmond District to close on the private parcels impacted by the project before the construction schedule was impacted. Mr. Tibbs coordinated daily with the owner, subcontractors, field crews and the QA/QC team to plan the work and schedule inspections; prepared and updated the Project CPM Schedule, 3-week look-ahead schedules, and daily work schedules; managed the budget; prepared the monthly requisition; and handled all subcontractor/supplier scoping and purchasing. Mr. Tibbs managed all aspects of the project for the owner including Shop drawings and Submittals; Environmental Inspections and Coordination; and Site Safety Plans and Implementation. The project was completed on-time and under budget while maintaining high quality and a stellar safety record.

Similar Challenges & Resolution

Overall Project Management	Intersections	Roadway Widening
Utility Relocations	Phased Construction	ROW Coordination

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

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

Mr. Tibbs is currently assigned to the VDOT Route 5 Bridge Replacement project but is not onsite full time. He is also assigned to Dominion VA Power, Chesterfield Project, of which closeout will be complete in December 2016. Mr. Tibbs will be 100% available for this project.

ATTACHMENT 3.4.1

Work History Forms

WAGMAN | JMT
A DESIGN-BUILD TEAM

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: **Intercounty Connector, Contract A (DB) SINGLE CONTRACT*** Location: **Montgomery County, MD**	Name: **Parsons-Jacobs A Joint Venture Schnabel was the Geotechnical Engineer**	Name of Client/ Owner: **Maryland State Highway Administration** Phone: **410-838-7788** Project Manager: **Melinda Peters* (currently RK&K's Senior Director)** Phone: **410-728-2900** Email: **mpeters@rkk.com** ***Formerly MD SHA Administrator**	**08/2010**	**12/2010 (Actual) (due to change orders and Owner-granted time extensions)**	**$464,000**	**$464,000 (Final) (Due to Owner-directed changes in scope)**	**Wagman was a 22% equity partner in the Intercounty Constructors Joint Venture entity that was contractually responsible for the delivery of this $464,000 Design Build Project. Proposed Lead Contractor Wagman's Fee was $102,107.**

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

SCOPE/PROJECT DESCRIPTION. Contract A of the Intercounty Connector (ICC) was a large Design-Build project in Montgomery County, Maryland. ($464M Design-Build best value). Wagman was an equity member of a fully integrated construction joint venture, so we were joint and severable with each partner and financially responsible for the project. The project was 8.5 miles long with 18 structures; 350,000 sf of noise walls; utility relocations; ROW acquisition; environmental permitting and monitoring; drainage; over three million cubic yards of excavation; and construction of four interchanges. On the western end of the project, work consisted of widening and reconstructing 1.5 miles of existing I-370. I-370 was widened to the median to create an additional lane and eight existing structures were widened to the median. After the bridges were widened, Wagman placed a latex concrete overlay. Wagman performed this work, since we are the largest latex modified concrete supplier in the Mid-Atlantic region. The interface of I-370 and the new ICC required us to widen to the median and to the outside and reconstruct four additional structures to accommodate new ramps for the new interchange. Additional SWM had to be added along the existing Interstate such as bio-swales and underground SWM basins. Major traffic control and traffic switches were required on the western end to minimize impacts to the traveling public. The project included extensive ITS and signalization within the project limits and beyond the project limits to inform the motorists and maintain traffic flow. Many innovative ideas were utilized to reduce cost and minimize impacts to the environment, such as open-bottom culverts, underground stormwater management structures to reduce thermal impact to adjacent streams, redesign of the interchange with existing I-370 and the MAR access road to eliminate structures and reduce the quantity of retaining walls. The MAR access road innovation required frank discussions with the Owner concerning risk allocation/sharing and cost savings to the Owner. Additional ROW was required and collaboration between the Owner and Wagman allowed the ROW to be acquired with the project schedule allowing a substantial cost savings to the owner. As a Joint Venture Partner, Wagman was responsible for the design and construction of the entire project. We utilized the ATC Process to redesign a three level interchange into a two level trumpet interchange reducing bid cost, but also reducing long-term maintenance costs for the owner. A Complete Traffic Management Plan was developed for the project that included all phases of construction and project completion. Context Sensitive Design was incorporated to ensure compliance with the aesthetic requirements and the project's commitment check list. The project utilized three dimensional modeling to assist with survey and earth moving operations. We adjusted the vertical and horizontal alignment to eliminate excess excavated material. Wagman's internal geotechnical engineers and our geotechnical engineer Schnabel Engineering, worked closely together to design foundations and address unsuitable soils on the project. Coordinating with Schnabel, Wagman replaced substandard soils with existing soils within the project and disposed of unsuitable soil within the project limits, eliminating costly soil disposal and the environmental impacts associated with the disposal. Major utilities were relocated to accommodate the highway design and construction. ICC, Contract A and B were completely independent projects and contracts.

