



JOHN J. TECKLENBURG  
MAYOR

JENNIFER COOK  
CLERK OF COUNCIL

*City of Charleston*  
*South Carolina*  
*Clerk of Council Department*

February 11, 2022

Ms. Amy Wharton, CFO  
City of Charleston  
116 Meeting Street  
Charleston, SC 29401

**Re: STORMWATER MANAGEMENT  
EHRHARDT ST. TUNNEL EXTENSION FEE AMENDMENT #4**

Dear Ms. Wharton:

The Committee on Ways and Means and City Council, at their respective meetings on February 9, 2022, gave approval to Fee Amendment #4 with Davis and Floyd for \$2,482,200.00 for construction contract management, construction-phase engineering, assurance and acceptance inspection, sampling, testing, and construction survey verifications for the Ehrhardt St. Tunnel Extension project. Approval of Fee Amendment #4 will increase the professional services contract by \$2,482,200.00 (from \$1,004,740.00 to \$3,486,940.00). Funding for this project is HUD CDBG-MIT Grant (\$9,964,190.00) and the Drainage Fund (\$7,891,329.00).

Enclosed please find an original for your records. One original will be retained in the Clerk's office.

Sincerely,

Jennifer B. Cook  
Clerk of Council

JBC/ad

Enclosure: As Stated

cc: Matt Frohlich (w/o original)  
Steve Kirk (w/one original)  
Julia Copeland (w/o original)  
Andrew Jones (w/o original)  
Matt Fountain (w/o original)

AMENDMENT NO. 04  
TO THE  
STANDARD FORM OF AGREEMENT  
BETWEEN OWNER AND ENGINEER  
FOR  
PROFESSIONAL SERVICES  
\*\*\*\*

Project: Medical District Flood Mitigation Project  
(a.k.a. Ehrhardt Street Drainage Improvements Project)  
\*\*\*\*

Initial:

Owner: 

Engineer: 

This is an Amendment to the Agreement between the City of Charleston (Owner) and Davis & Floyd, Inc. (Engineer) dated September 10, 2019 (hereafter referred to as the Agreement). This said Amendment is effective as of 11 February 2022.

1. Owner and Engineer, in consideration of the mutual covenants as set forth herein, agree to amend the Engineer's Services of the Agreement to include the Scope of Services and associated Fee detailed in the attached Proposal for Professional Services (Amendment 04) dated December 03, 2021 and generally described as follows:

*Davis & Floyd, Inc. (Consultant) will perform Construction Phase Services for the Project to include, but not necessarily be limited to, construction contract management, construction-phase engineering, assurance and acceptance inspection, sampling, testing, and construction survey verifications to support Contractor compliance with the Contract Documents. Other tasks may be added as requested or deemed necessary by the City.*

2. Owner and Engineer agree to amend the Agreement in accordance with Exhibit C, Article 4, C4.01, A.6. of the Agreement to establish a total contract value of \$3,486,940 (an increase of \$2,482,200.00 for this Amendment 04).
  - a) Owner shall pay Engineer for Services provided in accordance with this Amendment 04 for Tasks I. thru IV. on a time and expenses basis in the amount of \$2,122,500.00.
  - b) Services provided in accordance with this Amendment 04 for Task V. Additional Services Upon Request will be upon a time and expense basis if further authorized by Owner up to an amount not to exceed \$359,700.00.
3. In all other respects, the Agreement remains unmodified and in full force and effect.

City of Charleston  
OWNER

By:

Name:  John J. Tecklenburg

Title: Mayor

Address: P.O. Box 652  
Charleston, SC 29402

Davis & Floyd, Inc.  
ENGINEER

By:

Name:  Michael V. Horton, PE, CFM, LEED-AP

Title: Chief Engineering Officer

Address: P.O. Box 61599  
Charleston, SC 29419

Attachments:

1 - Proposal for Professional Services (Amendment 04) dated December 3, 2021

# DAVIS & FLOYD

SINCE 1954

December 03, 2021

Matthew Fountain, PE, PG  
Director of Stormwater Management  
City of Charleston  
2 George St, Suite 2100  
Charleston, SC 29401

via email - [fountainm@charleston-sc.gov](mailto:fountainm@charleston-sc.gov)

Re: Proposal for Professional Services – (Amendment No. 4)  
Ehrhardt Street (Medical District )Flood Mitigation Project Construction Phase Services  
D&F Job Number: 31874.00

Dear Mr. Fountain:

Thank you for allowing Davis & Floyd (D|F) the opportunity to submit this Proposal for Professional Services to support the Construction and funding requirements of the Ehrhardt Street (Medical District) Flood Mitigation Project.

D|F, in coordination with Black & Veatch, proposes professional services to perform Construction Phase support for the Project to include tasks such as contract management, construction-phase engineering, assurance and acceptance inspection, sampling, testing, and construction survey verifications to support Contractor compliance with the Contract Documents. Other tasks may be added as requested by the City. Descriptions of the services to be provided are detailed further in the attached Scope of Services and other supporting documents.

The fees for each Task are identified in the below table and further detailed in the attached Hourly Fee Analysis.

<b>Construction Phase Services</b>	<b>D F</b>	<b>B&amp;V</b>	<b>SCI</b>	<b>Total</b>
Task I. Contract Management and Administration	\$242,300	\$193,300		\$435,600
Task II. Grant Support	\$115,500	-		\$115,500
Task III. RFI, Submittal Review and Special Inspections	\$109,000	\$106,000		\$215,000
Task IV. Inspection and Testing	\$362,300	\$873,400	\$120,700	\$1,356,400
Task V. Additional Services Upon Request	\$50,200	\$309,500		\$359,700
<b>Total Estimate</b>	<b>\$879,300</b>	<b>\$1,482,200</b>	<b>\$120,700</b>	<b>\$2,482,200</b>

3229 W. Montague Avenue, North Charleston, SC 29418

(843) 561-8602 | (843) 747-6185

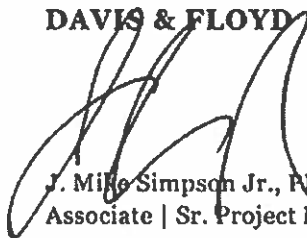
[WWW.DAVISFLOYD.COM](http://WWW.DAVISFLOYD.COM)

It is proposed that compensation for the services be on a time and expense basis not to exceed \$2,482,200 which includes a budget of \$359,700 for Additional Services to support the City's authorization of the contractor to work on weekends and/or at night requiring Construction Engineering and Inspection Services, or should the City require Risk Management and Dispute Resolution Services to support Contractor Claims. Additional Services will not proceed without written authorization from the City

We appreciate the opportunity to continue to support the City toward the success of this important project. Upon your request, DJF is prepared to provide three original copies of the City's Form of Agreement for use. Please don't hesitate to call should you have any questions or if we may provide additional information to assist with your consideration.

Very truly yours,

**DAVIS & FLOYD**



J. Mike Simpson Jr., PE, PMP  
Associate | Sr. Project Manager



Michael V. Horton, PE, CFM, LEED-AP  
Chief Engineering Officer

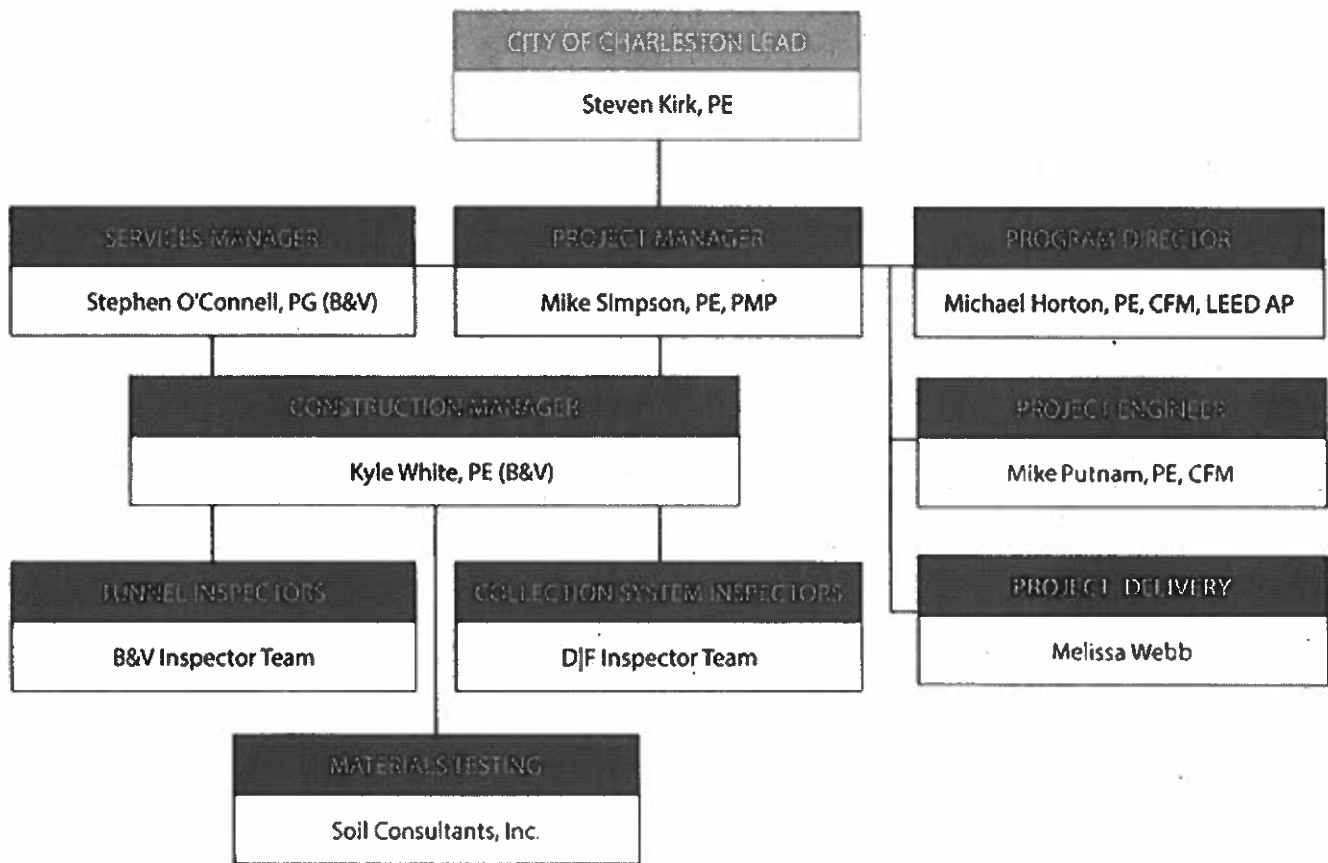
Enclosures:

