Response to Request for Qualifications

I-81 WIDENING MM 221 to MM 225 Augusta County, Virginia

State Project No.: 0081-007-013, B638, B639, B640, B641, B642, C501, D602 D603, P101, R201 Federal Project No.: NHPP-081-2(329) Contract ID Number: C00116269DB116

AUGUST 17, 2022







3.2: Letter of Submittal



August 17, 2022

Commonwealth of Virginia Department of Transportation (VDOT) 1401 E. Broad Street Richmond, VA 23219 Attn: Joseph A. Clarke, PE, DBIA (APD Division) **RE: I-81 MM 221 to 225** Augusta County, Virginia State Project No.: 0081-007-013, B638, B639, B640, B641, B642, C501, D602, D603, P101, R201 Federal Project No.: NHPP-081-2(329) Contract ID No.: C00116269DB116

Dear Mr. Clarke:

Archer Western Construction, LLC (AWC) is pleased to share our credentials, experience, and ideas working collaboratively with VDOT and the community for a successful I-81 MM 221 to 225 project (the Project). Our Team was assembled based upon each firm's core strengths and current experience and expertise in delivering the I-81 Widening MM 136.6-141.8 DB project. With **Dewberry Engineers Inc.** (Dewberry) as our Lead Designer, AWC offers VDOT a veteran Team with a successful track record of delivering Design-Build (DB) interstate highway projects on-time and on budget.

3.2.1	OFFEROR: Archer Western Construction, LLC, 13454 Sunrise Valley Dr, Suite 440, Herndon,
	VA 20171, Phone: 301-347-4680 Fax: 301-347-4681, is the legal entity who will execute the
	contract with VDOT.
3.2.2	OFFEROR'S PRIMARY CONTACT: Jeffrey Mays, Program Manager
	13454 Sunrise Valley Dr, Suite 440 Herndon, VA 20171
	Phone: 301-347-4680 Fax: 301-347-4681 jmays@walshgroup.com
3.2.3	PRINCIPAL OFFICER OF THE OFFEROR: EJ O'Neill, Vice President
	13454 Sunrise Valley Dr, Suite 440, Herndon, VA 20171
	Phone: 301-347-4680 Fax: 301-347-4681 ejoneill@walshgroup.com
3.2.4	Archer Western Construction, LLC, a limited liability company operating under federal tax ID
	number 27-0887868, will be financially responsible for the referenced project and does not have
	any liability limitations. Dewberry, serving as the Lead Designer, will be a subcontractor to AWC.
3.2.5	The Lead Contractor is Archer Western Construction, LLC and the Lead Designer is Dewberry
	Engineers Inc.
3.2.6	A complete list of affiliates and subsidiary companies may be found in Attachment 3.2.6.
3.2.7	Signed Certification Regarding Debarment Forms for both Primary and Lower Tier Covered
	Transactions are included as Attachments 3.2.7(a) and 3.2.7(b).
3.2.8	AWC's prequalification ID is A210 and the firm's status is active. Please refer to the Appendix for
	supporting documentation
3.2.9	AWC's surety letter is located in the Appendix.
3.2.10	Virginia State Corporation Commission (SCC) and Virginia Department of Professional and
	Occupational Regulations (DPOR) registration information for our team members are included in
	Attachment 3.2.10 with evidence of the registrations and licenses provided in the Appendix.
3 2 1 1	

The Archer Western Team looks forward to working with VDOT and is fully qualified and committed to the successful delivery of this critical Project!

Sincerely,

EJ O'Neill

Vice President

3.3: Offeror's Team Structure



3.3 OFFEROR'S TEAM STRUCTURE

Introduction

The Archer Western Construction Team is comprised of industry leading design and construction firms in Virginia and the Southeastern United States with the resources, experience, and capabilities to successfully manage the Project specific risks and construct this high-profile transportation Project in Augusta County, Virginia. This team, with current I-81 corridor experience (MM136.6-141.8 widening), has a proven track record based on previous working relationships and capabilities in providing complementary services and resources in design, construction, quality, utility coordination, and right-of-way acquisitions services. Structured as an integrated organization, our team supports effective communication with established internal and external relationships serving as the foundation for our partnership with VDOT. This approach will help us manage the widely varied design and construction requirements necessary to provide VDOT with a Project that meets the goals of providing additional capacity, reducing congestion, improving accessibility and mobility, and improving safety.

Archer/Dewberry Team Members

	Archer Western Construction, LLC (AWC) is a general contracting, construction management, and DB firm, who is a member of the Walsh Construction Group, a fourth generation, family-owned business dating back 124 years. This \$5 billion per year construction company is ranked as the Largest Southeast Transportation and DB Contractor, 2nd Largest Bridge Builder, and 2nd Largest Highway Contractor in the U.S. according to 2022 Engineering News Record. AWC has delivered over \$6.5 billion in DB transportation projects in the southeast over the last five years. We have maintained our presence in Virginia since the 1980s, completing DB projects along the I-95 corridor, I-395 in Arlington, and on I-495 in Tysons. Currently, AWC is delivering the \$179M I-81 MM136.6 - 141.8 DB Widening in Roanoke County and Salem VA. This corridor experience provides VDOT with a design-builder who understands the challenges and will effectively mitigate the risks associated with an interstate widening. Our success on DB projects is due in large part to the selection of personnel and team members, each with strengths to address critical project risks. Further, we bring additional DB strength to the Project through our partners and specialty firms as shown herein and our Organizational Chart.
🏶 Dewberry	Dewberry Engineers Inc. (Dewberry) will be the Lead Designer, responsible for all engineering design services, environmental permitting, and permit monitoring during construction. Dewberry will oversee all design subconsultants, ensuring all deliverables have completed the QA/QC processes required by the DB contract. Dewberry has extensive DB experience serving as the Lead Designer on over 25 VDOT DB projects, including the ongoing I-81 Widening MM 136.6 to 141.8. Key personnel and lead discipline staff from Dewberry have been selected based on their extensive design-build experience, relationships with AWC and our design subconsultants, and experience in interstate and freeway widening improvements. Dewberry is a nationally recognized engineering company headquartered in Fairfax, Virginia and is ranked among Engineering News Record's Top 25 highway design firms.
	McCormick Taylor, as a subconsultant to Dewberry, will provide all noise modeling and analysis services and will also be responsible for coordinating with all utility companies and managing utility designs and relocations. They have extensive experience providing these services throughout the Commonwealth on VDOT projects, including providing these same services on our I-81 Widening MM 136.6 to 141.8 project.



MBP	McDonough Bolyard Peck, Inc. (MBP) will be responsible for providing QA services on the project. MBP specializes in construction management and quality assurance and is one of the largest providers of these services to VDOT. They have over 40 local inspectors that are fully VDOT and DEQ certified, many of which have experience on DB projects in either QA, QC, or IA roles. All of MBP's staff proposed for this contract have VDOT DB experience and are ideally suited to implement the project specific QA/QC Plan which will be developed for this Project in accordance with VDOT's <i>Minimum Requirements</i> <i>for Quality Assurance and Quality Control on Design Build and P3 Projects</i> . MBP has recent relevant experience providing quality assurance services to AWC on the \$179M I-81 Widening MM136.6 -141.8 DB project for VDOT.
	Timmons Group, as a subconsultant to Dewberry, will provide all design survey services. Timmons provides a full spectrum of land surveying and mapping capabilities for land development, environmental, transportation and utility infrastructure projects, including technically complex high definition laser scanning, GPS, robotic total-station, and GIS surveying support, in addition to conventional surveying techniques. Timmons Group has been engaged in design-build and alternative project delivery for civil and structural engineering projects since 2006. The team has provided these services for more than \$4 billion in federal, state, and local projects across the Mid-Atlantic.
ECS	ECS Mid-Atlantic, LLC (ECS), as a subconsultant to Dewberry, will serve as the lead geotechnical firm, overseeing and completing all geotechnical field investigations and testing and providing all geotechnical recommendations during design. ECS has extensive experience along the I-81 corridor and in the Staunton District, including serving in the same capacity on our Team's I-81 Widening MM 136.6 to 141.8 DB project. They have an understanding of the key challenges in the corridor, including the potential for karst material, and are well versed in developing solutions to address those challenges.
Subsurface Utility Services Proud • Professional • Precise	Accumark, Inc. (Accumark) provides professional Subsurface Utility Services across Virginia and the Eastern United States. Registered and founded in 1994, Accumark has built their reputation on a foundation of professionalism, quality results and innovative techniques. The firm is headquartered in Virginia and will provide all utility designation and test pitting services, as well as identification and survey of any septic facilities if necessary. Accumark has provided these same services under contract to Dewberry on numerous design-build projects, including the I-81 Widening MM136.6- 141.8 DB project which is currently under construction. Accumark employs a team of professionals trained in utility designation, vacuum excavation, CADD design, research, and documentation.
DIVERSIFIED PROPERTY SERVICES INCORPORATED	Diversified Property Services Inc., (Diversified) is a registered DBE in the Commonwealth of Virginia, and will manage the right-of-way and land acquisition services. As a VDOT prequalified ROW acquisition firm, they will handle all areas of appraisal and appraisal review services, negotiations, acquisition of rights, and relocations. Diversified has extensive experience in Virginia and is currently providing these same services to our Team on the I-81 Widening MM 136.6 to 141.8 project.

3.3.1 Key Personnel Information on the Key Personnel is provided in Table 2.



Table 2 - Key Personnel		
Key Personnel Position		Firm
Design-Build Project Manager (DBPM)	Jeffrey Mays	Archer Western Construction, LLC
Entrusted Engineer In Charge (EIC)	Adam Hollon, PE	Archer Western Construction, LLC
Quality Assurance Manager (QAM)	Duncan Stewart, PE	McDonough Bolyard Peck, Inc.
Design Manager (DM)	Mark Brewer, PE	Dewberry Engineers Inc.
Construction Manager (CM)	Anthony Tundo	Archer Western Construction, LLC

3.3.2 Organization Chart

The Organizational Chart at the end of this section outlines the structure of our proposed Team. The "chain of command" shown in the chart by solid lines represents the primary reporting relationships. Dashed lines represent communication relationships between major Project disciplines and participants. This structure has been created to specifically address the overall project scope, the anticipated schedule for completion, and risks involved in meeting project objectives. The following narrative describes the functional relationships and communications among our Team:

The Archer/Dewberry Team has worked together collectively to successfully deliver projects in four different states and is currently delivering VDOT's I-81 Widening from MM 136.6 to MM 141.8.

Jeffrey Mays will serve as the *Design-Build Project Manager (DBPM*) and be responsible for the overall project design and construction. Jeff has over 20 years of experience in the industry and is serving as the DBPM on the \$179M I-81 Widening MM136.6-141.8 DB project in Roanoke, VA. Jeff will be AWC's primary decision maker on the Project and will assure all disputes are mitigated or resolved quickly and efficiently for all parties. Prior to the I-81 Project, Jeff served as the DBPM on the \$1.4B METRO Crenshaw/LAX Light Rail project and PM on the \$1B SH 130 and \$136M SH 45/I-35 interstate projects in Texas and is well versed with interstate and highway construction and associated risk mitigation.

Adam Hollon, PE will serve as the *Entrusted Engineer in Charge (EIC)*, and report directly to the DBPM. Adam brings extensive heavy civil construction experience to the AWC team and has supervised and directed project teams during all phases of construction including serving as the Construction Manager on the DDOT South Capitol Street Bridge Project. Adam's knowledge in traffic sequencing and self-perform work will be crucial to safety and efficient construction of this project. Adam will facilitate interaction between engineers and construction personnel and ensure that any engineering decisions relating to one component for the Project are evaluated for impacts to the Project as a whole. Adam will ensure that engineering decisions are not made by non-engineers. Adam will also be directly involved and have personal supervisory direction and control authority in making and approving engineering decisions during construction.

Duncan Stewart, PE, CCM, PSP will serve as the **Quality Assurance Manager (QAM)**, and will be independent from all construction operations. Duncan will be on site full-time for the duration of construction operations. He has over 25 years of experience in construction quality assurance and civil structural engineering with a heavy emphasis in transit and transportation projects including rail stations, roadways, bridges, and tolling facilities.

Mark Brewer, PE, will serve as the *Design Manager (DM)*, reporting to the DBPM and has overall responsibility for management of the design process. Mark's role includes oversight of design subconsultants and communication with each of the discipline leads. Mark will attend progress and coordination meetings



with VDOT and any public outreach meetings. Mark will also oversee implementation of the design QA/ QC program, which will be followed by Dewberry and all design subconsultant team members. He will remain involved during construction, attending construction progress meetings and ensuring RFIs, questions, submittals, and shop drawings are routed to the appropriate design discipline for review and response. Mark has a proven track record as a Design-Build DM, serving in this role most recently on the Centreville Road Widening project in Fairfax County, Virginia. Mark also has designed and provided construction support on four interstate widening and interchange projects for VDOT including the I-66 Widening project from Gainesville to Haymarket in Prince William County, the I-95 / Route 630 Reconstruction and Widening project in Stafford County, the Route 606 Bridge Replacement and Interchange Improvements project in Spotsylvania County, and the I-66 Improvements (with Route 29) project in Prince William County.

Anthony Tundo will serve as the *Construction Manager (CM)* reporting to the DBPM. Anthony is an experienced Project Manager with more than 15 years of complex transportation project experience. He will have oversight for all construction activities, including all Quality Control (QC) activities, on the project. Anthony's previous CM experience includes the \$58M I-395 HOV Ramp at Seminary Road project where he worked with MBP (QAM). Anthony will hold the Virginia DEQ Responsible Land Disturber Certification along with the VDOT Erosion and Sediment Control Contractor Certification.



3.4: Experience of Offeror's Team

Please see Attachments 3.4.1(a) Lead Contractor Work History Forms and Attachments 3.4.1(b) Lead Designer Work History Forms in the Appendix.

3.5: Project Risks



3.5 PROJECT RISKS

CRITICAL RISK #1 - MAINTENANCE OF MOBILITY & SAFETY

Why is the Risk Critical?

Carrying nearly 60,000 vehicles per day, I-81 is the most crucial north-south artery for local, regional commuter, and long-distance travel in the Shenandoah Valley. Additionally, I-81 is one of the most important and heavily utilized freight trucking corridors in the US, with an approximately 25% daily truck percentage in the Project limits. In order to maximize safety and ensure the preservation of traffic mobility, it will be critical that a sequence of construction and temporary traffic control plan is designed and implemented in a manner that maintains all existing lanes and is fully coordinated with all adjacent projects. Given the high travel speeds along I-81 with a 65-mph speed limit, we understand the importance of avoiding incidents during construction due to the heightened risk to both construction personnel and motorists. When incidents do occur, we understand that it is paramount to limit both the number of lanes blocked as well as the duration of the disruption. Elements our Team has identified that contribute to the criticality of this risk include:

- The need to maintain continuous access to interchange ramps adjacent to complex widening / reconstruction of multiple bridges;
- The need for safe access for heavy hauling vehicles into and out of the I-81 median;
- The need to ensure that water ponding and drainage spread in the travel lanes is avoided; and
- The need to sequence the Project in a manner that provides a shoulder area for incident management, vehicle breakdown, and police enforcement.

Impact on the Project

The impact of improperly or inadequately maintaining traffic in a safe or efficient manner, inadequately responding to and clearing incidents, or inadequately communicating construction activities with the traveling public and adjacent projects, could have substantial consequences including:

- Degradation of safety for drivers and construction personnel;
- Additional travel delays;
- Potential schedule and completion delays;
- Conflicting TTC devices due to the lack of full coordination with adjacent projects;
- Loss of lane capacity and/or emergency responder access;
- Hydroplaning that can lead to crashes;
- Community impacts to the City of Staunton along incident management detour routes; and
- Driver frustration.

Mitigation Strategies

Our Team is adamant about maintaining the highest possible levels of traffic mobility and safety within our work zones. We are committed to making mobility and safety our top priorities, and to exceeding the standard project requirements by implementing the following mitigation strategies:

1. Creating a Traffic Task Force: Recognizing the critical importance of ensuring the temporary traffic control plan is designed and implemented safely and fully coordinated with all applicable parties, our Team will establish a multidiscipline Traffic Task Force (TTF) that is focused on planning, designing, and implementing the Project's work zone traffic control program. The TTF will consist of construction personnel, engineers, and our safety team. Additionally, VDOT and third-party stakeholders will be invited to participate. Establishing and maintaining this task force allows for construction collaboration that ultimately ensures safety, mobility, and constructability are optimized. Our TTF team members have recent, relevant experience with I-81 widening, allowing us to understand the unique challenges and solutions in this corridor. With this experience, we are well versed in the development and execution of TMPs for Type C projects, as well as the development of site-specific Temporary Traffic Control plans per VDOT's IIM-LD-241 (Work Zone Safety and Mobility) process.



2. Developing a Sequence of Bridge Construction that Maintains All Lanes: As shown in Figure

1, the proximity and number of lanes on the bridges over Augusta Woods Road / CSX railroad and US 250 presents a challenge. Given the bridge pairs are only separated by 550', less than the separation needed for safe lane shifts between the bridges, we understand that the bridge sequence of construction must be fully coordinated so that traffic switches across the bridges in either direction occur concurrently. From the outset,

our team will work to incorporate this constraint into the TTC design and construction schedule, so that through traffic flows uniformly through this constrained area. Also, deck rehabilitation / replacement will be a challenge given three of these four bridges carry an auxiliary lane in addition to the two through lanes. As we understand the importance of maintaining these interchange acceleration and deceleration lanes, we will develop a multi-stage TTC plan with sub-stages that maintains all three of the lanes throughout construction. This is similar to our I-81 MM 136.6 to 141.8 southbound at Exit



Figure 1: Proximity and number and lanes on the bridges over Augusta Woods Road/CSX Railroad and US 250

140 bridge widening and full-width rehabilitation, where a plan was developed to maintain all three lanes (with a full length deceleration lane) by substaging the deck work.

3. Implementing a Construction Access Plan that minimizes interaction with traffic: To mitigate the potentially dangerous speed differentials between trucks entering and exiting the median and high-speed traffic in the left lane, we will:

- Reduce the need for access from mainline I-81 as much as possible by installing construction access points along under passing cross streets, so that median work can be accessed in a safer manner and avoids interaction with mainline traffic. For median work, access can likely be accomplished directly from cross streets such as Augusta Woods Drive and US 250; and
- Where direct I-81 access is required, provide full AASHTO acceleration / deceleration lengths for trucks as feasible, minimizing slow truck interaction with high speed traffic.