RELEVANT AND VERIFIABLE EVIDENCE OF GOOD PERFORMANCE. This project won the following awards:

2012 National Design-Build Award – Design-Build Institute of America (DBIA)
2012 Exemplary Ecosystem Initiatives Award – Federal Highway Administration (FHWA)
2012 America's Transportation Awards Top 10 Finalist – American Association of State Highway Transportation Officials (ASSHTO)
2012 Globe Award for Environmental Excellence – American Transportation Builders Association (ARTBA)
2011 Northeast's Region Best Overall Transportation Project – Engineering News Record (ENR)
2011 President's Award for Highways – American Association of State Highway and Transportation Officials (AASHTO)
2010 Intercounty Safety Award – Economy Forms Corporation (EFCO)

SIMILARITIES AS I-64 WIDENING EXIT 200 TO 205

Design-Build	Complicated Transportation Management
Widening of Existing I-370 to median	Major Existing Utility Relocation
Widening of Existing Structures	Abundance of Noise Walls
Precise Survey	Environmental Compliance
Phased Structural Construction	Public Outreach
	Quality Control
	ROW Acquisition
	Geotechnical Mitigation

SIMILAR RISKS AS I-64 WIDENING EXIT 200 TO 205

Risk 1 – Timely Environmental Permit: Employed environmental team that reviewed designs prior to submission and monitored construction operations. Employed a certified environmental reviewer to ensure packages were in compliance before submittal to governing agency. Conducted field surveys to verify potential impacts and revise design to minimize impacts and assist with permit approval. Completed noise study; then constructed noisewalls.
Risk 2 – Unsuitable Soils: Completed over 1,000 geotechnical borings. Designed drainage blanket at Route 97 Interchange due to wet soil conditions. Completed existing paving and geotechnical study of I-370 for widening and upgrading existing highway.
Risk 3 – Re-use Existing Drainage: On I-370, existing drainage was analyzed, re-used and supplemented for SWM and additional flow due to increased impervious areas. New drainage was connected to existing drainage systems along the corridor; in particular along existing cross roads and interchanges.

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: **Intercounty Connector, Contract B (DB) SINGLE CONTRACT*** Location: **Montgomery & Prince George's Counties, MD**	Name: **Parsons Transportation Group** **Additional Designer: Coordinated with JMT on adjacent DB Project. Schnabel Engineering was the geotechnical engineer**	Name of Client/ Owner: **Maryland State Highway Administration** Phone: **410-838-7788** Project Manager: **Melinda Peters* (currently RK&K's Senior Director)** Phone: **410-728-2900** Email: **mpeters@rkk.com** ***Formerly MD SHA Administrator**	**11/2011**	**11/2011 (Actual)**	**$545,092**	**$578,000 (Final)**	**Wagman was a 20% equity partner in the Intercounty Constructors Joint Venture entity that was contractually responsible for the delivery of this $578,000 Design Build Project. Proposed Lead Contractor Wagman's Fee was $115,600.**

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

SCOPE/PROJECT DESCRIPTION. ICC, Contract B was a $578M highway Design-Build, best value project extending from MD 97 to MD 29. Wagman was an equity member of a fully integrated construction joint venture, so we were joint and severable with each partner and financially responsible for the project. Contract B involved 7.5 miles of new controlled access, six-lane, tolled roadway with two interchanges; MD 650 New Hampshire Avenue and MD 182 Layhill Road. Existing cross roads were widened to upgrade the roads for the increased traffic volume. The work included 2.5 million yards of excavation, drainage, temporary detours for cross roads, utility relocations, 13 bridges, 300,000 SF of noisewalls and retaining walls. New stormwater management structures were created and Wagman reconstructed several existing stormwater management (SWM) facilities to handle the new stormwater run-off and updated regulations. Extensive SWM facilities such as bio-swales, basins and underground stormwater basins were included. The project included ITS to inform the public and open road tolling to collect tolls that included hardwired and cellular connections. The ITS and ETC system had to be integrated with the existing system maintained by the State. Quality control was the responsibility of the Design-Builder and Wagman managed the program. The ICC project was an extremely environmentally and community sensitive project and extensive measures were planned by the Design-Build team to minimize the environmental impact of this project. Contact B was the second of five contracts planned to create the $1.5 billion 18.8-mile Intercounty Connector that will ultimately connect the I-270 corridor in Montgomery County to the I-95/US1 corridor in Prince George's County, MD. Schnabel Engineering designed roadway, paving and structure foundations. Wagman utilized many Alternate Technical Concepts (ATC) and other innovations to reduce cost, improve schedule or improve environmental performance. For one ATC, we worked closely with Schnabel engineering to construct caissons in lieu of spread footings to minimize permanent impacts to wetlands and flood plains. Other ATCs were underground stormwater management facilities to minimize the thermal impact to fresh water streams after a rain event and adjustment of vertical alignment to reduce excavation and waste. Wagman's internal geotechnical engineers and our geotechnical engineer Schnabel Engineering, worked closely together to design foundations and address unsuitable soils on the project. Alternate pier locations were developed to minimize impacts with wetlands, streams and underground utilities. Our survey team utilized three dimensional modeling to increase production of the bulk excavating. Working with the model and adjusting vertical and horizontal alignment, Wagman reduced excavation elements, eliminated excess material to be hauled off site and reduced height of noisewalls; thus reducing cost. Existing side roads and new interchanges were constructed, widening the existing road and upgrading shoulders. ICC, Contract A and B were completely independent projects and contracts.