- Organization Responsibilities Chart
- Design Team Responsibility Matrix
- Scope of Services – Construction Phase Services
- Hourly Fee Summary
- Major Subconsultant Proposal – Black & Veatch
- Subconsultant Proposal – Soil Consultants, Inc. (SCI)

# CONSTRUCTION PHASE SERVICES

## Ehrhardt Street (Medical District) Flood Mitigation Project

### ORGANIZATION CHART



# CEI RESPONSIBILITY MATRIX



## Ehrhardt Street (Medical District) Flood Mitigation Project

P Primary Responsibility  
 S Secondary Responsibility  
 J Joint Responsibility

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### Construction Phase

1	General Administration of the Construction Contract	P	S
2	Conduct Pre-Construction Conference	P	S
3	Provide Construction Observation	J	J
4	Provide Periodic Specialty Inspection	S	P
5	Monitor Contractor's Construction Schedule	S	P
6	Inform Owner of Progress and Quality of Work	J	J
7	Public and Business Coordination	P	S
8	Utility Coordination	P	S
9	Environmental and Permitting Coordination	P	S
10	Traffic Control and T&T/DOT Coordination	P	S
11	Survey Control and Verification	P	S
12	Differing Site Conditions	S	P
13	Identify Non-Conforming Work	S	P
14	Recommend Corrective Measures of Defective Work	S	P
15	Issue Field Documentation	J	J
16	Review Contractor's Submittals	J	J
17	Review Contractor's Substitutes and Deviations	J	J
18	Review Contractor's Test Procedures and Certificates	P	S
19	Review Contractor's Pay Applications & Recommend Payment	P	S
20	Approve Contractor's Pay Applications	P	S
21	Assemble & Review manuals, warranties, bonds, samples & certificates	P	S
<b>Closeout Phase</b>			
22	Evaluate Contractor's Notice of Substantial Completion	J	J
23	Conduct Punchlist Inspection	J	J
24	Conduct Final Inspection	J	J

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SINCE 1986



**BLACK & VEATCH**  
 Building a world of difference.

**SCOPE OF SERVICES  
CONSTRUCTION PHASE SERVICES  
Ehrhardt Street (Medical District) Flood Mitigation Project**

Davis & Floyd, Inc. (Consultant) will perform Construction Phase Services for the Project to include, but not necessarily be limited to, construction contract management, construction-phase engineering, assurance and acceptance inspection, sampling, testing, and construction survey verifications to support Contractor compliance with the Contract Documents. Other tasks may be added as requested or deemed necessary by the City.

**Project Management**

Consultant shall provide a Project Manager for this project. This Project Manager will be responsible for the construction contract administration of the project. The Project Manager will work directly with the City's Project Manager or their designee.

The consultant shall provide a Construction Manager (CM) This project will be the CM's primary responsibility. The CM shall be a liaison between this project and the Spring/Fishburne project. The CM will be responsible for providing an appropriate level of inspection for phases and aspects of the project and serve as the City's project representative for construction related coordination and communication with the Contractor, in accordance with the duration and services listed herein. The CM will direct a staff of Project inspectors that will carry out the majority of the inspection, sampling, and testing responsibilities for the project. References to the Project Manager, CM, staff of inspectors, or to any individual inspector in the scope of services section shall be as Consultant.

**Duration**

The duration of work related to this Scope of Services is a period of 15 months from the notice to proceed. The work hours for the Construction Engineering and Inspection (CEI) team align with the hours and workdays as specified in the construction contract: 7:00am to 5:30pm, Monday through Friday.

**Services:**

**I. Construction Contract Management & Administration:**

The Consultant shall provide office engineering, scheduling and administration staff to adequately manage the project to include the tasks as listed below.

1. Document management
  - a. Software
  - b. Personnel
  - c. Contractor DBE progress
  - d. Interface with Contractor as necessary
  - e. Hard copies and electronic data
  - f. Construction submittals and tracking
  - g. Monthly Construction Progress Report
  - h. Monthly Invoicing Report
2. Preconstruction Conference
3. Contractor pay requests
  - a. Verification and approvals
4. Project Meetings

- a. Prepare Agendas and take and distribute Minutes for Weekly Meetings
- b. Prepare Agendas and take and distribute Minutes for Monthly Meetings
- 5. Change Management
  - a. Preparation of Field Orders, Work Change Directives, and Change Orders
  - b. Coordination with Spring / Fishburne Drainage Project Engineer
- 6. Construction contract Change Order generation
- 7. Project documentation
  - a. Daily work reporting
  - b. Photo and video gallery
- 8. Project schedule
  - a. Progress Schedule review
  - b. Progress Reports
  - c. Updates
- 9. Resource agency reporting
  - a. NPDES Stormwater Inspections and Reporting
  - b. SCDOT Encroachment Permit monitoring
- 10. Public Relations and Informational Meetings:
  - a. The Consultant shall facilitate the project public relations and informational meetings. The tasks shall include:
    - i. Leadership Updates
    - ii. Provide monthly progress reports to the City.
    - iii. Host site visits for leadership and elected officials (as requested by City)
  - b. Web Site Support
    - i. Review City's web page for accuracy and content
    - ii. Provide web page content monthly to City as needed
- 11. Utility coordination
  - a. Support of Contractor Utility Coordination
  - b. Support of Contractor coordination with MUSC
- 12. Project Coordination with other City Projects
  - a. Coordination with adjacent City projects within the same system
- 13. Project Closeout
  - a. Substantial Completion Inspection and recommendation
  - b. Development of Punchlist items at Substantial Completion
  - c. Final Inspection
  - d. Materials Certification preparation and submittal
  - e. DBE Compliance Review
  - f. Review Contractor As-built Drawings

## II. Grant Support:

The Construction Project is funded in part by a Community Development Block Grant-Mitigation (CDBG-MIT) grant program, which is funded and regulated at the federal level by the U.S. Department of Housing and Urban Development (HUD) and administered by the State of South Carolina. The South Carolina Office of Resiliency Disaster Recovery Division (SCOR - DRD) is the CDBG-MIT grant recipient, and the City of Charleston is the subrecipient. The Consultant will support the City with Grant-related and / or required assignments as requested by the City and / or SCOR-DRD through the provision of tasks such as the performance of CDBG-MIT Grant-related Contractor and Subcontractor Assessments, Record Keeping and Reporting; Providing timely information to support grant requirements; Support SCOR-DRD's Appointed Labor Standards Officer; and General Services to support the City's management of CDBG-MIT Grant Funding Requirements.

Due to the nature of known and potential for additional undefined grant-related services required to support the City and Grant-regulatory agencies (State of South Carolina, HUD, SCOR-DRD), this Scope of Services for Consultant Recordkeeping and Reporting is based upon an anticipated 34 hours per month of



support to provide services detailed below, as well as continuing Project Delivery support to the City PM, SCOR-DRD PM, and other grant leadership, attendance at project grant coordination meetings, and general coordination / project record evaluation and updates up to 10 hours per month.

Anticipated Consultant Recordkeeping and Reporting services, and anticipated frequency, are as follows:

1. Pre-Construction Contract Award
  - a. Verify Contractor is cleared via a search of the SAM system to verify contractor is in good standing and has not been debarred
  - b. Notify Contractor that it is the sole responsibility of prime contractor to verify subcontractor eligibility requirements outlined in state and Federal law - at minimum, based on factors such as past performance, proof of liability insurance, possession of a federal tax number, debarment, and state licensing requirements
  - c. Provide Davis-Bacon prevailing wage rate
  - d. Prepare template and coordinate with City / DRD for Monthly Progress Report
  - e. Document Attendance Roster, Agenda, and Notes for Mandatory Pre-Construction Contract, including outline of required federal/state labor requirements.
  - f. Support Appointed Labor Standards Officer
  - g. Support City LSO with submitting SCOR DRD Labor Standards Record (LSR) form to SCOR DRD for each construction contractor over \$2k, including subcontractors
  - h. Provide labor standards preconstruction advice and support
2. Post-Construction Contract Award (NTP)
  - a. Request / review for completeness Certificate from Contractor Designating Officer or Employee to Supervise Payment of Employees
  - b. Request / review for completeness Certificate from Contractor Subcontractors (each) Designating Officer or Employee to Supervise Payment of Employees
  - c. Verify each contractor's certification of Workers' Compensation Compliance is received from Contractor
3. Weekly Support
  - a. Provide misc. support to City / DRD for reporting and documenting project information for grant
  - b. Review that applicable posters are posted at work site by Contractor
  - c. Receive / Verify submission of weekly Contractor payroll reports and statements of compliance
  - d. Receive / Verify submission (by Contractor) of weekly subcontractor payroll reports and statements of compliance
  - e. Receive No Work payrolls, as necessary
  - f. Conduct on-site employee interviews w/ laborers and mechanics using form OMB 2501-0009 (CONFIDENTIAL)
  - g. Complete Labor Standards Checklist
4. Monthly
  - a. Federal Provisions - Verify all contracts, including but not limited to subcontracts and vendors, contain all applicable provisions at the 1st Occurrence of Contractor/supplier on Pay App
  - b. Verify Cost plus percentage of cost and percentage of construction cost methods NOT USED at the 1st Occurrence of Contractor/supplier on Pay App
  - c. Verify CDBG-MIT Grant Required indemnification is in all Contracts (Subcontracts and vendors) at the 1st Occurrence of Contractor/supplier on Pay App
  - d. Verify each subcontractor's certification of Workers' Compensation Compliance is received from Contractor at the 1st Occurrence of Contractor/supplier on Pay App
  - e. SAM Eligibility - Verify all contractors, including subcontractors, are registered in SAM and eligible to receive federal contracts
  - f. Monthly certification to DRD of status of reported program-related fraud, waste, and abuse
  - g. Verify Davis Bacon wage provisions are posted in prominent and accessible place at worksite