4. Coordinating Concurrent Projects: We know that overlapping work zones can lead to driver confusion and/ or serious safety risks if not fully coordinated. Given construction of the I-81 SB MM 221-220 Auxiliary Lane Project (UPC 116279) is planned to occur concurrently with this Project, we will work directly with VDOT, the contractor, and all applicable third parties to ensure full coordination of safety, mobility, construction sequencing, and design. This commitment provides drivers with a seamless "one project" look while traveling

the corridor, and maximizes both safety and mobility.

5. Avoiding Water Ponding and Drainage Spread in Travel Lanes: With major rehabilitation and/or deck replacement of bridges with existing narrow shoulders, we understand that narrowing shoulders to 2' during construction introduces the potential for drainage spread to encroach into the travel lanes. This can result in a dangerous situation for drivers during both rain and snow/ice



Figure 2: Temporary Drainage Spread Analysis



events, and we understand the importance of avoiding this condition. Techniques we have successfully utilized in the past to alleviate this condition that we will explore for this project include:

- Performing detailed computations along the entirety of the bridge decks and roadway widening during all stages of construction to ensure thresholds are not exceeded;
- Utilizing wider shoulders where possible to better contain spread outside of travel lanes; and
- Utilizing slotted temporary parapets, temporary scuppers, and/or permanent deck drainage systems to convey water off of bridge decks.

6. Focusing on site-specific enhanced incident avoidance strategies: A preliminary investigation completed by our Team found that there have been 185 total crashes within the Project limits over the past five years (2017-2021). To mitigate this, the following measures could be employed:

- A Work Zone ITS system with speed detectors and Portable Changeable Message Signs (PCMS), where messages can be automatically relayed to message boards to warn of congestion, reducing the risk of rear-end crashes;
- Temporary raised pavement markers and wider than minimum temporary lane markings for increased visibility; and
- Pre-staging incident management detour signs to allow the quick diversion and queue minimization of I-81 traffic to Woodrow Wilson Parkway if an incident temporarily closes I-81 and/or ramps.

7. Designing and sequencing the work in a manner that maintains shoulders: We will strive

to maintain a fully paved shoulder along the outside (right side) of I-81 during construction. Maintenance of a shoulder helps avoid incidents by providing an escape zone for potential rear-end collisions, as well as providing a forgiving roadside for potential run-off-road crashes. It also significantly aids in incident management by providing space for incident staging outside of the travel lanes, providing a space for vehicle breakdown, and providing a space for police enforcement of work zone speed limits. This shoulder area can be provided by several alternatives that our Team will explore, one of which is temporarily sliver widening the existing outside paved shoulder to result in a full shoulder after lanes are shifted with barrier placement for median widening.



Figure 3: Full right shoulder maintained during Dewberry's I-64 Segment III Widening

8. Verifying That Acceptable Operations Will Be Maintained For Off-Peak Temporary Lane

Closures: We accomplish this by collecting current traffic volumes, and analyzing all potential MOT operations using software such as Quick Zone and HCS to ensure temporary lane closures are limited to the hours of least impact. This strategy holds true for customizing lane closures schedules to account for seasonal variations in traffic volumes that occur on I-81. By ensuring that temporary lanes closures are limited to the hours of least disruption, the frequency and duration of traffic backups are minimized, helping to avoid congestion related rear-end crashes.

Role of VDOT and Other Agencies

It is expected that VDOT will be involved from a review and approval standpoint during the development of the plans, and we encourage VDOT to participate in the TTF. During construction we anticipate VDOT will be a critical partner in incident avoidance, incident detection, and incident management. Specifically, our Team expects to work in conjunction with VDOT Safety Service Patrol and the Traffic Operations Center (TOC). We also anticipate coordinating MOT operations and incident management during construction with other agencies, such as coordination with Staunton and Augusta County emergency responders.



CRITICAL RISK # 2 - WIDENING AND REHABILITATION OF BRIDGES

Why is the Risk Critical?

Widening and rehabilitation of existing bridges presents challenges due to the need to avoid impacts to the existing bridge elements and minimize impacts to traffic while completing widenings, deck overlays or replacements, and substructure modifications. Extensive analysis must be completed during design to confirm:

- The new bridge elements will not adversely impact existing conditions;
- Superstructure repairs or replacements can be completed while minimizing temporary traffic impacts;
- Bridge deck drainage during construction is addressed;
- Subsurface investigations and conditions are coordinated with the geotechnical engineer;
- Ensure that the widened substructure does not adversely impact waterways, roadways or railroads under the bridges;
- Staged construction of the bridge decks does not impact performance of the final structure; and
- The new elements can be easily and successfully connected to the existing structure.

During construction, care must be taken to not adversely impact the existing bridge elements or other adjacent structures or facilities, while also completing the necessary excavation, foundation construction, partial demolition, and temporary support of excavation to safely maintain operations and traffic at all times. These challenges become even more critical when work is completed in a constrained work location, such as within existing medians or in close proximity to travel lanes.

A review of the RFQ Information Package and site visits shows that potential challenges related to bridge work include:

- Reduced shoulder widths, creating temporary drainage challenge;
- Potential for Karst formation which could impact the foundations for the widened substructure elements;
- The alignment of Lewis Creek and the widening of the Northbound bridge pier adjacent to the creek potentially puts the column(s) of the widened pier within the banks of the creek. There also appears to be an existing low water crossing of the creek under the Northbound bridge that could be impacted by the pier widening;
- Three of the bridges (SB I-81 over Route 250, SB I-81 over I-64 Ramp I, and SB I-81 over Augusta Woods Drive/Buckingham Branch Railroad) include existing piers adjacent to the shoulders and in the median;
- The bridge over SB I-81 and I-64 Ramp I has a hammerhead pier that will be very close to the inside widening of the bridge, which could limit the vertical clearance (See Figure 4);
 An existing utility under the bridge, parallel

Figure 4: Existing Pier Adjacent to Inside Widening

- to the railroad, and in front of one of the piers of the SB I-81 Bridge over Augusta Woods Drive/Buckingham Branch Railroad (See Figure 5) will need to be considered when designing the widening; and
- Staged bridge construction under traffic can introduce vibrations which may impact the quality of the bridge deck.



Impact on the Project

The impact of not accounting for all of the existing conditions and constraints during design and construction could have the following impacts on the Project:

- Unintended impacts to existing bridges, roadways, and railroad resulting in construction delays, and potentially additional reconstruction work;
- 2. Foundation configuration changes as a result of subsurface conditions impacting traffic under the bridges during construction;
- 3. Adverse impacts to traffic and operations during construction;
- 4. Degradation of safety for motorists, construction personnel, and inspection staff;
- 5. Utility impacts;
- 6. Increased construction costs; and
- 7. Schedule delays associated with lost productivity. to Railroad



Figure 5: Existing Utility Under Bridge and Parallel to Railroad

Mitigation Strategies

Mitigation of potential issues starts with understanding if they are issues at all. Our Team has extensive experience in designing and constructing bridge widenings and rehabilitations. This experience is what leads us to extensively review existing information and work collectively as a team to ensure our design concepts and details, work sequences, construction techniques, and construction approach all account for challenging existing conditions and constraints and are properly coordinated with each other. Proper planning from the outset will ensure the proposed improvements can be completed as intended, without cost or schedule impacts, and without adverse impacts to the public. Mitigation strategies which our Team will employ include the following:

1. Review of Existing Documents: Our Team has already begun reviewing existing documentation provided with the RFQ Information Package and visited the project site to see first-hand the unique challenges associated with each of the bridge widenings. In addition to reviewing the information already available, we will obtain record information from VDOT for all of the bridges (including the latest inspection reports and as-built plans) to understand the existing conditions both under and above the bridges. Review of existing documents will identify limitations we need to consider when developing the designs of new bridge substructure elements, sequencing of construction plans to ensure traffic is adequately maintained around the construction areas, and for developing construction sequencing plans.

2. Collect Extensive Survey Data: In addition to obtaining all record information, we will complete an extensive survey and field investigation effort. Our Team will completely resurvey all existing conditions prior to start of design. These additional surveys will include high-accuracy pavement information to ensure horizontal and vertical positioning of existing infrastructure is understood and accounted for, and mobile scans of the existing bridges will be completed to obtain a complete "picture" of the underside of the bridge superstructures. All of this information will be utilized during design to ensure adequate clearances both above and below the bridges are maintained, and to ensure detailed designs can be completed with a thorough understanding of areas and elements which need to be protected or avoided during construction. While we understand that the location of the existing pier adjacent to the SB I-81 bridge over Ramp I has been extensively studied by the Department during development of the RFQ plans, our team will accurately locate the pier both horizontally and vertically to ensure that there is sufficient room to complete the widening as planned. We will



accurately locate the channel of Lewis Creek in the vicinity of the bridges to ensure we fully understand and can model the impacts of the widening of the piers to the hydraulic model. The location of the utility poles and the lines they support along the railroad under and adjacent to the SB I-64 Bridge over Augusta Woods Drive/ Buckingham Branch Railroad will be accurately surveyed to ensure that we understand the potential impacts to the construction of the pier superstructure widening of the bridge are mitigated.

3. Conduct Comprehensive Geotechnical Investigation: Knowing that there is the potential for Karst formations, we will develop our geotechnical investigation to obtain the necessary information to accurately analyze the subsurface conditions at each bridge. We will also analyze how construction of the new foundations could impact the existing piers and abutments (due to settlement or vibrations during driving of piles) or other adjacent facilities, such as the Buckingham Branch Railroad to ensure that we employ construction techniques that will mitigate these impacts. This may require use of different equipment or installation methods (e.g. predrilling of piles rather than driving full depth) to mitigate identified issues.

4. Coordination between Design and Construction Disciplines: A benefit of the design-build process is the close coordination between designer and contractor. During the design phase, decisions on temporary construction elements (sheeting, shoring, support, etc.) will be discussed on a "real-time" basis between our design and construction staff to ensure means and methods are accounted for. Desired and/or required construction sequencing will be reflected in our bridge plans and in the temporary traffic control plans to ensure all traffic movements are maintained in a safe and efficient manner throughout all stages of construction. Early discussion of limitations regarding traffic impacts will result in identification of equipment with as small of a footprint as possible to perform the work, leading to minimal impacts to traffic. Internal to the design team, roadway, bridge, geotechnical, hydraulic, and traffic design teams will hold formal coordination meetings on a weekly basis, and informal discussions will occur on a daily basis to ensure design details are coordinated throughout the design process. Our Team will also hold weekly coordination meetings between design and construction staff to ensure all aspects of the project are accounted for as design progresses, thereby avoiding rework activities which could impact the plan development schedule, or require re-work once plans are approved for construction.

5. Involvement of Specialty Subcontractors: Some aspects of the bridge demolition, support, and construction will require involvement of specialty subcontractors. During the design phase, specialty firms will be engaged to participate in constructability reviews and meetings to provide feedback on their intended approach to the work. Specific questions related to types of equipment to be used during each stage of work, and the resulting required work area which must be accounted for, can be discussed openly and reflected in temporary traffic control and sequencing plans. Similar to the coordination between our design and construction staff, this involvement of specialty subcontractors will ensure the need for resequencing of work, or the schedule and cost impacts associated with implementing changes after plan approval and during construction, are avoided. Additionally, specialty subcontractors will be aware of critical areas before work is started in the field. Understanding coordination which has already occurred with utility companies, for example, will allow us to monitor critical conditions from the outset (such as vibration monitoring of existing utilities) to ensure adverse impacts are avoided, and data is available to identify preconstruction conditions.

6. Coordinate Bridge Widening Sequence with Repairs: We expect the RFP Information Package will have detailed information on the scope of bridge rehabilitations, deck overlays or replacements, deck joint closures, and abutment modifications. As we review that information, we will develop a sequence of construction which enables us to complete the proposed bridge widenings in a way which will minimize impacts to traffic both on and under the bridges. Knowing that three of the existing bridges have scuppers, and that the staging of bridge widenings and deck repair/replacement could be impacted by the drainage requirements, we will evaluate each bridge during the RFP phase of the project. Once the runoff spread criteria is established we will determine the drainage spread for each of the bridges during each stage of construction, to determine if drainage will require modification of the staging.



7. Utilize Closure Pour Between Deck Stages: When placing a new bridge deck in multiple stages with vehicular traffic on the structure, there is the potential for vibrations from the traffic on the bridge to impact the bridge deck during curing of the concrete. In order to ensure that this does not occur, we will include a closure pour between adjacent stages of the deck construction. This will minimize any impacts and ensure the quality of the final bridge deck.

Role of VDOT and Other Agencies

We do not anticipate any additional involvement from VDOT beyond the normal roles and responsibilities associated with plan review and approval processes. Should unique design solutions be necessary to avoid impacts to existing substructure elements or existing facilities, we expect VDOT will discuss those solutions, review any special details, and provide feedback as to whether they will be acceptable. Temporary lane and shoulder closures, where allowed by the contract, will be authorized by the Traffic Operations Center, and our Team will communicate with VDOT to ensure there are no impacts to the adjacent projects which are also expected to be under construction. Minimal involvement from other agencies is anticipated with respect to the bridge modifications, although public outreach efforts will be completed by our Team to relay any temporary traffic impacts to the local community and third party stakeholders.

CRITICAL RISK #3 – GEOTECHNICAL/KARST TOPOGRAPHY

Why The Risk Is Critical?

The I-81 corridor is characterized by karst geology along its entire length in Virginia, and karst feature mapping available from the Virginia Department of Energy indicates the presence of karst features in the vicinity of this Project. Karst conditions often include steep subsurface bedrock surfaces, highly variable depths to bedrock, cavities within the rock mass, and/or soil-filled cavities. Based on the presence of carbonate rock along the project corridor, the risk of the development of sinkholes must be considered by the designer and warrants further exploration efforts, particularly in the locations of structural elements (bridges and retaining walls) and stormwater management basins. Karst topography represents a critical risk because it has the potential to impact the designs for structures, bridges, and stormwater management facilities which could impact the cost and/or schedule of the improvements. If not appropriately accounted for during the geotechnical investigation and analysis process at the outset of design, performance of the structures and embankments could be compromised (leading to degradation in stability, settlement, and structural performance), extensive redesign and reconstruction could be necessary impacting the Project's cost and schedule, or additional impacts to the traveling public could be introduced.

Impact on The Project

The largest potential impact on the Project will be encountered at the bridges. Based on the conceptual plan information provided with the RFQ Information Package, we recognize that five bridges will be widened:

- Southbound I-81 over the interchange ramp to eastbound I-64 (B638);
- Southbound I-81 over Route 333 (B639);
- Southbound I-81 over Route 250 (B640);
- Southbound I-81 over Lewis Creek (B641); and
- Northbound I-81 over Lewis Creek (B642).

Although no conceptual structural plans were provided with the RFQ Information Package, visual inspection of each of these bridges confirms that no MSE walls are present or require modification. Because of the potential for an erratic rock surface, weak rock layers, clay seams, and void spaces characteristic of karst geology, we anticipate that support for bridge foundations will likely require deep foundations extending to competent rock. Widening designs for each bridge will need to account for the existing foundation configurations, and design of deep foundations will need to avoid impacting the existing substructure elements.

In addition to the bridge locations, karst topography has the potential to impact the locations of stormwater management (SWM) facilities. Thorough investigation will be required to ensure there are no subsurface voids or seams which could result in dewatering of SWM facilities or providing avenues for stormwater to migrate to undesirable areas of the Project.

Subgrade soils consisting of residuum and fill soils which classify as high-plasticity clays and silts (CH/MH) are also typical in karst geology. A significant portion of these soils may exhibit high moisture contents which will require lime stabilization or other treatment prior to pavement construction. CH/MH soils, if located in close proximity to proposed subgrades or structures will require removal and replacement.

Finally, non-uniform geotechnical support can cause non-uniform stress distributions, leading to instability and/ or excessive differential settlement of embankments, pavement, and drainage facilities, and result in excessive downdrag on foundations.

Overall, the potential impacts of karst topography include:

- Increased costs associated with longer deep foundation elements;
- Increased costs associated with grouting of voids if they can't be avoided, for example at the bridge widening foundations;
- Increased costs associated with unique foundation designs, required to account for voids, weak rock, or erratic rock elevations;
- Increased costs associated with removal of unsuitable materials and/or treatment of materials on-site;
- Right-of-way impacts associated with relocation of stormwater management facilities, if they can't be located within the median of I-81; and
- Schedule delays associated with redesign efforts and/or modifications required during construction to address unforeseen challenges.

Mitigation Strategies

The potential for karst conditions to be encountered requires that experienced geotechnical personnel conduct the geotechnical exploration and engineering services for the Project. Our Team's mitigation strategy begins with selection of a well-qualified geotechnical engineering firm, ECS Mid-Atlantic, and lead geotechnical engineer, Brian Wyatt, PE, who has experience working in karst terrain and along the I-81 corridor. Throughout the procurement phase we will review the information provided with the RFP Information Package to identify areas of potential concern and develop design solutions which we expect will address those concerns and potential risks. A geotechnical exploration program will be developed in accordance with the VDOT Material Manual of Instructions (MOI), and we will expand our geotechnical investigation beyond those requirements to include geophysical testing (Electrical Resistivity (ER)) to assist with identification and extent of karst features.

ECS' experience includes geotechnical exploration and field and laboratory testing for bridges, culverts, roadways, retaining walls, temporary earth support structures, sign and pole foundations, and other supporting infrastructure. We also have a dedicated geophysical testing group to conduct more sophisticated surface and downhole geophysical methods including ER surveys, and ground penetrating radar (GPR). A combination of these methods will be used to characterize the extent of the karst risk.

Additional mitigation strategies to address karst feature impacts include:

- Cavities can be filled with flowable fill or concrete, or deep foundation elements may be extended through voids utilizing appropriate casing.
- Soft soil-filled cavities within the rock mass, if encountered, can be improved through pressure grouting to increase the strength and stiffness to provide foundation support.
- Pinnacled/erratic rock surfaces can be mitigated using concrete to fill the areas between pinnacles for



support of shallow foundations and hardened pile tips (driving shoes) to protect the piles during driving through the variable subsurface to the top of competent rock.

