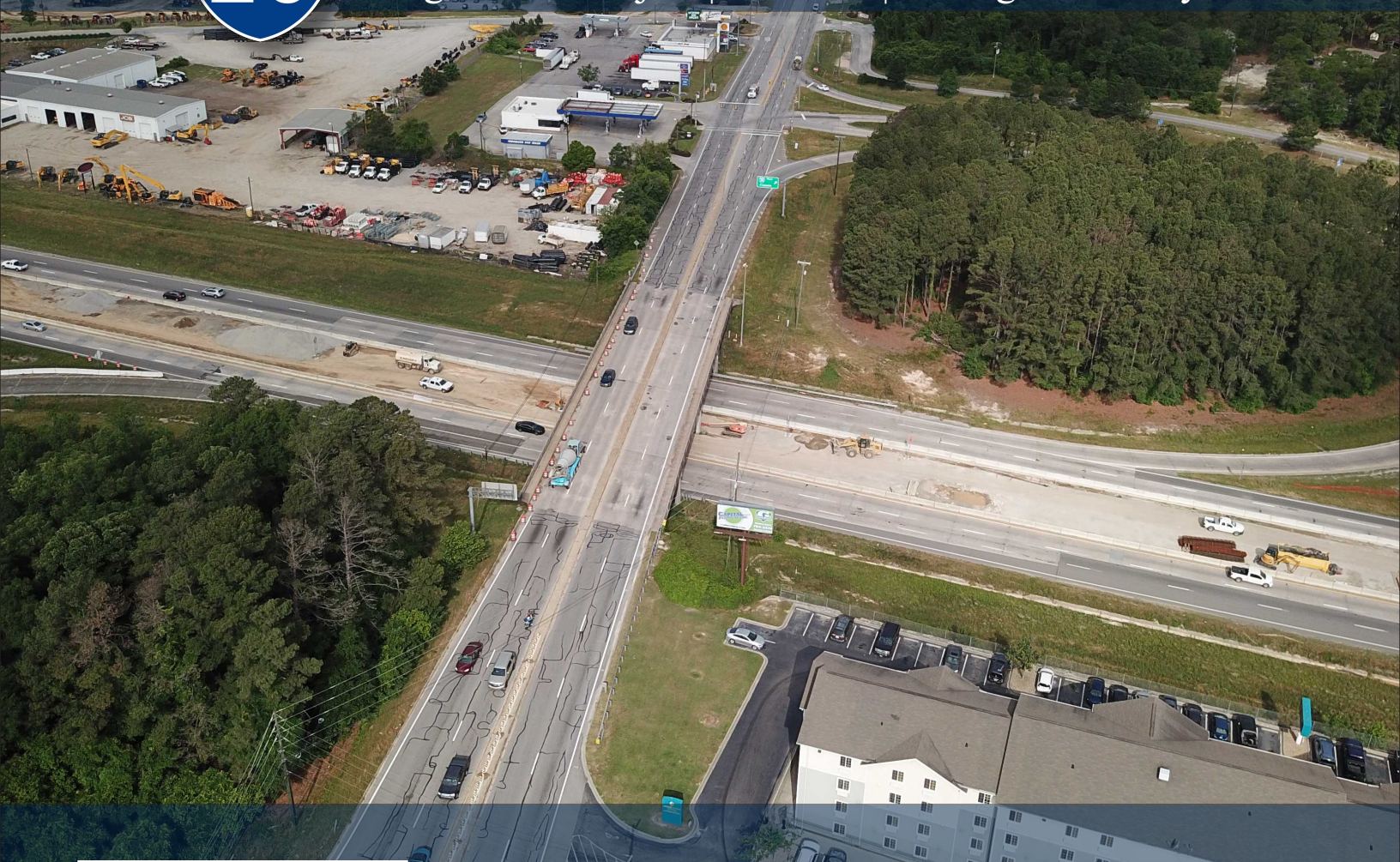




US 1 over I-20 Interchange Improvement


Design-Build Project | P030711 | Lexington County



May 29, 2019



This document includes several links for ease of reference. A blue border is placed on items with links to various items in the appendix.

In order to return to your PREVIOUS VIEW, click ALT + left arrow. You can also set your PDF viewing preferences by following these steps: Click on 1)View 2)Show/Hide 3)Toolbar Items, 4)Show Page Navigation Tools 5)Check “Previous View”. A  button will appear on your toolbar and can be used to go directly to your previous view. Bookmarks are also set for your convenience.

3.2 INTRODUCTION



The Archer Team is comprised of Archer Western Construction, LLC as the contracting entity and Design-Builder/Lead Contractor, and Infrastructure Consulting & Engineering, PLLC (ICE), a trusted and innovative professional design services firm. This Team will provide all services necessary to complete the US 1 over I-20 Interchange Improvement Project (referred to as “Project” hereinafter). This Team is uniquely qualified to provide a safe, high-quality, and cost-effective solution having successfully worked together on the recently completed I-77 Widening & Rehabilitation project and currently working together on the SC 277 Bridge Replacement project in Richland County. Archer Western Construction, LLC is a subsidiary of the Walsh Construction Group, a fourth generation, family owned construction company that dates back over 121 years.

3.2.2 Proposer’s Point of Contact for Procurement:

David M. Pupkiewicz, FDBIA
Manager Alternative Pursuits (AWC)
2410 Paces Ferry Rd, Suite 600
Atlanta, GA 30339
404.926.0757 (w) | 404.721.5050 (c)
dpupkiewicz@walshgroup.com

Aaron Livingston, PE
Lead Design Engineer (ICE)
1021 Briargate Circle
Columbia, SC 29210
803.227.4064 (w) | 803.605.3328 (c)
Aaron.livingston@ice-eng.com

3.2.3 Full Legal Name of Lead Contractor and Lead Designer:

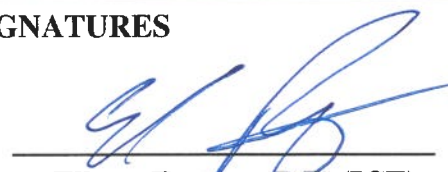
- The full legal name of the Lead Contractor: **Archer Western Construction, LLC** 
- The full legal name of the Lead Designer: **Infrastructure Consulting & Engineering, PLLC** 

3.2.4 Commitment Statement:

The Key Personnel identified in the organizational chart are committed to meeting SCDOT’s quality and schedule expectations and each person is available for the duration of the Project.

COMMITMENT SIGNATURES


Stephen P. Carter, Jr. (AWC)


Elham Farzam, P.E. (ICE)

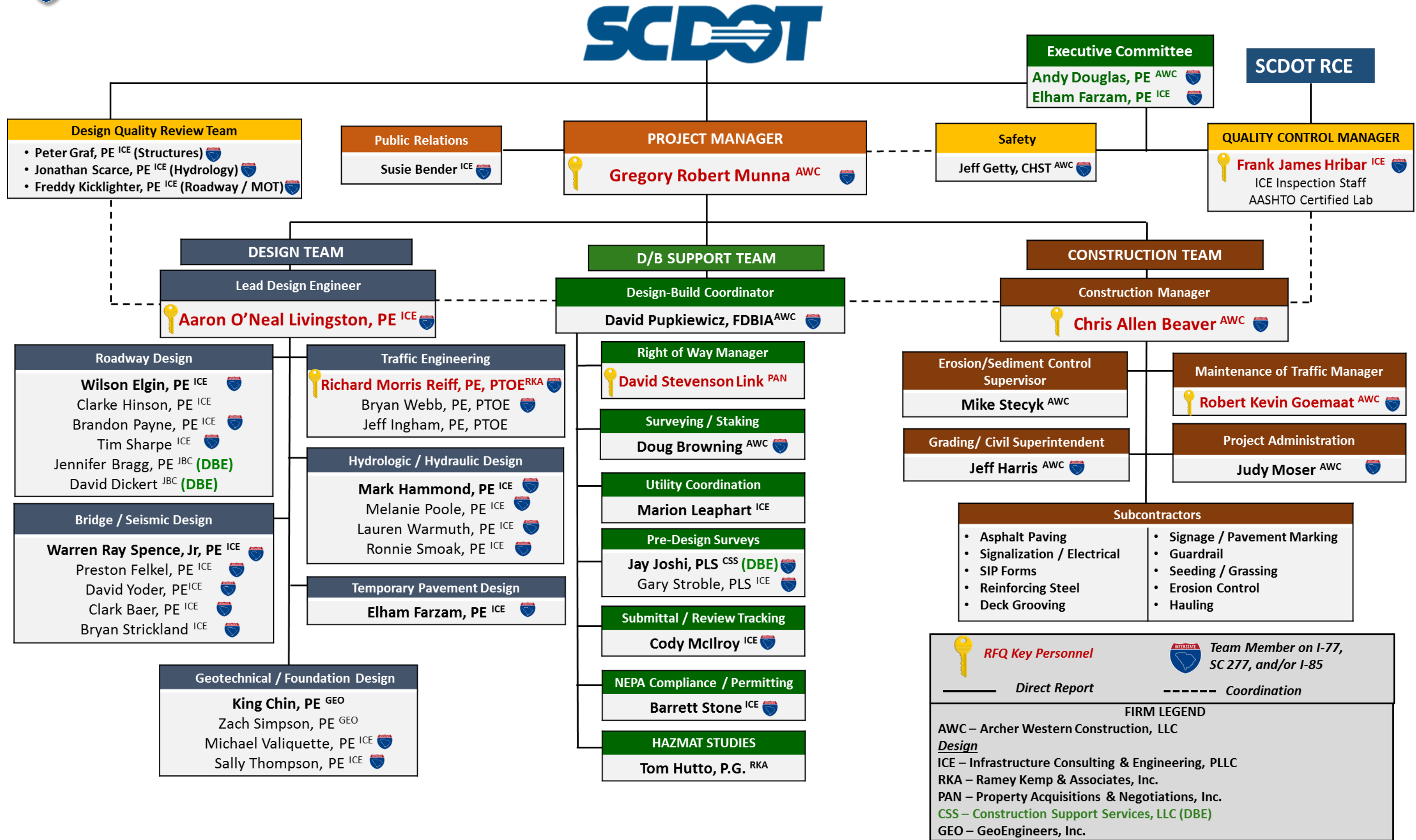
3.3 TEAM STRUCTURE AND PROJECT EXECUTION

3.3.1 Organizational Chart, Team Structure, and Team Integration:

Lead Organization & Construction Team	Lead Design Consultant Role/Tasks	Other Design Team Members Role / Task
 Primary Contractor (Contracting Entity) DUNS No.: 963849901	 Design Management, Structures, Geotechnical, Roadway and Hydro Design, Utility Coordination, Permitting, & QC Inspection & Testing DUNS NO.: 058232290	<div>  PAN, Inc. ROW Services DUNS 946746620 </div> <div>  GeoEngineers, Inc. Geotechnical / Foundation Design DUNS 018982918 </div> <div>  Ramey Kemp & Associates TMP/Traffic Analysis/Signing Plans DUNS 841962327 </div> <div>  GEL Engineering, LLC HAZMAT Studies DUNS 137405069 </div> <div>  Construction Support Services (DBE) Pre-design Surveys - DUNS 146508721 </div>

The improvements at the US 1 and I-20 Interchange involve the construction of a new bridge (to correct structural deficiencies), improved ramps and roadway approaches, and the demolition of the existing bridge. All of these improvements will occur while maintaining all lanes of traffic along US 1 and I-20. **The Archer Team** is structured to leverage the specialized capabilities of each firm, allowing the team to self-perform major work items in the most efficient manner possible. This Archer-ICE Team who recently delivered the successful **I-77 Widening and Rehabilitation DB Project in Richland County**, brings the depth and breadth of our local resources and through several employees who use the existing interchange, a first-hand familiarity and understanding of the traffic conditions. This insight provides SCDOT with the confidence that this Team will deliver the Project safely with the highest quality on time and within budget.

i) Organizational Chart / The Organizational Chart of **the Archer Team** is included on the following page. It illustrates the functional structure and “chain of command” including levels of management, reporting relationships, lines of communication/coordination, major functions to be performed, and team member roles and responsibilities in managing, designing, and constructing the Project. Our organization is constructed to force decisions to the lowest possible level empowering the people who have the experience and knowledge. The resumes of Key Individuals are included in **APPENDIX A**. Each Key Individual shown exceeds the minimum requirements specified in the RFQ.



ii) Significant Functional Relationships | Day-to-day operations are led by our Project Manager, **Greg Munna (AWC)**, who will report to the SCDOT and the Executive Committee. Greg will be accountable for meeting all Project goals. Assisting him is a Management Team of direct reports for significant functions of the Project, namely Pre-Construction, Design-Build Support, Construction, and Quality Control. **Aaron Livingston, PE (ICE)** will be the Lead Design Engineer who will lead the design related activities. **Chris Beaver (AWC)** will be the Construction Manager. The Design Team has been structured to capitalize on the strengths of seasoned ICE engineers, as well as specialized subconsultants in the field of: Traffic Analysis, MOT, and Signal Plans (RKA), Right of Way acquisition and relocations (PAN), geotechnical/foundation design (GEO), pre-design surveying (CSS), and assistance in roadway design (JBC). An AASHTO/SCDOT accredited lab will be used for any pre-design laboratory testing. ICE's own drilling crew and equipment will be used for any supplemental borings. In addition to design management services, ICE will provide roadway design, drainage and structures design, surveying, permitting, utility coordination and public relations. ICE's extensive design-build experience managing and integrating multiple subconsultant firms will ensure successful design delivery. The Quality Control Team will be led by QC Manager **Frank Hribar (ICE)**, who is currently serving as Assistant Project Manager on the Interstate Preservation Project on I-77, I-26, I-126, and I-20 in Columbia and brings a tremendous knowledge and history of the local interstate projects. After award of the contract, we will utilize an AASHTO/SCDOT accredited lab for any material testing during the construction. The Quality Control Team will report directly to SCDOT Resident Construction Engineer and the Executive Committee, as shown on the Organization Chart.

iii) Team Members' Prior Working Relationship | **TABLE 3.3.1.i** on the following page includes projects the Lead Contractor, AWC, and Lead Design Firm, ICE, have successfully delivered together. SCDOT will greatly benefit from the alliance with faster project delivery, cost efficiency, and a safer project with higher quality. Our established processes will benefit the Project's overall coordination. The Key Individuals of ***the Archer Team*** have long-standing working relationships with ICE. AWC's working relationship with ICE's Raleigh, NC and Columbia, SC design staff dates to 2008 and ICE personnel (Aaron Livingston and Elham Farzam) assisted AWC

with survey and design of detour and median crossovers on the I-85 reconstruction (MM 69-77) Project. Additional design-build project experience working together includes the recently completed the I-77 Widening & Rehabilitation (MM 15-27) and the current SC 277 Bridge over I-77 in Richland County.