- h. Verify DOL's "Notice to All Employees" federal posters are displayed at job site
  - i. Verify O/T hours worked are compensated not less than 1.5 x regular rate
  - j. Spot-check contractor/subcontractor payrolls for employer compliance
  - k. Provide Monthly Construction Contract Draw Request Review and Draft Checklist
5. Quarterly Support
- a. Request and receive description of Contractor Efforts to Offer Training and Employment Opportunities to Section 3 Residents and results
  - b. Prepare and Submit Subcontract Activity Report
  - c. Request and review Contractor Section 3 Summary Report
  - d. Request and review Contractor's (each) Subcontractor Section 3 Summary Report (or statement of no report)
6. Miscellaneous / As Necessary / Upon Request
- a. Request and receive description of Contractor Efforts to Award Contracts to Small and Minority Businesses, Women's Business Enterprises, and Labor Surplus Area Firms and results (separate from City MWBE requirements) - Bi-annually
  - b. Verify profit negotiation has occurred as a separate element of the price of every construction contract modification / change order - Each Change Order (*Work change directives under OCCA not applicable.*)
  - c. Verify a cost analysis has been prepared for every construction contract modification / change order. Each Change Order (*Work change directives under OCCA not applicable.*)
  - d. Verify/Coordinate Amendments approved by SCOR-DRD prior to execution (*Work change directives under OCCA not applicable.*)
  - e. Respond to reported program-related fraud, waste, and abuse
  - f. Labor Standards file maintained for each construction contract
  - g. Notify prime contractor of labor standards deficiencies and required corrective actions
  - b. Continue services to support Appointed Labor Standards Officer
  - i. Support City LSO with submitting SCOR DRD Labor Standards Record (LSR) form to SCOR DRD for each construction contractor over \$2k, including subcontractors
  - j. Provide labor standards advice and support
7. Construction Contract Final Completion
- a. Request from Contractor and Review Contractor's Section 3 Business Utilization Report and review against project file Construction Contract Final Completion
  - b. Request from Contractor and Review Contractor's Section 3 New Hires Report
8. Close Out
- a. Prepare Final Project Progress Report Summary of all reported Data
  - b. Assist City with completion of SCOR DRD Certificate of Construction Completion and & SCOR DRD Final Wage Compliance Report
  - c. Prepare Grant Record Documents (items II.1.a. thru II.7.b.) in digital format and transmit to SCOR-DRD for Project File
  - d. Transmit custody of certified payroll reports and other project documentation including sensitive information to City and / or DRD and delete sensitive information

### III. RFI, Submittal Review and Special Inspections:

The Consultant will provide review, tracking, and general coordination of Contractor Requests for Information (RFI), Shop Drawings and Other Submittals, and Contractor's Special Inspections such as Grading and Drainage, Water, Sewer, and Main Relocation, Structural, Transportation and Traffic Control / Detour Plans, General (Erosion Control / Misc. Materials), and Vortex Structure Special Inspections Contractor Weekly Report as required to be submitted by the Contractor in the Construction Contract Documents. This Scope of Services includes the initial review plus two revision reviews.

#### IV. Inspection and Testing:

The Construction Contract Documents require the Contractor to perform Quality Control (QC) testing. The Consultant, through self-perform or subconsultants, shall provide Project Inspectors to perform the majority of on-site inspection and testing duties in accordance with the project requirements to include acceptance testing. The Consultant shall be responsible for verifying and documenting that the quantities of testing (QC and QA) are being met and maintain master project QC and QA records. The Consultant shall review the Contractor's Quality Control Plan and recommend for approval in accordance with contract documents. Consultant shall interface and coordinate with the Contractor's QC personnel on a daily basis. The Project Inspectors shall report directly to the CM who shall direct the daily work of the Project Inspectors. These inspectors will be responsible for highly technical and specialized inspection and testing procedures for construction in the areas of asphalt, concrete, foundations, soils and earthwork, erosion control, traffic control, and others. Where required, these positions will be SCDOT certified in the areas mentioned or possess the ability to become certified through the SCDOT certification program. The following tasks have been developed to address the aforementioned goals and objectives.

##### 1. Perform Inspection of Tunnel and Shaft Construction Alternatives

Consultant shall provide inspection services associated with construction of the tunnel and shafts. Consultant shall interface and coordinate with the Contractor's personnel on a daily basis. The Project Inspector shall report directly to the CM who shall direct the daily work of the Inspector. The Consultant shall provide necessary personnel and equipment to perform necessary Quality Assurance reviews for the Contractor's construction of the following major project components:

1. Access Shaft
  - a. Cannon Street
2. Drop Shaft
  - a. Ehrhardt Street
3. Tunnel
  - a. President Street Tunnel Bulkhead
  - b. Ehrhardt Tunnel
  - c. Tunnel Connection to Drop Shaft

##### 2. Perform Inspection and Quality Assurance Testing for Concrete Structures

The Consultant shall provide necessary personnel and equipment to perform necessary Quality Assurance inspection, sampling, and on-site testing of concrete structures on the Project. This task includes performing necessary air and slump tests, inspecting the construction of the formwork, placement and tying of reinforcing steel, checking grades as set by the contractor, making and storing concrete cylinders, logging samples into the project sample log, tracking test results, taking check samples as needed, addressing failing samples by arranging and assisting in alternate testing of materials through an appropriate lab, and all other inspection duties. The Consultant shall provide staff to monitor these activities independently and where required, sample and test materials in accordance with the sampling frequencies established by the special provisions, specifications, supplemental specifications, and the SCDOT Construction Manual. Consultant staff assigned to this task must possess current SCDOT and ACI certifications in Concrete Inspection.

##### 3. Perform Inspection and Quality Assurance Testing for Earthwork and Base Activities

The Consultant shall provide necessary personnel and equipment to perform necessary Quality Assurance inspection, sampling, and on-site testing of earthwork and base construction on the Project. This includes, but is not limited to, excavations, mucking, borrow excavation, installation

of geosynthetics and geogrids, ground modifications, graded aggregate base course construction, placement of drainage systems, and any other related activities. This task includes performing necessary inspection and sampling of borrow excavation and subgrade at frequencies established in the specifications, monitoring, inspection, and testing of compaction activities on the project, establishing limits of mucking or undercutting, inspection and sampling of geosynthetic material placement, and completion of forms associated with earthwork and base construction, logging samples into the project sample log, tracking test results, taking check samples as needed, addressing failing samples by arranging and assisting in alternate testing of materials through an appropriate lab, and other inspection duties as described in the SCDOT Construction Manual and the Standard Specifications, 2007 edition. The Consultant shall monitor Contractor's compliance with the Contractor's approved plan for earthwork and shall provide staff to monitor these activities independently and conduct Quality Control sampling and testing of materials in accordance with project requirements, and where applicable, the sampling frequencies established by the special provisions, specifications, supplemental specifications, and the SCDOT Construction Manual. Consultant staff assigned to this task must possess a current SCDOT certification in Earthwork.

4. Perform Inspection and Quality Assurance/Quality Acceptance Testing of Hot Mix Asphalt Activities

The Consultant shall provide necessary personnel and equipment to perform necessary Quality Assurance inspection, sampling, and on-site testing of Hot Mix Asphalt construction on the Project. This may include placing Asphalt Base, Binder, Surface, and Friction Courses, and any other related activities. This task includes performing necessary QA inspection, testing, and sampling of Hot Mix Asphalt delivered to and placed on the Project. This includes performing rate calculations, checking mix and mat temperatures, monitoring the workmanship of the paving crew, directing any corrective action deemed necessary, taking roadway samples when needed, monitoring the compaction activities of the contractor, monitoring and performing compaction tests of asphalt, reviewing the traffic control operations associated with this activity, logging samples into the project sample log, tracking test results, taking check samples as needed, addressing failing samples by arranging and assisting in alternate testing of materials through an appropriate lab, and other inspection duties as described in the SCDOT Construction Manual and the Standard Specifications, 2007 edition. The Consultant shall monitor Contractor's compliance with the Contractor's approved Quality Control plan for asphalt and shall provide staff to monitor these activities independently and where required, conduct Quality Acceptance sampling and testing of materials in accordance with the sampling frequencies established by the special provisions, specifications, supplemental specifications, and the SCDOT Construction Manual. Consultant staff assigned to this task must possess a current SCDOT certification as HMA Roadway Technician.

5. Perform Quality Control and Quality Acceptance Inspection and Testing as required for other construction activities associated with the Project and not specifically mentioned above.

