

SE-240**SMALL PROFESSIONAL SERVICES CONTRACT FOR CONSTRUCTION PROJECTS****AGENCY:** SC Office of Resilience**PROJECT NAME:** Graves Station Friendfield Stormwater**PROJECT NUMBER:** D30-N053-PG**A/E NAME:** McCormick Taylor, Inc.**ADDRESS:** 1441 Main St., Suite 305Columbia, SC 29201

In consideration of the mutual covenants and obligations set forth herein, the Agency and A/E (hereinafter jointly referred to as the "parties") agree to the following:

A. CONTRACT DOCUMENTS

1. Documents forming a part of this contract are, in order of precedence:
 - a. This Contract, SE-240.
 - b. A/E Proposal describing services to be provided for this project, the associated hourly billing rates for the A/E and the A/E consultants, and the projected Reimbursable items.
 - c. Supplemental Conditions, attached if applicable.
 - d. The following other documents:

2. The contract is the entire and integrated agreement between the parties and supersedes prior negotiations, representations, or agreements, whether written or oral.

3. The Agency's Budget for the Cost of the Work: 1,995,625.00

The Cost of the Work shall be the total cost to the Agency to construct all elements of the Project designed or specified by the A/E and shall include Contractors' general conditions costs, overhead and profit. The Cost of the Work also includes the reasonable value of labor, materials, and equipment, donated to, or otherwise furnished by, the Agency. The Cost of the Work does not include the compensation of the A/E, the costs of the land, rights-of-way, financing, contingencies for changes in the Work, or other costs that are the responsibility of the Agency.

B. REPRESENTATIVES**1. Agency's Representatives**

Agency designates the individual listed below as its Representative, which individual shall have the authority to bind the Agency with respect to all matters regarding the Contract and requiring the Agency's approval or authorization:

NAME: Eric Fosmire**TITLE:** Chief of Staff & General Counsel**ADDRESS:** 632 Rosewood Dr Columbia, SC 29201**TELEPHONE:** 803-822-9580**EMAIL:** eric.fosmire@scor.sc.gov

The term "Agency" means the Agency or the Agency's Representative.

2. A/E's Representatives

A/E designates the individual listed below as its A/E's Representative, which individual shall have the authority to bind the A/E with respect to all matters regarding the Contract and requiring the A/E's approval or authorization:

NAME: Patrick Guise**TITLE:** Chief Visionary Officer, Co-Owner**ADDRESS:** 1818 Market Street, 16th Floor, Philadelphia, PA 19103**TELEPHONE:** (215) 592-4200**EMAIL:** pjguise@mccormicktaylor.com

The term "A/E" means the A/E or the A/E's Representative.

3. Neither the Agency nor the A/E shall change their representatives without ten days written notice to the other party.

C. A/E RESPONSIBILITIES

1. The A/E shall provide professional services as set forth in this Contract consistent with the professional skill and care ordinarily provided by A/E's practicing in the same or similar locality region under the same or similar circumstances.
2. The A/E represents that its' team is properly licensed in the jurisdiction where the Project is located to provide the services required.

D. INSURANCE

1. The A/E shall procure and maintain in effect during the term of this Contract the insurance coverages described below, which insurance shall be placed with insurance companies authorized to do business in the State of South Carolina and rated A minus VII or better by the current edition of Best's Key Rating Guide or otherwise approved by the Agency.
 - a. Professional Liability Insurance with limits of not less than \$1,000,000 per claim and in the aggregate. A/E shall maintain this coverage in effect during the term of this Contract and for five (5) years after the date of completion of services provided under this Contract. A/E shall give prompt written notice to Agency of all claims made against this policy during the period in which this policy is required to be maintained.
 - b. Worker's Compensation Insurance as required by the State of South Carolina with statutory limits.
 - c. Employers' Liability Insurance with limit of no less than \$1,000,000 per accident.
 - d. Automobile Liability Insurance: Insurance Services Offices (ISO) Form CA 00 01 covering Code 1 (any auto), or if A/E has no owned automobiles, Code 8 (hired) and Code 9 (non-owned), with limits not less than \$1,000,000 per accident for bodily injury and property damage.
 - e. Commercial General Liability Insurance (CGL): ISO Form CG 00 01 12 07 covering CGL on an "occurrence" basis for bodily injury and property damage, including products-completed operations, personal injury, and advertising injury, with limits no less than \$1,000,000 per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to the project or the general aggregate limit shall be twice the required occurrence limit. This Contract shall be considered to be an "insured contract" as defined in the policy.
2. The A/E agrees to require Consultants to comply with the insurance provisions required of A/E pursuant to this Contract unless A/E and Agency mutually agree to modify these requirements for Consultants whose work is of relatively small scope. The A/E agrees that it will contractually obligate its Consultants to advise A/E promptly of any changes or lapses of the requisite insurance coverages and A/E agrees to promptly advise Agency of any such notices A/E receives from its Consultants. The A/E agrees that it will contractually obligate its Consultants to indemnify and hold harmless the Agency to the same extent that the A/E is required to do so as provided in this Contract.
3. The A/E shall provide certificates of insurance to the Agency that evidence compliance with the requirements in this Section.
4. Additional Insured Obligations
 - a. To the fullest extent permitted by law, the A/E shall cause the primary and excess or umbrella policies for Commercial General Liability and Automobile Liability to include the Agency, its officers, officials, employees, and volunteers, as additional insureds for claims caused in whole or in part by the A/E's negligent acts or omissions. The additional insured coverage shall be primary and non-contributory to any of the Agency's insurance policies and shall apply to both ongoing and completed operations.
 - b. Prior to performing services, and thereafter upon replacement of each required policy of insurance, the A/E shall provide to the Agency a written endorsement to the A/E's General Liability Insurance policy that (i) names the Agency, its officers, officials, employees, and volunteers, as additional insureds, and (ii) states that coverage shall not be cancelled, except with notice to the Agency.
 - c. Information concerning reduction of coverage on account of revised limits or claims paid under the General Aggregate, or both, shall be furnished by the A/E with reasonable promptness.

E. INDEMNIFICATION

1. Without limitation and notwithstanding any provision in this Contract, the A/E shall indemnify and hold harmless the Indemnitees for and against claims, damages, losses and expenses (including attorneys' fees) asserted by a third party against an Indemnitee arising out of or resulting from negligent acts or omissions of the A/E, a consultant, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself). The A/E shall not be required to indemnify an Indemnitee to the extent the Indemnitee's damages result from the Agency's own negligence.

2. Such obligation shall not be construed to negate, abridge, or reduce any other rights, including any other obligations of indemnity, which would otherwise exist as to a party or person described in this Section As used in this paragraph, "Indemnitees" means the State (including its instrumentalities, agencies, departments, boards, and political subdivisions), the contractor, the subcontractors at all tiers, and the officers, agents and employees of all the forgoing.