RELEVANT AND VERIFIABLE EVIDENCE OF GOOD PERFORMANCE. This project won the following awards:

2013 Award of Excellence, Partnering Silver Award – Maryland Quality Initiative (MDQI)
2012 National Design-Build Award – Design-Build Institute of America (DBIA)
2012 Exemplary Ecosystem Initiatives Award - Federal Highway Administration (FHWA)
2012 Best Transportation Project – Mid Atlantic – Engineering News Record (ENR)
2012 America's Transportation Award Top 10 Finalist – American Assoc. of State Highway Transp. Officials (AASHTO)
2012 Alliance Award - Northern Virginia Transportation Alliance (NVTA)
2012 Globe Award for Environmental Excellence – American Road & Transportation Builders Assoc. (ARTBA)

SIMILARITIES AS I-64 WIDENING EXIT 200 TO 205

Design-Build	Major Existing Utilities
Precise Survey	Abundance of Noise Walls
Phased Structural Construction	Environmental Compliance
Geotechnical Mitigation	Public Outreach
Complicated Transportation Management	Quality Control
	Unsuitable Soils
	Bio-swales
	Assistance with ROW Acquisition

SIMILAR RISKS AS I-64 WIDENING EXIT 200 TO 205

Risk 1 – Timely Environmental Permit: Employed independent environmental reviewer to ensure compliance of design with environmental permits and commitments. Constructability reviews were conducted to reduce field changes to permitted plans. Conducted field surveys to verify potential impacts and revise design to minimize impacts to things such as wetlands and "Champion Trees." Worked through permit modification process to allow construction of large beam erection. Noise study and construction of noisewalls.

Risk 2 – Unsuitable Soils: Adjusted alignment & elevation to mitigate unsuitable soils. Backhauled to dispose of unsuitable soil and utilize suitable soils. Subsurface investigation to avoid and protect existing oil filled high voltage line.

Risk 3 – Re-use Existing Drainage: New drainage was connected to existing drainage at all cross roads and major interchanges. Existing drainage was analyzed for potential increases.

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: **I-95/I-495/I-295 Interchange, Inner Loop Local & Inner Loop Express (DB) SINGLE CONTRACT*** Location: **Prince George's County, MD**	Name: **Johnson, Mirmiran & Thompson, Inc. (JMT)/Whitman Requardt & Associates, LLP (WRA) A Joint Venture**	Name of Client/ Owner: **Maryland State Highway Administration (MD SHA)** Phone: **410-357-1000** Project Manager: **Shirlene Cleveland, PE, DBIA* (currently RK&K's Director of Third Party Coordination/Deputy Director of Engineering)** Phone: **443-829-1929** Email: **scleveland@rkk.com** ***Formerly MD SHA Administration Project Director WWMB**	**05/2009**	**11/2009 (Actual) (due to change orders and Owner-granted time extensions)**	**$93,187**	**$105,839 (Final) (Due to Owner-directed changes in scope)**	**$105,839 General Contractor Entire Contract**