The Consultant shall provide necessary personnel and equipment to perform necessary Quality Control or Quality Assurance inspection, sampling, and on-site testing of incidental construction activities and items including, but not limited to dewatering, pavement markings, seeding and erosion control measures, traffic control items, and clearing and grubbing. This also includes logging samples into the project sample log, tracking test results, taking check samples as needed, addressing failing samples by arranging and assisting in alternate testing of materials through an appropriate lab, and other inspection duties as described in the SCDOT Construction Manual and the Project Specifications. The Consultant shall provide staff to monitor these activities independently and to sample and test materials in accordance with the sampling frequencies established by the special provisions, specifications, supplemental specifications, and the SCDOT Construction Manual.

6. **Maintain field notes and compile Daily Work Reports (DWR)**

The Consultant shall maintain field notes and generate daily work reports (DWR) for each calendar day commencing with Notice to Proceed and concluding with Final Completion.

7. **Perform other associated duties typically assigned to Project Inspectors**

The Consultant shall provide staff to complete general project duties not described elsewhere. These tasks may include delivering samples to an appropriate lab, delivering or picking up revised plan sheets, project documents etc. from the engineer's office, performing routine but limited QA verification surveying, establish construction limits, proposed grades, etc. for property owners, utilities, etc., and compilation of data and records necessary to produce final plans, facilitate requests from outside parties, or to support decisions made in the field. The Consultant may be asked to meet with contractor's representatives, City personnel, SCDOT personnel, local interested parties, etc. to provide information or assistance.

8. **Furnish necessary equipment to facilitate Tasks 1-7**

The Consultant shall furnish necessary equipment, including cell phones, laptop computers, vehicles, and specialized testing equipment to fulfill their testing, sampling, and inspection responsibilities. This equipment will include, but not limited to, self-rescuers, air monitors, nuclear density gauge and related supplies (proctor mold, moisture tester, etc.), concrete air meter(s), slump cones, infrared thermometer, paint thickness gauge, surveying equipment, and any other testing and sampling equipment as required to comply with CEI services.

9. **Verification Survey:**

The Consultant shall provide survey crews and survey equipment to independently confirm layouts and geometry at key locations throughout the project construction. The survey crew will initially verify established project control points and will monitor primary control points periodically throughout the project duration for disturbance. Verification surveys should be performed at the minimum frequency as listed in the 2007 SCDOT Construction Manual. Elements to be checked shall include but are not limited to:

- Drainage structure invert and top elevations
- Stormwater piping invert elevations
- Road grading
- Road curb lines

**V. Additional Services:**

CEI services associated with the Additional Services provided herein shall not proceed without written authorization from the City.

1. **Night work and work outside construction contract hours – CEI services associated with night work or work outside of the construction contract hours of 7:00am to 5:30pm, Monday through Friday.** CEI services may include, but not necessarily be limited to, construction contract management, construction engineering, assurance and acceptance inspection, sampling, testing, construction survey verifications, and management of subconsultants.

## 2. Risk Management & Dispute Resolution

- a. Review and analysis of the Contractor's claims for differing subsurface and physical conditions are excluded from this Scope and may be provided as supplemental services.
- b. Provide risk management services, including disputes resolution on an as needed basis throughout the project.
- c. Preparation for and attendance at dispute resolution meetings throughout the course of the project. Meeting minutes shall be prepared for each meeting. In addition, project updates will be prepared and given to dispute resolution participants at each meeting.

End of Scope of Services.

**Hourly Fee Estimate  
Ehrhardt Street (Medical District) Flood Mitigation Project  
Construction Phase Services**

**Hourly Fee Estimate**

Personnel Classification	Engineer Vc	Director II	Engineer IV	Resident Construction Manager II	Inspector III	Engineer IV	Engineer IV	Engineer IV	Surveyor II	Civil Engineer	Technician II	Total Hours	Engagement	BCL, fee	Direct & Watch	Labor
	HR	HR	HR	CR	CR	HR	CR	HR	HR	HR	HR					
Personnel Organization	HR	HR	HR	CR	CR	HR	CR	HR	HR	HR	HR					
Team Member	HR	M. Wash	P. Wash	Complex	Shel	P. Wash	HR	Shel	Thomas	Shel	HR					
Task I: Contract Management and Administration	87	118		185								390	\$ 97,000	\$ -	\$ 190,000	\$ -218,000
Task II: Grant Support	160			118								418	\$ 4,900	\$ -	\$ -	\$ 119,000
Task III: RF, RFP, and Review and Selection of the			220	745		20	80	118	60	60		600	\$ 4,000	\$ -	\$ 100,000	\$ 108,000
Task IV: Inspection and Testing	10		40		110				30	180	150	290	\$ 6,000	\$ 170,700	\$ 673,400	\$ 334,100
Task V: Additional Services (Task Report)	20	80		20	160							240	\$ -	\$ -	\$ 300,000	\$ 300,000
<b>Total</b>	<b>117</b>	<b>198</b>	<b>168</b>	<b>148</b>	<b>290</b>	<b>20</b>	<b>80</b>	<b>118</b>	<b>60</b>	<b>180</b>	<b>150</b>	<b>1422</b>	<b>\$ 27,900</b>	<b>\$ 171,700</b>	<b>\$ 1,493,200</b>	<b>\$ 2,482,900</b>
<b>Total Estimate</b>													<b>\$</b>			<b>2,482,900</b>



**BLACK & VEATCH**

**Black & Veatch Corporation**  
550 King Street Suite 400, Charleston, SC 29403  
p +1 843 266 0667 e oconnells@bv.com

December 3, 2021

Davis & Floyd, Inc  
3229 W. Montague Avenue  
North Charleston, SC 29418

Attention: Mr. Michael Simpson, PE

Subject: **Ehrhardt Street (Medical District) Flood Mitigation Project, CEI Services  
(Amendment No. 04) - Rev 2**

Dear Mr. Simpson:

Black & Veatch Corporation is pleased to submit this scope of services to Davis & Floyd to provide a Construction Engineering and Inspection (CEI) services for the Ehrhardt Street (Medical District) Flood Mitigation Project. The following attachments are provided to outline our scope, responsibilities and fee.

Attachment No. 01 - Scope of Services  
Attachment No. 02 - Responsibility Matrix  
Attachment No. 03 - Fee Estimate  
Attachment No. 04 - Rate Schedule

Our fee to perform the scope of services described in this document is \$1,389,085, see Attachment No. 03 for a fee breakdown. Included within the overall fee is \$262,375 for night shift work and risk management/disputes resolution, which are not part of the base scope. These tasks shall not proceed without written authorization from the Davis & Floyd.

If you have any questions or comments, please do not hesitate to contact me.

Sincerely,  
Black & Veatch

Stephen A. O'Connell, P.G.  
Project Manager

Enclosure(s)  
Attachment No. 01 - Scope of Services  
Attachment No. 02 - Responsibility Matrix  
Attachment No. 03 - Fee Estimate  
Attachment No. 04 - Rate Schedule

cc: Mike Horton, P.E. - Davis & Floyd  
Jonathan Ladd, P.E. - Black & Veatch



## ATTACHMENT NO. 01 – SCOPE OF SERVICES

### (Amendment 4)

#### Ehrhardt Street (Medical District) Flood Mitigation Project

#### DESCRIPTION OF SCOPE OF SERVICES

This Scope of Services is between Davis & Floyd, Inc. (Engineer) and Black & Veatch (Consultant). Amendment 4 involves addition of services to provide Construction Engineering and Inspection (CEI) for the Ehrhardt Street (Medical District) Flood Mitigation Project. The services include Construction Management and Inspection to support Davis & Floyd and the City of Charleston.

The services anticipated to complete the tasks are outlined in scope below. The Scope of Service outlined in Amendment 4 are based on a duration of fifteen (15) months from receipt of the authorized Notice to Proceed.

#### Duration of the Work:

The duration of work related to this Scope of Services is a period of 15 months from the notice to proceed. The work hours for the CEI team align with the hours and workdays as specified in the construction contract: 7:00am to 5:30pm, Monday through Friday.

#### Consultant shall provide the following services:

##### A. General Construction Phase Services

1. Interpret construction contract documents as required by the Contract Documents and when requested by Owner or Contractor. Request and response shall be in writing.
2. Make periodic visits to the construction site to observe progress of the work, and consult with the Owner and the Contractor concerning problems and progress of the work
3. Provide documentation and aid with the administrative processing of change orders, following Owner's check list procedure including applications for extension of construction time. Evaluate the cost and scheduling aspects of all change orders and, where necessary, negotiate with the Contractor to obtain a fair time extension and/or price for the work. Said negotiation shall be subject to the approval of Owner. Work related to unusually complex or unreasonably numerous claims are covered in Supplemental Services.
4. Attend and participate preconstruction conference.
5. Attend and participate in monthly progress meetings, and other meetings with Owner, Engineer, and the Contractor when necessary, to review and discuss construction procedures and progress scheduling, engineering management procedures, and other matters concerning the project.
6. Attend and participate in weekly coordination meetings between Owner, Contractor and CEI team, when necessary, to review and discuss current construction activities.

7. Coordinate with Owner, Engineer, and Contractor as required during the work.
8. Participate in third-party coordination meetings as required by project stakeholders.

**B. Engineering Field Support Services**

1. Participate in tunnel tours as requested by the Owner. A total of two tours are anticipated.
2. Attend construction procedures meetings to be held prior to tunnel and shaft excavations.
3. Review daily and weekly data reports related to breakout from the Cannon Street shaft, tunnel excavation, geotechnical instrumentation, drop shaft installation, and tunnel CIP concrete lining placement.
4. Record date of receipt of shop drawings and samples. Receive samples which are furnished at the site by the Contractor.
5. During the work, verify that specified certificates, operation and maintenance manuals, and other data required to be assembled and furnished by the Contractor are applicable to the items installed; and deliver this material to Engineer for his review and forwarding to Owner prior to final acceptance of the work.
6. Receive and review drawings and other data submitted by the Contractor as required by the construction contract documents. Costs for additional reviews above and beyond requirement stated in the construction contract shall be borne by Contractor or Owner, as required by the contract documents. Consultant's review shall be for general conformity to the construction contract documents and shall not relieve the Contractor of any of his contractual responsibilities. Such reviews shall not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions and programs incident thereto.