- Unstable subgrades will be treated by undercut and replacement of materials, geosynthetic separation and/ or stabilization fabrics, and lime/cement stabilization.
- Stormwater management facility locations will be adjusted to avoid areas where subsurface voids are identified. Taking advantage of the wider median and open channel drainage systems, we believe runoff can be directed to modified locations and avoid acquisition of additional easements or right-of-way along the outsides of I-81.

To mitigate potential schedule impacts, our Team will review the existing geotechnical data and focus early phase geotechnical explorations in areas of bridge foundations. These early geotechnical explorations will consist of Standard Penetration Test (SPT) soil borings with rock coring and geophysical methods, followed by laboratory testing. Inspection and test results will enable the Team to delineate the extent of problematic karstic features and unsuitable subgrade soils early in the design process. Final mitigation methods will be selected during the design phase to avoid schedule impacts associated with redesign or re-work efforts during construction.

Role of VDOT and Other Agencies

We anticipate that VDOT will provide preliminary geotechnical exploration information with the RFP documents, and preliminary structure foundation configurations and stormwater management locations will be identified in the RFP Conceptual Plans. During final design, and consistent with our previous design-build projects, we expect VDOT will review and provide concurrence on our geotechnical exploration plan prior to our Team commencing field investigations. Following completion of field investigations, data collection, and analysis, VDOT will review and approve Geotechnical Engineering Reports (GER) developed for each bridge and the roadway, grading, and drainage improvements.

Appendix

3.1.2: SOQ Checklist

ATTACHMENT 3.1.2

Project: I-81 Widening MM 221 to MM 225 State Project No.: 0081-007-013 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	N/A
Acknowledgement of RFQ, Revision and/or Addenda	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	N/A
Letter of Submittal (on Offeror's letterhead)				
Authorized Representative's signature	NA	Section 3.2.1	yes	1
Offeror's Point of Contact information	NA	Section 3.2.2	yes	1
Principal Officer information	NA	Section 3.2.3	yes	1
Offeror's Corporate Structure	NA	Section 3.2.4	yes	1
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	1
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	N/A
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	N/A
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	N/A
Evidence of obtaining bonding	NA	Section 3.2.9	no	N/A

ATTACHMENT 3.1.2

Project: I-81 Widening MM 221 to MM 225 State Project No.: 0081-007-013 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	N/A
Full size copies of SCC Registration	NA	Section 3.2.10.1	no	N/A
Full size copies of DPOR Registration (Offices)	NA	Section 3.2.10.2	no	N/A
Full size copies of DPOR Registration (Key Personnel)	NA	Section 3.2.10.3	no	N/A
Full size copies of DPOR Registration (Non- APELSCIDLA)	NA	Section 3.2.10.4	no	N/A
DBE statement within Letter of Submittal confirming Offeror is committed to achieving the 6% DBE goal	NA	Section 3.2.11	yes	1
Offeror's Team Structure				
Identity of and qualifications of Key Personnel	NA	Section 3.3.1	yes	3
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	N/A
Key Personnel Resume – Entrusted Engineer in Charge	Attachment 3.3.1	Section 3.3.1.2	no	N/A
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.3	no	N/A
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.4	no	N/A
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.5	no	N/A
Organizational chart	NA	Section 3.3.2	yes	6
Organizational chart narrative	NA	Section 3.3.2	yes	2-5

ATTACHMENT 3.1.2

Project: I-81 Widening MM 221 to MM 225 State Project No.: 0081-007-013 STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

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

2.10 Acknowledgment of Receipt of RFQ, Revisions, and/or Addenda Form C-78-RFQ

Form C-78-RFQ

ATTACHMENT 2.10

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION

PROJECT:	I-81 Widening MM 221 to MM 225
CONTRACT ID:	C00116269DB116
PROJECT NO.:	0081-007-013

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 – July 1, 2022 (Date)	
2. Cover letter of	Addendum No. 1 – August 9, 2022 (Date)	
3. Cover letter of	(Date)	
27 CM	w/	August 17, 2022
SIGNATUR	RE	DATE
EJ O'Neill		Vice President
PRINTED NA	ME	TITLE

3.2.6 List of Affiliated and Subsidiary Companies

ATTACHMENT 3.2.6

Project: I-81 Widening MM 221 to MM 225

State Project No. 0081-007-013

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	Archer Western Contractors, LLC	2839 Paces Ferry Rd, SE, Suite 1200, Atlanta, GA 30339
Affiliate	Walsh Construction Company, LLC	929 West Adams Street, Chicago, IL 60607
Affiliate	Walsh Construction Company II, LLC	929 West Adams Street, Chicago, IL 60607
Affiliate	Walsh Construction Company of Canada	800 Bay Street, Suite 401, Toronto, ON M5S3A9

3.2.7 Debarment Forms

<u>CERTIFICATION REGARDING DEBARMENT</u> <u>PRIMARY COVERED TRANSACTIONS</u>

Project: I-81 Widening MM 221 to MM 225 Project No.: 0081-007-013

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

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

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

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

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

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

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

Signature

Date

Title

Name of Firm

<u>CERTIFICATION REGARDING DEBARMENT</u> <u>LOWER TIER COVERED TRANSACTIONS</u>

Project: I-81 Widening MM 221 to MM 225 Project No.: 0081-007-013

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

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

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

Dave Maharey

Signature

8/17/2022 Date

Executive Vice President Title

Dewberry Engineers Inc. Name of Firm

<u>CERTIFICATION REGARDING DEBARMENT</u> <u>LOWER TIER COVERED TRANSACTIONS</u>

Project: I-81 Widening MM 221 to MM 225 Project No.: 0081-007-013

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

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

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

July 28, 2022 Date

<u>Senior VP, Transportation Services</u> Leader Title

MBP Name of Firm

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project: I-81 Widening MM 221 to MM 225 Project No.: 0081-007-013

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

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

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

Ny Mecto

08/08/2022

Vice President Title

Signature

Date

Accumark, Inc.

Name of Firm

<u>CERTIFICATION REGARDING DEBARMENT</u> <u>LOWER TIER COVERED TRANSACTIONS</u>

Project: I-81 Widening MM 221 to MM 225 Project No.: 0081-007-013

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

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

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

tto Dablor

8/3/2022 Date President Title

Diversified Property Services, Inc. Name of Firm

ATTACHMENT 11.8.6(b) CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-122-470

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

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

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

B222 VICE PRESIDENT

ECS MID-ATLANDC, UC

Name of Firm
ATTACHMENT 3.2.7(b)

<u>CERTIFICATION REGARDING DEBARMENT</u> <u>LOWER TIER COVERED TRANSACTIONS</u>

Project: I-81 Widening MM 221 to MM 225 Project No.: 0081-007-013

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

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

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

08/03/2022 Chief Executive Officer Date Title

McCormick Taylor, Inc. Name of Firm

ATTACHMENT 3.2.7(b)

<u>CERTIFICATION REGARDING DEBARMENT</u> <u>LOWER TIER COVERED TRANSACTIONS</u>

Project: I-81 Widening MM 221 to MM 225 Project No.: 0081-007-013

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

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

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

8/1/2022 Date

Principal, Director of Transportation Design Build, Director of Bridges & Structures

Title

Timmons Group, Inc. (Timmons Group)

Name of Firm

3.2.8 Prequalification



Date Printed: 01/26/2022

Department's List of Prequalified Vendors Includes All Qualified Levels As Of 1/26/2022 - A -

Vendor ID:A210Vendor Name:ARCHER WESTERN CONSTRUCTION, LLCPrequal Level:PrequalifiedPrequal Exp:01/31/2023

-- PREQ Address --

Work Classes (Listed But Not Limited To)

13454 SUNRISE VALLEY DRIVE SUITE 440 HERNDON, VA 20171 Phone: (301)347-4680 Fax: (301)347-4681

002 - GRADING 003 - MAJOR STRUCTURES 006 - PORTLAND CEMENT CONCRETE PAVING 007 - MINOR STRUCTURES

 Bus. Contact:
 TALLEY, SAM

 Email:
 AWCESTIMATING@WALSHGROUP.COM

-- DBE Information --

DBE Type:N/ADBE Contact:N/A

3.2.9 Surety Letter



Travelers Bond 215 Shuman Blvd. Naperville, IL 60563 Telephone: (630) 961-7052 Fax: (630) 961-7020

July 21, 2022

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

RE: I-81 Widening MM 221 to MM 225 Augusta County, Virginia State Project No.: 0081-007-013, B638, B639, B640, B641, B642, C501, D602, D603, P101, R201 Federal Project No.: NHPP-081-2(329) Contract ID Number: C00116269DB116

We have been advised that Archer Western Construction, LLC is submitting a Statement of Qualifications in response to the Request for Qualifications for the above mentioned project. Travelers Casualty and Surety Company of America is pleased to recommend Archer Western Construction, LLC as a professional, well-financed construction company.

Travelers Casualty and Surety Company of America is currently providing **Archer Western Construction, LLC** with bonding support of \$400 million dollars on single contracts and \$8 billion dollars for an aggregate work program. As surety for **Archer Western Construction, LLC**, **Travelers Casualty and Surety Company of America**, with a A.M. Best Financial Strength Rating of A++ and Financial Size Category XV, is capable of obtaining 100% Performance Bond and 100% Labor and Materials Payment Bond in the amount of the anticipated cost of construction of \$122,000,000, and said bonds will cover the project and any warranty periods as provided for in the contract documents on behalf of Archer Western Construction, LLC, in the event that **Archer Western Construction, LLC** be the successful bidder and enter into a contract for this project. All issuance of bonds is subject to the review and approval of all contract terms, conditions and bond forms.

Should you have any questions, or need additional information, please feel free to contact me.

Yours truly, Travelers Casualty and Surety Company of America

Paten Ou

By:

Patricia Collins, Attorney-in-Fact





Travelers Casualty and Surety Company of America Travelers Casualty and Surety Company St. Paul Fire and Marine Insurance Company

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint **Patricia Collins** of **SARASOTA** . **Florida** , their true and lawful Attorney(s)-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this 21st day of April, 2021.



State of Connecticut

City of Hartford ss.

y: ______Robert L. Raney, Senior Vice President

On this the 21st day of April, 2021, before me personally appeared Robert L. Raney, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission expires the 30th day of June, 2026

NOTARY 12400 PUBLIC Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

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

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

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

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kevin E. Hughes, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this 21st day of July ,2022

Kevin E. Hughes, Assistant Secretary

To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880. Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.

3.2.10 SCC and DPOR Information Tables, Licenses and Registrations

ATTACHMENT 3.2.10 Project: I-81 Widening MM 221 to MM 225 State Project No.: 0081-007-013 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)								
	SCC Inf	formation (3.2.1	0.1)		DPOR Info	rmation (3.2.10.2)		
Business Name	SCC Number	SCC Type of Corporation	SCC Status	DPOR Registered Address	DPOR Registration Type	DPOR Registration Number	DPOR Expiration Date	
Archer Western Construction, LLC	T0437006	Foreign Limited Liability Company	Active	929 W. Adams Street Chicago, IL 60607	Class A Contractor	2705141795	7/31/2023	
Dewberry Engineers Inc.	F100462-3	Corporation	Active	8401 Arlington Blvd. Fairfax, VA 22031	Business Entity Branch Office	0411000941	2/29/2024	
McDonough Bolyard Peck, Inc. (d/b/a MBP)	03518008	Corporation	Active	7401 Beaufont Springs Dr. Suite 301, Richmond, VA 23225	Professional Engineers	0411000604	2/29/2024	
Accumark, Inc.	0440745-8	Corporation	Active, In Good Standing	9500 King Air Ct. Ashland, VA 23005	LS	0411000864	2/29/2024	
Diversified Property Services, Inc.	F1304106	Stock Corporation	Active	20 E Timonium Road, Suite 111 Timonium, MD 21093	Appraisal Business Registration	4008001190	11/30/2022	
ECS Mid-Atlantic, LLC	S1208216	Limited Liability Company	Good	14026 Thunderbolt Pl. Suite 300, Chantilly, VA 20151	ARC, ENG	0407004628	12/31/2023	
Timmons Group, Inc.	0264043-1	C Corporation	Active	1001 Boulders Pkwy, Ste. 300, Richmond, VA 23225	Professional Corporation	0405000456	12/31/2023	
Timmons Group, Inc.	0264043-1	C Corporation	Active	28 Imperial Dr. Staunton, VA 24401	Professional Corporation	0410000263	2/29/2024	
McCormick Taylor, Inc.	F1296914	Stock Corporation	Active and In Good Standing	4951 Lake Brook Dr. Suite 275, Glen Allen, VA 23060	Business Entity Registration	0407004111	12/31/2023	
McCormick Taylor, Inc.	F1296914	Stock Corporation	Active and In Good Standing	111 Mill Place Parkway Suite 105, Verona, VA 24482	Business Entity Branch Office Registration	0411000771	02/29/2024	

ATTACHMENT 3.2.10 Project: I-81 Widening MM 221 to MM 225 State Project No.: 0081-007-013 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		
Archer Western Construction, LLC	Adam Hollon	Herndon, VA	42271 Otter Creek Ter Brambleton, VA 20148	Professional Engineer	0402056440	12/31/2022		
Dewberry Engineers Inc.	Mark Brewer	Fairfax, VA	9933 Hemlock Woods Ln. Burke, VA 22015	Professional Engineer	0402050037	6/30/2024		
McDonough Bolyard Peck, Inc. (d/b/a MBP)	Duncan Kenneth Stewart	Richmond, VA	13318 Railey Hill Dr. Midlothian, VA 23114	Professional Engineer	0402036991	6/30/2024		

Entity Information			
Entity Name:	Archer Western Construction, LLC	Entity ID:	T0437006
Entity Type:	Limited Liability Company	Entity Status:	Active
Series LLC:	No	Reason for Status:	Active
Formation Date:	N/A	Status Date:	06/30/2010
VA Qualification Date:	06/30/2010	Period of Duration:	Perpetual
Industry Code:	0 - General	Annual Report Due Date:	N/A
Jurisdiction:	IL	Charter Fee:	N/A
Registration Fee Due Date:	Not Required		
egistered Agent Information			
RA Type:	Entity	Locality:	RICHMOND CITY
RA Qualification:	BUSINESS ENTITY THAT IS		
	AUTHORIZED TO TRANSACT BUSINESS IN VIRGINIA		
Name:	CORPORATION SERVICE COMPANY	Registered Office Address:	100 Shockoe Slip Fl 2, Richmond
			VA, 23219 - 4100, USA
rincipal Office Address			
Address:	929 W ADAMS ST, CHICAGO, IL, 60607 - 0000, USA		
Filing History	RA History Name History	Previous Registrations Protected	Series Garnishment Designe

Image Request

(Return to Search) (Return to Results) Back

Dewberry Engineers Inc.	Entity ID:	F1004623
Stock Corporation	Entity Status:	Active
N/A	Reason for Status:	Active and In Good Standing
N/A	Status Date:	10/21/2015
06/13/1989	Period of Duration:	Perpetual
0 - General	Annual Report Due Date:	N/A
NY	Charter Fee:	\$50.00
Not Required		
	Dewberry Engineers Inc. Stock Corporation N/A N/A 06/13/1989 0 - General NY Not Required	Dewberry Engineers Inc.Entity ID:Stock CorporationEntity Status:N/AReason for Status:N/AStatus Date:06/13/1989Period of Duration:0 - GeneralAnnual Report Due Date:NYCharter Fee:Not Required

Registered Agent Information

RA Type: Entity RA Qualification: BUSINESS ENTITY THAT IS AUTHORIZED TO TRANSACT BUSINESS IN VIRGINIA Name: CORPORATION SERVICE COMPANY Locality: RICHMOND CITY

Registered Office Address: 100 Shockoe Slip Fl 2, Richmond, VA, 23219 - 4100, USA

Principal Office Address

Address: 8401 ARLINGTON BLVD, FAIRFAX, VA, 22031 - 0000, USA

Principal Information

Title	Director	Name	Address	Last Updated
President, Chief Executive Officer	Yes	DARREN R CONNER	8401ARLINGTON BLVD, FAIRFAX, VA, 22031 - 0000, USA	05/27/2020
Executive Vice President	Yes	DONALD E. STONE JR.	8401 ARLINGTON BLVD., FAIRFAX, VA, 22031 - 0000, USA	06/17/2021
Treasurer	No	CYNTHIA CHEN	8401 ARLINGTON BLVD, FAIRFAX, VA, 22031 - 0000, USA	06/17/2021
Secretary	No	CRAIG N THOMAS	8401 ARLINGTON BLVD, FAIRFAX, VA, 22031 - 0000, USA	06/06/2019
	Yes	PETER GARVEY	8401 ARLINGTON BLVD, FAIRFAX, VA, 22031 - 0000, USA	06/17/2021
	Yes	SIDNEY O DEWBERRY	8401 ARLINGTON BLVD, FAIRFAX, VA, 22031 - 0000, USA	06/17/2021

Current Shares

Total Shares: 2000

Filing History

RA History

Name History Previous Registrations

Garnishment Designees Image Request



Search Return to Results

Entity Information				
Entity Name:	McDonough Bolyard Peck, Inc.	Entity ID:	03518008	
Entity Type:	Stock Corporation	Entity Status:	Active	
Series LLC:	N/A	Reason for Status:	Active and In Good Standing	
Formation Date:	12/29/1989	Status Date:	01/17/2020	
VA Qualification Date:	12/29/1989	Period of Duration:	Perpetual	
Industry Code:	0 - General	Annual Report Due Date:	N/A	
Jurisdiction:	VA	Charter Fee:	\$500.00	
Registration Fee Due Date:	Not Required			
Registered Agent Information				

RA Type: Individual RA Qualification: Member of the Virginia State Bar Name: REES BROOME, PC Locality: FAIRFAX COUNTY

Registered Office Address: 1900 GALLOWS RD STE 700, TYSONS CORNER, VA, 22182 - 0000, USA

Image Request

Back to Login

Principal Office Address

Address: 3040 Williams Dr Ste 300, Fairfax, VA, 22031 - 4654, USA

Principal Information

Title	Director	Name	Address	Last Updated
President, Chief Executive Officer	Yes	CHRISTOPHER J PAYNE	8111 GEORGETOWN PIKE, MCLEAN, VA, 22102 - 0000, USA	12/21/2020
Chairman	Yes	MAIRAV R MINTZ	12212 SOMERSWORTH DRIVE, SILVER SPRING, MD, 20902 - 0000, USA	12/21/2020
Treasurer, Chief Operating Officer	Yes	JOHN L MACKAY	9025 CORNELL DR, WAKE FOREST, NC, 27587 - 0000, USA	12/21/2020
Secretary	Yes	SCOTT A GALBRAITH	3138 CHRISTOPHERS WATCH LANE, RUSKIN, FL, 33570, USA	12/21/2020
Director	Yes	DON C YOUNG	3225 WINDSOR RIDGE SOUTH, Williamsburg, VA, 23188, USA	12/21/2020
Director	Yes	JAMES T PECK	608 CLAREECE PARK PLACE, Franklin, TN, 37069, USA	12/21/2020
Assistant Secretary	No	CHRISTINA C ALLEN	25487 KYLEMORE DRIVE, Aldie, VA, 20105, USA	12/21/2020
Director	Yes	KEVIN L BOCOCK	1727 MILLWOOD DRIVE, Salem, VA, 24153, USA	12/21/2020
Director	Yes	MICHAEL S BAGSHAW	3947 BALTIMORE STREET, Kensington, MD, 20895, USA	11/16/2021
Director	Yes	JULIE A COOLBAUGH	6392 YATES FORD ROAD, Manassas, VA, 20111, USA	11/16/2021

Current Shares

Total Shares: 250000

Filing History RA History Name History Previous Registrations Garnishment Designees

(Back) (Return to Search) (Return to Results)

Entity Information				
Entity Name:	ACCUMARK, INC.	Entity ID:	04407458	
Entity Type:	Stock Corporation	Entity Status:	Active	
Series LLC:	N/A	Reason for Status:	Active and In Good Standing	
Formation Date:	01/30/1995	Status Date:	02/07/2015	
VA Qualification Date:	01/30/1995	Period of Duration:	Perpetual	
Industry Code:	0 - General	Annual Report Due Date:	N/A	
Jurisdiction:	VA	Charter Fee:	\$50.00	
Registration Fee Due Date:	Not Required			
Registered Agent Information				
RA Type:	Entity	Locality:	HANOVER COUNTY	

RA Type:	Entity
RA Qualification:	BUSINESS ENTITY THAT IS AUTHORIZED TO
	TRANSACT BUSINESS IN VIRGINIA
Name:	Unisearch, Inc.