Table 3.3.1.i - AWC and ICE Prior Project Experience Working Together			
Project Name (Location)	Complete	Cost	Owner Reference **
I-77 Pavement Rehab Express (Yadkin/Surry Counties, NC)	2021	\$49M	NCDOT / Ramie Shaw 336.903.9134
SC 277 NB over I-77 Bridge Replacement (Richland County, SC)	2020	\$25M	SCDOT / John Burns 803.699.5068
I-77 Widening & Rehabilitation (MM 15-27) (Richland County, SC)	2018	\$91M	SCDOT / John Burns 803.699.5068
Pennsylvania Rapid Bridge Replacement Program (558 Bridges)	2019	\$899M	Plenary Group / Matt Girard 303.803.9458
I-85 Reconstruction Project (MM 69-77) (Spartanburg County)	2019	\$68M	SCDOT / Joseph Fowler 864.285.7720
NC 540 Western Wake Freeway (Wake County, NC)*	2013	\$468M	NCDOT / Ron Hancock 919.707.2400

*ICE Personnel Experience

** Detailed reference information is included in **Appendix H**

3.3.2 Critical Risks

i) Critical Risks for this Project | Project research, public meeting attendance, and our current experience on the SC 277 Bridge Replacement DB Project has shaped our approach to successful Project completion. We understand the Project's purpose is to: 1) replace the existing bridge with a new structure (correct structural deficiencies), and 2) improve the ramps and roadway approaches to bring the entire interchange up to current standards while meeting the future traffic demands. Considering the Project purpose and our local knowledge, we acknowledge SCDOT's identification of the critical risks of right of way acquisitions and relocations, and maintenance of traffic. These critical risks along with mitigation strategies and SCDOT's role are included in the table below:

TABLE 3.3.2.i – Critical Project Risks							
Critical Risk Issues / Problems	Potential Impacts	Risk Mitigation Strategies	Role of SCDOT & Other Agencies	Risks			
				Cost	Schedule	Quality	Safety/PR
1. RIGHT OF WAY ACQUISITIONS, INCLUDING RELOCATIONS							
R/W Impacts, Acquisitions and/or Relocations	<p>Delays in Project schedule due to potential relocations of:</p> <ul style="list-style-type: none">• 3 Gas Stations• Woodspring Suites Hotel• Two residential structures <p>Increased project costs for R/W acquisition and relocations</p>	<ul style="list-style-type: none">• Evaluate alternative concept designs to minimize relocations and R/W impacts• Use PAN’s experienced acquisition/appraisal staff, follow FHWA & SCDOT policies, and bring on additional resources, if needed.• Coordinate between R/W Team and Design Team to minimize impacts to critical risk sites and to reduce the number of impacts to sites.• Avoid relocation of service stations due to pro-longed relocation schedule.	<ul style="list-style-type: none">• SCDOT appraisal staff to provide guidance on potential partial impacts identified in the preferred alternative developed by the Design Build Team.• Provide just-compensation approval in expedient manner.	■	■		■

TABLE 3.3.2.i – Critical Project Risks (Cont'd)

Critical Risks Issues / Problems	Potential Impacts	Risk Mitigation Strategies	Role of SCDOT & Other Agencies	Risks			
				Cost	Schedule	Quality	Safety/PR
2. MAINTENANCE OF TRAFFIC							
Maintain Ramp movements during construction	<ul style="list-style-type: none">Increased backup/delays due to construction activitySafety of the workers and traveling publicDelay of scheduleAdditional cost to the DB Team and SCDOT	<ul style="list-style-type: none">Depending upon new ramp configuration, new ramps may be constructed off-linePerform traffic analysis to determine if weekend closure with detour is viableUtilize weekend and off-peak hours for tie-in work	<ul style="list-style-type: none">SCDOT to participate and provide guidance in the development of the TMPSCDOT to consider short-term closure of existing ramps during procurement	■	■		■
Maintain 6 lanes of interstate traffic while accessing median	<ul style="list-style-type: none">Increased backup/delays due to construction activitySafety of the construction workers and traveling publicDelay of scheduleAdditional cost to the DB Team and SCDOT	<ul style="list-style-type: none">Utilize temporary concrete barrier wall to separate construction activity from the traveling publicProvide signage to instruct trucks to use lanes away from temporary barrierProposed interchange moved further away from existing to allow for additional median area to construct structure center bents.	<ul style="list-style-type: none">SCDOT to participate and provide guidance in the development of the TMPSCDOT to consider median access through accel. and decel. lanesSCDOT to consider 1’ wide shoulders under existing bridge structure	■	■		■
Maintain all lanes on US 1	<ul style="list-style-type: none">Increased backup/delays due to construction activitySafety of the workers and traveling publicDelay of scheduleAdditional cost to the DB Team and SCDOT	<ul style="list-style-type: none">Propose to SCDOT to reduce speed limit to 35 mph and increase fines for speeding through construction zoneUse of temporary concrete barrier wall will segregate construction activity from the traveling publicSchedule major utility and construction work during the off-peak hours	<ul style="list-style-type: none">SCDOT will be asked to assist in acquiring speed reduction if warrantedSCDOT to participate and provide guidance in the development of the TMPSCDOT to lead PR effort and keep affected businesses informed.	■	■		■
Coordination with existing I-20 DB Project.	<ul style="list-style-type: none">Schedule delays on the existing I-20 DB Project could impact median access and bridge work	<ul style="list-style-type: none">Coordinate with SCDOT DB Group regarding the scope of the I-20 DB Project at US 1 InterchangeAnalyze the latest I-20 DB Project construction scheduleSequence bridge work to occur after work along I-20 is completed	<ul style="list-style-type: none">SCDOT to provide latest I-20 DB Project schedule during RFP Phase and then again after awardSCDOT to hold meetings with I-20 DB Project on-site staff for MOT and other Project related coordination	■	■	■	■

3.3.3 Project Resources, Strategies, and Execution

i) Team's Capacity and Available Resources | The Archer Team has reviewed the information that is available for this Project and has made a preliminary estimation of the equipment and personnel resources that will be required. The Design-Build Team Resources (**TABLE 3.3.3.i – next page**) details this information and illustrates that ample in-house construction and design resources are readily available to complete this Project on time. In addition to the AWC owned construction equipment available, we have multiple local/national agreements with equipment rental companies throughout the country to address any short-term needs. Exact equipment and personnel needs and availability will be determined during the next phase of procurement. The scope and schedule

of necessary resources to complete the design and permitting phase in an expeditious manner will be similar to the I-77 Widening Project where the design and permitting were carefully reviewed and ICE's Design Team was fully committed and provided the **designs three (3) months ahead of schedule**.

AWC personnel's excellent working relationship with ICE on the I-77 DB and the SC 277 Bridge Replacement projects, as well as previous DB projects in NC, will be a significant value to SCDOT and successful execution of the Project. ICE is fully committed to providing the necessary resources for an accelerated design schedule for the completion of the design and permitting phase. ICE's design resources in Charleston, Raleigh, and Atlanta offices are also available with thorough familiarity with SCDOT design and plan preparations requirements and standards.

ii) Strategy for Implementation of Resources to Execute the Contract

Contractor Self-Performance | Ample equipment and skilled tradesmen are available to facilitate the design and construction of this Project. AWC will oversee all construction as well as self-performing all major construction items that fall on the Project's critical path, accounting for approximately 65% of the project cost. The preliminary list of work that AWC will self-perform is shown in **TABLE 3.3.3 ii**. Subcontractors, including DBEs, will be utilized to perform tasks such as asphalt paving, erosion control device installation, guardrail installation, and pavement marking. Critical to the success of the Project will be the MOT and bridge construction. AWC will self-perform all of the activities associated with those scopes of work.

Lead Design Self-Performance | ICE will self-perform all the of the major design's components of the Project; roadway, drainage, and structure designs along with the associated design tasks consisting of pavement marking, signing, erosion control, and miscellaneous structures designs. Additionally, ICE will assist our exclusive sub-consultant partner with the geotechnical design. ICE will oversee all design as well as self-performing all major

TABLE 3.3.3.i			
Design-Build Team Resources			
Equipment	Total	Need	Avail.
Cranes	52	2	28
Pile Hammers	9	1	7
Bidwell Pavers	31	1	14
Roller Compactors	12	2	11
Sweepers/Brooms	42	1	34
Excavators	42	2	36
Dozers	25	2	12
Loaders	39	3	20
Lowboys / Flatbed	14	1	7
Water trucks	18	1	10
Motor Graders	14	2	11
Contractor's Personnel	Total	Need	Avail.
Project Managers	14	1	5
Admin. Eng./Project Controls	27	2	14
Superintendents	22	3	11
Foreman	46	10	18
Craft/Skilled	1408	48	436
Design Team Personnel	Total	Need	Avail.
Roadway Engineers/Designers	23	6	10
Traffic Eng. / MOT Staff	42	6	8
Structural Engineers/Designers	18	4	12
Hydrology/Hydraulics Staff	14	3	6
Geotechnical Engineers	86	4	10
Environmental Staff	5	2	4

TABLE 3.3.3.ii	
AWC SELF-PERFORMED ACTIVITIES	
Project Management	Traffic Control / MOT
DB Coordination	Earthwork/Grading
Concrete Paving	Storm Drainage
Bridge Foundations	Road Base
Bridge Substructure	Retaining Walls
Bridge Superstructure	Construction Layout

design items that fall on the Project's critical path, accounting for approximately 75% of the project's design cost.

a) Design / Permitting Phase

Traffic Engineering | The Archer Team will develop conceptual plans for up to three interchange improvement alternatives for review by FHWA, which will give conditional approval for any acceptable alternates. We will conduct all the necessary traffic analyses for our selected interchange alternate to incorporate in the Interchange Modification Report (IMR). It is assumed that the SCDOT will provide the count data and future growth projections so that the traffic information is consistent with the environmental document. We will evaluate potential alternates using a *TransModeler*® microsimulation model of the interchange. The microsimulation model allows for the evaluation of all aspects of the interchange operations for the proposed improvement scenarios, including queuing and the impact of driveways along US 1, which are not typically captured in the normal traffic analysis software packages. The traffic capacity and level-of-service (LOS) analyses will be conducted using the latest versions of the *Highway Capacity Software* (HCS) and the *Synchro* software and for existing and projected future-year conditions of the study roadways, intersections, I-20 freeway segments, and merge/diverge areas.

Environmental Services / Permitting | Our Team has a unique understanding of the project study area and potential environmental concerns through previous experience with adjacent SCDOT projects. Our Environmental Manager, Barrett Stone, provided environmental support for the development of the NEPA document and wetland delineation associated with the I-20 Widening MM49-60. Through these experiences, we have determined that the Project will likely impact wetlands and other waters of the U.S., located in the northwest quadrant of the interchange. Our Environmental Team's DB experience, along with firsthand knowledge of the project study area, will ensure compliance with the NEPA document, environmental commitments and the acquisition of any permits required for the interchange project.

Design Plans | Our design approach is to use the same design Team members from ICE involved with the I-77 Widening and SC 277 over I-77 Bridge Replacement DB Projects to eliminate the learning curve. The first task will be deciding where the new US 1 bridge will be located either to the north or south of the existing structure. Our preliminary observations indicate the construction of the structure to the north will have several advantages including fewer impacts to existing businesses, reduced impacts to the predominant loop ramp movement (US1 to I-20 eastbound) and to provide sufficient distance from the existing Norfolk-Southern Railroad.

Maintenance of Traffic (MOT) | Our Transportation Management Plan will reflect components outlined in the RFP and the following design principles and practices:

- | | |
|--|--|
| <ul style="list-style-type: none"> • Minimize impacts to the adjacent properties • Maintain existing traffic patterns as long as practical • Work in several locations concurrently • Utilize lane closures during off-peak hours • Develop an incident management plan to improve response times | <ul style="list-style-type: none"> • Consider the realignment of the existing frontage roads (Monroe Lane, Brickyard Road, Dooley Road, and Cedar Road) to minimize conflicts with the new interchange and maintain access • Work during nighttime hours to minimize impacts to commuter traffic |
|--|--|

R/W & Utility Coordination | As noted in Section 3.3.2, Table 3.3.2.i – Right of Way Acquisitions, there are multiple businesses adjacent to the interchange. Avoiding R/W impacts (including control of access) to all of these businesses will be our priority regardless of the type of interchange selected.

Of the eight (8) utilities which exist in the footprint of the project, three (3) utilities would likely require relocations including (a) Dominion Gas (formerly SCE&G) mainline crossing, (b) the aerial line carrying Dominion Distribution / Time Warner / Comporium Midlands and (c) Town of Lexington 8" sewer line which is along the shoulder of the I-20 eastbound off-ramp shoulder.

Additional Considerations: In addition to the major design elements discussed above, the Design Team will give special attention to 1) Ensuring our design will not impact the Norfolk-Southern Railroad located south of the Project, 2) Coordinating with The Town of Lexington to incorporate any signals of the final design into the Town's adaptive signal system as identified in their Transportation Improvement Plan, and 3) Evaluate interconnection of the existing sidewalks within the project limits.

b) Construction Phase | Based on the selected interchange configuration, the new bridge may be constructed in stages with traffic shifts or constructed completely off-line with one traffic shift. Portions of the new bridge that require lane closures along I-20 (median pier construction, beam erection, deck placement, etc.) will be performed at night using approved lane closures and traffic pacing. Ramp and roadway improvements will likely occur concurrently to bridge construction. Traffic shifts and phasing will be minimized to reduce impacts to the public and enhance safety. The construction approach, MOT phasing, and potential impacts to traffic will all be considerations in the selection of our interchange configuration.

iii. Geographical Location | All of the design will be completed in ICE, Ramey Kemp, and GeoEngineer's South Carolina offices (Columbia and Charleston). Through the design phase, AWC will be co-located in ICE's Columbia office and will transition to an onsite construction office upon the completion of the RFC plans. This

multi-location approach provides SCDOT with a team that effectively manages the various tasks for each phase while supporting cooperation and collaboration.

iv. ROW Services Firm / Available Capacity / PAN, Inc. will provide right of way acquisition and relocation services for the Team. The effort will be led by its owner / operator, David Link, who brings 28 years of SCDOT ROW experience mostly on large DB interstate highway projects including the 85/385 Gateway DB Project where he completed the acquisition of 73 parcels, including 38 fee simples, 16 condemnations, 5 easements, 8 right of entry, and 6 permissions in less than 16 months. PAN's and David's familiarity with DB project delivery and experience on interstate highways will prove invaluable to the success of the ROW acquisition process. PAN is currently completing ROW acquisition for the Alligator Road Widening in Florence County and will be completing the I-26 DB Project (MM 85-101) during the 2020/2021 timeframe. PAN has ample capacity to complete the ROW acquisition of this Project.

3.4 EXPERIENCE OF KEY INDIVIDUALS

Detailed resumes for the Key Individuals listed in the RFQ are provided in **APPENDIX A**.

3.5 PAST PERFORMANCE OF THE TEAM

3.5.1 Experience of the Proposer's Team: Three completed *Work History and Quality Form – Contractor/Designer* forms for the Contractor and three forms for the Designer are included in **APPENDIX B**.

3.5.2 Quality of Past Performance: Work History and Quality Form/Contractor Designer for applicable projects that have “yes” answers to the questions are included in **APPENDIX C**. AWC has not been suspended, debarred, disqualified from bidding, or declared ineligible for work by any entity within the last five years and there are not any such actions pending against them.

3.6 LEGAL AND FINANCIAL

A notarized affidavit as required by the RFQ and a Surety letter on behalf of **Archer Western Construction, LLC** are included in **APPENDIX D**.

3.7 ORGANIZATIONAL CONFLICTS OF INTEREST/CONFIDENTIALITY

APPENDIX E – Contains the requested information for Organizational Conflict of Interest.