F. A/E SERVICES

1. The A/E shall be fully responsible for coordinating all services under this Contract regardless of whether performed by its own employees or by consultants hired by A/E to perform a portion of its' services.
2. The A/E shall be responsible to Agency for the services furnished to A/E by any Consultant to the same extent as if A/E had furnished the service itself. A/E also agrees to coordinate and resolve any inconsistencies in its work and the work of its Consultants. All of A/E's contracts with Consultants shall be in writing, signed by both parties, and shall include the following provision: "The Agency is intended to be a third-party beneficiary of this Contract."
3. In the performance of its duties under this Contract, the A/E shall comply with the requirements of Chapter 5 of the Manual for Planning and Execution of State Permanent Improvement Projects (the "Manual").
4. The A/E shall prepare and distribute conference memoranda, meeting minutes, summaries of telephone conversations, documentation of site visits and inspection reports as required by the Agency to maintain a comprehensive record of the Project. The State Project Number and Name shall be shown on all documents.
5. Any reference in the Contract Documents to the A/E taking action or rendering a decision with a "reasonable time" or "reasonable promptness" is understood to mean no more than ten (10) days, unless otherwise specified in the Contract Documents or otherwise agreed to by the parties.
6. Construction Documents
 - a. The A/E shall submit to the Agency and OSE for review and approval, properly completed documents in the number and form requested, additional documentation required by the Design Documents Transmittal Form and an estimate of the Cost of the Work with each submittal. The A/E shall advise the Agency of any adjustments to the estimate of the Cost of the Work and request the OSE and Agency's approval.
 - b. Based on the Agency's approval of design documents, OSE's comments, if any, and on the Agency's authorization of any adjustments in the Project requirements and the budget for the Cost of the Work, the A/E shall prepare Construction Documents for the Agency's approval. The Construction Documents shall consist of Drawings and Specifications setting forth in detail the quality levels and performance criteria of materials and systems and other requirements for the construction of the Work.
 - c. The Agency and OSE review and approval of each submittal and all documents or other matters required herein shall not relieve the A/E of their professional duty of care in the preparation of the Instruments of Service for compliance with the requirements of applicable statutes, regulations, codes, the Manual, or for design deficiencies, omission, or errors.
7. Construction Phase Services
 - a. The A/E shall provide administration of the Contract between the Agency and the Contractor as set forth in the General Conditions of the Contract for Construction.
 - b. The A/E shall advise and consult with the Agency during the Construction Phase Services. The A/E shall be responsible for the A/E's negligent acts or omissions, but shall not have control over or charge of, and shall not be responsible for, acts or omissions of the Contractor or of any other persons or entities performing portions of the Work.
 - c. The A/E's responsibility to provide Construction Phase Services commences with the award of the Contract for Construction and terminates twenty-one (21) days after the A/E issues the final Certificate for Payment.
 - d. The A/E shall visit the site at intervals appropriate to the stage of construction to determine, in general, if the Work is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. The A/E shall not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The A/E shall submit a written report to the Agency, and promptly report to the Agency (1) deviations from the Contract Documents, (2) deviations from the most recent construction schedule submitted by the Contractor, and (3) defects and deficiencies in the Work.
 - e. The A/E has the authority to reject Work that does not conform to the Contract Documents. Whenever the A/E considers it necessary or advisable, the A/E shall have the authority to require inspection or testing of the Work in accordance with the provisions of the Contract Documents, whether the Work is fabricated, installed or completed.
8. Contractor Certificates for Payment
 - a. The A/E shall review and certify the amounts due the Contractor and shall issue certificates in such amounts. The A/E's certification for payment shall constitute a representation to the Agency, based on the A/E's evaluation of the Work and on the data comprising the Contractor's Application for Payment, that, to the best of the A/E's knowledge, information and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is entitled to payment in the amount certified.

- b. The issuance of a Certificate for Payment shall not be a representation that the A/E has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work, (2) reviewed construction means, methods, techniques, sequences or procedures, (3) reviewed copies of requisitions received from Subcontractors and suppliers and other data requested by the Agency to substantiate the Contractor's right to payment, or (4) ascertained how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

9. Contractor Submittals

- a. The A/E's action in reviewing submittals shall be taken in accordance with the approved submittal schedule or, in the absence of an approved submittal schedule, with reasonable promptness.
- b. The A/E shall review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.
- c. The A/E shall review and respond to requests for information about the Contract Documents. The A/E's response to such requests shall be made in writing with reasonable promptness. If appropriate, the A/E shall prepare and issue supplemental Drawings and Specifications in response to the requests for information.

10. Changes in the Work

- a. The A/E may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time.
- b. The A/E shall prepare Change Orders and Construction Change Directives, with supporting technical data and cost documentation supplied by the Contractor, for the Agency's approval and execution in accordance with the Contract Documents.

11. Project Completion

- a. As required by the project, the A/E shall:
 - i. conduct inspections to determine the date or dates of Substantial Completion and the date of final completion;
 - ii. issue Certificates of Substantial Completion;
 - iii. forward to the Agency, for the Agency's review and records, written warranties and related documents required by the Contract Documents and received from the Contractor; and,
 - iv. issue a final Certificate for Payment based upon a final inspection indicating that, to the best of the A/E's knowledge, information, and belief, the Work complies with the requirements of the Contract Documents.
- b. The A/E and the A/E's consultants and engineers shall conduct one Substantial Completion Inspection and one Final Completion Inspection. If additional inspections are required, payment to the A/E may be adjusted.
- c. When Substantial Completion has been achieved, the A/E shall inform the Agency about the balance of the Contract Sum remaining to be paid the Contractor, including the amount to be retained from the Contract Sum, if any, for final completion or correction of the Work.

12. Additional Services

- a. The A/E may provide Additional Services after execution of this Contract without invalidating the Contract. Except for services required due to the fault of the A/E, any Additional Services provided shall entitle the A/E to compensation pursuant to negotiations and an appropriate adjustment in the A/E's schedule.
- b. The A/E shall not proceed to provide Additional Services until the A/E receives the Agency's written authorization.

G. AGENCY'S RESPONSIBILITIES

- 1. The Agency shall establish the Agency's budget for the Project, including (1) the budget for the Cost of the Work; (2) the Agency's other costs; and, (3) reasonable contingencies related to these costs. The Agency shall update the Agency's budget for the Project as necessary throughout the duration of the Project until final completion. If the Agency significantly increases or decreases the Agency's budget for the Cost of the Work, the Agency shall notify the A/E of such change and of any corresponding changes in the Project's scope and quality.
- 2. The Agency shall review the A/E's documents and the estimate of Cost of the Work and shall submit its written approval to the A/E and OSE, if required.
- 3. The Agency shall provide prompt written notice to the A/E if the Agency becomes aware of any fault or defect in the Project, including errors, omissions or inconsistencies in the A/E's Instruments of Service.
- 4. The Agency shall include the A/E in all communications with the Contractor that relate to or affect the A/E's services or professional responsibilities. Communications by and with the A/E's consultants shall be through the A/E.

H. COST OF THE WORK

1. The Agency's budget for the Cost of the Work may be adjusted throughout the Project. It is recognized, that neither the A/E nor the Agency has control over the cost of labor, materials, or equipment; the Contractor's methods of determining bid prices; or competitive bidding, market, or negotiating conditions. Accordingly, the A/E cannot and does not warrant or represent that bids or negotiated prices will not vary from the Agency's budget for the Cost of the Work, or from any estimate of the Cost of the Work, or evaluation, prepared or agreed to by the A/E.
2. If at any time the A/E's estimate of the Cost of the Work exceeds the Agency's budget for the Cost of the Work, the A/E shall, at no additional cost, make appropriate recommendations to the Agency to adjust the Project's size, quality, or budget for the Cost of the Work, and the Agency shall cooperate with the A/E in making such adjustments.
3. If the Agency's budget for the Cost of the Work at the conclusion of the Construction Documents Phase Services is exceeded by the lowest bona fide bid, the Agency may:
 - a. if and as permitted by applicable law, give written approval of an increase in the budget for the Cost of the Work and award the contract within the revised budget;
 - b. cancel the invitation for bids and reissue it, without change in the Project program, scope, or quality, not less than ninety (90) days after the date bids were opened;
 - c. cancel the invitation for bids and terminate this Contract in accordance with Section K;
 - d. cancel the invitation for bids; in consultation with the A/E, revise the Project program, scope, or quality as required to reduce the Cost of the Work and reissue the invitation for bids with Construction Documents so revised; or,
 - e. negotiate a contract with the lowest responsive and responsible bidder pursuant to S.C. Code Ann. § 11-35-3020(d).
4. If the Agency chooses to proceed under Section H.3.a or H.3.b, the A/E shall not receive additional compensation for the increase in budget or delay in rebidding.
5. If the lowest bona fide bid exceeds the Agency's budget for the Cost of the Work by more than ten (10) percent and Agency chooses to proceed under Section H.3.d, the A/E shall modify the Construction Documents as necessary to comply with the Agency's budget for the Cost of the Work at the conclusion of the Construction Documents Phase Services, or as adjusted. If the Agency requires the A/E to modify the Construction Documents because the lowest bona fide bid exceeds the Agency's budget for the Cost of the Work due to market conditions the A/E could not reasonably anticipate, the Agency shall compensate the A/E for the modifications as an Additional Service; otherwise the A/E's services for modifying the Construction Documents shall be without additional compensation and the A/E shall be responsible for all its costs associated with the redesign and rebidding of the Project, including the reproduction of revised documents and fees for any new or revised permits based on the revised plans. In any event, the A/E's modification of the Construction Documents shall be the limit of the A/E's responsibility under this Section.
6. If the lowest bona fide bid exceeds the Agency's budget for the Cost of the Work by less than ten (10) percent, and the Agency chooses to proceed under Section H.3.e, the A/E shall, without additional charge to the Agency, assist in negotiations to reduce the bid to an amount within the Agency's budget for the Cost of the Work, but not more than 10% below the Agency's budget for the Cost of the Work. In such case, the A/E shall not be entitled to additional compensation for any effort or additional work necessary to bring the contract within the Agency's budget for the Cost of the Work.