Locality: HANOVER COUNTY

Registered Office Address: 7288 HANOVER GREEN DR, MECHANICSVILLE, VA, 23111 - 0000, USA

Principal Office Address

Address: 9500 King Air Ct, Ashland, VA, 23005 - 8095, USA

Principal Information

Title	Director	Name	Address	Last Updated
Vice President	No	Ryan Martin	9500 King Ait Ct., Ashland, VA, 23005, USA	01/03/2020
President, Chief Executive Officer	Yes	Kenneth Biele	47 Discovery, Suite 250, Irvine, CA, 92618, USA	01/14/2021
Vice President, Secretary, Treasurer, Chief Financial Officer	No	Mark Tobin	47 Discovery, Suite 250, Irvine, CA, 92618, USA	10/15/2021
	Yes	Christopher Suan	47 Discovery, Suite 250, Irvine, CA, 92618, USA	01/14/2021
	Yes	Ken Dabrowski	47 Discovery, Suite 250, Irvine, CA, 92618, USA	01/14/2021

Current Shares

Total Shares: 500

Name History Filing History RA History Previous Registrations Garnishment Designees

(Back) (Return to Search) (Return to Results)

Image Request Back to Login

Entity Information			
Entity Name:	DIVERSIFIED PROPERTY SERVICES OF VIRGINIA, INC.	Entity ID:	F1304106
Entity Type:	Stock Corporation	Entity Status:	Active
Series LLC:	N/A	Reason for Status:	Active and In Good Standing
Formation Date:	N/A	Status Date:	09/17/2021
VA Qualification Date:	08/05/1997	Period of Duration:	Perpetual
Industry Code:	0 - General	Annual Report Due Date:	08/31/2022
Jurisdiction:	MD	Charter Fee:	\$50.00
Registration Fee Due Date:	08/31/2022		

Registered Agent Information

RA Type: Individual RA Qualification: Officer of the Corporation Name: BRENDAN R HANTZES Locality: FAIRFAX COUNTY

Registered Office Address: 3771 VERMACCHIA DR, CHANTILLY, VA, 20151 - 0000, USA

Principal Office Address

Address: 20 E TIMONIUM RD SUITE 111, TIMONIUM, MD, 21093 - 0000, USA

Principal Information				
Title	Director	Name	Address	Last Updated
	Yes	PATRICIA E DABLOCK	20 E TIMONIUM ROAD SUITE 111, TIMONIUM, MD, 21093 - 0000, USA	07/07/2020
Vice President	Yes	BRENDAN R. HANTZES	3771 VERNACCHIA DR., CHANTILLY, VA, 20151 - 0000, USA	08/14/2017
President, Treasurer	Yes	JEANETTE DABLOCK	20 E TIMONIUM RD., STE 111, TIMONIUM, MD, 21093 - 0000, USA	07/07/2020
Secretary	No	JUNE REITER	20 E. TIMONIUM ROAD, STE 111, TIMONIUM, MD, 21093 - 0000, USA	08/14/2017

Current Shares

Total Shares: 5000

Filing History RA History Name History Previous Registrations Garnishment Designees Image Request

(Back) (Return to Search) (Return to Results)

Entity Information			
Entity Name:	ECS Mid-Atlantic, LLC	Entity ID:	S1208216
Entity Type:	Limited Liability Company	Entity Status:	Active
Series LLC:	No	Reason for Status:	Active
Formation Date:	04/16/2004	Status Date:	04/16/2004
VA Qualification Date:	04/16/2004	Period of Duration:	Perpetual
Industry Code:	0 - General	Annual Report Due Date:	N/A
Jurisdiction:	VA	Charter Fee:	N/A
Registration Fee Due Date:	Not Required		
Registered Agent Information RA Type:	Individual	Locality:	FAIRFAX COUNTY
KA Quanneation.	Member or Manager of the Limited Liability Company		
Name:	JAMES A ECKERT	Registered Office Address:	14026 THUNDERBOLT PL STE 100, CHANTILLY, VA, 20151 - 0000, USA
Principal Office Address			
Address:	14026 THUNDERBOLT PL STE 100, CHANTILLY, VA, 20151 - 0000, USA		

Back Return to Search Return to Results

Filing History RA History Name History

Garnishment Designees Previous Registrations Protected Series Image Request

Entity Information				
Entity Name:	McCORMICK TAYLOR, INC.	Entity ID:	F1296914	
Entity Type:	Stock Corporation	Entity Status:	Active	
Series LLC:	N/A	Reason for Status:	Active and In Good Standing	
Formation Date:	N/A	Status Date:	07/22/2020	
VA Qualification Date:	06/02/1997	Period of Duration:	Perpetual	
Industry Code:	0 - General	Annual Report Due Date:	N/A	
Jurisdiction:	PA	Charter Fee:	\$150.00	
Registration Fee Due Date:	Not Required			

Registered Agent Information

RA Type: Entity RA Qualification: BUSINESS ENTITY THAT IS AUTHORIZED TO TRANSACT BUSINESS IN VIRGINIA Name: COGENCY GLOBAL INC. Locality: CHESTERFIELD COUNTY

Registered Office Address: 250 Browns Hill Ct, Midlothian, VA, 23114 - 9510, USA

Principal Office Address

Address: 1818 Market St Fl 16, Philadelphia, PA, 19103 - 3604, USA

Principal Information

Title	Director	Name	Address	Last Updated
Treasurer, Chief Visionary Officer, Assistant Secretary	Yes	Patrick J. Guise	1818 Market Street, 16th Floor, Philadelphia, PA, 19103, USA	06/22/2022
Chief Executive Officer, Secretary, Assistant Treasurer	Yes	James C. Wiggans P.E.	1818 Market Street, 16th Floor, Philadelphia, PA, 19103, USA	06/22/2022
Vice President, Finance and Accounting	No	Greg Filosa	1818 Market Street, 16th Floor, Philadelphia, PA, 19103, USA	06/22/2022
Vice President, Energy Services	No	Susie Ridenour	1818 Market Street, 16th Floor, Philadelphia, PA, 19103, USA	06/22/2022
President	No	Tom Caramanico	1818 Market Street, 16th Floor, Philadelphia, PA, 19103, USA	06/22/2022
Vice President, Systems and Operations	No	Sandy Martin	1818 Market Street, 16th Floor, Philadelphia, PA, 19103, USA	06/22/2022
General Council, Professional Services	No	Gunther Carrle	1818 Market Street, 16th Floor, Philadelphia, PA, 19103, USA	06/22/2022
Vice President, Human Resources	No	Dawn Bruno	1818 Market Street, 16th Floor, Philadelphia, PA, 19103, USA	06/22/2022
General Council, Corporate	No	Malcolm Jacobson	1818 Market Street, 16th Floor, Philadelphia, PA, 19103, USA	06/22/2022
Vice President, Transportation Services	No	Mike Maholick	1818 Market Street, 16th Floor, Philadelphia, PA, 19103, USA	06/22/2022
Vice President, Chief Financial Officer	No	Darryl Freedman	1818 Market Street, 16th Floor, Philadelphia, PA, 19103, USA	06/22/2022

Current Shares

Total Shares: 70000

Filing History RA History Name History Previous Registrations Garnishment Designees Image Request

(Back) (Return to Search) (Return to Results)

Entity I	nformation			
	Entity Name:	Timmons Group, Inc.	Entity ID:	02640431
	Entity Type:	Stock Corporation	Entity Status:	Active
	Series LLC:	N/A	Reason for Status:	Active and In Good Standing
	Formation Date:	11/30/1984	Status Date:	12/18/2018
	VA Qualification Date:	11/30/1984	Period of Duration:	Perpetual
	Industry Code:	70 - Other DULY LICENSED PROFESSIONAL ENTITY not listed below as SPECIFIED in Section 13.1-543 of the Code of Virginia	Annual Report Due Date:	N/A
	Jurisdiction:	VA	Charter Fee:	\$980.00
	Registration Fee Due Date:	Not Required		

Registered Agent Information

RA Type: Entity RA Qualification: BUSINESS ENTITY THAT IS AUTHORIZED TO TRANSACT BUSINESS IN VIRGINIA Name: CORPORATION SERVICE COMPANY

Locality: RICHMOND CITY

Registered Office Address: 100 SHOCKOE SLIP, 2ND FLOOR, RICHMOND, VA, 23219 - 0000, USA

Principal Office Address

Address: 1001 Boulders Pkwy Ste 300, North Chesterfield, VA, 23225 - 5512, USA

Principal Information

Title	Director	Name	Address	Last Updated
Vice President	Yes	TIM DAVEY	1001 BOULDERS PARKWAY, STE 300, RICHMOND, VA, 23225 - 0000, USA	10/17/2019
Secretary	Yes	PAUL TRAPP	1001 BOULDERS PARKWAY, STE 300, RICHMOND, VA, 23225 - 0000, USA	10/17/2019
President, Chief Executive Officer	Yes	BRIAN BORTELL	1001 BOULDERS PARKWAY, STE 300, RICHMOND, VA, 23225 - 0000, USA	11/22/2021
Treasurer, Chief Financial Officer	No	VINCE DOHERTY	1001 BOULDERS PARKWAY, STE 300, RICHMOND, VA, 23225 - 0000, USA	11/22/2021
	Yes	LOWELL D BALLARD	1001 BOULDERS PARKWAY, STE 300, RICHMOND, VA, 23225 - 0000, USA	10/17/2019
	Yes	Andrew Gould	1001 Boulders Pkwy Ste 300, North Chesterfield, VA, 23225 - 5512, USA	11/22/2021
	Yes	Brian Crutchfield	1001 Boulders Pkwy Ste 300, North Chesterfield, VA, 23225 - 5512, USA	11/22/2021
	Yes	Chris Dodson	1001 Boulders Pkwy Ste 300, North Chesterfield, VA, 23225 - 5512, USA	11/22/2021
	Yes	Chris Kiefer	1001 Boulders Pkwy Ste 300, North Chesterfield, VA, 23225 - 5512, USA	11/22/2021
	Yes	Dwayne Dunevant	1001 Boulders Pkwy Ste 300, North Chesterfield, VA, 23225 - 5512, USA	11/22/2021
	Yes	Gary Johnson	1001 Boulders Pkwy Ste 300, North Chesterfield, VA, 23225 - 5512, USA	11/22/2021
	Yes	Keith Roberts	1001 Boulders Pkwy Ste 300, North Chesterfield, VA, 23225 - 5512, USA	11/22/2021
	Yes	Mark Richardson	1001 Boulders Pkwy Ste 300, North Chesterfield, VA, 23225 - 5512, USA	11/22/2021
	Yes	Randy Trott	1001 Boulders Pkwy Ste 300, North Chesterfield, VA, 23225 - 5512, USA	11/22/2021
	Yes	Roger Rodriguez	1001 Boulders Pkwy Ste 300, North Chesterfield, VA, 23225 - 5512, USA	11/22/2021
	Yes	Shannon Hayes	1001 Boulders Pkwy Ste 300, North Chesterfield, VA, 23225 - 5512, USA	11/22/2021

Current Shares

Total Shares: 500000

Filing History RA History Name History Previous Registrations

Garnishment Designees

(Back) (Return to Search) (Return to Results)

Privacy Policy (https://www.scc.virginia.gov/privacy.aspx) Contact Us (https://www.scc.virginia.gov/clk/clk_contact.aspx) (https://www.facebook.com/VirginiaStateCorporationCommission)

Name	ARCHER WESTERN CONSTRUCTION LLC
License Number	2705141795
License Description	Contractor
Firm Type	Corporation
Rank ¹	Class A
Address	929 W ADAMS ST, CHICAGO, IL 60607
Specialties ²	Commercial Building (CBC)
	Highway / Heavy (H/H)
	Residential Building (RBC)
Initial Certification Date	2011-07-12
Expiration Date	2023-07-31

License Details

- 1 Refer to the Statutory Definitions (http://law.lis.virginia.gov/vacode/title54.1/chapter11/section54.1-1100/) for descriptions of the rank or class of license (A, B, or C) that determines the monetary limits on contracts/projects.
- 2 Refer to the Classification Definitions (http://lis.virginia.gov/cgi-bin/legp604.exe?000+reg+18VAC50-22-20) and Specialty Definitions (http://lis.virginia.gov/cgi-bin/legp604.exe?000+reg+18VAC50-22-30) for detailed definitions of these classifications and specialties.

The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform DPOR so that appropriate action may be taken.

License Details

DEWBERRY ENGINEERS INC Name License Number 0411000941 License Description **Business Entity Branch Office Registration** Business Type Corporation Rank **Business Entity Branch Office** Address 8401 ARLINGTON BLVD, FAIRFAX, VA 22031 **Initial Certification Date** 2012-07-02 Expiration Date 2024-02-29

Related Licenses¹

License Number	License Holder Name	License Type	Relation Type	License Expiry
0401005284	WELLS, JOSEPH EDWARD	Architect License	Architecture	2023-10-31
0406001718	CENA, JANICE MARIE	Landscape Architect License	Landscape Architecture	2023-01-31
0402023693	JAMES, RUSSELL R	Professional Engineer License	Engineering	2023-03-31

Showing 1 to 3 of 3 entries

1 The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform the Broker and DPOR so that appropriate action may be taken.

The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform DPOR so that appropriate action may be taken.

License Details

Name	MCDONOUGH BOLYARD PECK INC
License Number	0411000604
License Description	Business Entity Branch Office Registration
Business Type	Corporation
Rank	Business Entity Branch Office
Address	7401 BEAUFONT SPRING DR BOULDERS VI SUITE 301,
	RICHMOND, VA 23225
Initial Certification Date	2009-07-15
Expiration Date	2024-02-29

Related Licenses¹

License Number	License Holder Name	License Type	Relation Type	License Expiry
0402036991	STEWART, DUNCAN KENNETH	Professional Engineer License	Engineering	2024-06-30

Showing 1 to 1 of 1 entries

1 The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform the Broker and DPOR so that appropriate action may be taken.

The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform DPOR so that appropriate action may be taken.

License Details

ACCUMARK INC Name License Number 0411000864 License Description **Business Entity Branch Office Registration** Business Type Corporation Rank **Business Entity Branch Office** Address 9500 KING AIR COURT, ASHLAND, VA 23005 **Initial Certification Date** 2011-09-15 Expiration Date 2024-02-29

Related Licenses¹

License Number	License Holder Name	License Type	Relation Type	License Expiry		
0403001810	RICHARDSON, FRANK R II	Land Surveyor License	Land Surveying	2023-06-30		
Showing 1 to 1 of 1 entries						

1 The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform the Broker and DPOR so that appropriate action may be taken.

The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform DPOR so that appropriate action may be taken.

License Details

Name	DIVERSIFIED PROPERTY SERVICES OF VIRGINIA INC
License Number	4008001190
License Description	Appraisal Business Registration
Firm Type	Corporation
Rank	Business Entity
Address	20 E TIMONIUM ROAD SUITE 111, TIMONIUM, MD 21093-
	0000
Initial Certification Date	2000-11-29
Expiration Date	2022-11-30

The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform DPOR so that appropriate action may be taken.

License Details

ECS-MID-ATLANTIC LLC Name DBA Name LEO J TITUS JR PE 0407004628 License Number License Description **Business Entity Registration** LLC - Limited Liability Company Firm Type Rank **Business Entity** Address 14026 THUNDERBOLT PL STE 300, CHANTILLY, VA 20151 Initial Certification Date 2004-12-10 Expiration Date 2023-12-31

Related Licenses¹

License Number	License Holder Name	License Type	Relation Type	License Expiry
0402031573	TITUS, LEO JOSEPH JR	Professional Engineer License	Engineering	2023-08-31
0401008763	DOYLE, MICHAEL GENE	Architect License	Architecture	2023-08-31

Showing 1 to 2 of 2 entries

1 The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform the Broker and DPOR so that appropriate action may be taken.

The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform DPOR so that appropriate action may be taken.

License Details

MCCORMICK TAYLOR INC Name License Number 0411000771 License Description **Business Entity Branch Office Registration** Business Type Corporation Rank **Business Entity Branch Office** Address 111 MILL PL PKWY UNIT 105, VERONA, VA 24482 **Initial Certification Date** 2010-10-27 Expiration Date 2024-02-29

Related Licenses¹

License Number	License Holder Name	License Type	Relation Type	License Expiry
0402036571	STYERS, SAMUEL ADAM	Professional Engineer License	Engineering	2023-06-30

Showing 1 to 1 of 1 entries

1 The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform the Broker and DPOR so that appropriate action may be taken.