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

SCOPE/PROJECT DESCRIPTION. As part of the overall Woodrow Wilson Bridge Contract, this contract included the reconstruction of two miles of mainline I-95/I-495. Improvements to seven ramps on the I-95/I-495/I-295 Interchange; 360,000 SY stone base; 165,000 TN Asphalt; 310,000 CY roadway excavation; 10,300 LF storm drainage; 35,000 SF noise barrier; and 81,500 LF steel pile were driven. Six retaining walls consisting of 16,000 SF of MSE walls; 19,000 SF CIP walls; and a 37,000 SF contractor-designed top down soldier pile and lagging wall with a CIP concrete face. This retaining wall was a design-build element that Wagman designed and coordinated with the Owner and Schnabel to obtain approval of the design and construction methods. Major bridge structures: one bridge was 1,160 LF curved steel that crossed I-95/I-495 and included a post-tensioned pier cap to accommodate a lengthy span; the second bridge was a I-95/I-495 mainline structure that required three phases of construction to widen the new structure and roadway while maintaining traffic on the Washington Beltway (Inner and Outer Loop). The project included extensive traffic control needed to widen and reconstruct mainline I-95/I-495. The existing Interstate was widened to the median and to the outside to accommodate express and local traffic. We added additional lanes and shoulders for heavy traffic volumes. We employed a full time construction traffic manager to address MOT issues as Wagman and JMT redesigned the approaches to Bridge 29 allowing alternate foundation solutions in a volatile unsuitable soil area along the Potomac River. The redesign allowed the owner to save $2M. The project included landscaping, context sensitive designs, signing, utility relocation coordination, lighting and ITS work. Wagman utilized three dimensional modeling to utilize equipment controlled by GPS. Our full-time survey crew tied into existing facilities and coordinated with other contractors. Our Project fell within the larger Woodrow Wilson Bridge Project that required a massive coordination effort between adjacent contracts and the local stakeholders. We supported MD SHA in the public outreach effort and participated in a project wide partnering process. The project was located in the environmentally sensitive Potomac River Basin, the project required compliance with environmental agency permits and general environmental regulations. Wagman exceeded all required DBE subcontracting goals and maintained the highest Erosion and Sedimentation rating possible. Wagman worked with JMT and Schnabel during construction to resolve design and construction issues and to provide a quality project to the owner; on time and under budget.

RELEVANT AND VERIFIABLE EVIDENCE OF GOOD PERFORMANCE. This project won the following awards:

2012 Alliance Award – Northern Virginia Transportation Alliance (NVTA)
2011 Award of Excellence, Partnering Bronze Award - Maryland Quality Initiative (MDQI)
2010 Award of Excellence, Major Roadway Over $10 Million - Maryland Quality Initiative (MDQI)

- Wagman created and maintained the P6 schedule and *earned all available milestones* and completed the project on time, safely and within budget.
- Wagman *maintained the highest E&S rating (4.0) available for MSHA Projects*

SIMILARITIES AS I-64 WIDENING EXIT 200 TO 205

Widening of Existing I-99/I-495 to median	Major Existing Utility Relocation
Precise Survey	Abundance of Noise Walls
Phased Structural Construction	Environmental Compliance
Addition of Lanes & Shoulders	Public Outreach
	Complicated Transportation Management
	Geotechnical Mitigation

SIMILAR RISKS AS I-64 WIDENING EXIT 200 TO 205

Risk 1 – Timely Environmental Permit: Worked closely with the Owner and agencies to allow permit modifications without impacting the project schedule. Dedicated E&S crew kept project in compliance

Risk 2 – Unsuitable Soils: This project was the approach to the main span of the Woodrow Wilson Bridge and unsuitable soils were encountered along the Potomac. We redesigned a bridge foundation to save the Owner $2M. Innovative piling design, Lightweight aggregate and foam concrete were utilized to reduce the load on existing substandard soils.

Risk 3 – Re-use Existing Drainage: Much of the drainage was reconstructed, but existing drainage was tied into and utilized along the corridor.

ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: **Odd Fellows Road Interchange at U.S. Route 29/460 and Roadway Improvements (DB) SINGLE CONTRACT*** Location: **Lynchburg, VA**	Name: **Wagman Heavy Civil, Inc.**	Name of Client/ Owner: **Virginia Department of Transportation Lynchburg District** Phone: **434.856.8318** Project Manager: **Mrs. Raina Rosado, PE** Phone: **434.856.8318** Email: **raina.rosado@vdot.virginia.gov**	**01/2016**	**08/2018 (estimated)**	**$29,846 (Original)**	**$29,846 (Estimated)**	**$2,200 JMT Design Fee**

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

(LEAD/PRIME DESIGNER – JMT / OFFICE LOCATIONS INVOLVED IN DESIGN: RICHMOND, VA; HERNDON, VA; VIRGINIA BEACH, VA; AND SPARKS, MD)

SCOPE/PROJECT DESCRIPTION. JMT provided professional engineering services to upgrade and extend Odd Fellows Road to US 460/29 in Lynchburg, VA. The project is being implemented as a Design-Build Project. JMT is teamed with Wagman Heavy Civil, Inc. construction firm and serving as the prime design firm on the project. The project includes the design and construction of a new tight diamond interchange between Odd Fellows Road and US 460/29; widening and reconstruction of 1.3 miles of Odd Fellows Road to a three-lane typical section with a two-way left turn lane, curb and gutter, sidewalk and a 10-foot shared use path; reconstruction and widening of a bridge over the Norfolk Southern Railroad; and construction of three roundabouts along Odd Fellows Road. The project is being designed and constructed under a very aggressive design-build schedule, which requires the close weekly coordination between VDOT, the City of Lynchburg, Wagman Heavy Civil, Inc., and FHWA.