I. INSTRUMENTS OF SERVICE

1. The A/E and the A/E's consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and shall retain all common law, statutory and other reserved rights, including copyrights. Submission or distribution of Instruments of Service to meet official regulatory requirements or for similar purposes in connection with the Project is not to be construed as publication in derogation of the reserved rights of the A/E and the A/E's consultants.
2. The A/E grants to the Agency a perpetual, irrevocable, non-exclusive license to use and authorize others to use, at any time and in any manner, the A/E's Instruments of Service for purposes including, but not limited to, of constructing, using, maintaining, altering and adding to the structures which are the subject of the Instruments of Service at the general location of the site of Project, and for any other use required by law. The A/E shall obtain and provide to the Agency licenses from the A/E's consultants that have terms identical to those that obligate the A/E to the Agency as expressed above in this Section.
3. In the event the Agency uses the Instruments of Service without retaining the authors of the Instruments of Service, the Agency releases the A/E and A/E's consultant(s) from all claims and causes of action arising from such uses. The Agency, to the extent permitted by law, further agrees to waive any claims against the A/E and its consultants for all costs and expenses, including the cost of defense, related to claims and causes of action asserted by any third person or entity to the extent such costs and expenses arise from the Agency's use of the Instruments of Service under this Section. The terms of this Section shall not apply if the Agency rightfully terminates this Contract for cause.

J. CLAIMS AND DISPUTE RESOLUTION

1. Both parties shall attempt to resolve disputes through good faith negotiations.
2. All disputes, claims, or controversies relating to the Contract, that cannot be resolved through good faith negotiations between the parties shall be resolved exclusively by the appropriate Chief Procurement Officer in accordance with Title 11, Chapter 35, Article 17 of the South Carolina Code of Laws, or in the absence of jurisdiction, only in the Court of Common Pleas for, or a federal court located in, Richland County, State of South Carolina. A/E agrees that any act by the State regarding the Contract is not a waiver of either the State's sovereign immunity or the State's immunity under the Eleventh Amendment of the United States Constitution. As used herein, the phrase, "the State" includes the Agency and the State Fiscal Accountability Authority.
3. A/E consents that any papers, notices, or process necessary or proper for the initiation or continuation of any claims or controversies relating to the Contract; for any court action in connection therewith; or for the entry of judgment on any award made, may be served on A/E by certified mail (return receipt requested) addressed to A/E at the address provided for the A/E's Representative or by personal service or by any other manner that is permitted by law, in or outside South Carolina. Notice by certified mail is deemed delivered three (3) business days after deposit, postage prepaid, in the United States mail.
4. The A/E and Agency waive claims against each other for listed damages arising out of or relating to this Contract.
 - a. For the Agency, listed damages are (i) lost revenue and profit, (ii) losses resulting from injury to business or reputation, (iii) additional or escalated overhead and administration expenses, (iv) additional financing costs, (v) costs suffered by a third party unable to commence work, (vi) attorney's fees, (vii) any interest, except to the extent allowed by Section M.6, (viii) lost revenue and profit lost use of the property, (ix) costs resulting from lost productivity or efficiency.
 - b. For the A/E, listed damages are (i) lost revenue and profit, (ii) losses resulting from injury to business or reputation, (iii) additional or escalated overhead and administration expenses, (iv) additional financing costs, (v) attorney's fees, (vi) any interest, except to the extent allowed by Section M.6, (vii) unamortized equipment costs; and (viii) losses incurred by the A/E's consultants for the types of damages the A/E has waived as against the Agency.
5. The A/E waives all claims against the Contractor and any of the Contractor's subcontractors (at any tier) for listed damages arising out of or relating to this Contract. The listed damages are (i) lost revenue and profit, (ii) losses resulting from injury to business or reputation, (iii) additional or escalated overhead and administration expenses, (iv) additional financing costs, (v) attorney's fees, (vi) interest, (vii) unamortized equipment costs; and (viii) losses incurred by the A/E's consultants for the types of damages the A/E has waived as against the Contractor. This mutual waiver is not applicable to amounts due or obligations under Section E (Indemnification).
6. Continuation of Work: Pending resolution of a claim or dispute, the A/E shall proceed diligently with the performance of its services under this Contract, and Agency shall continue to make payments in accordance with this Contract for all services rendered by A/E which are not the subject of the claim or dispute.

K. TERMINATION OR SUSPENSION

1. Agency Right of Suspension:
 - a. The Agency may, at any time, suspend the work, in whole or in part, by written notice to the A/E with or without cause for such period of time as determined by the Agency. The A/E shall be compensated for services performed prior to notice of such suspension, except in the event of suspension due to a default of the A/E.
 - b. When the Work, in whole or in part, is resumed, the remaining amount payable to the A/E may be equitably adjusted to reflect reasonable costs actually incurred by the A/E due to delay or interruption resulting from such suspension.
 - c. If the suspension exceeds ninety (90) consecutive days, the A/E's fees for the remaining services and the time schedules shall be equitably adjusted.
2. Agency Right of Termination:
 - a. Termination for Cause: If the A/E defaults, persistently fails or neglects to perform the services in accordance with the Contract Documents, or fails to perform a provision of the Contract, the Agency shall provide written notice of such default, failure, or neglect to the A/E. If the A/E fails to cure such default, failure, or neglect within ten (10) days from receipt of the Agency's notice, the Agency may, without prejudice to any other right or remedy the Agency may have, terminate the Contract.
 - b. Termination for Convenience: The Agency may, for its convenience, terminate all or any portion of the work or terminate this Contract by ten (10) days written notice stating the effective date of the termination. Thereafter, the Agency shall pay the A/E for those services actually performed before the date of termination. No payments shall be made for services not actually performed, and no payment shall be made or due for lost profits for portions of the services not actually performed.

3. A/E Right of Termination:

- a. The A/E may terminate the contract if work is stopped through no fault of the A/E, or other persons performing work either directly or indirectly for the A/E, for a period of time exceeding sixty (60) consecutive calendar days due to a court order or other public authority having jurisdiction; or a declared National emergency which requires the work to be stopped.
 - b. Agency Failure to Make Payment: Subject to the Agency's right to withhold payments pursuant to Section M, if the Agency fails to make payments to the A/E as set forth in Section M and any other applicable provisions of the Contract Documents, the A/E may, upon fourteen (14) days prior written notice to the Agency, terminate the Contract and recover from the Agency payment for all services performed, including reasonable overhead, profit and damages applicable to the services performed through the date thereof.
4. In the event of suspension or termination for convenience, upon request of Agency and payment of all fees pursuant to this Section, A/E shall promptly provide Agency with all documents completed or in progress on the date of termination, on computer tapes or disks. The Agency's rights to use the A/E's Instruments of Service in the event of a termination of this Contract are set forth in the Contract.