APPENDIX F – Contains SOQ's Confidential or Proprietary Information Summary List.

APPENDIX G – Contains addendum receipt forms.

3.8 PREQUALIFICATION REQUIREMENTS OF SHORT-LISTED FIRMS

AWC's prequalification certificates will be included in the RFP response should **the Archer Team** be shortlisted.



APPENDIX A

Key Individual Resume Forms

Project Manager - Greg Munna

Lead Design Engineer - Aaron Livingston, PE

Traffic Engineer - Rick Reiff, PE, PTOE

Right of Way Manager - David Link

Construction Manager - Chris Beaver

Quality Control Manager - Frank Hribar

Maintenance of Traffic Manager - Kevin Goemaat

KEY INDIVIDUAL RESUME FORM

Brief Resume of Key Individual anticipated for the Project.

- a. Name & Title:
Gregory Robert Munna, Project Manager
- b. Role of Key Individual for this Project:
Project Manager
- c. Name of Firm with which you are now associated:
Archer Western Construction, LLC
- d. Years of Experience: With this Firm **15** Years With Other Firms **0** Years



Employment History:

Archer Western Construction, LLC: Project Manager – As Project Manager, Greg is responsible for project administration, including project start-up, staffing, and contract negotiation with subcontractors. He oversees maintenance of quality control systems, schedule requirements, cost accountability, and the establishment of management systems. It is his duty to ensure close coordination among all project team members, ensuring owners a successful project delivery. 2004 - Present

- e. Education:
Georgia Institute of Technology / Atlanta, GA / Bachelor of Science / 2004 / Building Construction

- f. Active Registrations:
NA

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

1. I-85 Reconstruction from MM 69.1 to MM 77.2 – Spartanburg, SC

Key Personnel Role: Project Manager
Experience with Current Firm: Yes (Archer Western)
Project/Assignment Duration: Project 2017-2019 / Assigned 2019
Owner Contact Information: SCDOT, Joseph Fowler, fowlerjm@scdot.org, 864-285-7720
Design/Construction Value: \$68 Million

Project Description: The project consists of the reconstruction of the existing three lanes from MM 69.1 to MM 77.2 with Cement Modified Recycled Base (12" Uniform), Hot Mix Asphalt Surface Course Type C, and Portland Cement Concrete Paving 13" Uniform. Greg is responsible for managing subcontractor and supplier procurement, staffing, scheduling, cost control, safety, and managing coordination between the owner, quality control, superintendents, and subcontractors.



2. Northwest Corridor, DB – Marietta, GA

Key Personnel Role: Structures Project Manager
Experience with Current Firm: Yes (Archer Western)
Project/Assignment Duration: Project 2013-2019 / Assigned 2014-2019
Owner Contact Information: GDOT, Marc Mastronardi, mmastronardi@dot.ga.gov, 404-631-1970
Design/Construction Value: \$652 Million

Project Description: This design-build-finance project includes design and construction of 30 miles of Managed Lanes within the corridor of I-75 and I-575 for the Georgia Department of Transportation and STRA. The work included utility relocation, earthwork, drainage, retaining walls, concrete and asphalt paving, steel and concrete girder bridges, ITS, and tolling. Greg was responsible for managing the structures portion of the design process following award of the project. During construction, his responsibilities included procurement, project start-up, staffing, scheduling, cost control, safety, and managing coordination between the owner, quality control, superintendents, and subcontractors for the 40 bridge structures.



3. Corridor X/I-65 Interchange – Birmingham, AL

Key Personnel Role: Structures Project Manager
Experience with Current Firm: Yes (Archer Western)
Project/Assignment Duration: Project 2010-2016 / Assigned 2011-2013
Owner Contact Information: ALDOT, Terry McDuffie, mcduffiet@dot.state.al.us, 334-242-6208
Design/Construction Value: \$173 Million

Project Description: The Corridor X/I-65 Interchange project for the Alabama Department of Transportation consisted of adjoining I-65 to I-22. This project included three miles of interstate asphalt roadway and 17 bridges. Greg's responsibilities included procurement, project start-up, staffing, scheduling, cost control, safety, and managing coordination between the owner, quality control, superintendents, and subcontractors for the 22 bridge structures on the project.



4. I-75 Paving/Reconstruction – Crisp County, GA

Key Personnel Role: Project Engineer
Experience with Current Firm: Yes (Archer Western)
Project/Assignment Duration: Project 2006-2010 / Assigned 2006-2010
Owner Contact Information: GDOT, Marc Mastronardi, mmastronardi@dot.ga.gov, 404-631-1970
Design/Construction Value: \$162 Million

Project Description: This section of roadway has an annual average daily traffic (AADT) of approximately 110,000 vehicles. The project involved the demolition of all existing asphalt pavements and reconstruction of 514,275 SY of 12-inch PCC pavement. The project included the removal and replacement of three overpass bridges and partial removal, jacking, and widening of another six bridges. Greg's responsibilities included procurement, project start-up, contract administration, scheduling, cost control, safety, and coordinating with owner and subcontractors.



- 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.

Greg is currently assigned to the SCDOT I-85 Reconstruction project in Spartanburg, SC. That project is scheduled to be completed by October 2019, and Greg will be available before the US 1 over I-20 contract is signed.

The schedule for the US 1 over I-20 Interchange is as follows:

- Bids due March 2020
- Contract execution and NTP – 90 days (June 2020)

KEY INDIVIDUAL RESUME FORM

Brief Resume of Key Individual anticipated for the Project.

- a. Name & Title:
Aaron O'Neal Livingston, PE, Manager of Roadway Design
- b. Role of Key Individual for this Project:
Lead Design Engineer



- c. Name of Firm with which you are now associated:
Infrastructure Consulting & Engineering, PLLC



- d. Years of Experience: With this Firm **6** Years With Other Firms **10** Years

Employment History:

Infrastructure Consulting & Engineering, PLLC: Manager of Roadway Design – Aaron is responsible for managing the Columbia roadway design group and he oversees the performance of a team of seven designers. He is also responsible for preparing roadway designs on projects throughout South Carolina. His project experience includes design-build bridge replacements and interstate widening and rehabilitation projects, county road paving projects, on-call roadway and intersection improvement projects, and major widening and new alignment projects. 2013 - Present

CDM Smith: Roadway Designer -Aaron served as roadway designer where he provided various aspects of design for roadway projects including construction phase support and contract administration, and he managed small roadway design projects. Aaron has been a licensed Professional Engineer since 12/17/2007. 2003 - 2012

e. Education:

Clemson University / Clemson, South Carolina / Master of Business Administration / 2003 / Entrepreneurship
Clemson University / Clemson, South Carolina / Bachelor of Science / 2001 / Civil Engineering – Transportation

f. Active Registrations:

2007 / SC / Professional Civil Engineer / 26136
2013 / GA / Professional Civil Engineer / 037839
2013/ PA / Professional Civil Engineer / 081390

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

1. I-77 Widening & Rehabilitation (MM 15-27) – Richland County, SC



Key Personnel Role: Lead Roadway Engineer
Experience with Current Firm: Yes (Infrastructure Consulting & Engineering, PLLC)
Project/Assignment Duration: Project 2015-2018 / Assigned 2015-2018
Owner Contact Information: SCDOT, Tyke Redfearn, PE, RedfearnWT@scdot.org, (803) 737-1430
Design/Construction Value: \$91 Million

Project Description: Aaron served as the **Lead Roadway Design Engineer** responsible for preparing roadway geometric designs, signing and marketing, staging, and MOT plans. This project involved widening the interstate by adding one lane in the median in each direction for seven miles to include widening of 10 mainline bridges over roadways and streams. This section also included rehabilitation of an asphalt overlay with a concrete base and cross slope verification/correction. The work also included eight additional miles of pavement rehabilitation and cross slope verification/correction of southbound lanes. The pavement throughout the project consisted of asphalt overlay with a concrete base.



Lead Contractor - AWC

2. SC 277 Flyover Ramp/Bridge Replacement over I-77 – Richland County, SC



Key Personnel Role: Lead Roadway Engineer
Experience with Current Firm: Yes (Infrastructure Consulting & Engineering, PLLC)
Project/Assignment Duration: Project 2018-2019 / Assigned 2018-2019
Owner Contact Information: SCDOT, James “Jae” Mattox III, PE, MattoxJH@scdot.org, (803) 737-1805
Design/Construction Value: \$25 Million

Project Description: This Project consisted of all work necessary to remove the remainder of the existing four bridges and construct new bridges, including the associated roadway and drainage work necessary to tie the new approaches to the existing roadways. As the **Lead Roadway Engineer**, Aaron was responsible for the services required to repair the roadway approaches and he prepared the preliminary/final plans that included MOT, drainage design, sediment/erosion control plans, existing ROW plans, work zone traffic control, proposed barrier locations, signing, and pavement markings plans. **Lead Contractor - AWC**

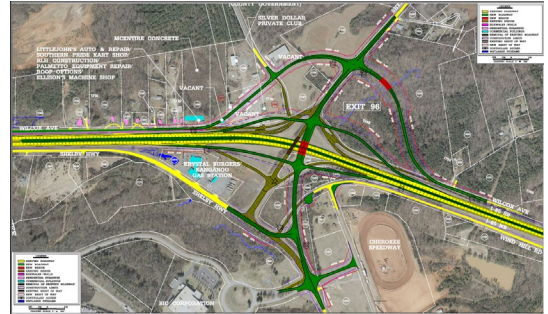


3. I-85 Widening (MM 80-96) – Cherokee County, SC



Key Personnel Role: Lead Roadway Engineer
Experience with Current Firm: Yes (Infrastructure Consulting & Engineering, PLLC)
Project/Assignment Duration: Project 2014-Constructin In-Progress / Assigned 2014-2016
Owner Contact Information: SCDOT, Brad Reynolds, PE, reynoldsbs@scdot.org, (803) 737-1440
Design/Construction Value: \$6 Million (Design) | \$435 Million (Construction)

Project Description: Aaron served as one of the **Lead Roadway Engineers** for this project that consisted of engineering services necessary for development of the Environmental Assessment and Design-Build preparation for widening approximately 16 miles of interstate. Along the approximately 16-mile project area, interchanges at Exit 83 (SC 110), Exit 87 (S-39), Exit 95 (S-82), and Exit 96 (SC 18) were modified to bring them into compliance with state and federal design requirements. The project also included adding a travel lane in each direction, improving various interchanges and exit ramps, and replacement of overpass bridges.



Aaron was responsible for providing the preliminary roadway plans including MOT, interchange design, cost estimates, identifying preliminary right-of-way requirements and environmental impacts, developing roadway design criteria, and completing any necessary design exception documentation.

4. US 21 over Harbor River – Beaufort, SC



Key Personnel Role: Lead Roadway Engineer
Experience with Current Firm: Yes (Infrastructure Consulting & Engineering, PLLC)
Project/Assignment Duration: Project 2017-2019 / Assigned 2017-2019
Owner Contact Information: SCDOT, James “Jae” Mattox III, PE, MattoxJH@scdot.org, (803) 737-1805
Design/Construction Value: \$54.7 Million

Project Description: This DB project consists of a new high-level fixed-span bridge that will replace the existing swing-span bridge along US 21 (Sea Island Parkway) over the Harbor River. The design consisted of all work necessary to remove the existing bridge and construct a new bridge, including the associated roadway and drainage work necessary to tie the new approaches to the existing roadway. Aaron served as ICE’s **Lead Roadway Engineer** responsible for the roadway approach designs for each bridge including MOT and signing, drainage, and erosion control. Final construction plans have been approved and the RFC plans have been released.



5. Alligator Road Widening Phases I & II – Florence, SC

Key Personnel Role: Lead Roadway Engineer
Experience with Current Firm: Yes (Infrastructure Consulting & Engineering, PLLC)
Project/Assignment Duration: Project 2016-2019 / Assigned 2016-2019
Owner Contact Information: SCDOT, Brian Dix, PE, DixBD@scdot.org, (803) 737-1085
Design/Construction Value: \$74 Million

This 7-mile project includes widening from a two-lane rural roadway to a three-lane section segment from US 76 to S-103 and to a five-lane curb and gutter section with sidewalk from S-103 to west of US 52. It also includes replacing the existing structures over I-95 and Alligator Branch Swamp Tributary and major intersection improvements at the US 52 intersection. Aaron served as the EOR and Lead Roadway Engineer responsible for overseeing the development of the overall design including right of way and MOT plans and pavement marking and signing plans.

- 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.
As Lead Roadway Designer, Aaron will not be required to be on-site full time for the duration of construction, so this section is not applicable.

KEY INDIVIDUAL RESUME FORM

Brief Resume of Key Individual anticipated for the Project.

a. Name & Title:
Richard Morris Reiff, PE, PTOE, Senior Traffic Engineer

b. Role of Key Individual for this Project:
Traffic Engineer

c. Name of Firm with which you are now associated:
Ramey Kemp & Associates, Inc.



d. Years of Experience: With this Firm 3 Years With Other Firms 13 Years

Employment History:

Ramey Kemp & Associates, Inc.: South Carolina State Director/Senior Traffic Engineer – Rick is responsible for all traffic engineering, transportation design, and transportation planning projects in South Carolina. He manages a group of 10 traffic and transportation engineers between the Ramey Kemp offices in Charleston and Columbia. His experience includes serving local governments and the SCDOT on all types of traffic and transportation engineering, planning, and design projects. He has completed hundreds of traffic engineering studies and his work includes interstate corridor studies, traffic engineering and operations studies, traffic signal design, and roadway safety reviews. 2016 – Present

Stantec Consulting Services Inc.: Traffic Engineering Department Manager – Rick was responsible for managing the traffic engineering and transportation planning department and leading a group of eight engineers on all types of traffic and transportation engineering projects for SCDOT, local municipalities and counties, and local developers. 2010 - 2016

Kimley-Horn and Associates, Inc.: Traffic Engineer – Rick served as a traffic engineer on all types of traffic engineering projects from traffic impact studies to numerous transportation masterplans for new large-scale communities and developments on the west coast of Florida. 2003 - 2009

e. Education:

Clemson University / Clemson, South Carolina / Master of Science / 2002 / Civil Engineering - Transportation
Clemson University / Clemson, South Carolina / Bachelor of Science / 2001 / Civil Engineering

f. Active Registrations:

2006 / FL / Professional Civil Engineer / 29436
2007 / TPCB / Traffic Operations / Professional Traffic Operations Engineer / 2293
2009 / SC / Professional Civil Engineer / 27504
2013 / NC / Professional Civil Engineer / 040402
2018 / GA / Professional Civil Engineer / 043212
2018 / TPCB / Traffic Safety / Road Safety Professional / 035

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

1. US 17 Corridor Analysis – Charleston County, SC

Key Personnel Role: Project Manager

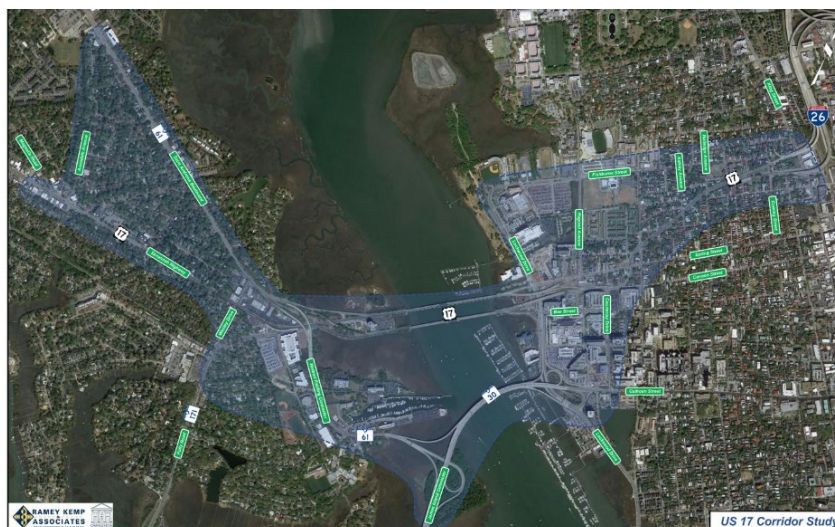
Experience with Current Firm: Yes (Ramey Kemp & Associates, Inc.)