Odd Fellows Road is maintained by the City of Lynchburg and is classified as an Urban Minor Arterial Roadway (GS-6), with rolling terrain and a minimum 35 mph design speed and will be posted at 25 mph. Route 460/29 is classified as an Urban Principal Arterial Roadway (GS-5) divided limited access highway with rolling terrain and a 70 mph minimum design speed and is posted at 65 mph. Odd Fellows Road currently carries between 1,300 and 8,700 vehicles per day and Route 460/29 carries approximately 35,600 vehicles per day. The projected volumes for 2035 are 8,125 to 12,700 vehicles per day for Odd Fellows Road and 56,450 vehicles per day on Routes 460/29.

JMT is responsible for all engineering and support services associated with the design of the project. Our survey teams updated the project's base survey and designated underground utilities. Our design engineers are designing the project to the appropriate VDOT, AASHTO, or City of Lynchburg standards. A complex and thorough maintenance of traffic plan was developed to accommodate the high volume of large trucks along the industrial corridor to ensure constructability and safety was achieved. A combination of temporary lane shifts, lane closures and detours was utilized to expedite construction and enhance safety and minimize disruption to the public.

JMT is using extended and enhanced stormwater management basins to meet VDOT's stormwater management requirements for storm water quantity and quality. Two-phase erosion and sediment control plans are being prepared for the project. The project impacts streams and wetlands. JMT worked closely with the environmental agencies to mitigate and minimize these impacts, and for obtaining the required permits for the project.

Utility coordination is required with Columbia Gas, Verizon, Appalachian Power, the City of Lynchburg and numerous other telecommunication companies. JMT conducted utility field inspections with all utility companies; determined prior rights; and reviewed plan, specifications, and estimate and worked closely with the utility companies to gain concurrence on their relocation plans to ensure that utility companies impacts were accounted for in all phases of construction. JMT developed the relocation plans (alignment for relocation) for the private utility companies to ensure that the proposed utility relocations would not conflict with the existing utilities and or proposed construction activities. JMT is designing waterline and sanitary sewer betterments and relocations for the City of Lynchburg which include jack and boring to extend utilities across US 460/29.

The project has involved interactive stakeholder involvement. JMT contacted over 50 businesses along the Odd Fellows Road Industrial Corridor to determine, what type of vehicles were accessing each parcel, their frequency and how circulation was occurring. JMT with Wagman held a public hearing on the project and was responsible for meeting preparation, meeting materials, and presentation boards. JMT also acquired the right-of-way and easements for the project which included preparation of right-of-way plans, title and deed research, appraisals, negotiations, and filing certificates. JMT was instrumental in ensuring construction activities could continue along the corridor with securing right of entry from landowners upon contact of negotiations. The right of way acquisition included 3 government parcels including the DMV, US Post Office, and Virginia Employment Commission.

RELEVANT AND VERIFIABLE EVIDENCE OF GOOD PERFORMANCE. This project has relevance to the I-64 Widening project because of the design-build method of innovative project delivery, working within limited access right-of-way, constructing interchange ramps, access to the project site from a high speed facility, working with the DMV and obtaining environmental permits. Additional similarities in scope of service required are shown in the box to the right. To advance the project, the Design-Build Team broke the construction plans into two submittals. This allowed the interchange construction to begin while the Odd Fellows Road improvements went to a public hearing. The Design-Build Team has consistently received accolades for quality work and a clean work site.

SIMILARITIES AS I-64 WIDENING EXIT 200 TO 205

- Design-Build
- Roadway
- Survey
- Right-of-Way
- Geotechnical
- Hydraulics
- TCD/TMP
- Permitting/Environmental
- Utility Coordination/Relocation
- Public Involvement/Comm.
- Context Sensitive Solutions
- Third-Party Coordination
- QA/QC and CEI
- Overall Project Mgmt.

SIMILAR RISKS AS I-64 WIDENING EXIT 200 TO 205

Risk 1: Environmental Permitting: Project involved minimizing impacts to wetlands and streams, purchasing mitigation credits, and continual coordination with DEQ and USACE to obtain the Section 401 Water Quality Certificate/Virginia Water Protection Permit and Section 404 of the Clean Water Act Permit.

Risk 2: Geotechnical: Project involved mitigating the risk associated with unsuitable materials, structure foundations, and borrow material.

Risk 3: Ability to Reuse Existing Storm Water Sewer Pipes: Project involved reusing existing pipes/culverts under Route 460. These structures were reviewed hydraulically and structurally for adequacy.

ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. 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: **Fairfax County Parkway (FCP – Route 286) Ext. (DB) SINGLE CONTRACT*** Location: **Springfield, VA**	Name: **Cherry Hill Construction, Inc.**	Name of Client/ Owner: **Eastern Federal Land Highways Division** Phone:703-440-9086 Project Manager: **Mr. Timothy Brown** Phone: **703-440-9086** Email: **timothy.brown@dot.gov**	4/2008	07/2011 (Actual)	$73,756	$112,416 (Actual) *(Received a significant contract modification adding the DB Segment IV, which increased the scope by 25%)*	$11,538 JMT Design Fee

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

(LEAD/PRIME DESIGNER – JMT / OFFICE LOCATIONS INVOLVED IN DESIGN: RICHMOND, VA; HERNDON, VA; VIRGINIA BEACH, VA; AND SPARKS, MD)

FCP (Route 286)/DAR Interchange

Scope/Project Description - The U.S. Army was relocating 8,500 jobs to the National Geospatial-Intelligence Agency (NGA) Campus East at Fort Belvoir North Area in VA as part of the BRAC in 2011. In preparation for this event, highway improvements were needed to address the traffic impacts. The extension of Fairfax County Parkway (FCP) would complete a vital link to I-95 near Fort Belvoir. To meet the requirements of BRAC, the FCP project had an extremely aggressive schedule of 750 calendar days to design, permit, relocate utilities, and construct the parkway. The design team initiated design upon notice of award, 10/2008 and delivered approval for construction plans that allowed construction of the western end (west of Accotink Creek) of the Project to commence 04/2009. Segment IV of the project was initially delayed due to funding constraints. With the ARRA funding bill passage, Segment IV was added to the DB team's contract and included completion of two additional bridges and the Boudinot Dr. Interchange. The addition of the Boudinot Interchange to the contract resulted in the need to deliver two design projects on accelerated schedules concurrently. Through aggressive management practices, the projects original schedule for Segments I and II was maintained, while Segment IV (25% increase in scope) within the time frame required to receive ARRA stimulus funding. The team met all schedule milestones and exceeded many of them. The critical portion, Segments I & II of the mainline FCP, was opened to traffic on 9/2010, two months ahead of schedule. Segment IV was opened to traffic one month ahead of schedule.

The design included new interchanges at FCP and Barta Road for access to the West North Loop Road of the NGA facility interior roadway network. Extensive design collaboration/ coordination with the U.S. Army for this access point was required and included coordination for security lighting, overheight vehicle detection, geometry and utility connections. The FCP work included: surveys, SUE, grading, drainage, SWM, pavement design, shared use paths, seven new bridges including a bridge widening of a severely skewed bridge on I-95 off Ramp H over Backlick Road. upstream/downstream extensions of an 8'x 8' reinforced concrete box culvert, multiple sound walls, cast in place and MSE retaining walls, lighting, traffic signals, landscaping, signing/striping, geotechnical engineering / exploration/ stability analyses, utility relocations/coordination, ROW plans/plats and extensive environmental services, including permitting and compliance monitoring. FCP project also included widening of I-95 (AADT> 100,000) to accommodate a new exit lane and ramp designed as a certified Defense Access Road to provide direct access to the NGA. Team also completed and gained VDOT acceptance of as-built plans documenting the built project.

The Team addressed potential traffic safety concerns in and around long-term work zone closures and temporary lane closures through the development of an extensive TMP. MOT plans were in accordance with MUTCD and VDOT WAPM. Modeling of MOT phasing impacts using Synchro and SimTraffic were used to predict LOS. Retimed signals using Synchro for corridor signal timing and a public outreach program. The DBT recognized that it would benefit the public and minimize congestion during construction if a detour was provided to allow construction of the grade separation for Fullerton Road. Meetings were held to discuss the detour with nearby property/business owners and the school bus facility and acceptance was gained. The Fullerton Rd pavement reconstruction and new median was required to be built on a portion of road that remained in use during the detour. The DBT hosted numerous public outreach events ("Citizen Information" and "Pardon-Our-Dust" meetings) and accommodated public involvement during the course of the project. We developed and implemented a web site that provided weekly update notifications of traffic shifts and scheduled phasing activities/shifts. Our team initiated early meetings with utility owners and provided assistance in the development of their plan/estimate submittals by providing design plans and profiles in CAD for them to design their relocations against. The team adjusted roadway to minimize relocation of 20" water line and 8" gas line along Barta Road that avoided delays to construction schedule. Completed relocations of 1,420 LF of 3rd Party coordination which was required and included VDOT, Ft. Belvoir Public Works, Ft. Belvoir Integration Office, and Fairfax, and the successful coordination with other contracts along I-95 and at NGA for MOT and design ties for horizontal and vertical alignments, lighting and the NGA secured gate facility.