L. MISCELLANEOUS PROVISIONS

1. Governing Law: The Contract, any dispute, claim, or controversy relating to the Contract, and all the rights and obligations of the parties shall, in all respects, be interpreted, construed, enforced and governed by and under the laws of the State of South Carolina, except its choice of law rules.
2. This Contract is formed pursuant to and governed by the South Carolina Consolidated Procurement Code and is deemed to incorporate all applicable provisions thereof and the ensuing regulations.
3. Severability: If it is determined that any provision of the Contract violates any law, or is otherwise invalid or unenforceable, such determination shall not impair or otherwise affect the validity, legality, or enforceability of the remaining provision or parts of the provision of the Contract Documents, which shall remain in full force and effect as if the unenforceable provision or part were deleted. In such case the Contract shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Contract.
4. Economic Conflict of Interest: An A/E shall not have or exercise any official responsibility regarding a public contract in which the A/E, or a business with which he is associated, has an economic interest. A person working for an A/E shall not have or exercise any official responsibility regarding a public contract in which the person, an individual with whom he is associated, or his family members have an economic interest. If an A/E is asked by any person to violate, or does violate, either of these restrictions, the A/E shall immediately communicate such information to the procurement officer. The state may rescind, and recover any amount expended as a result of, any action taken, or contract entered in violation of this provision. The terms "business with which he is associated," "economic interest," "family member," "immediate family," "individual with whom he is associated," "official responsibility" and "person" have the meanings provided in S.C. Code Ann. § 8-13-100.
5. Drug-Free Workplace: The A/E must comply with the Drug-Free Workplace Act, S.C. Code Ann. §§ 44-107-10, et seq. The A/E certifies to the Agency that A/E will provide a Drug-Free Workplace, as defined by S.C. Code Ann. §§ 44-107-20(1).
6. False Claims: According to SC Code § 16-13-240, "a person who by false pretense or representation obtains the signature of a person to a written instrument or obtains from another person any chattel, money, valuable security, or other property, real or personal, with intent to cheat and defraud a person of that property is guilty" of a crime.
7. Non-Indemnification: It is unlawful for a person charged with disbursements of state funds appropriated by the General Assembly to exceed the amounts and purposes stated in the appropriations per S.C. Code Ann. § 11-9-20. It is unlawful for an authorized public officer to enter into a contract for a purpose in which the sum is in excess of the amount appropriated for that purpose. It is unlawful for an authorized public officer to divert or appropriate the funds arising from any tax levied and collected for any one fiscal year to the payment of an indebtedness contracted or incurred for a previous year per S.C. Code Ann. § 11-1-40.
8. Assignment: The Agency and A/E, respectively, bind themselves, their agents, successors, assigns, and legal representatives to this Contract. Neither the Agency nor the A/E shall assign this Contract without the written consent of the other. S.C. Code Ann. Reg. 19-445.2180 provides as follows: "No State contract is transferable, or otherwise assignable, without the written consent of the Chief Procurement Officer, the head of a purchasing agency, or the designee of either; provided, however, that a contractor may assign monies receivable under a contract after due notice from the contractor to the State."
9. Force Majeure: In the event A/E is hindered, delayed or prevented from performing its obligations under this Contract as a result of any fire, flood, landslide, tornado or other act of God, malicious mischief, theft, strike, lockout, other labor problems, shortages of material or labor, or any other cause beyond the reasonable control of A/E, the time for completion of A/E's work shall be extended by the period of resulting delay.

10. Open Trade Representation: By signing this Contract, A/E represents that A/E is not currently engaged in the boycott of a person or an entity based in or doing business with a jurisdiction with whom South Carolina can enjoy open trade, as defined in SC Code § 11-35-5300. During the contract term, including any renewals or extensions, A/E will not engage in the boycott of a person or an entity based in or doing business with a jurisdiction with whom South Carolina can enjoy open trade, as defined in SC Code § 11-35-5300.

M. COMPENSATION

1. Basic Services:

The Agency shall compensate the A/E for the services rendered as described in the Contract Documents in Section A in the amount of:

\$ 730,287.50

2. Additional Services:

The Agency shall compensate the A/E for Additional Services rendered as described in the Contract Documents in Section A in the amount of:

\$

3. Reimbursable Expenses:

For Reimbursable Expenses the compensation shall be the actual costs incurred by the A/E and the A/E's consultants. The A/E and the A/E's consultants shall be allowed a reasonable markup not to exceed 10% for administrative cost related to Reimbursable Expenses.

The Agency shall compensate the A/E for Reimbursable Expenses described in the Contract Documents in Section A as a not-to-exceed amount of:

\$

4. When any portions of the Project are deleted or otherwise not constructed, compensation for those portions of the Project shall be payable to the extent services are performed on those portions. The A/E shall be entitled to compensation in accordance with this Contract for all services performed whether or not the Construction Phase is commenced.
5. Unless authorized in writing by the Agency prior to incurring the expense, no expense for transportation, travel, or subsistence will be reimbursable to the extent the expense exceeds the amount for which a state employee would be reimbursed under the Travel Regulations. Travel Regulations means the State Fiscal Accountability Authority's Regulations for Reimbursement for Travel and Subsistence Expenses, Disbursement Regulations pdf found at [<https://cgs.sc.gov/guidance-and-forms-state-agencies/cgs-accounting-policies-and-procedures>]. There shall be no charge for time spent in travel.
6. Progress Payments: Payments for services shall be made monthly in proportion to services performed. The Agency shall make payments to the A/E of undisputed amounts due for services performed by the A/E within twenty-one (21) days of receipt of the A/E's invoice. The A/E shall make progress payments to the consultants within seven (7) days of the receipt by the A/E of each payment from the Agency. Payments due to the A/E and unpaid under this Contract shall bear interest only if and to the extent allowed by S.C. Code Ann. §§ 29-6-10 through 29-6-60. Amounts due to the A/E shall bear interest at the rate of one percent a month or a pro rata fraction thereof on the unpaid balance as may be due.
7. The Agency shall not withhold amounts from the A/E's compensation to impose a penalty.

AGENCY:

BY: 

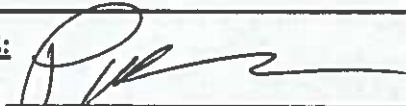
(Signature of Representative)

PRINT NAME: Eric G. Fosmire

PRINT TITLE: Chief of Staff & General Counsel

DATE: 14 November 2025

A/E:

BY: 

(Signature of Representative)

PRINT NAME: Patrick J. Guise

PRINT TITLE: Chief Visionary Officer, Co-Owner

DATE: 10/28/2025



October 28, 2025

Ms. Pam Kendrick
Environmental and Infrastructure Program Manager
South Carolina Office of Resilience
632 Rosewood Drive
Columbia, SC 29201

Re: Georgetown County – Graves Station Friendfield Stormwater
Price Proposal

Dear Ms. Kendrick:

McCormick Taylor, Inc. appreciates the opportunity to submit a price proposal to provide professional services to complete the Graves Station Friendfield Stormwater Project. Included within this package are our scope of services and the scope of services for our sub consultants, McKim and Creed, TELICs, and FME. Our design and construction schedule are included as an attachment, as well as a breakdown of our fee development, including hours and classification rates. This project will require restoration of SCDOT and County roadways upon completion of the drainage improvements.

McCormick Taylor and our team will complete the provided scope of services for a lump sum fee of \$730,287.50.

McCormick Taylor would like to thank SCOR and Georgetown County for the opportunity to be a part of this project and we look forward to discussing any questions you may have regarding this proposal.

Thank You,
MCCORMICK TAYLOR, INC

A handwritten signature in black ink, appearing to read "Jason Hetrick".

Jason Hetrick, P.E.
Assistant Director – Water Resources
803.978.2744

SCOPE OF SERVICES FOR GEORGETOWN COUNTY SC OFFICE OF RESILIENCE GRAVES STATION FRIENDFIELD STORMWATER D30-N053-PG

PROJECT DESCRIPTION

The proposed project consists of preparing an advertisement package to improve the stormwater management systems along Graves Station Street and local side-streets including Henrietta Lane, Emily Court, Jessica Drive, and Natalie Court. The proposed project is funded by a Housing and Urban Development (HUD) Community Development Block Grant – Mitigation (CDBG-MIT) Program grant administered by the SC Office of Resilience (SCOR).