**C. Construction Management and Inspection**

Consultant will furnish one full-time Construction Manager and one full-time Inspector during the construction work for an assumed 14-month period. The Construction Manager and Inspector will observe the Contractor's work and perform the services listed below. The Construction Manager and Inspector shall not have responsibility for the superintendence of construction site conditions, safety, safe practices or unsafe practices or conditions, operation, equipment, or personnel other than employees of the Consultant. This service will in no way relieve the Contractor of complete supervision and inspection of the work or the Contractor's obligation for complete compliance with the drawings and specifications. The Contractor shall have sole responsibility for safety and for maintaining safe practices and avoiding unsafe practices or conditions.

Specific services performed by the Construction Manager and Inspector are as follows:

1. Site Observations and Liaison with Owner and Contractor
  - a. Conduct onsite observations of the general progress of the work in determining if the work is proceeding in accordance with the construction contract documents.
  - b. Serve as liaison with the Contractor, working principally through the Contractor's Project Manager and superintendent, and provide interpretation of the construction

- contract documents. Transmit clarifications and interpretations of the construction contract documents to the Contractor.
- c. Serve as Owner's and Engineer's liaison with the Contractor.
  - d. Assist in obtaining from Owner additional details or information when required at the jobsite for proper execution of the work.
  - e. Give opinions and suggestions to Owner and Engineer based on the Construction Manager's observations regarding defects or deficiencies in the Contractor's work and relating to compliance with drawings, specifications, and design concepts.
  - f. Advise Contractor immediately of the commencement of any work requiring a shop drawing or sample submission if the submission has not been accepted by Engineer or Consultant.
  - g. Monitor changes of apparent integrity of the site (such as differing subsurface and physical conditions, existing structures, and site related utilities when such utilities are exposed) during construction related activities.
  - h. Observe pertinent site conditions when the Contractor maintains that differing subsurface and physical conditions have been encountered, and document actual site conditions.
  - i. Visually inspect materials, equipment, and supplies delivered to the worksite. Notify Contractor of materials, equipment, and supplies which do not conform to the construction contract documents.
  - j. Coordinate onsite materials testing services during construction. Copies of testing results will be forwarded to Owner for review and information.
  - k. Observe field tests of equipment, structures, and piping, and review the resulting reports, as appropriate.
  - l. Assist in keeping photo documentation of progress of the construction as a supplement to the Contractor's required documentation.
  - m. Prepare weekly and monthly construction progress reports containing a summary of the Contractor's progress, general condition of the work, problems, and resolutions or proposed resolutions to problems.
  - n. Review the progress schedule, schedule of shop drawings and other submittals, and schedule of values prepared by the Contractor. The scope includes the initial review plus two revision reviews. The cost for additional submittal reviews above two revisions may be the responsibility of the Contractor.
  - o. Report work which is known to be defective, or which fails any required inspections, tests, or approvals, or has been damaged prior to final payment; and advise Engineer whether the work should be corrected or rejected, or should be uncovered for observation, or requires special testing, inspection, or approval.
  - p. Maintain a marked set of drawings and specifications at the jobsite based on data provided by the Contractor and CEI team observations.
  - q. Review certificates of inspections, tests, and related approvals submitted by the Contractor as required by laws, rules, regulations, ordinances, codes, orders, or the

Contract Documents (but only to verify that their content complies with the requirements of, and the results certified indicate compliance with, the construction contract documents). This service is limited to a review of items submitted by the Contractor and does not extend to a determination of whether the Contractor has complied with all legal requirements.

- r. Collect operation and maintenance data provided by the Contractor.
- s. Maintain the following documents.
  - i. Correspondence files.
  - ii. Reports of meetings and discussions among the Engineer, Consultant, Owner, and Contractor.
  - iii. Submittals.
  - iv. Reproductions of original construction contract documents.
  - v. Addenda.
  - vi. Change orders.
  - vii. Field orders.
  - viii. Additional drawings issued subsequent to execution of the construction contract documents
  - ix. Progress reports.
  - x. Names, addresses, and telephone numbers of all contractors, subcontractors, and major suppliers of materials and equipment.
  - xi. Materials testing data and reports.
- t. Maintain a daily log of events, or Daily Work Report (DWR) at the jobsite, including the following information. The DWR shall remain the property of Consultant; Engineer and Owner will be provided copies.
  - i. Days the Contractor worked on the jobsite.
  - ii. Contractor and subcontractor personnel on jobsite; Owner personnel, and any visitors.
  - iii. Construction equipment on the jobsite.
  - iv. Observed delays and causes.
  - v. Weather conditions.
  - vi. Data relative to claims for extras or deductions.
  - vii. Daily activities.
  - viii. Observations pertaining to the progress of the work.
  - ix. Materials received on jobsite.
- u. Coordinate with all Engineer's staff including onsite personnel to ensure alignment of field and office related activities. Field coordination shall include scheduling and management of workload based on Contractor's construction schedule.
- v. Manage the Engineer's sub-consultants, conduct, evaluate, and report on vibration monitoring tests, and test analyses for materials, including concrete compression and shrinkage tests, moisture-density tests, relative density tests, asphalt tests, and in-place density testing.

w. **Project Close-Out**

- i. Upon notice of Substantial Completion, inspect the construction work and prepare a punch-list of those items to be completed or corrected before final completion of the project. Submit results of the inspection to Owner and the Contractor.
- ii. Before Engineer issues a Certificate of Substantial Completion, Consultant to submit to the Contractor a list of items observed to require completion or correction.
- iii. Conduct final inspection in the company of Owner and the Contractor and prepare a final list of items to be completed or corrected.
- iv. Verify that all items on the final list have been completed or corrected, and make recommendations concerning acceptance.
- v. Provide written recommendations concerning final payment to Engineer including a list of items, if any, to be completed prior to making such payment. This task includes review of all project requirements, obtaining Consent of Surety, all lien waivers, develop final change order for all allowances or other changes for time and cost that revert to Owner, and other review of other records required prior to release of final payment.

**D. Project Controls and Documentation**

Consultant will perform project controls and documentation during the construction phase of the project. By performing these services, Consultant shall not have authority or responsibility to supervise, direct, or control the Contractor's work or the Contractor's means, methods, techniques, sequences, or procedures of construction. Consultant shall not have authority or responsibility for safety precautions and programs incident to the Contractor's work or for any failure of the Contractor to comply with laws, regulations, rules, ordinances, codes, or orders applicable to the Contractor furnishing and performing the work. Specific services to be performed by Consultant are as follows:

1. Receive, review, and comment on the Contractor's initial and updated construction schedule and advise Engineer as to acceptability. Provide comments back to Contractor on acceptability of schedule and adherence to contract requirements.
2. Review the Contractor's initial and updated schedule of estimated monthly payments and advise Engineer as to acceptability. Provide comments back to Contractor on acceptability of schedule and adherence to contract requirements.
3. Review the Contractor's monthly payment requests and provide comments to Engineer. Engineers review shall be for the purpose of making a full independent mathematical check of the Contractor's payment request.

## **E. Additional Services**

CEI services associated with the Additional Services provided herein shall not proceed without written authorization from Engineer.

1. **Extended Hours Inspection** – CEI services associated with night work or work outside of the construction contract hours of 7:00am to 5:30pm, Monday through Friday. CEI services would include, but not necessarily be limited to, construction management, assurance and acceptance inspection, sampling, testing, and management of subconsultants.
  - a. Typical work outside of construction contract hours might include tunnel excavation and tunnel concrete lining activities.
2. **Risk Management & Dispute Resolution**
  - a. Review and analysis of the Contractor's claims for differing subsurface and physical conditions are supplemental services.
  - b. Provide risk management services, including disputes resolution on an as needed basis throughout the project. This will involve technical reviews of key project elements by Black & Veatch experts.
  - c. Prepare for and attend dispute resolution meetings throughout the course of the project. Meeting minutes shall be prepared for each meeting. In addition, projects updates will be prepared and given to dispute resolution participants at each meeting.
  - d. It is assumed risk management services would be performed by an individual outside the local core team.

## **Supplemental Services Not Included in Contract**

- A. Any other work requested by Owner that is not included in one of the items listed in any other phase will be classified as supplemental services. Additional supplemental services shall be including, but are not limited to:
  1. Additional meetings with local, State, or Federal agencies to discuss project- related issues not otherwise covered in the established permitting coordination or funding for this project; permitting requirements that become effective subsequent to the date of this agreement
  2. Supplemental engineering Work required to meet the requirements of regulatory or funding agencies that become effective subsequent to the date of this agreement
  3. Special consultants or independent professional associates requested or authorized by Owner.
  4. Preparation for litigation, arbitration, or other legal or administrative proceedings; and appearances in court or at arbitration sessions in connection with change orders or construction incidents.
  5. Provision, through a subcontract, of photographs or videotapes of the construction site topographic and infrastructure features along pipelines or access roads prior to starting during construction and following completion of construction.
  6. An environmental assessment report and/or environmental impact statement as requested by Owner or required by review agencies.