Project/Assignment Duration: Project 2017-In Progress / Assigned 2017-In Progress

Owner Contact Information: Charleston County, Richard Turner, rturner@charlestoncounty.org, (843) 202-6155

Design/Construction Value: Design \$1.7 Million / Construction Estimate \$1+ Billion

Project Description: Rick is the Traffic Engineering Leader responsible for evaluating the existing and future traffic congestion along the US 17 corridor in Charleston County, SC utilizing Caliper's TransModeler software. The study corridor extends from the Savannah Highway at Avondale Avenue across the Ashley River Bridges and through the Crosstown to the intersection with I-26 near Coming Street, and includes the intersections and interchanges with SC 61, Wesley Drive, Folly Road, Lockwood Boulevard, and the James Island Connector. TransModeler simulation has been used extensively to replicate the operating parameters of the existing corridor road network such as speed limits, number of lanes, elevation, etc. in addition to signal timing plans that control the traffic control devices during the weekday AM and PM peak periods.



US 17 Corridor Study

2. TxDOT I-2 / I-69C Interchange – Hidalgo County, Texas

Key Personnel Role: Senior Traffic Engineer
Experience with Current Firm: Yes (Ramey Kemp & Associates, Inc.)
Project/Assignment Duration: Project July 2018–May 2019 / Assigned January–April 2019
Owner Contact Information: ICE, PLLC, Elham Farzam, PE, elham.farzam@ice-eng.com, (803) 600-5591
Design/Construction Value: Design \$50k / Construction \$300+ Million



Project Description: Rick was a Senior Traffic Engineer responsible for preparation of traffic modeling and analyses for: (1) support of development of ATC alternatives which required extensive re-evaluation of the approved IMR/IJR for Interstate I-2 with over 187,000 ADT for re-evaluation of entrance and exit ramps using the TransModeler software in evaluating the performance of the mainline and frontage road system; and (2) modeling of the proposed maintenance of traffic control (MOT) plans to ensure adequate level of service for the directional ramps, mainline, exit/entrance ramps and frontage road system, as well as evaluation of existing state roads for short duration detour routes.

3. I-26 & Volvo Cars Drive Interchange Justification Report (IJR) – Berkeley County, SC

Key Personnel Role: Traffic Engineering Manager
Experience with Current Firm: No (Stantec Consulting Services, Inc.)
Project/Assignment Duration: Project 2015-2016 / Assigned 2015-2016
Owner Contact Information: SCDOT, Brent Dillon, dillonbs@scdot.org, (803) 737-1461
Design/Construction Value: Design \$150,000 / Construction \$30+ Million



Project Description: Rick was the Traffic Engineering Manager responsible for the traffic analyses and documentation in support of an Interchange Justification Report for a new interchange to serve the new Volvo cars factory along I-26 between SC 27 and Jedburg Road in Ridgeville. Efforts included extensive coordination with SCDOT, FHWA, SC Department of Commerce, and Berkeley County in an eight-week period in the summer of 2015. He was responsible for future traffic volume projections, concept development, analysis, and documentation for opening-year and horizon-year scenarios of the I-26 mainline and adjacent I-26 interchanges.

4. SC 277 over I-77 Bridge Replacement – Richland County, SC

Key Personnel Role: Traffic Engineering Leader
Experience with Current Firm: Yes (Ramey Kemp & Associates, Inc.)
Project/Assignment Duration: Project 2018-In Progress / Assigned 2018-Present
Owner Contact Information: SCDOT, Jae Mattox, mattoxjh@scdot.org, (803) 737-1805
Design/Construction Value: Traffic Engineering \$30,000 / Construction \$25 Million



Project Description: This Project involves constructing a new bridge along with related roadway approaches along SC 277 Northbound over I-77 and demolishing the existing bridge. As the Lead Traffic Engineer, Rick provided traffic analysis and detour analyses in support of: a) development of Alternate Technical Concept (ATC) and Technical Proposal MOT Concept Plans in the procurement phase; and, b) assistance in the development of the Traffic Management Plan (TMP) and the preparation of the Detour Plans. The Team proposed a full detour of no more than 32 hours (for detour set up, bridge demo, clean up, and restoring traffic). The Traffic Analysis report shows that queuing will not be an issue on the detour route.

5. I-526 Corridor Study – Charleston County, SC

Key Personnel Role: Lead Engineer
Experience with Current Firm: No (Stantec Consulting Services, Inc.)
Project/Assignment Duration: Project 2010-2014 / Assigned 2010-2014
Owner Contact Information: SCDOT, Brent Rewis, rewisbl@scdot.org, (803) 737-1444
Design/Construction Value: Design \$1.5 Million / Construction \$500+ Million

Project Description: Rick was the Lead Engineer and provided traffic capacity analyses and interchange improvement concept designs for an eight-mile segment of the I-526 corridor in North Charleston and West Ashley. He was responsible for the future traffic projections along the corridor, the development of multiple VISSIM models for the corridor and validating them based upon existing operating conditions, and the development of improvement strategies, including traffic operations strategies and capacity improvements to address existing and future projected traffic congestion. Additional analyses included consideration of proposed improvements at International Boulevard and Montague Avenue due to expansion of Boeing and the Charleston International Airport.

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.

N/A

KEY INDIVIDUAL RESUME FORM

Brief Resume of Key Individual anticipated for the Project.

- a. Name & Title:
David Stevenson Link, President
- b. Role of Key Individual for this Project:
Right of Way Manager
- c. Name of Firm with which you are now associated:
Property Acquisitions & Negotiations, Inc.



d. Years of Experience: With this Firm 27 Years With Other Firms 1 Years

Employment History:

PAN, Inc: President – David has been the President of PAN, Inc. for twenty-three years and has twenty-eight years of experience as a right of way consultant on state and federal highway projects. He has worked as a Project Manager, Acquisition Agent, and Relocation Agent under contract to the South Carolina Department of Transportation, Federal Aviation Administration, North Carolina Department of Transportation, and various city and county agencies. David has served as a Project Manager on forty major right of way projects in the past twenty-two years. 1993 - Present

e. Education:
Lander University / Greenwood, SC / Bachelor of Science / 1990 / Business Administration

f. Active Registrations:
1993 / South Carolina / Licensed Real Estate Agent / 17704

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

1. Interstate 95/U.S. Route 301 Interchange and S.C. Route 6 Connector – Orangeburg, SC

Key Personnel Role: Right of Way Manager
Experience with Current Firm: PAN, Inc.
Project/Assignment Duration: 2013–2014
Owner Contact Information: SCDOT, Claude Ipock, ipockcr@scdot.org, (803) 737-4202
Design/Construction Value: \$31 Million | \$610,795.00 (Right of Way fee)



Project Description: David was responsible for managing all right of way activities to include, negotiations, title work, appraisals, and relocation assistance. This was an interchange improvement project to construct a new interchange at US Route 301 and Interstate 95 in Orangeburg, South Carolina. The project also included the construction of a new connector road from Interstate 95 interchange to S.C. Route 6. Right of Way Acquisitions were required from forty-two tracts and the relocation of two single family residences, two outdoor advertising signs, and two personal property moves.



2. 85/385 Gateway – Greenville, SC

Key Personnel Role: Right of Way Manager
Experience with Current Firm: PAN, Inc.
Project/Assignment Duration: 2014–2016
Owner Contact Information: SCDOT, Andrew Huff, huffap@scdot.org, (864) 241-1012
Design/Construction Value: \$231 Million



Project Description: David was responsible for managing all right of way activities to include, negotiation, title work, appraisals, and relocation assistance for this Design-Build project for the improvements to the I-85/I-385 Interchange in Greenville, South Carolina. He led the acquisition of 73 parcels, including 38 fee simples, 16 condemnations, 5 easements, 8 right of entry, and 6 permissions in less than 16 months.



3. SC 41 Bridge Replacement over the Wando River – Charleston/Berkeley County, SC

Key Personnel Role: Right of Way Coordinator
Experience with Current Firm: PAN, Inc.
Project/Assignment Duration: Project 2014-Present / Assigned 2014-2015
Owner Contact Information: SCDOT, Mark A. Westbury, westburyma@scdot.org, (843) 636-9681
Design/Construction Value: \$45 Million



Project Description: This Design-Build project consisted of eight tracts from which right of way was acquired and the relocation of a c-store, boat storage, and two outdoor advertising signs. David was responsible for coordination of all right of way activities to include, negotiations, title work, appraisals, and relocation assistance. PAN completed this project under budget and on schedule.



4. Bowman Road 1 and 2 – Mount Pleasant, SC

Key Personnel Role: Right of Way Manager
Experience with Current Firm: PAN, Inc.
Project/Assignment Duration: 2010–2011
Owner Contact Information: Town of Mount Pleasant, Brad Morrison, BMorrison@tompsec.com, (843) 856-3080
Design/Construction Value: \$213,000.00 (Right of Way fee)

Project Description: David managed the acquisitions of right of way from 82 tracts and relocation of three displaces for the Town of Mount Pleasant. This project consisted of widening the existing two-lane road to three/four lane sections.



5. US 17 Hungryneck Boulevard – Mount Pleasant, SC

Key Personnel Role: Right of Way Manager
Experience with Current Firm: PAN, Inc.
Project/Assignment Duration: 2010–2011
Owner Contact Information: Town of Mount Pleasant, Brad Morrison, BMorrison@tompsec.com, (843) 856-3080
Design/Construction Value: \$4 Million (Right of Way fee)

Project Description: David managed all right of way activities for construction of US Route 17 / Hungryneck Boulevard interchange for the Town of Mount Pleasant. This project consisted of the acquisition of right of way from 38 parcels and four complicated business relocations. Relocations consisted of a bank, CVS Pharmacy, Mobile Offices, and a Furniture Store.



- 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.
As Right of Way Manager, David will not be required to be on-site full time for the duration of construction, so this section is not applicable.

KEY INDIVIDUAL RESUME FORM

Brief Resume of Key Individual anticipated for the Project.

a. Name & Title:
Chris Allen Beaver, Superintendent

b. Role of Key Individual for this Project:
Construction Manager

c. Name of Firm with which you are now associated:
Archer Western Construction, LLC



d. Years of Experience: With this Firm **13** Years With Other Firms **23** Years

Employment History:

Archer Western Construction, LLC | Superintendent | As a Superintendent, Chris is responsible for the completion of all phases of the project. The Superintendent's duties include the review of plans, scheduling of work, tracking of job costs, managing daily field operations and coordinating with the owner's engineers. The Superintendent will also be responsible for on-site safety management, subcontractor coordination and the supervision of all construction work, ensuring it is completed to the owner's satisfaction. 2005 - Present

Kiewit | Chris served in several roles in his 10 years including starting as an equipment operator, transitioning to Foreman then to Assistant Superintendent. 1995 - 2005

e. Education:
High School Diploma

f. Active Registrations:
NA

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

1. SCDOT SC 277 Bridge Replacement - Columbia, SC

Key Personnel Role: Superintendent/Construction Manager
Experience with Current Firm: Yes (Archer Western)
Project/Assignment Duration: Project 2019-2020 Assigned 2019-2020
Owner Contact Information: SCDOT, John Burns, burnsjm@scdot.org, 803-699-5068
Design/Construction Value: \$25 Million

Project Description: This design-build project involves constructing a new two-span, 453-foot continuous plate girder bridge and related roadway approaches along SC 277 NB over I-77. The project includes MSE wall abutments, drainage upgrades, permanent barrier wall, asphalt paving, and demolition. The new bridge is replacing a deficient cast-in-place tub structure which will be demolished as part of the project. Chris's responsibilities include overseeing all construction activities for this project to complete work on time and within budget. He is responsible for ensuring compliance with the SCDOT's quality and safety standards.

Lead Designer – ICE

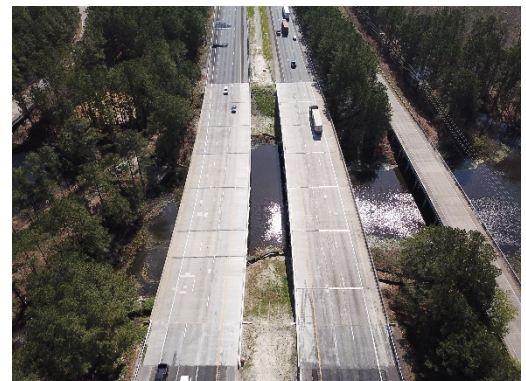


2. SCDOT I-77 Widening/Rehab (MM15-27) - Columbia, SC

Key Personnel Role: Structure Superintendent
Experience with Current Firm: Yes (Archer Western)
Project/Assignment Duration: Project 2016-2019 Assigned 2016-2018
Owner Contact Information: SCDOT, John Burns, burnsjm@scdot.org, 803-699-5068
Design/Construction Value: \$90 Million

Project Description: This design-build project consisted of widening I-77 NB and SB in Columbia, SC with one additional lane in each direction beginning between SC 12 (Percival Road) and I-20 and terminating near the S-52 (Killian Road) interchange. There are 10 bridges along the 6.5 miles of widening that was also rehabilitated and widened. The project included rehabilitation along I-77 SB from Percival Road to S-59 (Blythewood Road, 12 miles), and rehab along I-77 NB from Percival Road to Killian Road (6.5 miles). Chris's responsibilities included coordination with designers, scheduling, and cost control for the bridge demolition and bridge widenings.

Lead Designer – ICE



3. SCDOT SC-555 Dual Overpass Rehab - Columbia, SC

Key Personnel Role: Superintendent/Construction Manager
Experience with Current Firm: Yes (Archer Western)
Project/Assignment Duration: Project 2016-2017 Assigned 2016-2017
Owner Contact Information: SCDOT, John Burns, burnsjm@scdot.org, 803-699-5068
Design/Construction Value: \$2.6 Million

Project Description: This project involved the rehabilitation of SR 555 NB and SB over I-77 in Columbia, SC (within the project limits of the I-77 design-build project). The project scope included replacing bearings by jacking the bridge, hydro-demo and placing latex overlay full decks, full-depth bridge repair where required, new signalization at adjacent ramps, and new approach paving. Chris's responsibilities included scheduling and coordinating the bridge jacking and placement of the latex overlay.