The environmental challenges were complicated by the fast-track schedule, involvement of multiple stakeholders, and complex environmental and regulatory issues. The alignment traversed through the Fort Belvoir and crossed five former firing ranges and testing sites including three RCRA sites that had significant groundwater/soil contamination, and stringent Land Use Controls required by an EPA Consent Order to protect human health and the environment. Design services included a comprehensive in-situ waste characterization study to determine the nature and extent of the contamination on several areas and groundwater modeling to evaluate the impact of construction on the fate and transport of multiple contaminated groundwater plumes. The models successfully demonstrated to the U.S. EPA and the VA DEQ that the migration of the contaminant plumes would not be exacerbated by construction of the project. The team's comprehensive Hazardous Materials Management Plan was approved by the DEQ and EPA. The project maintained full compliance with environmental permits and constraints which included roadway realignment to avoid a Small Whorled Pogonia protected area and buffer. JMT also developed a landscape plan that provided a vegetative buffer to nearby residences from the roadway.

Relevant and Verifiable Evidence of Good Performance - This project has relevance to the I-64 Widening project because of the DB method of innovative project deliver, involved VDOT as the project owner; involved new, widen and reconstructed/rehabilitated roadways and bridges on Interstate carrying heavy traffic. Additional similar scope of services provided are shown in the box on the right. This project was recognized with several awards: National DBIA– Merit Award; DBIA Mid-Atlantic Region – Transportation Award; VTCA – Transportation Engineering Awards for VDOT Projects Greater than $10M; ACEC/VA – Merit Award; ACEC/MW – Honor Award for Excellence; and the ACEC/MD – Honor Award

Rodney Hayzlett was one of several JMT employees who received a "Star Partner" award for their exceptional dedication, teamwork, and professionalism in support of the project's goals by the NGA and USACE.*For a project with multiple phases or multiple contracts, only one phase or one contract will be considered. If additional phases or contracts are shown under the same Work History Form, only the first phase or contract listed will be evaluated.

SIMILARITIES AS I-64 WIDENING EXIT 200 TO 205

- Design-Build
- Roadway
- Survey/SUE/Right-of-Way
- Structures and Bridges
- Environmental
- Geotechnical
- Hydraulics & SWM
- TCD/TMP
- Noise/Sound Walls
- Utility Coord./Reloc
- Landscaping
- Public Involvement/Rel.
- Context Sensitive Sols.
- QA/QC
- Third-Party Coordination
- Interstate Widening
- Overall Project Mgmt.

SIMILAR RISKS AS I-64 WIDENING EXIT 200 TO 205

Risk 1 – Environmental Permits: JMT successfully coordinated with the agencies on potential ground water contamination, and mitigated potential impacts to Small Whorled Pogonia. All permits were obtained and team met an accelerated schedule.

Risk 2 – Geotechnical: A comprehensive geotechnical investigation plan was executed which included borings on former firing ranges, RCRA sites, and steep terrain to develop geotechnical recommendations for the new roadway alignment to account for unsuitable soil conditions and other materials recommendations.

Risk 3 – Ability To Re-Use Existing Storm Water Sewer Pipes: JMT was successful in documenting existing storm drain pipes and culverts for re-use in verifying adequate outfall conditions, especially with the pipe systems connecting to existing drainage along I-95 at the ramp tie-ins.

ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: **Route 7 Corridor Improvements – Reston Avenue to Jarret Valley Drive** Location: **Fairfax County, VA**	Name: **VDOT is going to procure this as a Design Build Contract**	Name of Client/ Owner: **Virginia Department of Transportation Northern Virginia District** Phone: **800-367-7623** Project Manager: **Mr. William Dunn, PE** Phone: **703-259-3226** Email: **William.Dunn@Vdot.virginia.gov**	**Spring 2019**	**Late 2025**	**234 (Estimated)**	***NA***	**5,815,532**

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.

(LEAD/PRIME DESIGNER – JMT / OFFICE LOCATIONS INVOLVED IN DESIGN: RICHMOND, VA; HERNDON, VA; VIRGINIA BEACH, VA; AND SPARKS, MD)

SCOPE/PROJECT DESCRIPTION. JMT is providing professional engineering services to increase capacity, safety and mobility to the congested Route 7 corridor between Reston Avenue and Jarrett Valley Drive in Fairfax County; (6.9 miles). The project includes widening the roadway from a four to six lane divided facility with a 28' raised grass median on the western half and 16' raised median on the eastern half of the project, and adds 10' shared use paths on both sides of the roadway to enhance mobility for cyclists and pedestrians. Improvements to 10 signalized intersections and locations where existing full access intersections existed along this corridor that did not meet signal warrant criteria. Access management techniques were implemented to either provide a left turn in / right in / right out or simply a right in / right out access promoting Median U-Turns to improve safety at the uncontrolled access points. All intersections included improvements to auxiliary turn lanes for the added capacity for left and right turning movements. There are 3 proposed bridge structures; one for the partial interchange at Baron Cameron, and two new bridge structures at the Difficult Run crossing where the roadway alignment has been shifted to the south to allow construction of the proposed Route 7 EB bridge in the clear to allow for all 4 lanes of Route 7 to be shifted to the new structure during the maintenance of traffic. The shifted alignment accommodates a 5' raise in vertical profile to pass the design year storm to prevent routine flooding events that occur today. As a result of the alignment shift, approximately 1750 LF of Colvin Run is being relocated with natural stream channel design. Early coordination with ACOE, DEQ, and EPA was initiated to get concurrence on the proposed solution walking through the teams efforts on avoidance and minimization of the impacts. JMT is utilizing Tuflow 2D modeling for the real time conditions for these two major watersheds as they converge at Route 7.