7. Provision, through a subcontract, of a cultural resources or archaeological study and report on the construction site.
8. Provision, through a subcontract, of archaeological consultations regarding artifacts that may be uncovered during construction.
9. Provision, through a subcontract, of laboratory and field testing required during construction and of any special reports or studies on materials and equipment requested by Owner.
10. Preparation of a master construction schedule from individual schedules submitted by construction contractors, and coordination and resolution of conflicts with contractors' schedules.
11. Where field conditions differ above and beyond those which could reasonably be expected from the geotechnical investigations and included in the Geotechnical Baseline Report, preparing documentation including sketches of construction work for approval by Owner, to supplement the drawings and specifications as may be required; and providing redesign if required.
12. Services for making revisions to drawings and specifications made necessary by the acceptance of substitutions proposed by the Contractor; and services after the award of each contract for evaluating and determining the acceptability of substitutions proposed by the Contractor.
13. Services resulting from significant delays, changes, or price increases caused directly or indirectly by shortages of materials, equipment, or energy.
14. Additional or extended services during construction made necessary by (1) work damaged by fire or other cause during construction, (2) a significant amount of defective or neglected work by any Contractor, (3) acceleration of the progress schedule involving service beyond normal working hours, (4) default by any Contractor, and (5) failure of the Contractor to complete the work within the construction contract time.
15. Special services in connection with partial utilization of any part of the project by Owner prior to Substantial Completion which requires the CEI team to work additional hours or requires employment of additional onsite personnel.
16. Evaluation of unusually complex or unreasonably numerous claims submitted by the Contractor or others in connection with the work.
17. Review and analysis of claims for differing subsurface and physical conditions submitted by the Contractor or others in connection with the work.
18. Changes in the general scope, extent, or character of the project, including, but not limited to:
  - a. Changes in size or complexity.
  - b. Owner's schedule, design, or character of construction.
  - c. Method of financing.
  - d. Revision of previously accepted studies, reports, design documents, or construction contract documents when such revisions are required by changes in laws, rules, regulations, ordinances, codes, or orders enacted subsequent to the preparation of such studies, reports, documents, or designs; or are required by any other causes beyond Consultant's control.



**ATTACHMENT NO. 02 – CEI RESPONSIBILITY MATRIX**

**Ehrhardt Street (Medical District) Flood Mitigation Project**

<b>CEI RESPONSIBILITY MATRIX</b>			
<b>Ehrhardt Street (Medical District) Flood Mitigation Project</b>			
		<b>Davis &amp; Floyd</b>	<b>Black &amp; Veatch</b>
<b>P</b>	<b>Primary Responsibility</b>		
<b>S</b>	<b>Secondary Responsibility</b>		
<b>J</b>	<b>Joint Responsibility</b>		
<b>Task No.</b>	<b>Task</b>		
<b>Construction Phase</b>			
1	General Administration of the Construction Contract	P	S
2	Conduct Pre-Construction Conference	P	S
3	Provide Construction Observation	J	J
4	Provide Periodic Specialty Inspection	S	P
5	Monitor Contractor's Construction Schedule	S	P
6	Inform Owner of Progress and Quality of Work	J	J
7	Public and Business Coordination	P	S
8	Utility Coordination	P	S
9	Environmental and Permitting Coordination	P	S
10	Traffic Control and T&T/DOT Coordination	P	S
11	Survey Control and Verification	P	S
12	Differing Site Conditions	S	P
13	Identify Non-Conforming Work	S	P
14	Recommend Corrective Measures of Defective Work	S	P
15	Issue Field Documentation	J	J
16	Review Contractor's Submittals	J	J
17	Review Contractor's Substitutes and Deviations	J	J
18	Review Contractor's Test Procedures and Certificates	P	S
19	Review Contractor's Payment Applications & Recommend Payment	P	S
20	Approve Contractor's Payment Applications	P	S
21	Assemble & Review manuals, warranties, bonds, samples & certificates	P	S
<b>Closeout Phase</b>			
22	Evaluate Contractor's Notice of Substantial Completion	J	J
23	Conduct Punchlist Inspection	J	J
24	Conduct Final Inspection	J	J



Attachment 2 of G3  
 Edward Super Medical Center Civil Movement Project  
 Project Task List of Effort Spreadsheet



	Project Director	Project Manager	Risk Manager	Construction Manager	Lead Inspector	Secondary Inspector	Night Shift Inspector	Senior Engineer	Construction Various	Admin. Partner	Accountant	Project Controls	Inspection	Total Hours	Expenses	Subtotal Budget
<b>TASK DESCRIPTION</b>																
General Construction Provis. Services	Subtotal	115	420							240	30			825	\$ -	\$ 147,850
Engineering Field Support Services	Subtotal		225					120	100				20	525	\$ -	\$ 107,850
Construction Management and Inspection	Subtotal				713	260	180							4940	\$ 10,000	\$ 651,820
Project Controls and Documentation	Subtotal		45									112		217	\$ -	\$ 36,810
Owner Controlled Activities																
Night Shift Inspector							185							881	\$ 55,000	\$ 150,025
Risk Management & Quality Inspection	Subtotal	15	60	60	60	60								215	\$ -	\$ 47,350
Summary of Costs		15	60	60	60	60								4075	\$ 55,000	\$ 207,375
Sum of Expenses		120	740	40	713	265	185	120	100	240	30	112	20	7568	\$ 65,000	\$ 1,224,865
Total Project Cost																Total Costs \$ 1,289,865



**Attachment No. 4 - Standard Hourly Rates Schedule**

<b>Black &amp; Veatch - Standard 2020 Personnel Rate Schedule</b>	
<b>Category</b>	<b>Rate: \$/hour</b>
Senior Project Director	\$275
Risk Manager/Technical Advisor	\$275
Project Director	\$225
Project Manager	\$210
Construction Manager	\$200
Senior Engineer	\$200
Engineering Manager	\$185
Night Shift Inspector	\$185
Geotechnical/Civil Engineer	\$165
Project Controller	\$160
Project Controller	\$160
Project Engineer	\$155
Inspector	\$145
Technician	\$120
Accountant	\$120
Administrative Assistant	\$100

The standard hourly rates will be adjusted annually, as of January 1 to reflect equitable changes in the compensation payable to the consultant and shall not exceed a 3% adjustment on any given year.

**Reimbursable Expenses Schedule**

<b>Category</b>	<b>Unit</b>	<b>Unit Rate</b>
Mileage	Mile	Current federal rate
Direct Expenses		Actual cost



**SOIL CONSULTANTS, INC.**  
 Engineering and Testing  
 Since 1951

PO Drawer 898  
 Charleston, SC 29402-0898  
 P: 843.723.4539 F: 843.723.3848  
 www.SoilConsultantsInc.com

**Construction Materials      Geotechnical      Nondestructive      Special Inspections**

November 13, 2020

Davis & Floyd, Inc.  
 3229 W. Montague Avenue  
 North Charleston, SC 29418

Attention: Mr. William Dotterer  
 E: [wdottere@davisfloyd.com](mailto:wdottere@davisfloyd.com)

Reference: Proposal for Testing and Inspection Services  
 Ehrhardt Street Drainage Improvements CE&I  
 Charleston, SC

SCI Proposal No. 12-20-418

Dear Mr. Dotterer,

Soil Consultants, Inc. (SCI) is pleased to provide this unit rate proposal to provide construction materials testing and special inspection services for the Ehrhardt Street Drainage Improvements project located in Charleston, SC. We prepared our proposal using information that you provided in your November 11, 2020 phone conversation with Mr. Taylor Johnson.

Soil Consultants, Inc. is certified by SCDOT as a DBE and SBE firm, by Charleston County as SBE, and by the City of Charleston as WBE. Services provided by SCI may be applicable to your project's DBE/SBE participation levels.

**Fees**

Fees to provide requested services are presented in Table 1. Invoices will be issued based on services rendered, subject to the noted conditions.

Table 1 - Unit Fees		
<b>Earthwork Monitoring and Testing</b>	<b>Unit</b>	<b>Unit Rate</b>
Modified Proctor (ASTM D1557, Method A)	each	\$ 165.00
Soil Classification (ASTM D4318, D1140 & D422 wo hydrometer)	each	\$ 215.00
Standard Proctor (ASTM D 698, Method A)	each	\$ 155.00
Senior Technician – regular time (proofrolling/asphalt)	hour	\$ 78.50
Technician - regular time	hour	\$ 58.50
Trip Charge	each	\$ 25.00
Nuclear Gauge	day	\$ 60.00
<b>Concrete Inspections and Testing</b>	<b>Unit</b>	<b>Unit Rate</b>
Concrete Special Inspector - regular time (reinforcing inspections)	hour	\$ 93.00