The project area comprises an approximately 60-acre residential community with a single ingress/egress from US-17 via Amelia Drive and Graves Station Street. Existing stormwater infrastructure includes roadside ditches, driveway culverts, and cross-line pipes below Graves Station St. Within the project area are approximately 6,200 linear feet of SC Department of Transportation (SCDOT) and County owned roads and right-of-way which will house the majority of the improved stormwater infrastructure. Included with the project are new and enlarged cross-line pipes, improved ditch conveyances, improved driveway culverts, and potentially detention facilities. The project will include resurfacing of the roadways within the project limits. Stormwater management will follow state and local requirements and be designed to meet the conveyance requirements to at least the 25-year storm. Since Graves Station St. and Amelia Dr. are SCDOT-owned roads, SCDOT design standards will be utilized. Relocation of utilities may be necessary in particular along Graves Station St. Relocations will be coordinated with utility providers. Accurate development of a scope and effort estimate for utility relocation will not be possible until the SUE investigations are complete and design progresses forward. Right-of-way and easements may be necessary for this project as well. Assumed easement needs have been included in this scope. Due to the unknowns related to utility relocation and easement/ROW acquisition until designs progress, if needs for these services surpass the assumed need, a supplement for those additional services will be prepared. Easement acquisition will follow Georgetown County procedures.

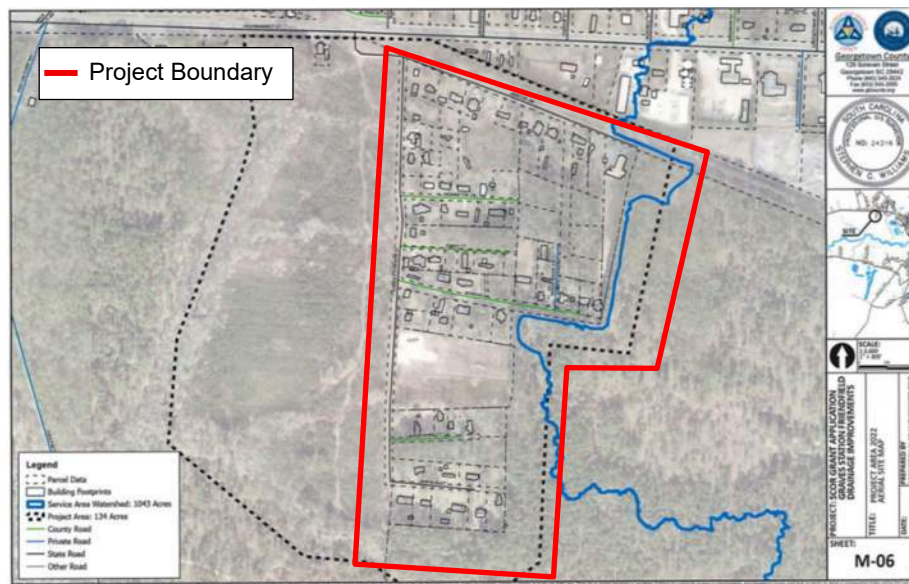


Figure 1. Vicinity Map

SUMMARY OF WORK

The following tasks represent McCormick Taylor's scope of services for the development/delivery of construction plans for the above project. These tasks will be identified in the engineering fee estimates included within. The scope of services to be performed by McCormick Taylor's subconsultants will be identified within the scope of services, with each subconsultants' independent scope of services and fee included as an attachment. This project shall consist of the following tasks unless specified otherwise:

- Task 1: Project Management/Agency Coordination (MT)**
- Task 2: Field Surveys (MK)**
- Task 3: Utility Coordination (TELICS)**
- Task 4: SUE (TELICS)**
- Task 5: Geotechnical Investigations (FME)**
- Task 6: Hydrology/Hydraulic Design (MT)**
- Task 7: Preliminary/30% Design Submittal (MT)**
- Task 8: 60% Design Submittal (MT)**
- Task 9: Public Involvement (MT)**
- Task 10: Benefit Cost Analysis (MT)**
- Task 11: Environmental Documentation (MT)**
- Task 12: Permitting (MT)**
- Task 13: Downstream Impact Analysis (MT)**
- Task 14: MOT/Signing And Marking (MT)**
- Task 15: Final Design/90% Design Submittal (MT)**
- Task 16: Advertisement/100% Package (MT)**
- Task 17: Construction Phase Services (MT)**

General services excluded from this scope of services:

- Right-of-way and easement acquisition
- Lighting and electrical design
- Utility Relocation Design
- Traffic Signal Design
- Construction Inspection and Material Testing

McCormick Taylor expects that SCOR and Georgetown County will complete the following tasks and/or provide the following data:

- Provide access to all reports, data, and information in possession of SCOR or the County, which may prove pertinent to the work such as existing plans, previous studies, GIS data. This information is to be supplied in electronic format whenever possible.
- Composition and placement of legal advertising for access to the property in the project area for surveys, geotechnical borings, and fields visits.
- Plans of existing roadways as available.
- Existing aerial photography as available for the project.
- All previously obtained existing survey information, including, but not limited to, survey and digital terrain model (DTM) information, plat and boundary research and documents, parcel information, right-of-way data sheets, etc.

PROJECT SCHEDULE

The project schedule is included as an attachment.

1. PROJECT MANAGEMENT

1.1. Project Management and Coordination

Project goals and objectives will be determined through coordination between McCormick Taylor (**MT**), Georgetown County (**COUNTY**), and the South Carolina Office of Resilience (**SCOR**). **MT** will manage the project to conform to SCOR and the Office of State Engineer (OSE) requirements and standards. As the project is located within the South Carolina Department of Transportation (SCDOT) right-of-way, SCDOT standards for Highway Construction and Drainage, in compliance with all Federal standards, will be followed. The process will include the following:

- 1.1.1. **MT** will provide a Project Manager responsible for overseeing all tasks related to the contract.
- 1.1.2. **MT** will conduct a preliminary site visit to gain greater familiarity with the project location and identify potential issues.
- 1.1.3. **MT** will facilitate a project kickoff meeting with the **SCOR** and **COUNTY** to discuss the project.
- 1.1.4. **MT** will perform project organization, management, scoping, and progress meetings with **SCOR's** Project Manager and **COUNTY**. This scope assumes twelve (12) virtual meetings to be held monthly during the design phase. During construction, updates will be given via email or during the construction administration progress meetings. This task will include the preparation of project updates via MS Power Point Presentation and handouts for the meetings. **MT** will prepare meeting minutes and distribute within three business days.
- 1.1.5. **MT** will conduct and attend resource agency coordination (SCDES, SCDOT, USACE, Georgetown County) and partnering efforts. This scope assumes four (4) meetings with resource agencies. **MT** will prepare agendas, materials, and notes for all meetings as needed.
- 1.1.6. Prepare monthly invoices, status reports, and schedule updates.
- 1.1.7. Provide weekly progress updates via email to include the following:
 - Actual start/finish dates for completed activities.
 - Actual start dates, expected completion dates, and physical percent complete for activities in progress.
 - Projected start/finish dates for future activities
 - Updates are to include the latest information on the schedule for design activities and additional information that may affect the project's schedule.
- 1.1.8. **MT** will attend up to ten (10) in person Project Stakeholder meetings with **COUNTY** Staff and other stakeholders identified including property owners.

1.2 Quality of Product

SCOR requires services provided to be of the utmost quality. **SCOR** depends on **MT** to provide quality in the plans, specifications, reports and any supporting material that is developed. **MT** will perform a thorough quality control check prior to any submittal.

Assumptions:

- *Management time for the project is assumed to be 36 months.*

Deliverables:

- *Monthly invoices and progress reports – Assume Thirty-Six (36)*
- *Updated Monthly design schedule – Assume Twelve (12 from Notice of Award to start of construction)*
- *Weekly email progress Updates*
- *Monthly Virtual Progress Meetings*

2. FIELD SURVEYS

2.1. Surveying

McKim & Creed (**MC**) will perform field surveys to determine accurate elevations and locations of existing facilities (e.g., utilities, roadways, property boundaries, culverts, and any other unnaturally occurring appurtenances) for design purposes. Pipe sizes, materials, condition, invert elevations, along with drainage inlet data and ditch geometries will be obtained for the drainage network. All existing trees with DBH of 6 inches or greater within the survey boundary shall be located with DBH and species provided. All surveys shall conform to the SCDOT's "Preconstruction Survey Manual" (latest edition) and "The Standards of Practice for Land Surveying in South Carolina." These services must be under the direct supervision of and certified by a registered South Carolina Professional Land Surveyor. **MT** will coordinate with **MC** regarding the survey limits and information captured. **MT** will review the survey data for completeness. Please refer to McKimm & Creed price proposal for additional information.