The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform DPOR so that appropriate action may be taken.

License Details

Name	MCCORMICK TAYLOR INC
License Number	0407004111
License Description	Business Entity Registration
Firm Type	Corporation
Rank	Business Entity
Address	4951 LAKE BROOK DR STE 275, GLEN ALLEN, VA
	23060
nitial Certification Date	2001-05-22
Expiration Date	2023-12-31

Related Licenses ¹

License	License Holder	License Type	Relation	License
Number	Name		Type	Expiry
0402036571	STYERS, SAMUEL ADAM	Professional Engineer License	Engineering	2023-06-30

Showing 1 to 1 of 1 entries

1 The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform the Broker and DPOR so that appropriate action may be taken.

The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routlinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform DPOR so that appropriate action may be taken.

License Details

Name	TIMMONS GROUP INC
License Number	0410000263
License Description	Professional Corporation Branch Office Registration
Firm Type	PC - Professional Corporation
Rank	Professional Corporation Branch Office
Address	28 IMPERIAL DR, STAUNTON, VA 24401
Initial Certification Date	2013-11-08
Expiration Date	2024-02-29

Related Licenses¹

License Number	License Holder Name	License Type	Relation Type	License Expiry
0403003385	MEDLEY, JOSEPH CARTER	Land Surveyor License	Land Surveying	2023-02-28
Showing 1 to 1 of 1 entries				

1 The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform the Broker and DPOR so that appropriate action may be taken.

The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform DPOR so that appropriate action may be taken.

License Details

Name	TIMMONS GROUP INC
License Number	0405000456
License Description	Professional Corporation Registration
Firm Type	PC - Professional Corporation
Rank	Professional Corporation
Address	1001 BOULDERS PKWY STE 300, RICHMOND, VA 23225
Initial Certification Date	1984-12-26
Expiration Date	2023-12-31

Related Licenses¹

License Number	License Holder Name	License Type	Relation Type	License Expiry
0406001629	WILEY, SCOTT WILLIAM	Landscape Architect License	Landscape Architecture	2023-12-31
0402021266	BORTELL, BRIAN F	Professional Engineer License	Engineering	2024-07-31
0403002287	DUNEVANT, MICHAEL DWAYNE	Land Surveyor License	Land Surveying	2023-01-31

Showing 1 to 3 of 3 entries

1 The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform the Broker and DPOR so that appropriate action may be taken.

The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform DPOR so that appropriate action may be taken.

License Details

Name	HOLLON, RICHARD ADAM
License Number	0402056440
License Description	Professional Engineer License
Rank	Professional Engineer
Address	BRAMBLETON, VA 20148
Initial Certification Date	2016-12-12
Expiration Date	2022-12-31

The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform DPOR so that appropriate action may be taken.

License Details Name BREWER, MARK CONRAD License Number 0402050037 License Description Professional Engineer License Rank Professional Engineer Address BURKE, VA 22015 Initial Certification Date 2012-06-07 Expiration Date 2024-06-30

The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform DPOR so that appropriate action may be taken.

License Details

Name	STEWART, DUNCAN KENNETH
License Number	0402036991
License Description	Professional Engineer License
Rank	Professional Engineer
Address	RICHMOND, VA 23235
Initial Certification Date	2002-06-24
Expiration Date	2024-06-30

Related Licenses¹

License Number	License Holder Name	License Type	Relation Type	License Expiry
0411000604	MCDONOUGH BOLYARD PECK INC	Business Entity Branch Office Registration	Engineering	2024-02-29

Showing 1 to 1 of 1 entries

1 The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform the Broker and DPOR so that appropriate action may be taken.

The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform DPOR so that appropriate action may be taken.

3.3.1 Key Personnel Form

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

- a. Name & Title: Jeffrey Mays Program Manager
- b. Project Assignment: Design-Build Project Manager

c. Name of the Firm with which you are employed at the time of submitting SOQ.:

Archer Western Construction, LLC

d. Employment History: With this Firm **<u>18</u>** Years With Other Firms **<u>4</u>** Years

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

Archer Western Construction, LLC, 2019-Present, Program Manager

As a Program Manager, Mr. Mays is responsible for overall direction, completion and financial outcome of specific large-scale projects and/or multiple projects in the Mid-Atlantic, including leading multidisciplinary teams, actively collaborating with business development, and providing strategic direction across business group initiatives. He represents the organization's interests and forges critical relationships with a specific target client base.

Archer Western Construction, LLC, 2012-2019, Senior Project Manager

As a Senior Project Manager, Mr. Mays was responsible for overall project delivery including coordination and management of: design-build policies/procedures, safety processes, risk mitigation, quality management, stakeholder coordination, subcontractor solicitation, negotiation, award and contract administration; cost control for self-performed work and subcontractors; design and maintenance of Primavera CPM schedule; material/equipment procurements; monthly job status summaries; estimating; weekly progress and coordination meetings; staff training; and execution of monthly pay applications.

Archer Western Construction, LLC, 2004-2012, Project Manager: As a Project Manager, Mr. Mays was

responsible for project administration, including project start-up, staffing, and contract negotiation with subcontractors and suppliers. He oversaw maintenance of quality control systems, schedule requirements, construction of the project, cost accountability, and the establishment of management systems. It was Mr. Mays' duty to ensure close coordination among all project team members, ensuring owners a successful project delivery.

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

Virginia Tech, Blacksburg, VA / Bachelor of Science / 2002 / Civil and Environmental Engineering University of Texas, Austin, TX / Master of Science / 2003 / Construction Engr and Project Mgmt

- f. Active Registration: Year First Registered/Discipline/VA Registration #:N/A
- g. Document the extent and depth of your experience and qualifications relevant to the Project.
- 1. 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 I-81 Widening MM 136-141 (DB) (\$179M), *Roanoke, VA* Firm: Archer Western Construction

Role: DB Project Manager **Dates:** 2021 – 2024 (Est)

- Responsible for overall project design and construction
- Responsible for construction, quality management, contract administration, risk management
- Supervised the design, permitting, and construction
- Managed the project control and document control systems
- Managed labor and procured subcontractors and materials in time to meet a demanding schedule
- Applied safety, environmental, and quality plans
- Administered schedule to ensure milestones were met

The design-build project consists of widening 5.2 miles of I-81 in both the NB and SB directions from two to three lanes between MM136 and MM141. The project includes 6 bridge replacements, 2 bridge widenings, asphalt resurfacing, noise walls, drainage and SWM upgrades, barrier wall and electrical/signage upgrades.

Similarities to I-81 Project: I-81 DB widening, bridge construction, retaining walls, utility relocations, drainage, multi-phase TMP/MOT, environmental considerations, stakeholder coordination

METRO Crenshaw/LAX Light Rail Project (DB), (\$1.4B), Los Angeles, CA

Role: DB Project Manager Dates: 2016-2019

- Firm: Walsh Construction (AWC Affiliate)
- Led a staff of over 200 supervisors and 1,000 self-performing craft workers.
- Responsible for Risk Management and Mitigation strategies
- Supervised the design, permitting, and construction on the fast-tracked design-build project
- Coordinated with multiple stakeholders utilizing oral, written, and social media outlets to assure public and all stakeholders were informed
- Managed the project control and document control systems
- Managed labor and procured subcontractors and materials in time to meet a demanding schedule
- Applied safety, environmental, and quality plans
- Administered schedule to ensure milestones were met

The project is an 8.5-mile light rail line that includes 5.5 miles of at-grade track, 3,600 feet of cast-in-place bridge structures, 4,600 feet of U-wall, 4,700 feet of cut and cover trench and approximately 6,000 feet of dual bored tunnels. In addition, the project includes 8 stations and a signature parabolic bridge over I-405, the busiest and most congested freeway in the U.S., where Walsh used innovative design and construction techniques to temporarily shore the new parabolic bridge structure off an existing rail bridge to drastically minimize impacts to traffic and mitigate project risks.

Similarities to I-81 Project: Design-Build delivery, bridge construction, retaining walls, asphalt, drainage, Interstate and roadwork, utility relocations, multi-phase traffic management, workforce development, procurement coordination, schedule management, environmental considerations, stakeholder coordination, DBE coordination

CTxHC SH 130 Segments 5 & 6 (DB), (\$1.0B), *Lockart, TX* Firm: Archer Western Construction

Role: Project Manager Dates: 2009-2011

- Responsible for Risk Management and Mitigation strategies
- Developed and managed the project control and document control systems
- Managed labor and procured subcontractors and materials in time to meet a demanding schedule
- Applied safety, environmental, and quality plans
- Administered schedule to ensure milestones were met including constructing 68 bridges in 2 years.
- Provided constructability reviews on design to minimize conflicts that could affect schedule

This privately developed Design-Build project spanned over 40 miles of private toll road from Mustang Ridge through Lockhart to I-10 in Seguin, Texas. AWC's scope included 68 bridges, 31 retaining walls, and over 40 miles of roadway including work along I-10 and US 183.

Similarities to I-81 Project: Design Build, interstate highway construction, bridge construction, retaining walls, multi-phase due to permitting, stormwater management considerations, environmental considerations, innovative design and construction techniques, stakeholder 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.

Not applicable for this position

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: Richard "Adam" Hollon, P.E., Project Manager

b. Project Assignment: Entrusted Engineer in Charge (EIC)

c. Name of the Firm with which you are employed at the time of submitting SOQ.: Archer Western Construction, LLC

d. Employment History: With this Firm 4 Years With Other Firms 14 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):

Archer Western Construction, LLC | Construction Manager | August 2017 – present

As Construction Manager, Mr. Hollon supervises on-site teams and manages daily field operations. This includes management of project timelines, development of progress reports for owner meetings, and coordination/supervision of contractors. Other duties include managing bid solicitation, contract drafting, buyouts, shop drawing review and submittal review, cost estimating, plan distribution, project pay requests, and change order/purchase order drafting. He also monitors materials and equipment installed by contractors, enforces quality control, and ensures compliance with safety standards and contract requirements.

Kiewit Infrastructure Group | Project Engineer, Design-Build Coordinator, Segmental Engineer, Superintendent, General Superintendent | July 2010 - August 2017

Throughout his time with Kiewit, Mr. Hollon managed operations for the construction of deck and river finishing works, scheduling, quality, and safety. He provided field engineering, cost tracking, and quality control support to multiple field engineers while leading a segmental heading. Led coordination of superstructure design among designer, owner, and adjacent contracts during design development, including structural and systems engineering. He also led cost tracking and forecasting. Drafted subcontracts and change orders. Performed monthly critical path updates and submitted client invoices.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Oregon State University, Corvallis, OR/BS/2004/Civil Engineering

f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2016/Professional Engineer/Virginia/0402056440

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

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

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

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

South Capitol Street Corridor (Phase I), Washington, DC

Firm: Archer Western Construction, LLC

- Managed design development of the new Frederick Douglass Memorial Bridge (FDMB) with EOR and owner • throughout the DB process; responsible for safety, quality, compliance, and schedule performance
- Led planning and execution of construction operations for building the new FDMB and demolishing the existing • bridge; delivered the new structure ahead of schedule
- Successfully coordinated planning and execution of field operations with stakeholders including NPS, USACE, • DOEE, US Coast Guard, Local Wards, Anacostia River users, local developers, and utility owners

Dates: 2017-2022

Role: Construction Manager

The South Capitol Street Corridor PH 1 Project is a Design-Build Project that includes the replacement of the Frederick Douglas Memorial Bridge (FDMB) across the Anacostia River in DC. Extensive approach work including 500' long ovals providing roadway connectivity to the FDMB. Coordination with several utility companies is required as extensive utility relocations are required. Roadway upgrades are also included between the east oval and I-295. Three bridges are included in the rehabilitation of 1.5 miles of I-295. MOT is an extremely important part of the project with lane closure restrictions include normal rush hours and sporting events at the adjacent baseball and soccer stadiums.

Similarities to I-81 Project: Design-Build, highway widening, bridge construction, retaining walls, asphalt, drainage, utility coordination and relocation, stormwater management, environmental considerations, noise analysis, stakeholder coordination.

Dulles Corridor Metrorail Project, Phase 2, Herndon, VA

Role: Construction Manager **Dates:** 2014-2017

Firm: Kiewit Infrastructure Group

- Managed planning and execution of field operations for the construction of aerial guideway superstructure, including soliciting and subcontracting aerial guideway work
- Coordinated construction operations with Metropolitan Washington Airports Authority (MWAA) and other local stakeholders
- Project received 2015 Top Safety Performance Award

The project is a 23-mile extension of Washington's existing Metrorail system. Known as the Silver Line, the extension is operated by the Washington Metropolitan Area Transit Authority (WMATA). It was built in two phases by the MWAA and will provide a no-transfer ride from Dulles to downtown Washington, D.C.

Similarities to I-81 Project: Design-Build, Multi-phased construction, environmental considerations, innovative design and construction techniques, utility coordination and relocation, significant stakeholder coordination

Tilikum Crossing Cable-Stayed Bridge, Portland, OR

Role: Various (See below) Dates: 2010-2014

- Firm: Kiewit Infrastructure Group
 Dates: 2010-2014
 Construction Manager (4 months) Managed operations for the construction of deck and river finishing works. Managed scheduling, quality, and safety. Performed field work without safety or quality incident.
- Lead Segmental Engineer (18 months) Developed innovative traveler formwork system to reduce cycle schedule, account for required form modifications, and support equipment during construction.
- Design-Build Coordinator (6 months) Worked with the designer to develop revised construction sequencing giving segmental operations more flexibility during construction. Drove designer to develop lean structural design, providing material and labor cost savings.
- Project Engineer (15 months) Primary point of contact for technical field operation issues. Led cost tracking and forecasting. Drafted subcontracts and change orders. Performed monthly critical path updates and submitted client invoices.
- Estimator (6 months) Conducted quantity take-offs for superstructure construction operations. Performed DBE, MBE, and WBE outreach. Participated in subcontract and procurement buyout, estimate closeout, and final cost proposal submission. Developed foreman safety book addressing hazards and precautions for working conditions.

The first bridge of its kind in the U.S., the 1,720-long Tilikum Crossing carries MAX Orange Line trains, buses, streetcars, cyclists, and pedestrians over the Willamette River in Portland, OR. The structure is a 4-pier cable-stayed bridge type with two piers on land and two in the water at the towers.

Similarities to I-81 Project: Design-Build, bridge construction, dense urban environment, superstructure rehabilitation, innovative design and construction techniques, significant stakeholder coordination

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.

Adam is currently assigned to the South Capitol Street Bridge Project, as Construction Manager. Adam will be available for the I-81 MM 221-225 widening prior to design activities commencing.
KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

- a. Name & Title: Anthony Tundo, Assistant Project Manager II
- b. Project Assignment: Construction Manager

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

d. Employment History: With this Firm 8 Years With Other Firms 7 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):

Archer Western Construction, 2014 – Present, Construction Manager - Mr. Tundo supervises on-site teams and manages daily field operations. This includes management of project timelines, development and maintenance of project schedules, and coordination/supervision of subcontractors. Other duties include leading pre-task planning for self-perform crews, managing labor force and subcontractors, supporting PM in financial forecast and updating cost reports, enforcing quality control, and ensuring compliance with safety standards and contract requirements. On DB projects Anthony provides constructability reviews, oversees utility relocations, and provides input into the R/W acquisition schedule.

Contour Construction, 2012- 2014, Construction Manager - Reviewed foreman's reports and enter reports into project management software for cost tracking. Managed overall project schedule with superintendents, leading pre-task planning for self-perform crews, managing labor force and subcontractors, supporting PM in financial forecast and updating cost reports, enforcing quality control, and ensuring compliance with safety standards and contract requirements. Submitted payment applications to owner or prime contractor. Performed takeoffs using EarthWorks Pro and On-Screen Takeoff. Create takeoff spreadsheets for repeated calculations. Solicited and organize subcontractor quotes. Created estimates using Estimating Link.

R.B. Robinson Contracting Inc., 2011- 2012, Field and Office Engineer - Reviewed and verified timesheets summited by site foreman. Built 3D GPS models, created localization files, and installed supporting files into GPS rover and grade control equipment. Managed daily schedule of equipment, truck, and labor needs. Created takeoffs and estimates using InSite and Heavy Bid software. Tracked and summarized change orders for invoicing. Managed the initial use of mobile time recording. Scheduled delivery of materials.

Barrett Paving Materials Inc., 2009 – 2011, Project Engineer Intern

NY State Dept. of Transportation, 2008 –2009, Transportation Construction Inspector

Syracuse Utilities, 2007-2008, Laborer

- e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Cornell University – Ithaca, NY – 2011 - BS Civil & Environmental Engineering Morrisville State College – Morrisville, NY – 2008 – Associates Degree Engineering Science
- f. Active Registration: Year First Registered/ Discipline/VA Registration #: N/A Anthony will renew both the Virginia Department of Environmental Quality (DEQ) Responsible Land Disturber (RLD) and the VDOT Erosion and Sediment Control Contractor (ESCCC) Certifications prior to the commencement of construction
- 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.)

South Capitol Street Corridor Ph 1 (DB)(\$451M), *Washington, DC* Firm: Archer Western Construction, LLC **Role:** Utility Construction Manager **Dates:** 2018-2022

- Supported the DBPM while supervising the design, permitting, and construction activities
- Led pre-activity planning for self-perform crews

- Managed labor force and procured subcontractors and materials in time to meet a demanding schedule
- Managed the project schedule (creating and updating)
- Scheduled quality control inspection staff
- Managed environmental compliance
- MOT coordination
- Conducted the Management and Oversight Meetings, design meetings, and construction progress meetings

The South Capitol Street Corridor PH 1 Project is a Design-Build Project that includes the replacement of the Frederick Douglas Memorial Bridge (FDMB) across the Anacostia River in DC. Extensive approach work including 500' long ovals providing roadway connectivity to the FDMB. Coordination with several utility companies is required as extensive utility relocations are required. Roadway upgrades are also included between the east oval and I-295. Three bridges are included in the rehabilitation of 1.5 miles of I-295. MOT is an extremely important part of the project with lane closure restrictions include normal rush hours and sporting events at the adjacent baseball and soccer stadiums.