4. I-95 Richmond Bridges - Richmond, VA

Key Personnel Role: Superintendent
Experience with Current Firm: Yes (Archer Western)
Project/Assignment Duration: Project 2010-2014 Assigned 2011-2014
Owner Contact Information: VDOT, Scott Fisher, scott.fisher@vdot.virginia.gov, 804-674-2452
Design/Construction Value: \$73 Million

Project Description: This project included the rehabilitation of 20 individual interstate bridge structures located at 10 separate sites between mile markers 76 and 83 on I-95 in Richmond, VA. The work also included adding two miles of shoulder to widen existing roadway, which required widening four of the bridges. The rehabilitation work called for complete replacement of all superstructure elements for the 20 bridge structures using the technique employed by Archer Western Construction, LLC in 1999 on the nearby James River Bridge (i.e., nightly bridge deck/beam removal followed by immediate replacement with preconstructed composite units). Chris's responsibilities included coordination with designers, scheduling, and cost control for the demolition and superstructure element installation at all 20 bridge sites.



- 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.

Chris is currently assigned to the SCDOT SC 277 Bridge Replacement project in Columbia, SC. That project is scheduled to be completed by August 2020.

The schedule for the US 1 over I-20 is as follows:

- Bids due March 2020
- Contract execution and NTP – 90 days (June 2020)
- Design Phase complete/begin construction – March 2021

KEY INDIVIDUAL RESUME FORM

Brief Resume of Key Individual anticipated for the Project.

a. Name & Title:
Frank James Hribar, Construction Manager

b. Role of Key Individual for this Project:
Quality Control Manager

c. Name of Firm with which you are now associated:
Infrastructure Consulting & Engineering, PLLC



d. Years of Experience: With this Firm 3 Years With Other Firms 30 Years

Employment History:

Infrastructure Consulting & Engineering, PLLC: Construction Manager – Frank’s responsibilities include managing CE&I personnel for public and private projects and overseeing construction activities including quality control, quality assurance, CE&I, and independent assurance. His management responsibilities include conflict resolution, generating contract change orders, environmental coordination, field audits and final inspections, failed material resolutions, and coordination with FHWA, SCDOT, and other project stakeholders. 2016-Present

Dennis Corporation: Vice President – CE&I Manager | Frank was responsible for managing the CE&I personnel for public and private projects, managing multiple county road improvement projects, developing and reviewing cost estimates, approving contractors’ pay requests, preparing project control documentation, generating the approved contract change requests, conducting field audits and final inspections, and preparing final documents for close out. 2008-2016

Tierra/CRM East: Senior Inspector | Frank was responsible for roadway inspections and structural inspections (bridges and culverts). 1997-2007

Lane Construction: Superintendent | Frank served as a Superintendent on the construction of heavy highway bridge projects. 1989-1997

Lee Construction: Foreman/Surveyor | Frank served as a Foreman/Surveyor on the construction of heavy highway bridge projects. 1986-1989

e. Education: N/A

f. Active Registrations: N/A

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

1. Interstate Pavement Preservation – District 1, SC

Key Personnel Role: Assistant Project Manager
Experience with Current Firm: Yes (Infrastructure Consulting & Engineering, PLLC)
Project/Assignment Duration: Project 2016-In Progress / Assigned 2016-Present
Owner Contact Information: SCDOT, Robbie Isgett, PE, IsgettRE@scdot.org, (803) 737-6660
Design/Construction Value: \$55 Million

Project Description: Frank currently serves as the **Assistant Project Manager** for this interstate preservation project which includes HMA resurfacing of I-20 EB (12.3 miles), I-26 (6.9 miles), I-126 (3.6 miles), and I-77 (15 miles). His responsibilities include overseeing construction management, construction engineering, construction survey verification, and assurance and acceptance inspection and testing in the areas of concrete, earthwork, drainage and base, erosion control, traffic control, and asphalt roadway to determine compliance with the contract requirements.



2. I-77 Widening & Rehabilitation (MM 15-27) - Richland County, SC

Key Personnel Role: Assistant Quality Control Manager
Experience with Current Firm: Yes (Infrastructure Consulting & Engineering, PLLC)
Project/Assignment Duration: Project 2015-2018 / Assigned 2016-2018
Owner Contact Information: SCDOT, Tyke Redfearn, PE, RedfearnWT@scdot.org, (803) 737-1430
Design/Construction Value: \$91 Million

Project Description: Frank served as the **Assistant Quality Control Manager**, and his responsibilities included scheduling/assigning inspectors to the job site, verifying material certifications, attending weekly meetings, making routine site visits, reviewing material testing reports, and performing bridge/concrete field reviews. This project involved widening the interstate by adding one lane in the median in each direction for seven miles to include widening of 10 mainline bridges over roadways and streams. This section also included rehabilitation of an asphalt overlay with a concrete base and cross slope verification/correction. The work also included eight additional miles of pavement rehabilitation and cross slope verification/correction of southbound lanes. The pavement throughout the project consisted of asphalt overlay with a concrete base. **Lead Contractor - AWC**



3. SC 802 Widening & Bridge over Beaufort River - Beaufort, SC

Key Personnel Role: Construction Manager
Experience with Current Firm: No (Dennis Corporation)
Project/Assignment Duration: Project 2009-2010 / Assigned 2009-2010
Owner Contact Information: Beaufort County, Rob McFee, PE, rmcfee@bcgov.net, (843) 255-2730
Design/Construction Value: \$54 Million

Project Description: Frank served as the **Construction Manager** for this project that consisted of the widening of SC 802 from US21/SC 802 to Ribaut Road. The project also included a new two-lane bridge across the Beaufort River and widening from two lanes to four lanes with a raised/flush median for approximately 2.5 miles. Frank was responsible for construction management, cost estimates, CE&I inspections and testing, bid documentation, utility coordination, and erosion and traffic control.



4. SC Route 6 Widening - Lexington County, SC

Key Personnel Role: Chief Inspector
Experience with Current Firm: No (Tierra/CRM East)
Project/Assignment Duration: Project 2004-2006 / Assigned 2004-2006
Owner Contact Information: SCDOT, Robert Dickinson, dickinsorc@scdot.org, (803) 737-6660
Design/Construction Value: \$29 Million

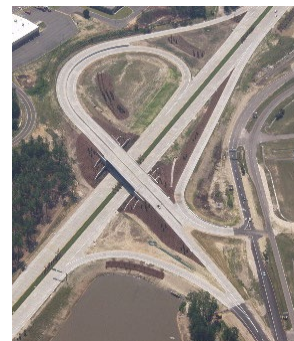
Project Description: This project consisted of widening SC 6 for 5.9 miles from an existing two-lane section to a new five-lane curb and gutter section with a five-foot sidewalk. The work also included constructing a new drainage system, new curbs and gutters, sidewalks, intersection improvements, and three bridges. Frank served as **Chief Inspector**, and his primary duties on this project included overseeing all aspects of constructing three new bridges; oversight of concrete pours; testing concrete for air entrainment, slump, temperature, and cast compressive strength cylinders; maintaining logs and spreadsheets to facilitate the process of final plans; obtaining field samples and documentation for necessary testing; daily generation of work reports, pay items, and daily work schedules; verification of erosion control requirements and documentation for environmental protection; daily inspections of all aspects of traffic control requirements; and documentation and monitoring of clearing and grubbing operations, muck excavations, backfilling and compaction of borrow materials, monitoring compaction testing of soils, and collecting samples as necessary for lab testing.



5. John Hardee Expressway, Phase 1 - Lexington County, SC

Key Personnel Role: Lead Inspector
Experience with Current Firm: No (Tierra/CRM East)
Project/Assignment Duration: Project 2002-2004 / Assigned 2002-2004
Owner Contact Information: SCDOT, Robert Dickinson, dickinsorc@scdot.org, (803) 737-6660
Design/Construction Value: \$19 Million

Project Description: This project involved constructing 2.6 miles of four-lane PCC pavement with a landscaped median, four ramps, and one two-span bridge with "T" piers and MSE Wall abutments. The project included a pile panel wall with a fracture faced finish to support the existing fill around the runway localizer. Frank served as the **Lead Inspector** responsible for overseeing concrete pours; testing concrete for air entrainment, slump, temperature, and cast compressive strength cylinders; monitoring clearing and grubbing operations, muck excavations, backfilling, and compaction of borrow materials; monitoring compaction testing of soils and collecting samples for lab testing; inspection of all formwork, steel, concrete, piling, and deck construction for bridge; maintaining logs and spreadsheets to facilitate the process of final plans; obtaining field samples and documentation for necessary testing; conducting weekly and annual interviews for compliance of federal regulations; verification of erosion control requirements and documentation for environmental protection; generating work reports, pay items, and daily work schedules; daily inspections of all aspects of traffic control requirements and documentation; reviewing plans to identify possible conflict items; and coordinating with utility owners and airport personnel to identify conflicts, agree on resolution, and implement the utility relocations.



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.

Frank is currently assigned to the Interstate Pavement Preservation project in District 1 which will be completed by July 2019. He will not be assigned any other projects and will be 100% available and on-site during all construction activities for this Project.

KEY INDIVIDUAL RESUME FORM

Brief Resume of Key Individual anticipated for the Project.	
<p>a. Name & Title: Kevin Robert Goemaat, Assistant Project Manager</p>	
<p>b. Role of Key Individual for this Project: Maintenance of Traffic Manager</p>	
<p>c. Name of Firm with which you are now associated: Archer Western Construction, LLC</p>	
<p>d. Years of Experience: With this Firm <u>1</u> Year With Other Firms <u>9</u> Years Archer Western Construction, LLC Assistant Project Manager Kevin is currently responsible for the operations, financials, and leadership of a \$68 million SCDOT Project. Kevin has brought with him years of MOT experience gathered from throughout his employment history. 2018 – Present IPR Southeast, LLC Project Manager Managed the day-to-day operations of multiple public and private underground utility rehabilitation projects including owner/client relations and value engineering. 2017 - 2018 Rogers Group, Inc. Project Manager Responsible for all day to-day operations of multiple, multidisciplinary crews including paving, milling, grading and recycling. Kevin's project responsibilities included owner/client relations, project financials, project schedule, day to day work activities, billings/collections, project closeout, dispute resolutions, and value engineering. 2016 – 2017 Sloan Construction: Project Engineer/Estimator/Project Manager – Involved in all aspects of highway project management for projects ranging from \$250k to \$16M. Kevin's project experience included finishing a two-year, \$16 million interstate reconstruction project on schedule and under budget. 2009 - 2013</p>	
<p>e. Education: Name & Location of Institution(s)/Degree(s)/Year(s)/Specialization(s): Clemson University / Clemson, SC / Bachelor of Science / 2010 / Construction Science and Management</p>	
<p>f. Active Registrations: NA</p>	
<p>g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. I-85 Reconstruction from MM 69.1 to MM 77.2 - Spartanburg, SC Key Personnel Role: Assistant Project Manager Experience with Current Firm: Yes (Archer Western) Project/Assignment Duration: Project 2017-2019 / Assigned 2018-2019 Owner Contact Information: SCDOT, Joseph Fowler, fowlerjm@scdot.org, 864-285-7720 Design/Construction Value: \$68 Million Project Description: This project includes the complete replacement of eight miles of PCC pavement along I-85 in Spartanburg, SC. This project includes 200,000 CY of new 13" PCC pavement as well as full reconstruction of the subgrade. Self-performed scope includes MOT, pavement demo, fine grading subgrade, mass excavation for median reconstruction and PCCP. Kevin's responsibilities include owner relations, scheduling, directing and managing all field operations, coordination of subcontractors, all aspects of project financials and reporting and full control of the CPM schedule. His MOT responsibilities include overseeing the implementation of major traffic shifts between phases of construction.</p>	



2. I-26 Rehabilitation and Cross Slope Correction – Spartanburg, SC

Key Personnel Role: Project Manager
Experience with Current Firm: No (Sloan Construction)
Project/Assignment Duration: Project 2012-2013 / Assigned 2012-2013
Owner Contact Information: SCDOT, Ray Moallemi, moallemia@scdot.org, 864-706-3469
Design/Construction Value: \$42 Million

Project Description:

This project involved the rehabilitation of 16 miles of eastbound and westbound interstate near Clinton, SC. The project's scope included 350,000 square yards of surface planning and 113,000 tons of hot mix asphalt paving. In areas where cross-slope correction created unmanageable drop-offs, specific MOT phasing was implemented in to accommodate them. Additionally, each work activity had an associated lane closure. Kevin's responsibilities included overseeing all field operations including nightly two or three distinct MOT configurations nightly for the two-year duration of the project.



3. Cherokee & Union Resurfacing with RCC & CMRB – Cherokee County, SC

Key Personnel Role: Project Manager
Experience with Current Firm: No (Sloan Construction)
Project/Assignment Duration: Project 2011-2012 / Assigned 2011-2012
Owner Contact Information: SCDOT, Shane Parris, parrissl@scdot.org, 864-680-3666
Design/Construction Value: \$3.3 Million

Project Description:

This resurfacing project's scope included milling, CMRB, RCC, excavation for shoulder paving, and asphalt paving in front of a major business corridor on I-85 in Cherokee County, SC. Keeping all businesses open during work operations necessitated strict MOT work. Kevin's responsibilities included planning the project's construction phases and implementing the MOT for all critical work activities.



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

Kevin is currently assigned to the SCDOT I-85 Reconstruction from MM 69.1 to MM 77.2 in Spartanburg, SC. The I-85 reconstruction project is scheduled to be completed by October 2019, prior to construction beginning on this project.