SCDOT DBE and SBE

Charleston County SBE

City of Charleston WBE

Mr. William Dotterer  
 Davis & Floyd, Inc.  
 November 13, 2020

**Table 1 - Unit Fees**

Technician - regular time	hour	\$ 58.50
Trip Charge	each	\$ 25.00
Compressive Strength - cylinder (6" x 12")	each	\$ 23.00
Compressive Strength - cylinder (4" x 8")	each	\$ 20.00
Cylinder Pickup/Stripping/Marking - regular time	hour	\$ 58.50
Trip Charge - Cylinder Pickup	each	\$ 25.00
<i>*Fees are based on premise that sets contain no fewer than 3 specimens.</i>		
<i>*Fees are based on using a neoprene cap on one end and a sulfur-based cap on the other to evaluate compressive strength</i>		
<i>*Fees are applicable if testing is performed during regular business hours as defined by SCI. Additional fees will apply if testing is required outside of SCI regular business hours.</i>		
<i>*If a specimen is held as a spare, fees will apply whether the specimen is tested or not.</i>		
<b>Masonry Inspections and Testing</b>	<b>Unit</b>	<b>Unit Rate</b>
Masonry Special Inspector - regular time (reinforcing inspections)	hour	\$ 93.00
Technician - regular time	hour	\$ 58.50
Compressive Strength - grout prism	each	\$ 35.00
Compressive Strength - mortar cube (2"x2"x2")	each	\$ 30.00
Grout Pickup/Stripping/Marking - regular time	hour	\$ 58.50
Trip Charge	each	\$ 25.00
<b>Structural Steel/Welding Inspections</b>	<b>Unit</b>	<b>Unit Rate</b>
Steel Special Inspector - regular time	hour	\$ 105.00
Trip Charge	each	\$ 25.00
Consumables	See Note Below	
<i>*Consumables may be required if penetrant, magnetic particle or ultrasonic testing required; fees will be charged based on type and quantity used</i>		
<b>PDA Testing</b>	<b>Unit</b>	<b>Unit Rate</b>
PDA Testing	day	\$ 1,875.00
Trip Charge	each	\$ 25.00
CAPWAP Analyses	each	\$ 400.00
PDA Report	hour	\$ 140.00
<i>*You will provide safe access to test piles as required for test gauge attachment and removal. Providing may require a man lift or crane-hoisted man basket. Climbing pile hammer leads is not considered safe access</i>		
<i>*PDA gauges can be fastened to the piles before lifting piles; however, SCI does not recommend this method and by using this method for attaching gauges before lifting, you accept all risks for any damage to SCI test equipment.</i>		
<i>*Assistance from the contractor may be required to keep test gauges, cables, and other equipment out of water. PDA testing requires that pile tops remain above grade or above water a minimum distance of 3 feet to permit gauge attachment.</i>		
<i>*You assume all responsibility for any damage to test equipment occurring during this project.</i>		
<b>Project Management</b>	<b>Unit</b>	<b>Unit Rate</b>
Project Engineer - regular time	hour	\$ 140.00
Project Manager - regular time	hour	\$ 105.00
Trip Charge	each	\$ 25.00

Mr. William Dotterer  
Davis & Floyd, Inc.  
November 13, 2020

Noted conditions for our service include:

1. Services are scheduled by calling the Materials Testing department at 843.723.4539. We request 24-hour notice for most services, with 72-hr notice for pile testing services.
2. Fees for field work are computed from time of departure to time of return to the laboratory, subject to the minimum charges outlined herein.
3. Trip charges are levied for each trip required to complete the requested service.
4. Trip charges do not include gate charges, parking fees, or other fees that may be required to access the site. These incidental fees will be invoiced as incurred.
5. All field inspections require a 3-hour minimum charge during SCI regular business hours and require a minimum 4-hour charge outside of SCI regular business hours.
6. Pickup and/or delivery require a 2-hour minimum charge during SCI regular business hours and require a 4-hour minimum charge outside of SCI regular business hours.
7. Regular time is defined as within SCI regular business hours: between 7 am and 4:00 pm Monday through Friday, excluding holidays.
8. Overtime is defined as all time before and after regular business hours Monday through Friday, time in excess of 8 hours per day, all time on weekends, and all time on holidays.
9. Overtime rates of 1.5 times the appropriate personnel rate will be applicable and invoiced for all services provided outside of SCI regular business working hours and for all services provided on weekends. Overtime rates of 2.0 times the appropriate personnel rate will be applicable and invoiced for all field and laboratory services provided on holidays.
10. For in-house laboratory services requested after SCI regular business hours, on weekends, or on holidays, personnel overtime rates will apply in addition to the laboratory service unit rate. A minimum charge of 2-hours personnel overtime rate will apply with actual personnel time invoiced if greater than 2 hours.
11. Standby time or lost time, resulting through no fault of SCI, will be invoiced at the appropriate unit rates.
12. Mileage rates or trip charges may be subject to additional fuel surcharge.
13. Estimated pricing does not include costs for re-tests due to failure.
14. Payment terms are net 30 days – 1.5% finance charge per month on all outstanding accounts over 30 days.
15. Payments made with credit cards (Visa and MasterCard) are subject to a 3% convenience fee.
16. Quoted fees include standard report distribution defined as one electronic copy to parties designated by the Client when the work is authorized. Report issuance is via the Soil Consultants, Inc. report system. Quoted fees do not include uploading reports to project specific software, access to project specific software, training for project specific software, or acquisition of project specific software. Additional fees will be levied if required.
17. Fees and conditions offered in this proposal will remain in force and effect for 60 days from the proposal date. If the proposal has not been accepted by execution and returned within the 60-day period, Soil Consultants, Inc. reserves the right to revise any service scope, fee, and/or condition to the proposal.

Mr. William Dotterer  
Davis & Floyd, Inc.  
November 13, 2020

18. After contract acceptance, quoted unit rates are valid until December 31, 2022. Soil Consultants, Inc. reserves the right to levy unit rate increases for services provided in subsequent calendar years.

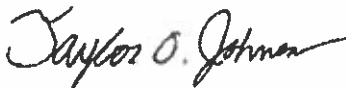
Authorization

To authorize our services with the outlined scope, fees, and noted conditions, execute the attached *Agreement for Testing and Inspection Services* with the accompanying *Terms and Conditions* and return them to us via email. The *Agreement for Testing and Inspection Services* requires signature, date, and printed name. The *Terms and Conditions* require initials and date. Return of the *Agreement* page constitutes acceptance of our proposal, *Agreement* and *Terms and Conditions*.

If you have exceptions to our proposal, *Agreement*, or *Terms and Conditions*, please note your exceptions and return the full document. Once the exceptions have been resolved by agreement in writing, Soil Consultants, Inc. will consider the contract to be executed.

We appreciate the opportunity to present this proposal. If we may be of further assistance, please call.

Sincerely,  
Soil Consultants, Inc.



Taylor O. Johnson  
Project Manager



M. Brian Johnson  
President

Attachments

Agreement for Testing and Inspection Services



**SOIL CONSULTANTS, INC.**  
 Engineering and Testing  
 Since 1951

PO Drawer 698  
 Charleston, SC 29402-0698  
 P: 843.723.4539 F: 843.723.3648  
 www.SoilConsultantsInc.com

**Construction Materials      Geotechnical      Nondestructive      Special Inspections**

**AGREEMENT FOR TESTING AND INSPECTION SERVICES**

THIS AGREEMENT is by and between:

Davis & Floyd, Inc.  
 3229 W. Montague Avenue  
 North Charleston, SC 29418

hereinafter called "CLIENT" and SOIL CONSULTANTS, INC., P.O. Drawer 698, Charleston, SC 29402, hereinafter called "CONSULTANT", who agree as follows:

**DECLARATIONS.** CLIENT desires to engage CONSULTANT to provide testing and inspection services in connection with CLIENT's project ("THE PROJECT") described as follows:

Ehrhardt Street Drainage Improvements CE&I  
 Charleston, SC

CONSULTANT has submitted a scope of service, associated fees and noted conditions to CLIENT via SCI Proposal 12-20-418, dated November 13, 2020 ("PROPOSAL"). The scope of service and associated fees with noted conditions outlined in the PROPOSAL incorporated into this Agreement by reference are acceptable to CLIENT.

**SCOPE OF WORK.** CONSULTANT shall provide services for THE PROJECT in accordance with the scope, fees and noted conditions as outlined in PROPOSAL and the attached *Terms and Conditions to the Agreement for Testing and Inspection Services*, which are made a part of this Agreement.

EXECUTED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2020

BY \_\_\_\_\_  
 For CLIENT

\_\_\_\_\_  
 PRINT NAME

BY \_\_\_\_\_  
 For SOIL CONSULTANTS, INC.

**M. Brian Johnson**  
 PRINT NAME

Initial and date the Terms and Conditions page as part of contract execution. Return of this page only constitutes acceptance of the proposal, Agreement, and Terms and Conditions. If exceptions are noted on the attached Terms and Conditions, the contract will not be binding until such exceptions are resolved by agreement in writing.

**TERMS AND CONDITIONS**  
**AGREEMENT FOR TESTING AND INSPECTION SERVICES**  
 (Effective October 27, 2020)

1.0 **CONSULTANT'S RESPONSIBILITIES**

1.1 Act for CLIENT in professional manner, using that degree of care and skill ordinarily exercised by and consistent with the standards of the profession practicing in the same or similar locality of THE PROJECT site.

1.2 Provide only those services that, in the opinion of CONSULTANT, lie within the technical and professional areas of expertise of CONSULTANT and which CONSULTANT is adequately staffed and equipped to perform.

1.3 Perform services with personnel having sufficient credentials and/or experience to provide the requested service and provide services in accordance with the methods outlined in the proposal, acceptable industry standards, or as specified by the Client.

1.4 Submit formal reports within a reasonable time consistent with the scope of work performed with reports indicating, where applicable, compliance with THE PROJECT specifications or other contract documents. Such reports shall be complete and thorough, citing the tests performed, methods employed, values obtained, parts of the structure or THE PROJECT area involved.

1.5 Consider all reports to be confidential and distribute reports only to those persons, organizations or agencies specifically designated by CLIENT or its authorized representative. All reports prepared by CONSULTANT and all data obtained during this service are instruments of service and belong to CONSULTANT.

1.6 Retain all technical records relating to and deemed pertinent to the service, as determined by CONSULTANT, for a period of five years following submission of the report. During this period, records will be made available to CLIENT within one week of CLIENT request.

2.0 **CLIENT'S (OR AUTHORIZED REPRESENTATIVE) RESPONSIBILITIES**

2.1 Provide CONSULTANT with all plans, specifications, permits, change orders, approved shop drawings and other information required for the requested service.

2.2 Issue authorization in writing, giving CONSULTANT free access to THE PROJECT site, and to all shops or yards where materials are prepared or stored consistent with the scope of service.

2.3 Designate in writing a person or firm to act as CLIENT's representative with respect to CONSULTANT's services to be performed under this Agreement, such person or firm to have complete authority to transmit instructions, receive information and data, interpret and define CLIENT's policies and decisions with respect to THE PROJECT and to order, at the CLIENT's expense, services as may be requested of CONSULTANT.