Similarities to I-81 Project: Design Build, highway widening, bridge construction, retaining walls, asphalt, drainage, utility coordination and relocation, stormwater management, environmental considerations, noise walls, stakeholder coordination.

VDOT Jones Branch Connector over I-495 (\$43M), *Tysons, VA* **Firm:** Archer Western Construction, LLC Role: Construction Manager Dates: 2016-2019

- Supported the PM while supervising the construction activities
- Led pre-activity planning for self-perform crews
- Managed labor force and procured subcontractors and materials in time to meet a demanding schedule
- Managed the project schedule (creating and updating)
- Managed environmental compliance
- MOT coordination
- Conducted the Management and Oversight Meetings, design meetings, and construction progress meetings

The project involved a new four-lane road and bridge from the I-495 Express Lanes/Jones Branch Drive interchange to Scotts Crossing Road. Improvements were made along the access road from Jones Branch Drive to the I-495 Express Lanes, and Scotts Crossing Road.

Similarities to I-81 Project: Roadway improvements (widening/intersections), bridge construction, retaining walls, utility relocations, multi-phase TMP/MOT, environmental considerations, stakeholder access concerns.

I-395 HOV Ramp at Seminary RD & NB Aux Lane Ext (DB) (\$58M), Alexandria, VARole: Construction ManagerFirm: Archer Western Construction, LLCDates: 2014-2016

- Supported the DBPM while supervising the design, permitting, and construction activities
- Led pre-activity planning for self-perform crews
- Managed labor force and procured subcontractors and materials in time to meet a demanding schedule
- Managed the project schedule (creating and updating)
- Scheduled quality control inspection staff
- Managing environmental compliance
- MOT coordination
- Conducted the Management and Oversight Meetings, design meetings, and construction progress meetings

This design-build project included constructing a new I-395 HOV Ramp to the existing Seminary Rd, replacing the superstructure of the Seminary Rd Bridge, widening/rehabilitating the Sanger Ave Bridge, widening the I-395NB General Purpose Lanes, widening the Seminary Rd Off-Ramp, and widening the Duke St On-Ramp. Other major features of work include four sound walls, MSE walls, concrete piles, micropiles, and asphalt paving.

Similarities to I-81 Project: Design-Build delivery, highway widening, bridge construction/rehab, retaining walls, asphalt, drainage, utility coordination and relocation, stormwater management, environmental considerations, noise analysis, stakeholder 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 and for the QAM, provide a current list of assignments, role, and the anticipated duration of each assignment.

Currently assigned to PEPCO 8 Way Duct Bank as Project Manager. Anthony will complete his current assignment (March 2023) prior to the start of construction for the I-81 Widening MM 221-225 Project.

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

- a. Name & Title: Mark Brewer, PE, Senior Associate
- b. Project Assignment: Design Manager (DM)

c. Name of the Firm with which you are employed at the time of submitting SOQ .: Dewberry Engineers Inc.

d. Employment History: With this Firm <u>15</u> Years With Other Firms <u>0</u> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):

Dewberry Engineers Inc.; Design Manager / Project Manager (2017-Present)

Responsible for overall project management for roadway improvement projects, serving both public and private clients. Management requirements involve integrating multiple engineering disciplines, including roadway, structural, hydraulic, traffic, and environmental disciplines in Dewberry's Fairfax, Gainesville and Leesburg VA offices, as well as coordinating various subconsultant services. Project oversight responsibilities include managing the quality control and quality assurance program, ensuring that all project work adhere to prescribed standards of quality and accuracy. Specific project experience with Design and Project Management responsibilities included (dates show duration in design phase):

- Route 29 Widening Phase II (\$66.9M), 6/2022 to 5/2023 Design Manager
- Centreville Road Widening Design-Build (\$60.5M), 6/2020 to 7/2022 Design Manager
- Van Buren North Extension NEPA Documentation (\$1.7M), 10/2020 to 12/2022 Project Manager
- Route 28 Phase III Widening Design-Build (\$30.1M), 5/2018 to 3/2022 Design Manager
- Leesburg Bypass Improvement Project Design-Build (\$3.6M), 4/2019 to 12/2021 Design Manager
- Dulles Greenway Westbound Ramp Reconfiguration (\$1.6M), 4/2019 to 12/2020 Design Manager
- Dulles Greenway Eastbound Widening Design-Build (\$16.5M), 11/2017 to 10/2020 Design Manager

Dewberry Engineers Inc.; Project Engineer / Senior Project Engineer / Lead Designer (2007-2017)

Responsible for design for multiple design-build and design-bid-build projects, including coordination with subconsultants and design integration for ultimate project completion. Also provided lead design coordination efforts to incorporate overall roadway design including structural, hydraulic, traffic engineering, and environmental permitting services. Involved with internal coordination with other design disciplines, design-build team meetings with construction staff, as well as regular meetings with clients/owners for each of the projects. Roadway and hydraulic design responsibilities included development of horizontal alignments, vertical profiles, superelevation transitions, roadway drainage plans and calculations, grading plans, cross sections, erosion & sediment control plans, roadway construction plans, and right-of-way acquisition plans. Design projects with engineering roles included:

- I-95/Route 630 Reconstruction and Widening Design-Build (\$112M), 10/2016 to 7/2020 Senior Project Engineer
- Route 659 (Belmont Ridge Road) Reconstruct to 4-Lanes Design-Build (\$45.4M), 10/2015 to 4/2019 Senior Project Engineer
- Route 606 Loudoun County Parkway/Old Ox Road Reconstruction & Widening Design-Build (\$92.9M), 6/2014 to 8/2018 Senior Project Engineer
- I-66 Widening Design-Build (\$56.1M), 9/2013 to 8/2016 Sr. Project Engineer
- Route 29 Over Little Rocky Run Design-Build (\$11.4M), 6/2013 to 10/2015 Sr. Project Engineer
- Route 27/244 Interchange Modifications Design-Build (\$32.5M), 9/2011 to 8/2015 Sr. Project Engineer
- Route 50 Widening Design-Build (\$77.3M), 3/2011 to 12/2015 Senior Project Engineer
- Pacific Boulevard Extension Design-Build (\$5.9M), 7/2011 to 8/2013 Senior Project Engineer
- University Boulevard Extension PPTA Design-Build (\$30.7M) 3/2011 to 12/2013 Lead Designer
- Route 28 Corridor Improvements Design-Build (\$480M), 7/2007 to 6/2015 Project Engineer
- Interstate 66 Improvements (\$215M), 7/2007 to 9/2015 Project Engineer

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: University of Virginia, Charlottesville, VA / BS / 2007 / Civil Engineering

- f. Active Registration: Year First Registered/ Discipline/VA Registration #: Professional Engineer / 2012 / Civil Engineering / Virginia #0402 050037
- 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 (design and construction); projects older than fifteen (15) years will not be considered for evaluation.

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

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

Centreville Road Widening Design-Build, (\$60.5M), *Centreville, VA* Firm: Dewberry Engineers Inc.

- Oversaw design staff and subconsultants to coordinate all design elements;
- Directly involved with roadway, erosion control, and drainage design;
- Participated in public outreach and individual meetings with stakeholders;
- Participation in monthly owner meetings through design and construction; and
- Provided construction support through RFI and submittal reviews.

Project improvements included approximately 2.5-miles of roadway widening, signalized intersection upgrades at five locations, pedestrian improvements, public utility enhancements, surface drainage conveyance system, and stormwater management facilities. Mark managed design efforts to widen the roadway to a six-lane divided roadway, but he also coordinated elements such as stormwater management, drainage design, traffic engineering, and utility relocations to support the ultimate eight lane roadway. For stormwater management, Mark coordinated reviews from VDOT and Fairfax County Land Development Services for the project's both dry ponds and underground detention facilities, achieving approvals and agreements on long-term maintenance.

Similarities to I-81 Project: Design-Build; primary route widening; noise analysis and attenuation; pavement milling, variable overlay, and reconstruction; retaining walls; drainage; utility coordination and relocation; phased TMP/MOT; stormwater management; environmental considerations; stakeholder coordination.

Dulles Greenway Eastbound Widening Design-Build, (\$16.5M), *Dulles, VA* **Firm:** Dewberry Engineers Inc.

Role: Design Manager **Dates:** 11/2017 – 10/2020

- Responsible for the layout of roadway horizontal, vertical, and drainage design;
- Coordinated all design efforts, including work from outside sub-consultants;
- Extensive coordination with MWAA for traffic, stormwater management, and environmental constraints; and
- Preliminary design and then transitioned to final design through Design-Build delivery.

Project included widening of the Dulles Greenway for 2.3 miles from the mainline toll plaza to its eastern terminus, and along the Dulles Toll Road and the off-ramp to Centreville Road. This consisted of primary arterial roadway widening from the existing two-lane section to a three-lane section, improved roadside drainage, extensive stormwater management meeting DEQ and MWAA criteria, bridge widening over Route 28, bridge improvements over the Dulles Toll Road / Silverline Metrorail, and in-depth traffic studies to document the project with VDOT and MWAA.

Similarities to I-81 Project: Design-Build; principal arterial roadway widening (mill/overlay and new full depth); drainage and stormwater management; retaining walls; bridge widening and modifications; phased TMP/MOT with erosion control; extensive stakeholder coordination; environmental permitting.

I-66 Widening Design-Build, (\$56.1M), Haymarket, VA

Role: Sr. Project Engineer **Dates:** 9/2013 – 8/2016

Firm: Dewberry Engineers Inc.

- Senior designer for roadway alignments, erosion control, and drainage design;
- Conducted interdisciplinary quality control checks;
- Participation in monthly owner meetings through design and construction; and
- Provided construction support and final as-built documentation.

Project improvements included approximately 2.5-miles of roadway widening, signalized intersection upgrades at five locations, pedestrian improvements, public utility enhancements, surface drainage conveyance system, and stormwater management facilities. Mark managed design efforts to widen the roadway to a six-lane divided roadway, but he also coordinated elements such as stormwater management, drainage design, traffic engineering, and utility relocations to support the ultimate eight lane roadway. For stormwater management, Mark coordinated reviews from VDOT and Fairfax County Land Development Services for the project's both dry ponds and underground detention facilities, achieving approvals and agreements on long-term maintenance.

Similarities to I-81 Project: Design-Build; Interstate widening; noise analysis and attenuation; pavement milling, variable overlay, and reconstruction; bridge construction; retaining walls; drainage; utility coordination; phased erosion control and TMP/MOT; stormwater management; environmental considerations.

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 applicable for this position.

Role: Design Manager **Dates:** 6/2020 – 2/2024 (est.)

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: Duncan Stewart, PE, CCM, PSP

b. Project Assignment: Quality Assurance Manager

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

d. Employment History: With this Firm 22 Years with Other Firms 2 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):

MBP, Service Executive, 1999-Present: Mr. Stewart provides a wide range of services ranging from construction quality assurance to pre-construction and post-construction services. His experience has been almost exclusively related to quality assurance for VDOT, including significant project and program level support to VDOT's Design-Build (DB) program. He has served as a QAM for six VDOT DB projects for a total construction value \$75 million. Since 2017 he has also reviewed and evaluated multiple DB construction projects for the Construction Quality Improvement Program (CQIP) working as a consultant Responsible Charge Engineer for VDOT's Construction Division. Mr. Stewart is also currently the Quality Control Manager (QCM) for a DB new \$20 million bridge project in Lynchburg, VA. Since 2017, he has developed and delivered bridge construction and bridge restoration training to VDOT's inspector trainee program. He has delivered these courses to over 100 trainees and inspectors across Virginia. In these roles he has gained expert knowledge of VDOT's QA/QC, inspection, and record keeping requirements, and is often called on for support and training. He has also provided IA/IV oversight of VDOT design-build projects, as well as project controls support to the Ohio Department of Transportation for its DB program.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Royal Military College of Canada, Kingston, Ontario, Canada/B.Eng./1997/Civil Engineering

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

2002/Professional Engineer (PE)/036991; 2014/Certified Construction Manager (CCM)/CMCI ID: 2423 2015/Planning & Scheduling Professional (PSP)/1490

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.)

Route 35 Darden Bridge Replacement (DB) (\$10M), *Courtland, VA* Firm: MBP

Role: QAM **Dates:** 2014 - 2016

- Provided Quality Assurance (QA) services (developed the project's QA/QC plan)
- Provided QA inspection and testing, and project records management services during the construction phase.
- Prepared, maintained, and submitted project documentation including diaries, EEO, ARRA, materials notebook/documentation, as-built sketches, and monthly pay documents including verifying and approving monthly pay packages; prepared and submitted final records
- Managed the QA inspection team
- Coordinated QA with the design builder's QC inspection staff

This project consisted of replacing an existing bridge with a new 900-foot structure over the Blackwater River, as well as grading, paving, and drainage for 1,000-feet of associated roadway. This project was completed on an extremely accelerated schedule and required proactive QA/QC management to avoid and resolve issues.

Similarities to the I-81 Project: Design-Build delivery, roadway work, bridge construction, retaining walls, utility relocations, drainage multi-phase TMP/MOT, environmental considerations, stakeholder coordination.

VDOT I-64 at US 15 (DB) (\$7M), Zion Crossroads, VA Role: QAM Firm: MBP, Inc Dates: 2012-2014 Provided QA services (developed the project's QA/QC plan) Provided QA inspection and testing, and project records management services during the construction phase. Prepared, maintained, and submitted project documentation including diaries, EEO, ARRA, materials notebook/documentation, as-built sketches, and monthly pay documents including verifying and approving monthly pay packages; prepared and submitted final records Managed the QA inspection team Coordinated QA with the design builder's QC inspection staff The project included complicated Maintenance of Traffic (MOT) considerations, as well as a wide range of construction elements from utility relocations to signalization and paving. The project construction cost was approximately \$7 million. Similarities to the I-81 Project: Design-Build delivery, interstate highway widening, bridge construction, retaining walls, utility relocations, drainage multi-phase TMP/MOT, environmental considerations, stakeholder coordination I-895 Airport Connector Road (DB) (\$42M), Richmond, VA Role: QAM Dates: 2008-2011 Firm: MBP, Inc Provided QA services (developed the project's QA/QC plan) Provided OA inspection and testing, and project records management services during the construction phase. Prepared, maintained, and submitted project documentation including diaries, EEO, ARRA, materials notebook/documentation, as-built sketches, and monthly pay documents including verifying and approving monthly pay packages; prepared and submitted final records Managed the QA inspection team Coordinated QA with the design builder's QC inspection staff This project consisted of construction of 1.5 miles of a limited access 4-lane highway from I-895 to Charles City Road,

This project consisted of construction of 1.5 miles of a limited access 4-lane highway from I-895 to Charles City Road, including a new bridge over I-895, a new interchange at I-895, a new bridge over Sprouse Drive, and a new bridge over the CSX Railway. Construction included extensive MSE retaining walls, steel girder and concrete beam bridges, and the widening of an existing bridge on I-895.

Similarities to the I-81 Project: Design-Build delivery, interstate highway widening, bridge construction, retaining walls, utility relocations, drainage multi-phase TMP/MOT, environmental considerations, stakeholder coordination

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

Current Assignments:

- City of Lynchburg Lakeside Drive Bridge over Blackwater Creek, QCM, substantial completion September 2022 (Full-time) – Assignment will be complete prior to start of construction of I-81 MM 221-225
- VDOT On-call Finals Contract, Project Manager, current term ends June 2023 (Part-time a couple of hours a month)

3.4.1 (a) Work History Form/Lead Contractor

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 V Original Contract Value	Value (in thousands) Final or Estimated Contract Value	g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
Ohio River Bridge Downtown Project (DB) Louisville, KY	Jacobs	Name of Client: KYTC Project Manager: Andy Barber Phone: (502) 564-4890 Email: <u>andy.barber@ky.gov</u>	12/2016	11/2016	\$ 860,000	\$894,042 * * Difference due to Owner added scope	\$576,657

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly. The Work History Form shall include only one singular project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form. If the Offeror chooses to submit work performed as a Joint Venture or Partnership, identify how the Joint Venture or Partnership was structured and provide a description of the portion of the work performed only by the Offeror's firm.



SIMILARITIES TO I-81 WIDENING MM 221 TO MM 225 PROJECT

- Design-Build Delivery
- Interstate Highway Widening
- Bridge rehabilitation/re-decking
- Asphalt paving
- Multi-stage bridge construction/replacement
- Utility relocations & Avoidance
- Environmental Permitting and Strict Compliance Monitoring
- Storm Drainage and SWM Pond Facilities
- MOT Operations minimizing impacts
- Noise barrier analysis, design, and construction
- Independent QA program
- AWC responsible for QC program
- Public involvement and Outreach
- Third Party Stakeholder communication & coordination

PROJECT NARRATIVE AND SCOPE:

In February 2013, Walsh Construction II (Archer Western affiliate), was awarded the contract for the design and construction of a new Ohio River crossing (Abraham Lincoln Bridge) and widening and reconstruction along I 64, I-65, and I-71 in Louisville, KY. Specific elements of the project included:

- Widening of I-65 from four to 8-lanes for approximately 6.1 miles;
- Widening of I-64 from four to 6-lanes for approximately 1.3 miles;
- Ramp and shoulder improvements at I-65/I-64/I-71 Interchange;
- Replacement of 45 bridge structures over sideroads, railroads, stormwater facilities, and interstate ramps;
- Stormwater management improvements;
- New cable stayed bridge over the Ohio River;
- Rehabilitation/replacement of the bridge deck of the existing Ohio River bridge;
- Noise barrier analysis, design, and construction; and
- Public outreach.

All work was performed on a heavily traveled interstate highway and all lane restrictions were coordinated by Archer Western with KYTC to allow for public notifications of construction activity.

Being new to Louisville, Archer Western partnered with local area high schools, tech/vocational schools community colleges, and universities to help grow our workforce. An apprenticeship program was established and over the life of the project had 35 graduate to journeyman status.

ARCHER WESTERN'S ROLE:

This project was constructed by Archer Western Affiliate Walsh Construction II, LLC. All Walsh companies operate as a single entity with resources (people, material, equipment) and experience shared as project needs arise. For example, many of our key personnel have experience working on both Walsh Construction and Archer Western Construction projects. It is anticipated that Walsh Construction II will not have a role on this project However, personnel and construction equipment from Walsh Construction II projects could be assigned to the I 81 Project.