The schedule for the US 1 over I-20 Interchange is as follows:

- Bids due March 2020
- Contract execution and NTP – 90 days (June 2020)



APPENDIX B

Work History and Quality Forms

Contractor Work History Forms

I-77 Widening & Rehabilitation

I-95 Richmond Bridges Replacement

I-395 HOV Ramp at Seminary Road

Designer Work History Forms



I-77 Widening & Rehabilitation

I-85 Widening (MM 80-96)

SC 277 over I-77 Bridge Replacement


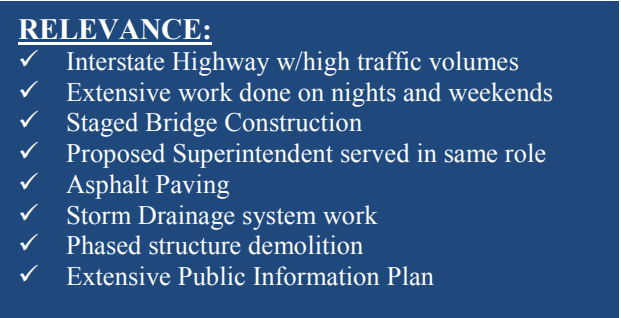




WORK HISTORY AND QUALITY FORM – CONTRACTOR

a. Project Name & Location (City, State)	b. Name of lead responsible for the overall project design or construction	c. Contact information of the Client & their Project Manager who can verify AWC’s responsibilities	d. Actual or Estimated Construction & Professional Services Completion Date	e. Actual or Estimated Project Construction Cost (in thousands)	f. Dollar Value of Work Performed by AWC (in thousands)
Name: I-77 Widening & Rehab. (MM 15-27) Location: Richland County, SC	Name: Infrastructure Consulting & Engineering, PLLC	Name of Owner: SCDOT Project Manager: John Burns Phone: 803-699-5068 Email: burnsjm@scdot.org	Construction: December 2018 Design: March 2017	\$90,318	\$58,707
g. Narrative describing the work performed by AWC. If submitting work completed by an affiliated or subsidiary company of AWC, identify the full legal name of the affiliate or subsidiary and their role on the Project.					
<p>Project Description: This design-build project consists of widening NB and SB I-77 in Richland County with one additional lane in each direction beginning between SC12 (Percival Road) and I-20 and terminating near the S-52 (Killian Road) interchange, a distance of approximately 6.5 miles. There are 10 bridges along the project site that will also be rehabilitated and widened including the mainline bridges (5 dual bridges), two of which are stream / lake crossings. Finally, the project includes 12 miles of interstate rehabilitation along SB I-77 from Percival Road to S-59 (Blythewood Road) and interstate rehabilitation along NB I-77 from Percival Road to Killian Road.</p> <p>Key Individual name/role/time on the project:</p> <p>Chris Beaver / Structures Superintendent / July 2016 - December 2018</p>			  <div><p>RELEVANCE:</p><ul style="list-style-type: none">✓ Design-Build✓ Proposed Superintendent served in same role✓ Bridge Construction on Interstate Highway✓ Maintain all lanes of traffic on heavily trafficked interstate✓ Working adjacent to environmentally sensitive areas✓ Concrete paving✓ Public Relations</div>		
h. Self-Assessment. The information provided in this section should be a self-assessment of AWC’s performance on the project to identify Lead Contractor/Major Sub-contractors with firms or personnel that have successfully completed projects on time and on or under budget, and to identify Lead Contractor/Major Sub-contractors that have records of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.					
AWC started construction on time with USACE and SCDHEC NOI permits in hand, the latter of which was acquired early due to partnering with SCDOT. AWC managed all issues that arose promptly to minimize delays and continued to partner with the SCDOT throughout the construction duration to eliminate claims, disputes, and litigation. There are no existing or pending claims, disputes or litigation/arbitration on this project as it relates to design.					
i. Quality Initiatives. Discuss AWC’s quality initiatives including, but not limited to, cost control, schedule management and adherence, avoidance of claims, and other pertinent initiatives enhancing quality on the project.					
<p>Quality initiatives included:</p> <ul style="list-style-type: none">• Schedule Control – AWC used their standard schedule monitoring protocols (3-week look ahead, 90 day look ahead, monthly updates), weekly review of upcoming activities kept critical activities in forefront• QC/QA of Design – All submittals went through comprehensive QC review by design production squads and discipline leads. ICE used QA Review Team that included Peter Graf (structures), Larry Cook (Roadway), Jonathan Scarce (Hydro) and Michael Valiquette (Geotech)• Constructability Reviews - AWC’s management provided constructability reviews of all submittals prior to their submission to the SCDOT• QC Team: Quality Manger and the senior inspector were involved during the design process providing input on the inspection process, ensuring that all testing requirements were met or exceeded. Same QC team lead inspection on the project for the duration of construction. The QC team participated in all owner and project schedule meetings to verify correct inspection coverage, plans, and appropriate documentation were provided to the SCDOT.• Work Plan Preconstruction Meetings: AWC instituted work plan review meetings prior starting major activities. Also included SCDOT (including staff from headquarters), the QC and QA teams, and safety personnel, these meetings aided in successfully identifying risks related to quality, safety, and schedule prior to the start of work					
j. For each question in Section 3.5.2 of the RFQ for which a “Yes” answer was provided, AWC shall provide a detailed explanation below.					
Not Applicable					

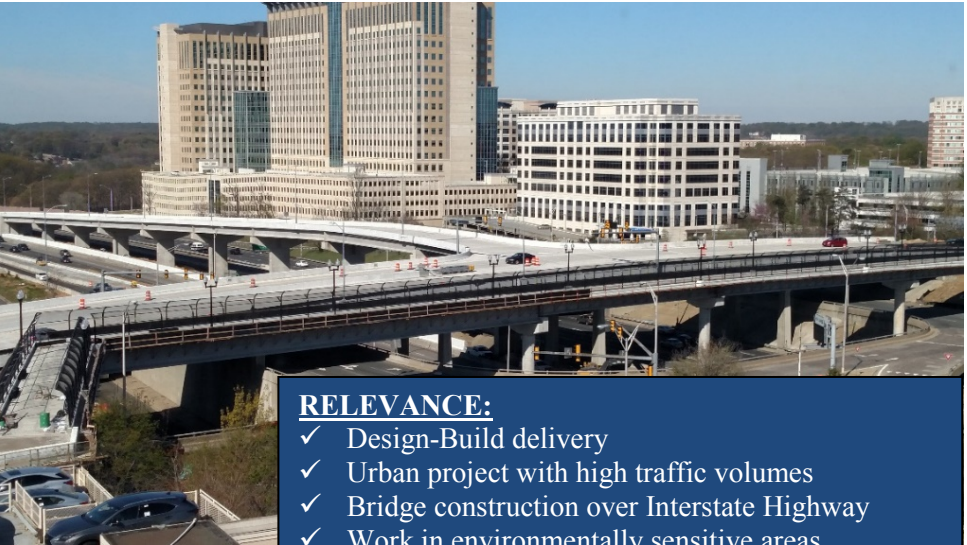


WORK HISTORY AND QUALITY FORM – CONTRACTOR




a. Project Name & Location (City, State)	b. Name of lead responsible for the overall project design or construction	c. Contact information of the Client & their Project Manager who can verify AWC’s responsibilities	d. Actual or Estimated Construction & Professional Services Completion Date	e. Actual or Estimated Project Construction Cost (in thousands)	f. Dollar Value of Work Performed by AWC (in thousands)
Name: I-95 Richmond Bridges Replacement Location: Richmond, VA	Name: AECOM (Formerly URS)	Name of Owner: VDOT Project Manager: Scott Fisher Phone: (804) 674-2452 Email: scott.fisher@VDOT.Virginia.gov	Construction: October 2014 Design: March 2009	\$73,537	\$51,476
g. Narrative describing the work performed by AWC. If submitting work completed by an affiliated or subsidiary company of AWC, identify the full legal name of the affiliate or subsidiary and their role on the Project.					
<p>Archer Western was the prime contractor for the VDOT I-95 Richmond Bridges replacement project. This project consisted of the rehabilitation of 20 interstate bridges on I-95 in Richmond, Virginia, including 2 miles of shoulder widening and the extension of acceleration lanes. Bridge work was superstructure work that includes nightly bridge deck/beam removal and immediate replacement with precast composite deck sections. Substructure work involved the rehabilitation of existing columns and footings. The structure work also included the construction of new substructure and retaining walls required for the widening of four bridges. Maintenance-of traffic (MOT) requirements were extensive, because 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.</p> <p>Key Individual name/role/time on the project:</p> <p>Chris Beaver Superintendent January 2011 – August 2014</p>			<div></div> <div><p>RELEVANCE:</p><ul style="list-style-type: none">✓ Interstate Highway w/high traffic volumes✓ Extensive work done on nights and weekends✓ Staged Bridge Construction✓ Proposed Superintendent served in same role✓ Asphalt Paving✓ Storm Drainage system work✓ Phased structure demolition✓ Extensive Public Information Plan</div>		
h. Self-Assessment. The information provided in this section should be a self-assessment of AWC’s performance on the project to identify Lead Contractors/Major Subcontractors with firms or personnel that have successfully completed projects on time and on or under budget, and to identify Lead Contractors/Major Subcontractors that have records of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.					
<p>This challenging bridge replacement and reconstruction project was completed 3 months ahead of schedule and earned a \$3,000,000 “NO EXCUSES” early completion bonus with zero claims.</p> <p>AWC self-performed all of the items of work that were on the critical path (concrete paving, bridge construction and demolition, storm drainage, concrete barrier wall). AWC’s use of CPM scheduling and mandatory Subcontractor Preconstruction Conferences and weekly safety/scheduling/quality meetings with VDOT resulted in completing the Project 3 months early.</p>					
i. Quality Initiatives. Discuss AWC’s quality initiatives including, but not limited to, cost control, schedule management and adherence, avoidance of claims, and other pertinent initiatives enhancing quality on the project.					
<p>While the use of Accelerated Bridge Construction (ABC) Techniques was used on a previous VDOT project, additional innovations were included on this project including:</p> <ul style="list-style-type: none">• Match-casting the pre-constructed composite bridge units assuring the quality of the finished product• Enhancing the accuracy of the As-Built Survey by utilizing Laser Scanning technology• Utilized “Live Load” shoring to replace the existing pier caps allowing the existing bridges to remain in operation					
j. For each question in Section 3.5.2 of the RFQ for which a “Yes” answer was provided, AWC shall provide a detailed explanation below.					
Not Applicable					



WORK HISTORY AND QUALITY FORM – CONTRACTOR

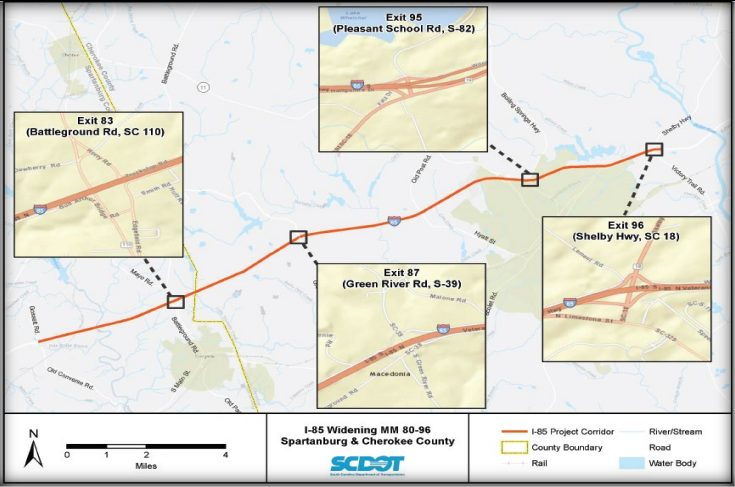
a. Project Name & Location (City, State)	b. Name of lead responsible for the overall project design or construction	c. Contact information of the Client & their Project Manager who can verify AWC’s responsibilities	d. Actual or Estimated Construction & Professional Services Completion Date	e. Actual or Estimated Project Construction Cost (in thousands)	f. Dollar Value of Work Performed by AWC (in thousands)
Name: I-395 HOV Ramp at Seminary Rd. & NB Aux Lane Extension Location: Alexandria, VA	Name: Parsons Transportation Group	Name of Owner: VDOT Project Manager: Arif Rahman, PE Phone: 703-259-1940 Email: MD.rahman@VDOT.virginia.gov	Construction: May 2016 Design: February 2014	\$70,250	\$57,755
g. Narrative describing the work performed by AWC. If submitting work completed by an affiliated or subsidiary company of AWC, identify the full legal name of the affiliate or subsidiary and their role on the Project.					
<p>Archer Western was the design-builder and lead contractor for the VDOT I-395 HOV Ramp at Seminary Road & NB Auxiliary Lane Extension Project. This design-build project includes constructing a new I-395 HOV Ramp to the existing Seminary Road Bridge, replacing the superstructure of the Seminary Road Bridge, constructing a new pedestrian bridge, widening and rehabilitating the Sanger Ave Bridge, widening the I-395 Northbound General Purpose Lanes, widening the Seminary Road off-ramp, and widening the Duke St on-ramp. In addition to the pedestrian bridge, major features of work include new steel beams and deck for the Seminary Road Bridge, new Bulb-T beam and deck for the HOV Ramp, four sound walls, MSE wall, concrete piles, micropiles, and asphalt paving.</p> <p>One of the most significant challenges was the construction of the piers in the median of I-395. This part of the interstate includes HOV lanes in each direction and a narrow median. AWC developed a median access plan and lane closure sequence that minimized traffic impacts to I-395.</p> <p>Public Relations: VDOT led an exhaustive public information program with AWC support to inform the community about upcoming activities, lane closures, access and restrictions. Efforts included 1-on-1 meetings with businesses, community open houses, and a website with interactive maps and details.</p> <p><u>Key Individual name/role/time on the project:</u></p> <p>NA</p>			 <div>RELEVANCE:<ul style="list-style-type: none">✓ Design-Build delivery✓ Urban project with high traffic volumes✓ Bridge construction over Interstate Highway✓ Work in environmentally sensitive areas✓ Phased MOT✓ Asphalt paving✓ Utility coordination✓ R/W Acquisition Services Provided✓ Storm drainage system work</div>		
h. Self-Assessment. The information provided in this section should be a self-assessment of AWC’s performance on the project to identify Lead Contractors/Major Subcontractors with firms or personnel that have successfully completed projects on time and on or under budget, and to identify Lead Contractors/Major Subcontractors that have records of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.					
<p>AWC completed the project on time, with no unresolved issues or claims. An executive partnering process was established that included AWC senior Management and VDOT Leadership. This team met on a monthly basis to review outstanding issues and review the progress of the project. AWC self-performed all of the items of work that were on the critical path (concrete paving, bridge construction and demolition, storm drainage, concrete barrier wall). This provided greater schedule and quality control contributing to the project’s on time delivery.</p>					
i. Quality Initiatives. Discuss AWC’s quality initiatives including, but not limited to, cost control, schedule management and adherence, avoidance of claims, and other pertinent initiatives enhancing quality on the project.					
<p>While the design solutions and construction techniques on this project have been used on previous VDOT projects, additional innovations on this project included:</p> <ul style="list-style-type: none">• Use of lightweight reinforced concrete deck on the existing Seminary Road bridge to ensure the portions of the existing structure that remained were not overloaded.• The connection of the new HOV ramp structure to the existing Seminary Road bridge structure involved a rigid connection to the web of the steel beam. Additional design and QC procedures were used to verify the connection would be stable and functional.• The new pedestrian overpass was value engineered post award to a concrete girder and deck structure simplifying construction and minimizing impacts to traffic. <p>In addition to the weekly subcontractor meetings, a safety, quality, and scheduling preconstruction conference with VDOT participation, was conducted for each subcontractor before their work commenced.</p> <p>AWC’s safety policy requires each new hire worker receive site specific safety training before they are allowed to work. An additional Safety Leadership Team, with VDOT participation was established and resulted in superior safety results.</p>					
j. For each question in Section 3.5.2 of the RFQ for which a “Yes” answer was provided, AWC shall provide a detailed explanation below.					
Not Applicable					