2.4 Designate in writing those persons or firms who are authorized to receive copies of the CONSULTANT's reports.

2.5 Advise CONSULTANT sufficiently in advance of required services to allow CONSULTANT to schedule personnel for completion of the required services. The required advance notice shall be established by mutual agreement of the parties.

2.6 Direct THE PROJECT contractor to:

2.6.1 Secure and deliver to CONSULTANT, with no cost to CONSULTANT, preliminary representative samples of those materials he proposes to use, which require testing, together with any relevant data of the materials.

2.6.2 Furnish casual labor and all facilities needed by CONSULTANT to obtain and handle samples at THE PROJECT site to facilitate the specified service.

2.6.3 Provide adequate interior site use of CONSULTANT, adequate space at THE PROJECT for safe storage and proper curing of test specimens, which must remain on THE PROJECT site before testing.

3.0 **GENERAL CONDITIONS**

3.1 CONSULTANT, by the performance of services covered hereunder, does not in any way assume, abridge or abrogate any duties, responsibility or authorities with regard to THE PROJECT customarily vested in THE PROJECT architects, design engineers, or any other design agencies or authorities.

3.2 CONSULTANT shall not be responsible for acts or omissions of any party or parties involved in the design of THE PROJECT or the failure of any contractor or subcontractor to construct any aspect of THE PROJECT in accordance with recommendations contained in any correspondence or verbal recommendation issued by CONSULTANT.

3.3 CONSULTANT is not authorized to revoke, alter, amend, enlarge or release any requirement of THE PROJECT specifications or other contract documents nor to approve or except any portion of the work, unless specifically authorized in writing by CLIENT or his authorized representative. CONSULTANT shall not have the right of reflection or the right to stop the work, except for such periods as may be required to conduct the sampling and/or testing/inspection covered by the Agreement.

3.4 As used herein and in reference to the services provided by CONSULTANT, the following words and their derivative words or phrases shall have the meaning indicated, unless otherwise specified in this Agreement:

3.4.1 **Inspect, Inspection:** The visual observation, monitoring and/or testing of construction to permit the Consultant, as an experienced and qualified professional, to determine that the work, when completed by the contractor, generally conforms to the Contract Documents. In making such inspections, CONSULTANT makes no guarantee for, and shall have no authority or control over, the contractor's performance or failure to perform the work in accordance with the Contract Documents. CONSULTANT shall have no responsibility for the means, methods, techniques, sequences or procedures selected by the contractor or for the contractor's safety precautions and programs nor for failure by the Contractor to comply with any laws or regulations relating to the performance or furnishing of the work by the contractor. Periodic and/or continuous observation, testing, or inspection does not mean that CONSULTANT is observing placement or performed testing on all materials or verifying conformance of all materials with the Contract Documents.

3.4.2 **Certify, Certification:** A statement of the CONSULTANT'S opinion, based on his or her observation of conditions, to the best of the Consultant's professional knowledge, information and belief. Such statement of opinion does not constitute a warranty or guarantee, either express or implied. It is understood that the CONSULTANT'S certification shall not relieve the CLIENT or the CLIENT'S contractors of any responsibility or obligation they may have by industry custom or under any contract.

3.6 This Agreement may be terminated by either party on ten (10) days written notice or by mutual agreement. If this Agreement is terminated by either party, regardless of reasons for termination, CONSULTANT shall be paid in full for all services performed through the termination date, and the CLIENT shall be provided with a complete report of the results of tests and analysis conducted before termination.

3.6 CONSULTANT will not delegate, assign, sublet or transfer his duties or interest in the Agreement without the written consent of the CLIENT. CLIENT will notify CONSULTANT within 10 days if CLIENT transfers his duties or interest in the Agreement to other entities. Such transfer will not relieve the CLIENT of obligations outlined herein.

3.7 The only warranty made by CONSULTANT in connection with its services performed hereunder is that it will use that degree of care and skill as set forth in article 1.1. No other

warranty, expressed or implied, is made or intended for services provided hereunder or furnishing oral or written reports of findings made.

3.8 Notwithstanding any other Agreement provision and to the full extent permitted by law, neither the CLIENT nor CONSULTANT, their respective officers, directors, partners, employees, contractors or subcontractors shall be liable to the other or shall make any claim for any incidental, direct or consequential damages arising out of or connected in any way to THE PROJECT or to this Agreement. This mutual waiver of consequential damages shall include, but is not limited to, loss of use, loss of profit, loss of business, loss of income, loss of reputation or any other consequential damages that either party may have incurred from any cause of action including negligence, strict liability, breach of contract and breach of implied warranty.

3.9 Should CONSULTANT provide observations, monitoring or testing services for THE PROJECT during construction, CLIENT agrees that, in accordance with the generally accepted construction practice, the contractor will be solely and completely responsible for site working conditions, including safety of all persons and property during performance of the work, and for compliance with OSHA regulations. These requirements will apply continuously and will not be limited to normal working hours. Any monitoring of the contractor's procedures conducted by CONSULTANT does not include review of the adequacy of the contractor's safety measures.

3.10 Scope, fees, and conditions offered in this PROPOSAL will remain in force and effect for a period of 60 days from the proposal date. If this Agreement is executed but work is delayed, through no fault of CONSULTANT, beyond the date when fees are considered valid in the proposal, CONSULTANT reserves the right to invoice revised fees.

3.11 It is intended that the CONSULTANT'S services in connection with THE PROJECT shall not subject the CONSULTANT'S individual employees, officers or directors to any personal legal exposure for the risks associated with this PROJECT. Therefore, and notwithstanding anything to the contrary contained herein, the CLIENT agrees that as the CLIENT'S sole and exclusive remedy, any claim, demand or suit shall be directed and/or asserted only against the CONSULTANT, a South Carolina corporation, and not against any of the CONSULTANT'S individual employees, officers or directors.

4.0 **INSURANCE**

4.1 CONSULTANT shall secure and maintain throughout the full period of this Agreement sufficient insurance to protect it adequately from claims under applicable Worker's Compensation Acts and from claims for bodily injury, death or property damage as may arise from the performance of services under this Agreement. CONSULTANT will, upon request, file certification of such coverage with CLIENT or its authorized representative. No insurance of whatever kind or type, which may be carried by CONSULTANT, is to be considered as in any way limiting the contractor's or subcontractor's responsibility for damages resulting from his operations or for furnishing work and materials to THE PROJECT. CLIENT agrees, therefore, to include, or cause to be included in THE PROJECT'S construction contract, such requirements for insurance coverage and performance bonds to be secured and maintained by THE PROJECT contractor as CLIENT deems adequate to indemnify CLIENT, CONSULTANT, and other concerned parties, against claims for damages and to insure compliance of work performance and materials with PROJECT requirements.

4.3 **Limitation of Liability** - In recognition of the relative risks and benefits of the project to both the CLIENT and the CONSULTANT, the risks have been allocated such that the CLIENT agrees, to the full extent permitted by law, to limit the total aggregate liability of the CONSULTANT to the CLIENT, its agents, subconsultants to the CLIENT, third parties, and to all construction contractors and subcontractors for any and all claims, losses, costs, damages of any nature whatsoever including attorneys' fees awarded under this Agreement or claims expenses from any causes, so that total aggregate liability of the CONSULTANT and his subconsultants to all these names shall not exceed the total fees paid by the CLIENT or fifty thousand dollars, whichever is greater. Such claims and causes include, but are not limited to negligence, professional errors or omissions, strict liability, breach of contract or breach of warranty. The CONSULTANT is defined herein as Soil Consultants, Inc., its subconsultants, and the respective partners, officers, directors, shareholders and employees of Soil Consultants, Inc. and its subconsultants.

6.0 **PAYMENT**

6.1 CLIENT will pay CONSULTANT for services and expenses as presented on invoices. CONSULTANT'S invoices will be presented at the completion of its work or monthly basis for geotechnical engineering services and on a two-week schedule for other services. CONSULTANT invoices are due upon receipt by CLIENT or its authorized representative. A finance charge will be levied on past due (30 days or older) invoices.

6.2 CONSULTANT shall be paid in full for all services under the Agreement, including any amounts of CLIENT'S contract or any unforeseen need for CONSULTANT'S services exceeding original contract requirements. Payment for services shall be made irrespective of any claim by CLIENT for compensation for additional work conducted. Any such claim shall not delay payment of fees for services performed by CONSULTANT.

6.3 If it is necessary to enforce this agreement by suit brought by CONSULTANT or if it is necessary for CONSULTANT to engage the services of an attorney for the purpose of defending CONSULTANT in any suit brought against it by someone other than CLIENT, arising out of or concerning this Agreement, then CLIENT agrees to pay all costs of such collection or defense including reasonable attorney's fees.

6.0 **MEDIATION AND CHOICE OF LAW/VENUE**

6.1 All disputes between the parties regarding this Agreement or the work performed hereunder shall be subject to mandatory mediation before either party instituting arbitration or litigation. All disputes shall be resolved in accordance with the laws of the State of South Carolina and the parties agree that the venue for any mediation, arbitration, or litigation shall be in Charleston County, South Carolina.

7.0 **EXTENSION OF AGREEMENT**

7.1 The Agreement, including these terms and conditions, represents the entire agreement between CLIENT and CONSULTANT and supersedes all prior negotiations, representations or agreements, written or oral. The invalidity or unenforceability of any provisions of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect. Any invalid, illegal or unenforceable term or provision shall be deemed replaced by a term or provision that is valid and enforceable and that comes closest to expressing the intention of the invalid, illegal or unenforceable term or provision. The Agreement may be amended only by written instrument signed by CLIENT and CONSULTANT.