3. UTILITY COORDINATION

3.1. General Responsibilities and Duties

TELICS will coordinate the project development with all utilities that may be affected. All utility relocations will be handled in accordance with the SCDOT "A Policy for Accommodating Utilities on Highway Rights of Way" and Code of Federal Regulations, Title 23, Chapter 1, Subchapter G, part 645, subparts A and B. **MT** will coordinate with **TELICS** to support this task. Refer to **TELICS** proposal for detailed scope of services.

4. SUE

4.1. SUE Process

TELICS will oversee the completion of the subsurface utility engineering (SUE) process, with coordination and oversight from **MT**. The project is to have a SUE recommendation done as specified in Task 3 prior to moving forward with SUE as outlined in the scope below. The **MT** Project Manager will provide approval of the submitted recommendation prior to beginning SUE on this project. Refer to **TELICS** proposal for detailed scope of services.

5. GEOTECHNICAL INVESTIGATIONS

5.1 Exploration

F&ME Consultants (**FME**) shall perform all geotechnical field exploration, laboratory testing, subsurface data reporting, engineering analysis and design associated with this project. **FME** will provide one (1) electronic copy of the Geotechnical Subsurface Data Report, one (1) electronic copy of the Preliminary Geotechnical Report and one (1) electronic copy of the Final Geotechnical Report to **MT**. **MT** will coordinate with **FME** to identify boring locations and will review for completeness of **FME**'s submissions. **FME** will obtain any necessary permissions related to this task. Pavement design is not part of this task, standard SCDOT pavement sections for resurfacing and utility trench patching will be utilized. Please refer to **FME's** price proposal for a detailed breakdown of services provided under this task.

6. HYDROLOGY/HYDRAULIC DESIGN

6.1. Hydrologic and Hydraulic Modeling (PCSWMM)

- 6.1.1. **MT** will develop a PCSWMM model for the project areas. **MT** will verify and validate existing conditions and calibrate the model to reflect survey data obtained in Task 3, as well as input data, such as field verified drainage area, land uses, and precipitation data that appropriate for a detailed final design model.
- 6.1.2. A proposed model will be developed to evaluate the effectiveness of various stormwater facility alternatives within the sites. The effectiveness of the alternatives will be evaluated based on the 50%, 10%, 4%, 2%, and 1% chance 24-hour storm events. In addition to the typical design storms, **MT** will consider rain bomb (short duration, high intensity) events and anticipated climate change considerations regarding precipitation and base level change, drawing on the data and recommendations presented in the Strategic Statewide Resilience and Risk Reduction Plan and additional sources from Carolinas Integrated Sciences and Assessments (CISA). The final basis of design decisions will be reviewed and incorporated into the master model for confirmation of design parameters.
- 6.1.3. Within the stormdrain design process, SCDOT design requirements and design methodology will be followed, thus a more precision based approach will be needed to appropriately specify pipe sizes, ditch dimensions, and various stormwater best management practices (BMP) to be proposed. Individual hydrologic and hydraulic models will be prepared for each corridor or BMP. For this design, SCS methodology will be used to design cross-line pipes, and the Rational Method will be used to design driveway culverts and ditches. This methodology will allow for the design of BMP control structures and pipe systems to properly detain stormwater within the sites and discharge it at the desired rate while providing the required freeboard. **MT** will also utilize the National Oceanic and Atmospheric Administration (NOAA) Atlas 14 precipitation data for the design of the stormwater facilities. **MT** will use this information to size outfall protection and channel stabilization.
- 6.1.4. Throughout the hydraulic design process, care will be taken to consider the impacts the proposed drainage system and BMPs will have on the upstream and downstream areas. **MT** will consider various tailwater conditions to ensure the proposed BMPs will not create a flooding issue farther upstream if they cannot drain effectively. Similarly, **MT** will conduct downstream analysis to determine if any downstream impacts may result from the improvements.

6.2. Drainage Design

- 6.2.1. All hydrologic and hydraulic designs and documents will be in compliance with the following design criteria:
 - SCDOT's Requirements for Hydraulic Design Studies (latest edition)
 - SCDOT Standard Drawings (latest edition)
 - The Environmental Protection Agency's (EPA) National Pollution Discharge Elimination System (NPDES) as administered under general permit by the SC Department of Health and Environmental Control (SCDES)
 - FEMA Regulations, 44CFR Chapter 1
 - State Stormwater and Sediment and Erosion Control Regulations administered by SCDES, 26 S.C. Code Ann. Regs. 72-405 (Supp. 1995) et seq.; South Carolina State Water Law
 - AASHTO "Highway Drainage Guidelines" (dated 2007)
 - "SCDOT Stormwater Quality Design Manual" (dated December 2014)

- SCDOT Supplemental Technical Specifications

6.2.2. **MT** will utilize PCSWMM model discussed in the above task coupled with the SCS and Rational Methods to develop pipe and ditch sizes as well as various stormwater BMPs to be proposed. Individual hydrologic and hydraulic models will be prepared for each corridor or BMP. The National Oceanic and Atmospheric Administration (NOAA) Atlas 14 precipitation data will be utilized for the drainage design. **MT** will use this information to size outfall protection and channel stabilization. **MT** understands that **SCOR** has identified the 25-year storm as the design event, which is in exceedance of the **SCDOT** design storm of 10-years.

6.2.3. **MT** will perform all aspects of the drainage and drainage design and will follow all guidelines for roadway surface drainage and sediment and erosion control. The impacts of the existing hydrology due to the proposed project will be evaluated. Based on this evaluation, design alternatives to control flooding and manage the runoff associated with the project will be examined. Designs will be performed for driveway culverts, outfalls, cross-line pipes, and BMPs. An erosion and sediment control plan will be provided to aid in controlling erosion during the construction of the project.

6.2.4. **MT** will provide the hydrologic services listed below:

- Establish design criteria.
- Perform field investigation(s) to:
 - Inventory the location and review the condition of the existing storm drainage appurtenances.
 - Determine the boundaries of tributary watersheds draining through the area.
 - Identify and evaluate the usability of drainage outfalls.
- Collect data.
 - Review the previously completed studies and available datasets.
 - Land use data for existing and proposed developments.
 - Determine if there is any involvement in floodways or flood hazard areas.
 - Identify flooding problems associated with the project based on historical information.
 - Identify receiving stream(s) for the project and cross check with SCDES's most current 303(d) list and table for water bodies with approved TMDLs.
 - Obtain plans of existing roads that will impact the project.

6.3. Engineering Services for Hydraulic/Hydrologic Design

6.3.1. Prepare the appropriate drainage basin map using existing topographic maps, information gathered from the field investigation(s) and available information from federal, state and local agencies.

6.3.2. Perform a hydrologic study of the watershed(s) affected by the project.

6.3.3. Verify the adequacy of the existing storm drainage facilities.

6.3.4. Prepare a report summarizing the findings of the hydrologic analysis and computations, including cost estimates for upgrading any undersized storm water appurtenances affected by the proposed improvements.

6.3.5. Attend DFR and any field meetings.

6.3.6. Update the drainage design as necessary to meet project, utility and right-of-way needs and incorporate it into the construction plans.

- 6.3.7. Identify and incorporate necessary drainage improvements into the construction plans.
- 6.3.8. **MT** will provide Quality Control and Quality Assurance of the hydrologic and hydraulic design for completeness, correctness, accuracy and consistency with the above referenced standards.