WORK HISTORY AND QUALITY FORM – DESIGNER

a. Project Name & Location (City, State)	b. Name of lead responsible for the overall project design or construction	c. Contact information of the Client & their Project Manager who can verify ICE, PLLC’s responsibilities	d. Actual or Estimated Construction & Professional Services Completion Date	e. Actual or Estimated Project Construction Cost (in thousands)	f. Dollar Value of Work Performed by ICE, PLLC (in thousands)
Name: I-77 Widening & Rehab. (MM 15-27) Location: Richland County, SC	Name:  Archer Western Construction, LLC	Name of Owner: SCDOT Project Manager: Tyke Redfearn, PE Phone: 803.737.1430 Email: redfearnwt@scdot.org	Construction: December 2018 Design: March 2017	\$90,318	\$5,412 (Design) + \$910 (QC Inspection)
g. Narrative describing the work performed by ICE, PLLC. Include the office location(s) where the design work was performed and whether ICE, PLLC was the lead designer or a sub-consultant.					
<p>Project Description: ICE was the Lead Design Firm for this 12-mile interstate widening and pavement rehabilitation design-build project. This project consists of widening northbound and southbound I-77 with an additional lane in each direction from MM 15 to MM 22 (7 miles) including the widening of the mainline bridges (5 dual bridges) including two stream / lake crossings. In addition, I-77 travels below two existing railroad bridges and the widening through this area must be designed and constructed to minimize impacts to those bridge piers and foundations.</p> <p>Roadway Design: ICE was responsible for preparing roadway geometric design for the project using the design standards and criteria based on design speed, functional classification, design traffic volumes, right-of-way, and aesthetics. Construction Phasing/MOT is one of the most critical aspects of the project because of the high volume of traffic on I-77. A comprehensive Traffic Control Plan / MOT was developed by the Roadway Design Team. This Plan was developed in concert with the Construction personnel during both the procurement and final design phases. Structural Design: ICE’s Structural Design Team was responsible for evaluating the existing bridges and embankments to determine any required enhancements to the existing structures that may be required to meet SCDOT’s scope requirements. There are five pairs of mainline bridges to be widened. Additionally, ICE designed the two (2) Median Access Ramp (MAR) at Edgewater and Windsor Lake Blvd. used for delivery of material in the median. Hydro Design: The hydraulic design includes analyzing four detailed FEMA flood study stream crossings, as well as seven miles of Geopak Drainage design associated with the highway drainage. HDS#5 and XPSWMM are being used to analyze cross pipes. Erosion Control is being designed, as well as water quality BMPs due to 303D watersheds on a portion of the project. Utilities & Railroad Coordination: Extensive utility coordination was necessary with utility owners of commercial, industrial, and residential land uses. The Design Team identified all utility conflict points and designed the Project to avoid conflicts with utilities where possible, and minimize impacts where conflicts cannot be avoided. Quality Control: QC inspectors travel to the location of the material production site and perform QC tests and inspections at the producer’s facility. Upon completion of all tests, the Quality Control Manager verifies the results are transmitted to the RCE, Quality Acceptance, and Independent Assurance Manager.</p> <p>Design Location: ICE Corporate Office: 1021 Briargate Circle, Columbia, SC 29210</p> <p>Key Individual name/role/time on the project:</p> <p>Aaron Livingston, PE / Lead Roadway Design Engineer / 2015-2018 Frank Hribar / Assistant Quality Control Manager / 2016-2018</p>					
<div><div><div>RELEVANCE:</div><div><div>✓ Design-Build</div><div>✓ Bridge Construction on Interstate Highway</div><div>✓ Interstate MOT</div><div>✓ Utility Coordination</div><div>✓ Permitting</div><div>✓ Environmental Compliance</div><div>✓ Public Relations</div></div></div><div></div></div>					
h. Self-Assessment. The information provided in this section should be a self-assessment of ICE, PLLC’s performance on the project to identify Lead Designers/Major Sub-consultants with firms or personnel that have successfully completed projects on time and on or under budget, and to identify Lead Designers/Major Sub-consultants that have records of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.					
The design of the Project was completed 3 months ahead of the schedule by end of December 2016 and with the USACE permit and SCDHEC NOI permit in hand, enabled AWC to start construction 3 months earlier than planned. The design of non-critical path bridges followed and all completed by March 2017. There are no existing or pending claims, disputes or litigation/arbitration on this Project.					
i. Quality Initiatives. Discuss ICE, PLLC’s quality initiatives including, but not limited to, cost control, schedule management and adherence, avoidance of claims, and other pertinent initiatives enhancing quality on the project.					
Quality Initiatives included: a) <i>Schedule Control</i> measures put in place on the outset and monitored on a minimum of weekly basis by the D-B Coordinator / Pre-Construction Manager (Andy Gillis). He acted as the schedule Czar and ensured every one met their pre-agreed upon deliverable dates, b) <i>QC/QA of Design</i> – All submittals went through a comprehensive QC review by the production squads and disciplines, followed by the QA Quality Review Team by ICE (Peter Graf (structures), Larry Cook (Roadway), Jonathan Scarce (Hydro) and Michael Valiquette (Geotech), and, c) <i>Constructability Reviews</i> - AWC’s management provided over the shoulder constructability reviews of all submittals prior to submittals to SCDOT.					
j. For each question in Section 3.5.2 of the RFQ for which a “Yes” answer was provided, ICE, PLLC shall provide a detailed explanation below.					
Not Applicable					

WORK HISTORY AND QUALITY FORM – DESIGNER

a. Project Name & Location (City, State)	b. Name of lead responsible for the overall project design or construction	c. Contact information of the Client & their Project Manager who can verify ICE, PLLC’s responsibilities	d. Actual or Estimated Construction & Professional Services Completion Date	e. Actual or Estimated Project Construction Cost (in thousands)	f. Dollar Value of Work Performed by ICE, PLLC (in thousands)
Name: I-85 Widening Project (MM 80 to 96) Location: Spartanburg and Cherokee Counties, SC	Name: Blythe/Zachry, Joint Venture	Name of Owner: SCDOT Project Manager: Brad Reynolds, PE Phone: 803.737.3081 Email: ReynoldsBS@scdot.org	Construction: October 2021 Design: December 2017	\$435,000	\$4.8 Million (DB Prep, NEPA & DB Plan Reviews)
g. Narrative describing the work performed by ICE, PLLC. Include the office location(s) where the design work was performed and whether ICE, PLLC was the lead designer or a sub-consultant.					
<p>Project Description: As the lead design firm, ICE was responsible for managing the engineering services necessary for development of the Environmental Assessment and Design-Build preparation for widening approximately 18 miles of interstate. The Columbia, SC office performed all of the services on this Project. Along the approximately 18-mile project area, interchanges at Exit 83 – Battleground Road (SC 110), Exit 87 – Green River Road (S-39), Exit 95 – Pleasant School Road (S-82), and Exit 96 – Shelby Highway (SC 18) will be modified to bring them into compliance with state and federal design requirements. The project also included adding a travel lane in each direction, improving various interchanges and exit ramps, and replacement of overpass bridges. This project was separated into three sections. ICE was responsible for the bridge/structure design, hydrology design, and roadway design in Segment 3.</p> <p>Project Management ICE was responsible for the project organization, management, scoping, and coordination with SCDOT, FHWA, and municipalities. ICE also coordinated public meetings and development of displays. ICE provided budget, schedule, and expenditure reports to SCDOT. ICE also managed subconsultants who performed the tasks required to deliver the preliminary road and bridge plans, environmental documents, and traffic studies. Bridge/Structure Design ICE identified and analyzed bridge replacement alternatives and developed the conceptual bridge plans. The bridge construction staging was also included. ICE provided conceptual level and detailed cost estimates for each bridge and performed bridge inspections in order to direct the Contractor to repair the bridge as needed in the Design-Build RFP.</p> <p>Hydrology Design The hydrology design for this project involved the analysis and preliminary sizing of all cross line structures with the use of HY8 and XPSWMM. Downstream structures were analyzed as well due to pre/post concerns from the interstate widening. Several major streams were analyzed to evaluate the degree of FEMA involvement. Roadway Design This task required providing the preliminary roadway plans including interchange design, providing cost estimates, identifying preliminary right-of-way requirements and environmental impacts, developing roadway design criteria, and completing any necessary design exception documentation. Utility Coordination A preliminary utility report was developed to include major utility and utility easements within the project limits, recommendations to the extent of prior rights, assessment of utility impacts and costs associated with impacts and feasibility of early utility relocations.</p> <p>Office Location where the Work was Performed: Columbia, SC (ICE’s Corporate Headquarters)</p> <p>Key Individual name/role/time on the project: <u>Aaron Livingston, PE</u> Lead Roadway Engineer 2014-2016</p>					
h. Self-Assessment. The information provided in this section should be a self-assessment of ICE, PLLC’s performance on the project to identify Lead Designers/Major Sub-consultants with firms or personnel that have successfully completed projects on time and on or under budget, and to identify Lead Designers/Major Sub-consultants that have records of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.					
ICE managed the work of nine subconsultants on this assignment, including three major subconsultants including Mead & Hunt, STV and Three Oaks. ICE Leadership committed to SCDOT the completion of the NEPA Document and DB RFP package in time for SCDOT’s procurement in February 2016. The original professional services agreement included NEPA Document, Preliminary Design, and support during the Design-Build procurement phase for approximately \$6 Million. After 16 months of planning, environmental analysis, and completion of the Preliminary Plans, the contract budget was decreased by \$1 Million, which was the direct result of effective management and attention to details by ICE Management Team. All deliverables were submitted on time per the established schedule. There are no existing or pending claims, disputes, or litigation/arbitration on this Project.					
i. Quality Initiatives. Discuss ICE, PLLC’s quality initiatives including, but not limited to, cost control, schedule management and adherence, avoidance of claims, and other pertinent initiatives enhancing quality on the project.					
Quality Initiatives included: a) Schedule and Cost Control measures put in place on the outset and monitored on a minimum of bi-weekly snap shot as well as weekly status meeting to make sure everyone stayed on the project schedule and specifically no critical path activity was impacted by delays or indecision, b) QA/QC of Design - the EA was signed on October 19, 2015 (less than 12 months) allowing SCDOT to begin the DB procurement of the project. This was made possible only by implementation of a robust QA/QC program for the deliverables on the project including but limited to NEPA document, alternative analysis, impact analysis, “preferred option” Preliminary Design plan preparations, Stormwater Management Report, and Conceptual Bridge Plans, c) Working closely with SCDOT and resource agencies to meet this aggressive schedule for an 18-mile widening project with four interchanges. There are no claims and no litigation because of ICE services to date.					
j. For each question in Section 3.5.2 of the RFQ for which a “Yes” answer was provided, ICE, PLLC shall provide a detailed explanation below.					
Not Applicable					



- RELEVANCE:
- ✓

Design-Build
- ✓

Interstate Widening
- ✓

Interstate MOT
- ✓


Interchange Modernization
- ✓

Asphalt Paving
- ✓

Utility Coordination
- ✓

Environmental Analysis

WORK HISTORY AND QUALITY FORM –DESIGNER

a. Project Name & Location (City, State)	b. Name of lead responsible for the overall project construction	c. Contact information of the Client & their Project Manager who can verify RKA’s responsibilities	d. Actual or Estimated Construction & Professional Services Completion Date	e. Actual or Estimated Project Construction Cost (in thousands)	f. Dollar Value of Work Performed by RKA & ICE (in thousands)
Name: SC 277 over I-77 Bridge Replacement Location: Richland County, SC	Name:  Archer Western Construction, LLC	Name of Owner: SCDOT Project Manager: James (Jae) Mattox Phone: 803-737-1805 Email: mattoxjh@scdot.org	Professional Services: March 2019 (TMP/Detour Plans) May 3, 2019 (Final Plans) Construction: August 2020 (est.)	\$ 24,990	\$30 (RKA) \$1,642 (ICE)
g. Narrative describing the work performed by Ramey Kemp & Associates, Inc. and ICE, PLLC. Include the office location(s) where the design work was performed and whether RKA and ICE were the lead designer or a sub-consultant.					
<p>Project Description: The Project includes the construction of a new replacement bridge and related roadway approaches along SC 277 Northbound over I-77 and demolishing the existing bridge.</p> <p>Traffic Engineering: A traffic analysis and detour analyses were provided by RKA (sub-consultant) in support of: a) development of Alternate Technical Concept (ATC) and Technical Proposal MOT Concept Plans in the procurement phase; and, b) assistance in the development of the Traffic Management Plan (TMP) and the preparation of the Detour Plans. The Team proposed a full detour of no more than 32 hours (for detour set up, bridge demo, clean up, and restoring traffic). The Traffic Analysis report showed that queuing will not be an issue on the detour route. The results of the detour analysis showed that for the worst-case peak hour, that the mainline traffic would operate at worst-case level of service (LOS) C conditions and that the majority of the ramps would operate at acceptable LOS conditions with only the I-20 eastbound to SC 277 northbound loop ramp operating at LOS E conditions. Roadway Design: Serving as the lead design firm, ICE was responsible for preparing roadway geometric design for the project using the design standards and criteria based on design speed, functional classification, and design traffic volumes. Construction Phasing/MOT is a critical aspect because of access / erection plans for the structure / and demolition of existing bridge. A comprehensive Traffic Control Plan / MOT / Detour was developed by the Roadway Design Team. This Plan was developed in concert with the Construction personnel during the procurement and final design phases. Structural Design: ICE’s Structural Design Team was responsible for a design that meets all current standards and provided the clear distance required in the RFP. In order to meet all design standards a curved steel plate girder structure was selected. Hydro/Hydraulic Design: This work included analyzing four detailed FEMA flood study stream crossings, as well as seven miles of Geopak Drainage design associated with the highway drainage. HDS#5 and XPSWMM are being used to analyze cross pipes. Erosion Control is being designed, as well as water quality BMPs due to 303D watersheds on a portion of the project. Utilities & Railroad Coordination: Extensive utility coordination was necessary with utility owners of commercial, industrial, and residential land uses. The Design Team identified all utility conflict points and designed the Project to avoid conflicts with utilities where possible, and minimize impacts where conflicts cannot be avoided. Railroad coordination is on-going and all necessary agreements and Right of Entry documents will be completed prior to work with in Railroad Right of Way commencing. Quality Control: Once construction begins, QC inspectors perform QC tests and inspections at the producer’s facility. Upon completion of all tests, the Quality Control Manager verifies the results are transmitted to the RCE, Quality Acceptance, and Independent Assurance Manager. ICE has completed and submitted all design plans to SCDOT for review and approval. This includes bridge, roadway, drainage, hydraulic, geotechnical, and MOT plans including an I-77 closure and detour plan which will allow AWC to demolish the spans of the existing bridge over the lanes of I-77 within a 32-hour detour.</p> <p>Design Location: Charleston (RKA) & Columbia (ICE), SC</p> <p>Key Individual name/role/time on the project: Rick Reiff, PE, PTOE, RSP / Traffic Engineer / 2018-2019 Aaron Livingston, PE / Lead Roadway Engineer / 2018-2019</p>					
h. Self-Assessment. The information provided in this section should be a self-assessment of RKA’s and ICE’s performance on the project to identify with firms or personnel that have successfully completed projects on time and on or under budget, and to identify RKA’s and ICE’s records of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.					
RKA was very responsive to the Design-Builder (AWC) and EOR (ICE) for their work during the procurement phase and post-award in the preparation of the traffic analysis operational study for the 32-hour Detour Plan included in the Project TMP. The final design plans were submitted on time (May 2019) and the SCDHEC NOI permit was obtained ahead of schedule enabling AWC to begin construction activities earlier than expected. There are no existing or pending claims, disputes or litigation/arbitration on this Project.					
i. Quality Initiatives. Discuss RKA’s and ICE’s quality initiatives including, but not limited to, cost control, schedule management and adherence, avoidance of claims, and other pertinent initiatives enhancing quality on the project.					
Quality Initiatives included: a) Schedule Control measures put in place on the outset and monitored on a minimum of weekly basis by the D-B Coordinator / Design Engineer (Chris Gossett). He acted as the schedule Czar and ensured every one met their pre-agreed upon deliverable dates, b) QC/QA of Design – All submittals went through a comprehensive QC review by the production squads and disciplines, followed by the QA Quality Review Team by ICE (Peter Graf (structures), Larry Cook (Roadway), Jonathan Scarce (Hydro) and Michael Valiquette (Geotech), and, c) Constructability Reviews - AWC’s management provided over the shoulder constructability reviews of all submittals prior to submittals to SCDOT. RKA and their team of traffic experts were involved early in the procurement phase to analyze traffic data and provide input on detour options and conducted QC on MOT and Detour plans.					
j. For each question in Section 3.5.2 of the RFQ for which a “Yes” answer was provided, RKA and ICE shall provide a detailed explanation below.					
Not applicable					

RELEVANCE:

- ✓ Design-Build
- ✓ Same Team/Key Personnel
- ✓ Interstate MOT
- ✓ Bridge over Interstate
- ✓ Demolition of Existing Bridge
- ✓ Traffic Analysis



APPENDIX C

Quality of Past Performance





APPENDIX C

QUALITY OF PAST PERFORMANCE

Quality Questions:	AW	ICE
Has the Lead Contractor or any member of the joint venture been declared delinquent or placed in default on any Project?	NO	NO
Has the Lead Contractor or any member of the joint venture submitted a claim on a project that was litigated? If litigated, explain the results.	NO	NA
Have any projects been delayed more than 30 days such that liquidated damages were assessed?	NO	NO
Has the Lead Contractor been cited by OSHA for violations deemed serious, willful, or repeated?	NO	NA
Have any projects under contract with the Lead Contractor or any member of the joint venture been subject to remediation actions, stop work orders, or project delays in excess of 30 days as a result of Section 404/Section 401 permit violations?	NO	NO
Has an Owner, a Lead Contractor, or any member of the joint venture filed a claim against the Lead Designer's Errors and Omissions Insurance?	NO	NA
Has the Lead Designer filed legal proceedings against the Lead Contractor, or vice versa, on a design-build contract?	NA	NO

**Additional Work History and Quality Forms are not applicable based on
no "Yes" answers in the table above.**



APPENDIX D

Legal and Financial





AFFIDAVIT

The undersigned, being duly sworn, deposes and says that he is Stephen P. Carter, Jr., Senior Vice President for Archer Western Construction, LLC. He further states that Archer Western Construction, LLC has the financial capacity and resources necessary to complete the US 1 OVER I-20 INTERCHANGE IMPROVEMENT Design-Build Project as proposed in the Request for Qualifications issued by the South Carolina Department of Transportation.