LIMITING IMPACTS TO THE TRAVELING PUBLIC/AFFECTED BUSINESSES AND COMMUNITIES:

Minimizing impacts to the traveling public was a critical aspect of this congested corridor. AWC applied the use of a MOT "Task Team" from pursuit phase through TMP implementations. The Task Team was comprised of designers, construction personnel, KYTC and INDOT representatives, and emergency responders (local fire and police). The MOT Task Team developed the TMP around the goals of safety, efficiency, stability, access, and communication. Key components included:

- Establishing weekly MOT/Incident management meetings focused on upcoming construction activities, traffic patterns, and "what if" incident scenarios.
- Assigning a dedicated MOT Manager responsible for implementing the plan and acting as the single point • of contact for all MOT issues.
- Having the MOT Manager attend meetings at the KYTC Traffic Management Center regarding changes • in the traffic patterns, lane closures, and upcoming activities.
- Implementing an Incident Management Plan with communication protocols with law enforcement and • emergency responders to clear accidents.
- Strategically located laydown and storage areas to reduce construction traffic and minimize trucks from entering existing traffic lanes.

INNOVATIVE DESIGN SOLUTIONS/CONSTRUCTION TECHNIQUES:

Archer Western utilized our experience and "lessons learned" from several major river crossings and interstate highway widening projects to implement several innovative design solutions. First, the interstate widening scope was extensive enough to allow an alternate roadway alignment and geometry which minimized the amount of temporary pavement, reduced earthwork quantities and eliminated three MOT phases. The revised phasing also minimized nighttime construction work, representing a safety improvement to our team's field staff and inspection staff, as well as reduced impacts to the travelling public.

Additional innovative design solutions included developing an engineered ground improvements solution in lieu of surcharging to reduce schedule and optimize the design of the retaining walls and foundations. The team also developed designs for multiple prebuilt elements for bridge construction and the existing river crossing deck replacement. Use of preassembly reduced schedule, minimized traffic impacts, improved quality, and eliminated potential safety issues.

EFFECTIVE COMMUNICATION STRATEGIES WITH BUSINESSES & STAKEHOLDERS:

The Public Information Officer (PIO) supported KYTC in their communications with the public and would respond to general public inquires and comments including impacts regarding construction phasing/traffic shifts. This included meeting with neighborhood associations, business and property owners, and other stakeholders. An interactive website was set up and managed by KYTC with support from our team.

IMPLEMENTING AND MAINTAINING OA/OC PLANS DURING DESIGN AND CONSTRUCTION:

Archer Western's philosophy is that Quality is the responsibility of every worker and is accomplished by using proven checks and balances throughout the course of the project. These systems are implemented on all projects and are formalized in a written job specific Quality Control Plan (OCP). The OCP includes:

- QCP acceptance from all subcontractors as a condition of working on the project •
- •
- •

The quality program on this project included a dedicated QC Manager and staff who were independent of construction operations. They were involved in the development of all work plans and treated as a partner more than a policeman in the process.

ON-TIME COMPLETION:

ahead of schedule.

- Use of IAuditor software and field tablets by field techs to sign off on inspections
- Dedicated sync folders set-up to monitor and track field reports
- Oversight and review of the work as it is put into place
- Tracking and resolution of quality issues (NCRs)

Design plans were completed on-time and construction achieved substantial completion 1 month

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 V Original Contract Value	Value (in thousands) Final or Estimated Contract Value	g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
Northwest Corridor Managed Lane Project (DB) Atlanta, GA	Parsons	Name of Client/ Owner: Georgia DOT Project Manager: John Hancock Phone: (678) 784-7050 Email: <u>jhancock@dot.ga.gov</u>	11/2013	12/2018	\$ 598,533	\$651,900 * * Difference due to Owner added scope	\$491,084

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly. The Work History Form shall include only one singular project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form. If the Offeror chooses to submit work performed as a Joint Venture or Partnership, identify how the Joint Venture or Partnership was structured and provide a description of the portion of the work performed only by the Offeror's firm.



SIMILARITIES TO I-81 WIDENING MM 221 TO MM 225 PROJECT

- Design-Build Delivery
- Interstate Highway Widening
- Bridge rehabilitation/re-decking
- Asphalt paving
- Multi-stage bridge construction/replacement
- Utility relocations & Avoidance
- Environmental Permitting and Strict Compliance Monitoring
- Storm Drainage and SWM Pond Facilities
- MOT Operations minimizing impacts
- Noise barrier analysis, design, and construction
- Independent QA program
- AWC responsible for QC program
- Public involvement and Outreach
- Third Party Stakeholder communication & coordination

PROJECT NARRATIVE AND SCOPE:

This 29.7-mile, design-build-finance project involves the addition of reversible managed lanes along I-75 and I-575. The proposed improvements extend the existing High Occupancy Vehicle lanes from the current terminus at Akers Mill Road northward along I-75 and I-575. Scope of work includes design, permitting, and construction of all infrastructure including open-road tolling. The project includes 39 bridges mostly precast concrete girders. There are four bridges made of curved steel plate girders. Also included are over 650,000 sf of MSE walls, 1.4 million sf of noise walls, 313,000 sy of concrete paving, and 1.6 million cy of earthwork. The project was divided into six segments with concurrent construction along the 29-mile corridor to meet the aggressive three-year construction schedule.

All work was performed on a heavily traveled interstate highway and all lane restrictions were coordinated by Archer Western with GDOT to allow for public notifications of construction activity.

ARCHER WESTERN'S ROLE:

Archer Western' role in the project was the Managing Member of the Northwest Express Roadbuilders JV and lead contractor. In this capacity Archer Western had overall responsibility and management of the complete scope of work including all design and engineering, utility relocations, permitting, quality control, construction, public outreach, and overall project administration and management. Archer Western was the primary point of contact with the owner and created and monitored the project schedule.

LIMITING IMPACTS TO THE TRAVELING PUBLIC/AFFECTED BUSINESSES AND COMMUNITIES:

Minimizing impacts to the traveling public was a critical aspect of this congested corridor. AWC applied the use of a MOT "Task Team" from pursuit phase through TMP implementations. The Task Team was comprised of Designers, Construction personnel, GDOT representatives, and emergency responders (local fire and police). The MOT Task Team developed the TMP around the goals of safety, efficiency, stability, access, and communication. Key components included:

- Assigning a dedicated MOT Manager responsible for implementing the plan and acting as the single point of contact for all MOT issues
- Having the MOT Manager attend meetings at the GDOT Traffic Management Center regarding changes in • the traffic patterns, lane closures, and upcoming activities
- Developing contingencies to alleviate congestion if traffic backups became unreasonable •
- Dividing the project into six segments each with only two phases until traffic was placed in its final • configuration
- Providing exit or entrance ramps and emergency pull offs every three-fourths of a mile •
- Implementing an Incident Management Plan with communication protocols with law enforcement and • emergency responders to clear accidents

EFFECTIVE COMMUNICATION STRATEGIES WITH BUSINESSES & STAKEHOLDERS: The

Public Information Coordinator supported GDOT in their communications with the public and would respond to general public inquires and comments including impacts regarding construction phasing/traffic shifts. This included meeting with neighborhood associations, business and property owners, and other stakeholders

INNOVATIVE DESIGN SOLUTIONS/CONSTRUCTION TECHNIQUES:

Archer developed a front-loaded approach to accelerating construction. By creating early work packages focusing on areas without utilities and environmental impact concerns, crews were able to hit the ground running as soon as the main NTP 2 was approved. While these early works packages were being built, Archer simultaneously coordinated with appropriate agencies, utilities, and other stakeholders to prepare the remainder of the construction packages. Archer submitted 13 ATCs totaling over \$65M in savings and a seven-month schedule reduction. ATCs included various alternative road alignments, an alternative deck design, reduced MSE panel thickness, the use of steel cross frames and weathering steel, and alternative barrier standards. Several of the ATCs also benefited ROW requirements by eliminating 25 of 81 planned acquisitions and reducing the acquisition size on nine parcels. The project team developed a different geometric design to avoid relocating a high-voltage electric transmission line—saving the project \$3M and drastically reducing health and safety risks to construction crews by eliminating such a high danger component and preventing the public impact of potential service delays to electric customers.

IMPLEMENTING AND MAINTAINING QA/QC PLANS DURING DESIGN AND CONSTRUCTION:

Archer Western's philosophy is that Quality is the responsibility of every worker and is accomplished by using proven checks and balances throughout the course of the project. These systems are implemented on all projects and are formalized in a written job specific Quality Control Plan (OCP). The OCP includes:

- QCP acceptance from all subcontractors as a condition of working on the project.
- •

- Tracking and resolution of quality issues (NCRs)

The quality program on this project included a dedicated QC Manager and staff who were independent of construction operations. They are involved in the development of all work plans and are treated as a partner more than a policeman in the process.

ON-TIME COMPLETION:

Schedule management on GDOT's longest Managed Lane Project was paramount as revenue generation was a high priority to accommodate the repayment of the bonds used to fund the project. AWC had a dedicated Schedule Engineer who would input the information provided by the designers, field personnel, and subcontractors into our integrated project schedule. AWC used Primavera Project Planner (P6) to develop a Cost Loaded Critical Path Method schedule (CPM). Twice a month the project schedule was updated and distributed, along with a narrative report that detailed the activities along the critical path and potential "rocks in the road". At each Owner Progress Meeting a three-week Look Ahead schedule was reviewed and agreed upon. This was followed by monthly submissions of the progress schedule with our pay application.

- Use of tracking software and field tablets by field techs to sign off on inspections
- Dedicated sync folders set-up to monitor and track field reports
- Oversight and review of the work as it is put into place

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 Original Contract Value	Value (in thousands) Final or Estimated Contract Value	g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
Name: I-95 Richmond Bridge Replacements Location: Richmond, Virginia	Name: AECOM	Name of Client/ Owner: VDOT Project Manager: Scott Fisher Phone: (804) 674-2452 Email: <u>scott.fisher@VDOT.Virginia.gov</u>	10/2014	10/2014 Completed all work orders in less than the originally planned allowable contract time and achieved the incentive bonus	\$67,957	\$73,537* *Cost difference due to owner directed scope changes and payment of early completion bonus	\$51,476

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly. The Work History Form shall include only one singular project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form. If the Offeror chooses to submit work performed as a Joint Venture or Partnership, identify how the Joint Venture or Partnership was structured and provide a description of the portion of the work performed only by the Offeror's firm.



SIMILARITIES TO I-81 WIDENING MM 221 TO MM 225 PROJECT

- Interstate Highway Widening
- Asphalt Paving
- Multi-Stage Bridge Construction/Replacement
- Use of Innovative Design Solutions and Construction Techniques
- Taking Calculated Risks and Realizing Incentives
- Utility Relocations & Avoidance
- Environmental Compliance Monitoring
- MOT Operations Minimizing Impacts
- AWC Provided Internal QC Program
- Public Involvement and Outreach
- Third Party Stakeholder Communication & Coordination

PROJECT NARRATIVE AND SCOPE:

Rehabilitation of 20 interstate bridges, two miles of shoulder widening, and the extension of acceleration lanes along I-95 in Richmond, Virginia. Specific elements of the project included:

- Widening shoulders of I-95 for approximately 2.1 miles;
- Replacement of superstructure (beams, deck, barrier) of 20 I-95 mainline bridges;
- Construction engineering, fabrication, and delivery of pre-constructed bridge units (PCUs);
- Substructure rehabilitation including concrete patching and pier repair;
- Stormwater management improvements along I-95;
- New foundations, substructure, and retaining walls at four bridge widenings;
- Replacement of five pier caps while bridges remained active; •
- Utility coordination; and
- Supported Public outreach.

All interstate work was performed on a heavily traveled roadway and all lane restrictions were coordinated by Archer with VDOT to allow for public notifications of construction activity. Maintenance of traffic (MOT) requirements were extensive, as I-95/I-64 in Richmond was reduced to one lane in each direction for approximately 200 nights of superstructure replacement in a two-year period, with corresponding lane closures or traffic detours on underlying City of Richmond streets. The project also included an extensive construction engineering effort for superstructure shop drawings, temporary falsework, pier reconstruction, superstructure demolition/erection plans, and three approved VECPs.

ARCHER WESTERN'S ROLE:

Archer Western served as the prime contractor and had overall responsibility and management of the complete scope of work including all construction engineering, utility relocations, internal quality control, construction, supporting VDOT public outreach, and overall project administration and management. Archer was the primary point of contact with the owner and created and monitored the project schedule.

ON-TIME COMPLETION:

This challenging bridge replacement and reconstruction project achieved substantial completion 3 months ahead of schedule and earned a \$3,000,000 "NO EXCUSES" early completion bonus.

IMPLEMENTING AND MAINTAINING QA/OC PLANS DURING DESIGN AND

CONSTRUCTION:

Archer Western's philosophy is that Quality is the responsibility of every worker and is accomplished by using proven checks and balances throughout the course of the project. These systems are implemented on all projects and are formalized in a written job specific Quality Control Plan (QCP). The QCP includes:

- QCP acceptance from all subcontractors as a condition of working on the project.
- Use of tracking software and field tablets by field techs to sign off on inspections •
- Dedicated sync folders set-up to monitor and track field reports ٠
- Oversight and review of the work as it is put into place ٠
- Tracking and resolution of quality issues (NCRs) •

The quality program on this project included a dedicated QC Manager and staff who were independent of construction operations. They were involved in the development of all work plans and are treated as a partner more than a policeman in the process.

INNOVATIVE DESIGN SOLUTIONS AND CONSTRUCTION TECHNIQUES: Archer utilized our experience and "lessons learned" from a previous VDOT project to develop our approach to engineering, fabricating, and installing the 234 PCUs. First, in order to improve quality, match-casting the pre-constructed composite bridge units was instituted to ensure the fit would work at the installation site. Enhancing the accuracy of the as-built survey (prior to fabrication of the PCUs) to ensure a proper field fit was accomplished using laser scanner technology. The laser scan coupled with detailed field measurements eliminated all potential fit issues. Lastly, Archer utilized "Live Load" shoring in the locations where the five pier caps were replaced. This approach allowed the existing bridges to remain in operation which resulted in significantly reducing impacts to traffic, improving quality, and eliminating potential safety issues.

LIMITING IMPACTS TO THE TRAVELING PUBLIC, AFFECTED BUSINESSES, AND

COMMUNITIES: Minimizing impacts to the traveling public was a critical aspect of this congested corridor. Archer applied the use of a dedicated MOT Superintendent and support team. The Team was comprised of MOT engineers, construction personnel, and MOT device subcontractors and suppliers. Weekly MOT meetings that included our MOT Team, VDOT representatives, and emergency responders (local fire and police) were held to review upcoming activities and the detour routes. Our approach to the implementation of the TMP centered around the goals of safety, efficiency, stability, access, and communication. Key components included:

- single point of contact for all MOT issues.
- •
- and emergency responders to clear accidents.
- travel distance.

EFFECTIVE COMMUNICATION STRATEGIES WITH BUSINESSES & STAKEHOLDERS:

VDOT launched a robust communications strategy to keep the traveling public informed of the construction schedule and worked tirelessly to schedule construction around major events, including working with local organizations to inform those in homeless camps of alternative options. We participated with timely construction notifications and by working with traffic operations to use DMS signage to alert drivers in advance construction work would be underway during certain times over the two-year period. Prior to installing traffic control devices our Traffic Control Supervisor would call the VDOT Traffic Operations Center (TOC) to confirm the lane closure locations and start/stop times. Calls were made at the beginning of traffic control installations, and at the end when the last traffic control device was removed, and the road had been restored. We informed the TOC of accidents occurring in or near the work zone each shift. We also coordinated with the Virginia State Police to assist with safely installing, removing, and patrolling each lane closure along the Interstate and to escort every oversize load safely from the Precast Yard to the Bridge Site. The City of Richmond Police patrolled along all side roads and underpasses where we constructed bridges overhead.

• Assigning a dedicated MOT Superintendent responsible for implementing the plan and acting as the

Developing each bridge replacement plan with site specific details, necessary material, labor and equipment needs, first responder input, and delivery route for PCUs

Implementing an Incident Management Plan with communication protocols with law enforcement

Strategically located laydown and PCU fabrication area to reduce construction traffic and minimize

Developed a schedule restricting bridge demolition and PCU installation to specific weekends each year with hold out for special events and holidays.

3.4.1 (B) Work History Form/Lead Designer

<u>ATTACHMENT 3.4.1(b)</u> <u>LEAD DESIGNER - WORK HISTORY FORM</u> (LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor	c. Contact information of the Client and their	d. Construction	e. Construction	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the
	responsible for overall construction of the	Project Manager who can verify Firm's	Contract Start	Contract	Construction Contract	Construction Contract	Firm identified as the Lead Designer for this
	project.	responsibilities.	Date	Completion Date	Value (Original)	Value (Actual or	procurement.(in thousands)
				(Actual or		Estimated)	
				Estimated)			
Name: I-64 Capacity Improvements – Segment I Design-Build Location: Newport News, VA	Name: Shirley Contracting Company LLC	Name of Client: VDOT Project Manager: Janet M. Hedrick Phone: 757-956-3071 Email: Janet.Hedrick@VDOT.Virginia.gov	3/2015	12/2017	\$84,879	\$101,396* *Difference due to Owner Added Scope	\$6,024

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant. The Work History Form shall include only one singular project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form.



SIMILARITIES TO I-81 WIDENING MM 221 TO MM 225 PROJECT

- Design-Build Delivery
- Interstate Median Widening
- High Traffic Volumes & Travel Speeds
- Widening and Repair of Interstate Bridges
- Geotechnical Challenges
- Environmental Permitting and Compliance Monitoring
- Linear & Reduced Footprint SWM Facilities
- MOT Operations minimizing Congestion
- Minimization of Impacts to Private Properties
- Coordination with adjacent projects

PROJECT NARRATIVE AND SCOPE:

In 2015, Dewberry (as the lead engineer on our design-build team) was awarded the contract for the widening and pavement rehabilitation of I-64 in York County, Virginia which included: Although the RFP allowed for the widening and rehabilitation of the existing bridges over Industrial Park Drive and CSXT Railroad, our Team committed to completely replacing the existing bridges

- Widening of I-64 from 4-lanes to 6-lanes for approximately 5.2 miles;
- Widening of I-64 bridges over Lee Hall Reservoir and Fort Eustis Boulevard;
- Demolition and replacement of the I-64 bridges over Industrial Park Drive and CSX Railroad;
- Lengthening of the auxiliary lanes at the Fort Eustis Boulevard Interchange;
- Stormwater management improvements;
- Drainage improvements including closed system median storm sewers; and
- Approximately 12,500 linear feet of noise barriers.