6.4. Erosion Prevention, Sediment Control and Comprehensive Stormwater Pollution Prevention Plan

- 6.4.1. Prepare an erosion and sediment control plan for inclusion in the construction plans, outlining methods for minimizing the amount of erosion and sedimentation during construction and for conformance to the NPDES General Permit. The plan will be detailed on the drainage sheets prepared for the project. **MT** will prepare the NOI and the NPDES General Permit application and obtain necessary approvals from the South Carolina Department of Environmental Services (SCDES) and Georgetown County. **MT** will prepare a Comprehensive Stormwater Pollution Prevention Plan (C-SWPPP) following SCDES and Georgetown County requirements.
- 6.4.2. **MT** will identify the receiving stream(s) for this project. After this determination has been made, the stream(s) will be cross-checked with SCDES's current 303(d) list (<https://des.sc.gov/sites/des/files/Documents/BOW/WaterQuality/303dList2020-2022pdf.pdf>) and table for water bodies with approved TMDLs (<https://des.sc.gov/sites/des/files/Documents/BOW/WaterQuality/TMDLAttainmentStatus.pdf>) to see if this receiving stream(s) has either an approved TMDL or a soon-to-be TMDL target date. If listed, **MT** shall provide the necessary best management practices to bring the project in conformance with SCDES requirements. This process should also be updated prior to construction.
- 6.4.3. **MT** will assist the **COUNTY** and **SCOR** in filing the permit application through SCDES e-Permitting. **MT** will submit the permit packages to agencies. Review fees will be reimbursed by **SCOR**.
- 6.4.4. **MT** will provide Quality Control and Quality Assurance of the erosion and sediment control plan for completeness, correctness, accuracy and consistency with the above referenced standards.

6.5. On Site Meetings

- 6.5.1. Representatives from **SCOR**, **COUNTY**, and **MT** involved in hydrologic design will attend one (1) design field review meetings of the project during the Preliminary plan development and one (1) during the 90% construction plan development. All information gathered during these field investigations will be evaluated and plans revised accordingly. **MT** will prepare a draft agenda and distribute it to designated participants for preparation and comment prior to each meeting. **MT** will provide a summary of each field review.
- 6.5.2. All services described herein will be conducted with reference to SCDOT requirements and guidelines, such as "Requirements for Hydraulic Design Studies," the "Plan Preparation Guide," and the SCDOT Standard Drawings.

Assumptions:

- *The project does not falls within a TMDL.*
- *The drainage plan view, details, profiles, etc. will be included in the plan production tasks.*

Deliverables:

- *Drainage Report*

- *NPDES permit application*
- *One (1) Signed and Sealed set of electronic drainage sheets PDF file will be provided for inclusion in the Final Construction Plans.*
- *One (1) electronic PDF file of the Signed and Sealed Stormwater Management Design Study/Report to include the Stormwater Pollution Prevention Plan (SWPPP) Checklist.*
- *One (1) copy and one (1) electronic PDF file of correspondence to the local municipal floodplain coordinator(s).*

7. PRELIMINARY (30%) PLANS

7.1. Preliminary (30%) Design

MT will develop a preliminary (30%) design which will consist of a report and plans as outlined below. **MT** will develop these plans in accordance with Chapter 5 of the OSE Manual for Planning and Execution of State Permanent Improvements. The hydrologic and hydraulic design and layout for the stormdrain systems are accounted for in Task 6.

7.2. Design Criteria

7.2.1. Prior to beginning development of the preliminary plans **MT** will prepare and submit design criteria for the project. These criteria shall address all design features for roadway, hydraulic, and other design features. The established design criteria will be submitted to **SCOR** and the **COUNTY** for approval.

7.2.2. For improvements within SCDOT right-of-way, **MT** will conform to the following SCDOT and FHWA design standards during plan development. County owned roads will follow Georgetown County design standards.

- The SCDOT's Standard Specifications for Highway Design Construction (Latest Edition)
- The SCDOT's Roadway Design Reference Material for MT Prepared Plans
- The SCDOT's Standard Drawings for Road Construction (Latest Edition)
- Standard Provisions of the SCDOT
- The SCDOT's Roadway Design Manual (Latest Edition)
- AASHTO "A Policy on Geometric Design of Highways and Streets" (2011 Edition) and other applicable AASHTO Standards such as Bike and Pedestrian Manual (Latest Edition)
- 2003 The Manual of Uniform Traffic Control Devices (MUTCD), 2009 Edition
- SCDOT Hydrologic and Hydraulic Design Manual
- Other Applicable SCDOT and FHWA design material

7.2.3. Preliminary plans will be developed and serve as the base documents for further refinement into the 60% Design, Final Design (90%) and Advertisement Package.

7.3. Preliminary Plans

7.3.1. **MT** will establish preliminary plans identifying major design features including locations of new and improved pipes, regraded ditches, detention facility locations, and potential utility coordination and right-of-way needs.

7.3.2. The preliminary plans are to include:

- Geometric controls (horizontal and vertical)
- Existing conditions layout with pertinent field survey data
- Detailed plan layout
- Development of preliminary storm drainage plan and type, size, invert elevation and location of major storm drainage features including outfall ditches, pipes, and ditches
- Type, size, and location of major above ground utility facilities
- Limits of existing right-of-way and adjacent properties
- Limits and configuration of proposed right-of-way
- Property lines, property parcel number, and ownership
- Preliminary cost estimate
- Others as per SCDOT Standards

- 7.3.3. **MT** will provide Quality Control and Quality Assurance of the Preliminary Plans for completeness, correctness, accuracy and consistency with the above referenced standards.
- 7.3.4. **MT** will address and respond up to one (1) round of **SCOR** and **COUNTY** comments for the Preliminary Plan set.
- 7.3.5. Representatives from **SCOR**, **COUNTY**, and **MT** will perform one (1) Design Field Review (DFR) meeting during preliminary plan development. All information gathered during field investigations will be evaluated and the plans revised accordingly. **MT** will provide a summary of each field review. After the DFR has been completed **MT** will review comments made in the field and during the meeting and apply them to the plans.
- 7.3.6. **MT** will develop an opinion of probable construction costs based on the preliminary plans.

Deliverables:

- *One (1) electronic pdf set of preliminary plans, and one (1) electronic copy of all CAD files upon request.*
- *Preliminary Design Report containing all computations and design methodologies.*
- *Up to five (5) half size copies of the Preliminary Plan Set to be distributed at the on-site DFR.*
- *One (1) electronic pdf copy of preliminary quantities and cost estimate*
- *Briefing Meeting, virtual*

8. 60% PLANS

8.1. 60% Design

MT will develop 60% plans as outlined below. **MT** will develop these plans in accordance with Chapter 5 of the OSE Manual for Planning and Execution of State Permanent Improvements. The hydrologic and hydraulic design and layout for the stormdrain systems are accounted for in Task 6.

8.2. 60% Plans

- 8.1.1. Upon receipt of comments from the Preliminary Plans and DFR, 60% plans will be developed. The plan sheets will depict property lines within and immediately adjacent to the project, property ownership, improvements on property, control of access, existing and proposed right-of-way, existing utilities, construction limits, and erosion control items that affect right-of-way requirements. Existing easements, both permanent and temporary will be shown. All plans shall be in accordance with the SCDOT Roadway Design Manual.
- 8.1.2. Property strip map sheets will depict all parcels of property adjacent to roadway within project limits and will be assigned a parcel number, the property owner identified (name and tax map reference number). Right-of-way acquisition is not anticipated for this project. Reduced scale property parcel drawings will be used as appropriate.
- 8.1.3. **MT** will provide Quality Control and Quality Assurance of the right-of-way plans for completeness, correctness, accuracy and consistency with the above referenced standards.
- 8.1.4. **MT** will address and respond up to one (1) rounds of **SCOR** and **COUNTY** comments for the 60% Plan set.
- 8.1.5. **MT** will develop an opinion of probable construction costs based on the 60% plans.
- 8.1.6. **Representatives** from **SCOR**, **COUNTY**, and **MT** will perform one (1) Design Field Review (DFR) meeting during 60% plan development. All information gathered during field investigations will be evaluated and the plans revised accordingly. **MT** will provide a summary of each field review. After the DFR has been completed **MT** will review comments made in the field and during the meeting and apply them to the plans.

Deliverables:

- One (1) electronic pdf set of 60% plans, and (1) one electronic copy of all CAD files upon request.
- 60% Design Report containing all computations and design methodologies.
- One (1) electronic pdf copy of preliminary quantities and cost estimate
- Briefing Meeting, virtual

9. PUBLIC INVOLVEMENT

9.1. Public Involvement Support

MT shall be responsible for developing a public involvement plan and coordinating public involvement activities associated with the project. **MT** shall be responsible for facilitating the three (3) public meetings.