Signed this 24th day of May 2019

Stephen P. Carter, Jr.

Subscribed and sworn before me this 24th day of May 2019

Notary





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

May 8, 2019

Ms. Carmen Wright
Office of Project Delivery
South Carolina Department of Transportation
955 Park Street, Room 101
Columbia, South Carolina 29201

**RE: US 1 over I-20 Interchange Improvement
Project ID P003711**

Dear Ms. Wright:

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. Thus, **Archer Western Construction, LLC** has the bonding capacity to be bonded for the project as proposed in the RFQ. Please be advised that any request or issuance of bonds will be subject to the review and approval of all contract terms, conditions and bond forms.

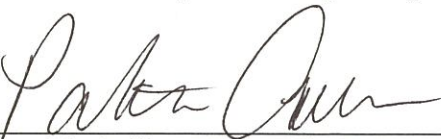
Travelers Casualty and Surety Company of America is authorized to transact business in all fifty (50) states with a Treasury Listing of \$201,664,000 and is rated A++ XV by A.M. Best Company.

Travelers Casualty and Surety Company of America is listed on the current U.S. Department of the Treasury Financial Management Service list of approved bonding companies.

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

Yours truly,

Travelers Casualty and Surety Company of America

By: 
Patricia Collins, Attorney-in-Fact

(Seal)





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 Chicago, Illinois**, their true and lawful Attorney-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 **3rd** day of **February**, 2017.



State of Connecticut

City of Hartford ss.

By: 
Robert L. Raney, Senior Vice President

On this the **3rd** day of **February**, 2017, before me personally appeared **Robert L. Raney**, who acknowledged himself to be the Senior Vice President of Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

In Witness Whereof, I hereunto set my hand and official seal.

My Commission expires the **30th** day of **June**, 2021




Marie C. Tetreault, Notary Public

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

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

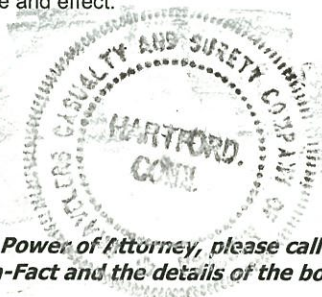
FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing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

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

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

I, **Kevin E. Hughes**, the undersigned, Assistant Secretary of Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this 8 day of May, 2019




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-in-Fact and the details of the bond to which the power is attached.



APPENDIX E

Organizational Conflict of Interest



DISCLOSURE OF POTENTIAL CONFLICT OF INTEREST CERTIFICATION

PROPOSER hereby indicates that it has, to the best of its knowledge and belief has:

 X Determined that no potential organizational conflict of interest exists.

 Determined a potential organizational conflict of interest as follows:

Attach additional sheets as necessary.

1. Describe nature of the potential conflict(s):
2. Describe measures proposed to mitigate the potential conflict(s):



Signature

05/24/2019

Date

Stephen P. Carter, Jr.

Print Name

Archer Western Construction, LLC

Company

If a potential conflict has been identified, please provide name and phone number for a contact person authorized to discuss this disclosure certification with Department of Transportation contract personnel.

Name

Phone

Company



APPENDIX F

Confidential / Proprietary Information List



APPENDIX F

Confidential and/or Proprietary Information Page Numbers

Appendix C – Quality of Past Performance

Table of Questions Appendix C, Cover Sheet

Appendix D – Legal & Financial

AWC FinancialCapacity Appendix D

AWC BondingCapacity Appendix D



APPENDIX G

Addendum Receipt Form(s)



NOTICE OF RECEIPT
US 1 over I-20 Interchange Improvement
Design-Build – Project ID P030711
Lexington County

Addendum 1

The information in this addendum shall be made part of the contract documents. PROPOSERS are instructed to incorporate the information into the previously provided RFQ documents.

PROPOSERS are required to sign this document and enclose it with their Statement of Qualifications. Receipt of this signed document by The South Carolina Department of Transportation serves as confirmation that the PROPOSER has received and incorporated this Addendum into the contract documents.

Confirmation Statement:

I, the PROPOSER confirm that I have received this addendum package and have incorporated the information provided in the addendum into the contract documents.



PROPOSER's Signature

May 22, 2019

Date

Stephen P. Carter, Jr.

Printed Name

For: Archer Western Construction, LLC

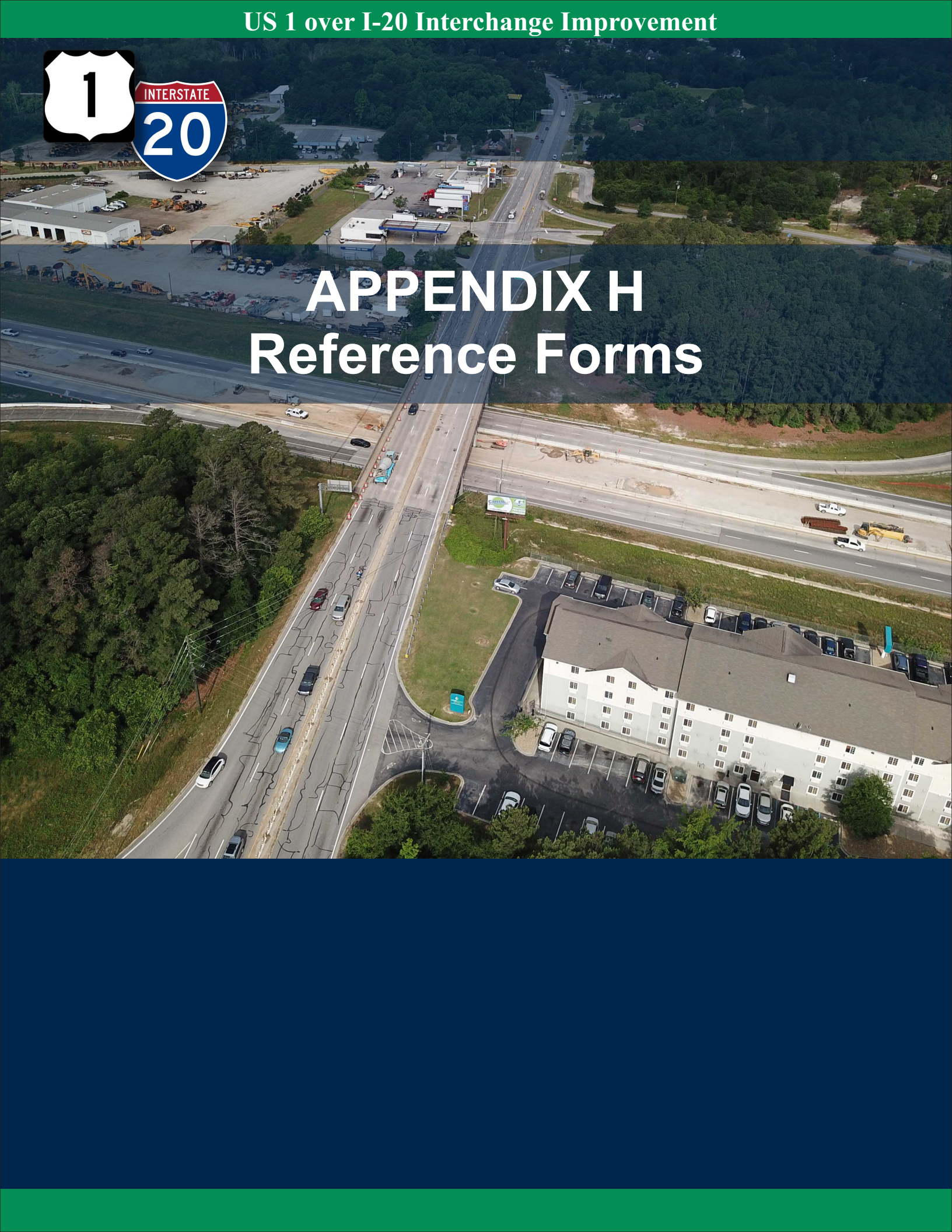
Design-Build Team Name





APPENDIX H

Reference Forms



Email	First Name	Last Name	Key Individual Name	Project Name	Role of Key Individual	Team
fowlerjm@scdot.org	Joseph	Fowler	Gregory Robert Munna	I-85 Reconstruction from MM 69.1 to MM 77.2	Project Manager	Archer Western Construction, LLC
mmastronardi@dot.ga.gov	Marc	Mastronardi		Northwest Corridor, DB	Structures Project Manager	Archer Western Construction, LLC
mcduffiet@dot.state.al.us	Terry	McDuffie		Corridor X/I-65 Interchange	Structures Project Manager	Archer Western Construction, LLC
mmastronardi@dot.ga.gov	Marc	Mastronardi		I-75 Paving/Reconstruction	Project Engineer	Archer Western Construction, LLC
burnsim@scdot.org	John	Burns	Chris Allen Beaver	SC 277 Bridge Replacement	Superintendent/Construction Manager	Archer Western Construction, LLC
burnsim@scdot.org	John	Burns		I-77 Widening/Rehab (MM15-27)	Structure Superintendent	Archer Western Construction, LLC
burnsim@scdot.org	John	Burns		SC-555 Dual Overpass Rehab	Superintendent/Construction Manager	Archer Western Construction, LLC
scott.fisher@vdot.virginia.gov	Scott	Fisher		I-95 Richmond Bridges	Superintendent	Archer Western Construction, LLC
fowlerjm@scdot.org	Joseph	Fowler	Kevin Robert Goemaat	I-85 Reconstruction from MM 69.1 to MM 77.2	Assistant Project Manager	Archer Western Construction, LLC
moallemia@scdot.org	Ray	Moallemia		I-26 Rehabilitation	Project Manager	Sloan Construction
parrissl@scdot.org	Shane	Parris		Cherokee & Union Resurfacing with RCC & CMRB	Project Manager	Sloan Construction
RedfearnWT@scdot.org	Tyke	Redfearn	Aaron O’Neal Livingston, PE	I-77 Widening & Rehabilitation (MM 15-27)	Lead Roadway Engineer	Archer Western Construction, LLC
MattoxJH@scdot.org	Jae	Mattox		SC 277 Flyover Ramp/Bridge Replacement over I-77	Lead Roadway Engineer	Archer Western Construction, LLC
reynoldsbs@scdot.org	Brad	Reynolds		I-85 Widening (MM 80-96)	Lead Roadway Engineer	Infrastructure Consulting & Engineering, PLLC
MattoxJH@scdot.org	Jae	Mattox		US 21 over Harbor River	Lead Roadway Engineer	United Infrastructure Group, Inc.
DixBD@scdot.org	Brian	Dix		Alligator Road Widening Phases I & II	Lead Roadway Engineer	Infrastructure Consulting & Engineering, PLLC
rturner@charlestoncounty.org	Richard	Turner	Richard Morris Reiff, PE, PTOE	US 17 Corridor Analysis	Project Manager	Ramey Kemp & Associates, Inc.
elham.farzam@ice-eng.com	Elham	Farzam		TxDOT I-2 / I-69C Interchange	Senior Traffic Engineer	Ramey Kemp & Associates, Inc.
dillonbs@scdot.org	Brent	Dillon		I-26 & Volvo Cars Drive Interchange Justification Report (IJR)	Traffic Engineering Manager	Stantec Consulting Services, Inc
MattoxJH@scdot.org	Jae	Mattox		SC 277 over I-77 Bridge Replacement	Traffic Engineering Leader	Archer Western Construction, LLC
rewisbl@scdot.org	Brent	Rewis		I-526 Corridor Study	Lead Engineer	Stantec Consulting Services, Inc
ipockcr@scdot.org	Claude	Ipock	David Stevenson Link	Interstate 95/U.S. Route 301 Interchange and S.C. Route 6 Connector	Right of Way Manager	McCarthy Improvement Company
huffap@scdot.org	Andrew	Huff		85/385 Gateway	Right of Way Manager	Flatiron-Zachry Joint Venture
westburyma@scdot.org	Mark	Westbury		SC 41 Bridge Replacement over the Wando River	Right of Way Coordinator	PCL Civil Constructors, Inc. / ICA Engineering
BMorrison@tompssc.com	Brad	Morrison		Bowman Road 1 and 2	Right of Way Manager	Property Acquisitions & Negotiations, Inc.
BMorrison@tompssc.com	Brad	Morrison		US 17 Hungryneck Boulevard	Right of Way Manager	Property Acquisitions & Negotiations, Inc.
lsgettRE@scdot.org	Robbie	Isgett		Interstate Pavement Preservation	Assistant Project Manager	Infrastructure Consulting & Engineering, PLLC
RedfearnWT@scdot.org	Tyke	Redfearn	Frank James Hribar	I-77 Widening & Rehabilitation (MM 15-27)	Assistant Quality Control Manager	Archer Western Construction, LLC
rmcfee@bcgov.net	Rob	McFee		SC 802 Widening & Bridge over Beaufort River	Construction Manager	Dennis Corporation
dickinsorc@scdot.org	Robert	Dickinson		SC Route 6 Widening	Chief Inspector	Tierra/CRM East
dickinsorc@scdot.org	Robert	Dickinson		John Hardee Expressway, Phase 1	Lead Inspector	Tierra/CRM East



[illegible]