The demolition and replacement of the I-64 bridges over Industrial Park Drive were not required by the RFP, but our team recognized that replacing the bridges would provide a longer-lasting product which required less maintenance. Dewberry developed plans for the new bridges, consisting of 2-span structures instead of matching the existing 3-span structures. During design, VDOT issued a contract modification to strengthen the outside shoulders between the Fort Eustis Boulevard Interchange and the eastern project limit to accommodate a future fourth travel lane in each direction. This additional work was completed as a plan revision to the already approved plans without impacting the schedule. Dewberry's scope included completion of:

- Updated field surveys;
- Wetland and stream delineations, environmental permitting, and permit monitoring;
- Roadway engineering design;
- Bridge structural designs;
- Hydrologic and hydraulic analysis for the bridges over Lee Hall Reservoir;
- Drainage and stormwater management design;
- Traffic engineering design including signing & pavement marking, ITS, and temporary traffic control design;
- Landscaping design; and
- Public outreach.

To advance the start of construction, temporary traffic control plans for outside shoulder strengthening were developed as an advance, separate plan which enabled construction activities to begin while final right-of-way acquisition and construction plans were still being developed. **DEWBERRY'S ROLE:**

DEWBERRY'S ROLE:

As the Lead Designer, Dewberry's Fairfax, Virginia office, supported by the Glen Allen, Virginia office, was responsible for completion of all engineering services. In addition, Dewberry completed all design field surveys, environmental permitting and documentation, and quality control (QC) during construction. Dewberry oversaw subconsultant services to complete updated aerial mapping, utility designations and test pits, geotechnical investigations and recommendations, noise analysis, and pipe video inspections.

USE OF INNOVATIVE DESIGN SOLUTIONS:

Although the RFP allowed for the widening and rehabilitation of the existing bridges over Industrial Park Drive and CSXT Railroad, our Team committed to completely replacing the existing bridges with new 2-span structures. The resulting shorter structures require less maintenance and provide additional horizontal clearance between the CSXT railroad and the superstructure of the bridge. As construction began, the choice to replace both I-64 bridges over CSXT was confirmed to be the correct decision based on extensive structural deterioration and large voids found beneath the approach slabs, all of which was addressed through the construction of the new bridges.

LIMITING IMPACTS TO THE TRAVELING PUBLIC, BUSINESSES & COMMUNITIES AND STRATEGIES WHICH MINIMIZED CONGESTION DURING CONSTRUCTION:

To reduce impacts to the travelling public, an advance temporary traffic control plan was developed so that shoulder strengthening could be completed during night-time operations, ultimately enabling all major construction activities to occur behind concrete barrier. Stormwater management facilities were reconfigured to avoid impacts to private properties, ultimately resulting in all facilities being located either within existing right-of-way or on property owned by the City of Newport News. Finally, approximately 12,500 linear feet of noise barriers were installed within existing right-of-way, with minimal property impacts, to provide noise reductions to nearly 1,000 homes and apartments.

IMPLEMENTING AND MAINTAINING AN EFFECTIVE QA/QC PLAN:

Dewberry implemented a comprehensive QA and QC plan which was adhered to throughout design, and effectively reviewing plans which were developed in two offices in different geographic areas (Fairfax, VA and Glen Allen, VA). Advance temporary traffic control plans were developed to allow construction to start before final plan approvals, and QA/QC efforts ensured no re-work or design conflicts arose through any phase of design, enabling construction to continue without adverse design impacts. A major element of the Project was to correct existing deficiencies in the existing concrete pavement, and complex spreadsheets were developed, checked, and re-checked to ensure a smooth riding surface would be provided when construction was completed. Calculations ensured cross-slopes and longitudinal grades didn't exceed maximum breakovers, minimum and maximum cross-slopes were provided, minimum asphalt overlays were provided, and pavement drainage was maintained throughout construction. These comprehensive spreadsheets were provided to the contractor and paving subcontractor for implementation in the field, ultimately resulting in the desired product and improved pavement conditions.

DEVELOPING AND MANAGING EFFECTIVE COMMUNICATION STRATEGIES WITH BUSINESS OWNERS, RESIDENTS, ADVOCACY GROUPS, RAILROADS, AND OTHER STAKEHOLDERS:

Throughout design and construction, our team engaged with first responders, adjacent private property owners, the City of Newport News, CSXT railroad, and the general public to provide regular updates regarding the improvements. An extensive outreach process was completed for the design and installation of the noise barriers, and regular communication with first responders ensured public safety was maintained as construction progressed and access points for emergency responses were changed. Our team worked in coordination with VDOT public outreach staff to provide progress updates to keep the public apprised of project progress and upcoming milestones.

<u>ATTACHMENT 3.4.1(b)</u> <u>LEAD DESIGNER - WORK HISTORY FORM</u> (LIMIT 1 PAGE PER PROJECT)

b. 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 Valu Construction Contract Value (Original)	te (in thousands) Construction Contract Value (Actual or Estimated)	g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
Name: I-64 Capacity Improvements – Segment III Design-Build Location: York County, VA	Name: Shirley Contracting Company LLC	Name of Client: VDOT Project Manager: Janet M. Hedrick Phone: 757-956-3071 Email: Janet.Hedrick@VDOT.Virginia.gov	12/2017	12/2021	\$178,282	\$182,767* *Difference due to Owner Added Scope	\$10,177

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant. The Work History Form shall include only one singular project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form.



SIMILARITIES TO THE I-81 WIDENING MM 221 TO MM 225 PROJECT

- Design-Build Delivery
- Interstate Median Widening
- High Traffic Volumes & Travel Speeds
- Widening and Repair of Interstate Bridges
- Geotechnical Challenges
- Environmental Permitting and Compliance Monitoring
- Closed System Median Storm Drainage
- Linear & Reduced Footprint SWM Facilities
- MOT Operations minimizing Congestion
- Minimization of Impacts to Private Properties
- Coordination with adjacent projects

PROJECT NARRATIVE AND SCOPE:

In December 2017, Dewberry (as the lead engineer on our design-build team) was awarded the contract for the widening and reconstruction of I-64 in York County, Virginia which included:

- Widening of I-64 from 4-lanes to 6-lanes for approximately 8.3 miles;
- Widening and repair of I-64 bridges over Lakeshead Drive and The Colonial Parkway;
- Demolition and replacement of the 900' bridges over Queens Creek;
- Interchange auxiliary lane improvements at the Route 199 and Route 143 Interchanges;
- Stormwater management improvements;
- Drainage improvements and adequate outfall channel enhancements;
- Noise barrier analysis, design, and construction; and
- Public outreach.

Design of these improvements were coordinated with the on-going I-64 Segment II project, which was under construction but not yet completed at the time of plan development and at the start of construction. Since the existing pavement was required to be completely demolished and replaced, the horizontal alignment of the eastbound and westbound lanes were adjusted where possible to minimize impacts to existing ITS facilities, adjacent properties, and environmentally sensitive areas including Queens Lake, Queens Creek, and the associated contributing channels and streams.

Dewberry's scope included:

- Updated field surveys;
- Wetland and stream delineations, environmental permitting, and permit monitoring;
- Roadway engineering design;
- Bridge structural design;
- Hydrologic and hydraulic analysis for Queens Creek;
- Drainage and stormwater management design;
- Traffic engineering design including a traffic signal, signing & pavement marking, ITS, and temporary traffic control design; and
- Public outreach.

Advance temporary traffic control plans were developed and approved, enabling construction to begin concurrently with the completion and approval of right-of-way acquisition and construction plans. Extensive public outreach occurred for proposed noise barriers, coordination with the National Park Service for work over and on The Colonial Parkway, and with Camp Peary, a secure government property located immediately adjacent to westbound I-64.

DEWBERRY'S ROLE:

As the Lead Designer, Dewberry's Fairfax, Virginia and Glen Allen, Virginia offices were responsible for the completion of all engineering services. Our Mechanicsburg, Pennsylvania office also completed design services for the widening of the I-64 bridges over The Colonial Parkway. Dewberry also completed all design field surveys, environmental permitting and documentation, and oversight of subconsultant services to complete updated aerial mapping, utility designations and test pits, geotechnical investigations and recommendations, noise analysis, and pipe video inspections.

USE OF INNOVATIVE DESIGN SOLUTIONS:

Dewberry utilized our experience and "lessons learned" from the I-64 Capacity Improvements – Segment I project to implement several innovative design solutions. First, we developed alternate horizontal alignments for I-64 which minimized temporary shoulder strengthening limits and areas and increased the width of the median which avoided construction of a 1,300' retaining wall. This unique design concept reduced night time construction work (improving safety for construction and inspection staff), reduced impacts to the travelling public, and eliminated maintenance and inspection of a large retaining wall. As part of the pavement reconstruction, the new pavement incorporated recycled aggregate and cold central plant materials, limiting the amount of material and equipment which left the project limits. Profiles and alignments were finalized to maximize the use of RAP and CCPRM in the ultimate pavement section.

LIMITING IMPACTS TO THE TRAVELING PUBLIC, BUSINESSES & COMMUNITIES AND STRATEGIES WHICH MINIMIZED CONGESTION DURING CONSTRUCTION:

Our unique design concept minimized the amount of temporary shoulder strengthening required during the initial phase of construction, reducing temporary impacts to traffic and improved safety for the travelling public, construction, and inspection staff. During the design phase, we determined that the preliminary noise analysis didn't properly account for existing topography further from I-64. As a result of updated noise modeling, three additional noise barriers totaling approximately 6,500 lf were added, reducing noise impacts to numerous additional properties and residents. For the replacement of the bridges over Queens Creek, we developed an alternate sequence of construction which eliminated one stage of construction and a temporary cross-over within the median of I-64, improving safety and operations during construction.

IMPLEMENTING AND MAINTAINING AN EFFECTIVE QA/QC PLAN:

Dewberry implemented a comprehensive QA and QC plan which was adhered to throughout design, effectively reviewing plans which were developed in three offices in different geographic areas (Fairfax, VA, Glen Allen, VA, and Mechanicsburg, PA). Extensive coordination was required for the bridge widenings over Lakeshead Drive and the Colonial Parkway due to their close proximity to each other, minimal width between parapets, and the need to reduce the Parkway to a single lane to accommodate brick arch construction. Dewberry's design team met on a weekly basis to review progress and schedule and ensure all design and permitting activities were coordinated.

DEVELOPING AND MANAGING EFFECTIVE COMMUNICATION STRATEGIES WITH BUSINESS OWNERS, RESIDENTS, ADVOCACY GROUPS, RAILROADS, AND OTHER STAKEHOLDERS:

Throughout design and construction, our team engaged with first responders, adjacent private property owners, and the general public to provide regular project updates, and coordinated with the adjacent project which was under construction. Our team collaborated with VDOT public outreach staff to provide progress updates to keep the public apprised of project progress and upcoming milestones, and completed an extensive public outreach process to notify, meet, and discuss the noise barrier changes with the public and adjacent property owners. A formal public meeting at the local high school was held by our team specifically to discuss changes in the noise analysis and the resulting additional noise barriers. A temporary access point was designed between E. Rochambeau Drive and EB I-64 to improve interstate emergency response during construction, and regular coordination meetings with first responders were held to discuss future traffic pattern changes.

<u>ATTACHMENT 3.4.1(b)</u> <u>LEAD DESIGNER - WORK HISTORY FORM</u> (LIMIT 1 PACE PER PROJECT)

LIMIT TTAGETEKT KÖJECT									
c. Project Name & Location	b. Name of the prime/ general	c. Contact information of the Client and their Project	d. Construction	e. Construction	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the		
	contractor responsible for overall	Manager who can verify Firm's responsibilities.	Contract Start	Contract	Construction Contract	Construction Contract	Firm identified as the Lead Designer for this		
	construction of the project.		Date	Completion Date	Value (Original)	Value (Actual or	procurement.(in thousands)		
				(Actual or		Estimated)			
				Estimated)					
Name: I-81 Widening MM 136.6 to MM 141.8 Location: Roanoke County & City of Salem, VA	Name: Archer Western Construction LLC	Name of Client: VDOT Project Manager: Duane Mann, PE, PMP Phone: 540-765-7226 Email: m.mann@VDOT.Virginia.gov	5/2021	1/2026	\$178,963	\$178,963 (Actual To-Date)	\$11,897		

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant. The Work History Form shall include only one singular project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form.



<u>SIMILARITIES TO</u> <u>I-81 WIDENING MM 221 TO MM 225 PROJECT</u>

- Interstate 81 Widening
- Design-Build Delivery
- Bridge Repairs and Widening
- High Traffic Volumes, Truck Volumes & Travel Speeds
- Environmental Permitting and Compliance Monitoring
- MOT Operations minimizing Congestion
- Minimization of Impacts to Private Properties
- Coordination with adjacent projects
- Teamed with Archer Western Construction
- Utilized Same Design Subconsultants

PROJECT NARRATIVE AND SCOPE:

In 2021, Dewberry (as the lead engineer on the Archer Western design-build team) was awarded VDOT's first major design-build contract on I-81 in Roanoke County and the City of Salem to provide the following improvements: To accommodate full-width shoulders. We investigated several alignment adjustments which would minimize variable depth overlays and asphalt build-up, and in adjusting the horizontal

- Widening from 4 to 6-lanes for approximately 5.2 miles just south of the I-581 Interchange;
- Demolition and replacement of the I-81 bridges over Route 112, Route 619, and Route 635;
- Widening and repairs of the I-81 bridges over Route 311;
- Substructure repairs to the Route 419 and Route 705 overpasses;
- Interchange improvements and lane reconfigurations on Route 112 (Exit 137);
- Clearzone grading and roadside safety improvements;
- Drainage, stormwater management, and adequate outfall improvements; and
- Approximately 2.8 miles of noise barriers

The primary objectives of this project was to increase capacity through the addition of a third thru-lane and full-width shoulders in each direction, reduce congestion, and improve reliability and safety. The majority of the widening is located in the median to reduce right-of-way and easement impacts on private properties, and due to the relatively narrow median width, concrete barriers were implemented for a majority of the project length. Stormwater management facilities were consolidated to reduce impacts, with several being located within interchange ramps or partially within existing right-of-way. In addition to roadway, drainage and structural improvements, roadway and interchange lighting was added at each of the three (3) interchanges within project limits, the existing ITS facility located primarily within the median is being relocated adjacent to the southbound lanes of I-81, and landscaping is being implemented where noise barriers are not being installed and where existing residential development is within 50' of the right-of-way. As of the date of this statement of qualifications submission, advance temporary traffic control plans have been approved, construction of the median widening has begun, and construction plan approval is anticipated in August for all but the last bridge package (I-81 over Route 311).

Dewberry's scope included:

٠

- Updated field surveys;
- Wetland and stream delineations, environmental permitting, and permit monitoring;
- Roadway, structural, and drainage design;
- Traffic engineering design including, signing & marking, ITS, and temporary traffic control design;
- Public outreach coordination; and
- Oversight of all design subconsultants

DEWBERRY'S ROLE:

As the Lead Designer, Dewberry's Fairfax and Glen Allen, Virginia offices were responsible for the completion of all engineering services. Dewberry completed all design field surveys, environmental permitting and monitoring, and oversaw subconsultant services to complete updated aerial mapping, utility designations and test pits, utility relocation coordination, geotechnical investigations and recommendations, noise analysis, pipe video inspections, and right-of-way acquisitions.

USE OF INNOVATIVE DESIGN SOLUTIONS:

To accommodate the widening in the median, portions of the horizontal alignment of I-81 were adjusted to accommodate full-width shoulders. We investigated several alignment adjustments which would minimize variable depth overlays and asphalt build-up, and in adjusting the horizontal alignments were also able to eliminate design exceptions and design waivers which had been approved for the RFP conceptual design. Working in coordination with VDOT, ditch grading and multiple typical section configurations were implemented to reduce guardrail installation while also avoiding impacts to private properties. Rock cut-slopes were incorporated where feasible based on geotechnical analysis and noise barrier alignments were adjusted to avoid impacts to private properties. Ultimately, acquisition of easements and/or right-of-way was eliminated from over 20 properties impacted by the RFP conceptual design. We also coordinated with VDOT to implement a unique pavement subbase drainage design, incorporating outlet pipes.

LIMITING IMPACTS TO THE TRAVELING PUBLIC, BUSINESSES & COMMUNITIES AND STRATEGIES WHICH MINIMIZED CONGESTION DURING CONSTRUCTION:

From the outset of design, our approach was to reduce impacts to the travelling public and adjacent properties. We developed a unique sequence of construction which eliminated median cross-overs on I-81, improving safety during construction and eliminating extensive temporary pavement overlays. Construction is underway and being completed with a more "conventional" widening approach where traffic will be maintained separately in both the northbound and southbound directions through all stages of construction. Design of outside grading, stormwater management facilities, and noise barrier alignments were all completed with a goal of reducing impacts. Through modifications to these elements, we were able to eliminate impacts to over 20 private properties and avoid impacts to all private structures and buildings.

IMPLEMENTING AND MAINTAINING AN EFFECTIVE QA/QC PLAN:

Dewberry implemented a comprehensive QA and QC plan, effectively coordinating all design disciplines and environmental permitting between our Fairfax and Glen Allen offices to provide seamless construction plans. QA/QC requirements were also required of our design subconsultants, including the subconsultant responsible for design of the I-81 bridges over Route 311. Documentation of QC and QA reviews were provided with each milestone submission.

DEVELOPING AND MANAGING EFFECTIVE COMMUNICATION STRATEGIES WITH BUSINESS OWNERS, RESIDENTS, ADVOCACY GROUPS, RAILROADS, AND OTHER STAKEHOLDERS:

Throughout design, Dewberry has been responsible for communication with interested parties and stakeholders who reached out to VDOT or our team. We provided verbal and written responses to all inquiries, and maintained a public communication tracking summary on VDOT's ProjectWise. We also coordinated directly with the City of Salem to obtain Right-of-Way Permit approval for all work within City right-of-way, including the long-term closure and reconstruction of Route 635, which was closed, substantially completed, and reopened to traffic within one month (final grading of slopes will be completed following demolition and reconstruction of the I-81 bridges over Route 635). We were also responsible for development, distribution, and tracking of all noise barrier voting documents for the three separate noise barriers to be constructed with the project.







www.dewberry.com