The primary focus of the Route 7 Corridor Improvements project is to develop roadway widening improvements as well as improvements to the impacted intersections. The widening will generally be in the median; however, alternative concepts were developed to evaluate and determine the most feasible and prudent options where widening exclusively to the median will not be practical to account for the bifurcation between the EBL and WBL roadways. This is how the 28' median for the western portion and the 16' median for the eastern portion was derived. Design alternatives were simulated at major intersections to determine the most feasible and prudent options to maximize traffic flow volumes and decrease delay times along the corridor. Bicycle and pedestrian crossings were analyzed at the signalized intersections due to the multi-use trails paralleling Route 7 through the corridor.

Traffic volumes along the corridor are relatively high (54,000 ADT in 2011) and are expected to generate considerable delays at conventional intersections with the projected traffic levels (86,000 ADT in 2040). JMT took an innovative look at the intersections by exploring alternative intersection configuration options. In most cases, the implementation of alternative intersections will allow VDOT to maximize the investment in the infrastructure by providing acceptable levels of service with moderate investment as compared to interchange options. The alternative intersection evaluation included Displaced Left/Continuous Flow, Green-T, Restricted Crossing Median U-Turn, Median U-turn and roundabout intersections. The result ended up with a partial interchange at the Baron Cameron intersection with Route 7 as depicted on the picture to the left where the Route 7 EBL are depressed through the intersection. This solution removed the heavy turning movements from Baron Cameron NB onto Route 7 EB in the am and from WB Route 7 to SB Baron Cameron in the pm. Removing these high volume turning movements from the signalized intersection vastly improved the overall LOS for the intersection and is in conformance with the Fairfax County Comprehensive Plan. Another alternative intersection utilized on the Route 7 Corridor Improvements project is a Displaced Left/Continuous Flow intersection with the Route 7 / Lewinsville Road intersection. Similarly to the Baron Cameron intersection, the Lewinsville Road has a heavy turning volume that is directional in the am and pm operations.

JMT is assisting VDOT in an aggressive and robust public outreach program with the local civic associations, elected officials, and impacted landowners. JMT has partnered with VDOT in conducting Working Group workshops with the local stakeholders along the corridor to mitigate their concerns and to work through any issues in the design concept prior to proceeding to final design. To date, JMT has attended 5 Public Information Meetings, 1 Public Hearing, and approximately 60 individual group meetings with citizen groups, politicians, and concerned individuals.

RELEVANT AND VERIFIABLE EVIDENCE OF GOOD PERFORMANCE. This project has relevance because VDOT is now going to move forward with this project utilizing the DB method of innovative project delivery, JMT will be assisting VDOT in preparation of the DB documents. The project involves widened, reconstructed and rehabilitated roadways and new bridges with public outreach effort to educate and inform the surrounding communities and landowners, traffic engineering analysis and modeling using the latest modeling software and tools, stormwater management, utility coordination, and a thorough understanding of the corridor operations.

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

SIMILARITIES AS I-64 WIDENING EXIT 200 TO 205

- Roadway
- Utility Coordination/ Relocation
- Survey/ROW
- TCD/TMP
- Public Involvement
- Structures/Bridge
- Drainage Design
- QA/QC
- Traffic Engineering and Analysis
- Sound Walls

SIMILAR RISKS AS I-64 WIDENING EXIT 200 TO 205

Risk 1 – Environmental Permits: JMT assisted VDOT with the avoidance and minimization efforts to help introduce the project to ACOE, DEQ, and EPA to get concurrence on the proposed project's impacts prior to submitting the Environmental Assessment for review and approval. This proactive approach decreased the review and approval times by the agencies.

Risk 2 – Geotechnical: With the relocation of Colvin Run stream and the shift of the roadway alignment to the south into the floodplain, we have worked with VDOT Materials section to prepare details to account for the unsuitable soil conditions and methods of mitigating the impact to construction cost to the project.

Risk 3 – Ability To Re-Use Existing Storm Water Sewer Pipes: There are numerous existing pipes throughout the Route 7 corridor that are planned to be utilized for the proposed condition as part of the outfall for drainage systems. These pipes have been verified for capacity and are planned to be video inspected for condition.

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