9.2. Public Involvement Plan

MT will develop a public involvement plan to effectively involve the public in the project's decision-making process. The Public Involvement Plan (PIP) will consist of a formal written plan that will go into greater detail regarding the schedule and timing of various public involvement strategies. The PIP will be presented to **SCOR** and the **COUNTY** within two weeks of the kickoff meeting.

9.3. Meetings

MT will coordinate the date and location of the three meetings with **SCOR** and **COUNTY** personnel and will prepare the newspaper ad for the Public Notice. **MT** will not provide security guards from local law enforcement agencies or private security firms for public meetings. **SCOR** or **COUNTY** may provide security guards at their own expense.

9.4. Meeting Materials

MT will prepare the related Public Information Meeting materials, (deliverables would include displays, handouts, comment forms, and sign-in sheets). The information contained in handouts will be consistent with the information contained within the environmental document. **MT** will provide draft copies of all materials to be used in public meetings or hearings to **SCOR** and **COUNTY** for review a minimum of 10 business days prior to printing.

9.5. Meeting Responses

MT shall prepare responses to each comment received as a result of a public information meeting for **SCOR** and **COUNTY** to review and distribute.

Assumptions:

- *Three Public Meetings: Meetings will be held shortly after project initiation, after 60% design is complete, and after 100% plans are complete (after award of construction contract)*
- *Online Meeting, the option to host an online version of the meeting will be included for each meeting.*
- *# of MT attendees per meeting – 3*
- *# of sign-in forms per meeting/hearing – 6*

- *Flyers - **MT** will distribute flyers directly to residents in the Graves Station community, printing costs will be reimbursed by **SCOR**.*
- *Yard Signs - **MT** will place the yard signs within the project limits, printing cost will be reimbursed by **SCOR**.*
- *Website/Social Media - **MT** will coordinate with **COUNTY** and **SCOR** staff for use of either or both of **SCOR's** or **COUNTY'S** website and social media. **MT** will provide routine updates to the account manager.*
- *Newspaper Paid Ads - All expenses will be reimbursed by **SCOR**, **MT** will draft and provide the ads to the publisher.*
- *Meeting space will be held at a **COUNTY** owned facility and will be at no cost to the project team.*

*Chairs and tables will be provided at no cost to the project team. In the event rentals are required, a supplement will be submitted to **SCOR**.*

MT will place or distribute advertisements/notices of public meetings and hearings, including the Right of Entry letter allowing for non-destructive site investigations and inspections.

Deliverables:

- *Electronic version public involvement plan*
 - *Three Public meetings with an Online Meeting option*
 - *Display Boards (Quantity: 4 – 24"x36" boards per meeting)*
 - *Flyers (Quantity: 50 flyers per meeting)*
 - *Meeting handouts (Quantity: 50 per meeting)*
 - *Yard Signs (Quantity: 3 yard signs per meeting)*
 - *Website/Social Media content to **SCOR** and **COUNTY**, updated routinely.*
 - *Three sets of Newspaper Paid Ads*
 - *Electronic versions of displays, handouts, comment forms, and sign-in forms.*
- Hard copies of displays, handouts, comment forms, and sign-in forms.*

10. BENEFIT COST ANALYSIS

10.1. BCA

MT will conduct a Benefit Cost Analysis (BCA) using the latest FEMA BCA Toolkit based on the design. It is understood that a BCA of 1.0 or greater is required as part of this grant funding. The BCA will be developed for the 60% design and 100% design.

Deliverables:

- 60% BCA Summary Document and Computations
- 100% BCA Summary Document and Computations
- Inclusion of findings within final Project Report

11. ENVIRONMENTAL DOCUMENTATION

11.1. HUD Environmental Assessment (EA)

MT will provide the National Environmental Policy Act (NEPA) level environmental review as part of the project development and decision-making process. The HUD EA will be prepared in accordance with 24 CFR Part 58 and the HUD Environmental Review Online System (HEROS). **MT** will determine and document compliance findings for HUD-Assisted Projects and compile the findings into the EA for HUD approval. **MT** will collect, review, and synthesize pertinent background data and coordinate with regulatory agencies to inform the determination. The Environmental Review Report (ERR) will include documentation of agency consultation and public notification processes for delivery to **SCOR** and the **COUNTY**.

MT will provide assessment and applicable agency coordination and consultation in accordance. These include:

- Potential effects to threatened endangered species will be analyzed as part of the EA. No species habitat survey is included in this scope. If that is required by the agencies, a supplement will be submitted.
- Preparing the necessary documentation and submission to SHPO/THPO for review in accordance with Section 106.
- Wetlands on site are anticipated to be impacted by the proposed improvements. Therefore, the HUD 8-step wetland process will be followed including USACE coordination.
- The wetland impacts will require two additional public notices including the Early Notice and the Final Notice of Work. **MT** will prepare those notices for **SCOR** review prior to publishing. The notices will be published in the legal section of a local newspaper for public review.
- Additional agency consultation will be conducted by **MT** as needed. These may include USFWS, USACE, EPA, among others.

Assumptions:

- HUD review and approval of the EA is required through the HUD HEROS platform.
- It is anticipated that the National Register listed Friendfield Plantation will not be directly impacted by the improvements. SHPO/THPO will be consulted as part of the EA and compliance with Section 106.
- No Phase I or II Environmental Site Assessments will be conducted. As work is primarily expected to remain within the SCDOT right-of-way, hazardous materials or underground storage tanks are not expected. In the event a Phase I or II assessment is required, a supplement will be submitted.
- The project does not fall within a TMDL and is not within proximity of shellfish beds.
- The project is not expected to impact FEMA regulated floodplains and will result in a finding of No-Impact; or No-Rise ("based on the hydraulic analysis of the pre-construction and post-construction

discharges, the planned drainage improvements will have no significant impact on either flood elevations or flood widths.”)

Deliverables:

- *One (1) electronic pdf copy of the Environmental Review Report and supporting documentation.*
- *Inclusion of findings within final Project Report*
- *Documentation of regulatory agency consultation.*
- *FONSI-NOI RROF public notice.*
- *Public notices (Early and Final Notices) regarding wetland impacts if applicable.*

12. PERMITTING

12.1. Permitting Packages

MT will prepare and submit permit packages to the agencies for review and issuance of required permits. It is anticipated that wetlands at the outfalls along Graves Station St. and potentially other locations in the project site are present. Minor impacts are expected to accommodate the improved drainage system. The design will be developed with the goal of limiting wetland impacts such that mitigation is not required. If mitigation is unavoidable due to wetland impacts, **MT** will prepare a supplement for mitigation documentation and bank coordination.

It is anticipated that the following permits will be required:

12.2. USACE Jurisdictional Determination

MT shall make a determination of the site, environmental permits expected to be required for this project.

MT will delineate wetlands utilizing the three-parameter approach (hydric soils, hydrophytic vegetation and wetland hydrology) set forth in the 1987 USACE Wetland Delineation Manual. The **MT** will also implement the appropriate regional supplement while delineating waters of the US.

MT will provide an assessment and documentation of site conditions as to the presence and/or absence of wetland areas. The jurisdictional determination corridor will be within the limits of the project. **MT** will prepare and submit a Request for Jurisdictional Determination (JD) package to the United States Army Corps of Engineers (USACE) Charleston District. The JD Request package will include the project site location figures (County Map, USGS Topography Map, and NRCS Soil Survey Map), and an aerial photography figure depicting the surveyed jurisdictional boundaries of waters of the U.S. including tidally influenced waters and any freshwater wetlands. Other items to be prepared and submitted with the JD Request package will include documentation of all permits, representative photographs of each wetland area or wetland types delineated within the project study area, and wetland determination data forms of each wetland area and the adjacent upland. **MT** will provide any additional information requested by USACE necessary to secure the Jurisdictional Determination (JD) or approximation letter from the USACE and include a copy of the JD or approximation letter with the permit application (by reference at a minimum) and/or, if applicable, in the environmental document.

Identification and marking of any upland/wetland boundaries with sequentially numbered flags. Additionally, using sub-meter GPS and/or survey data, **MT** will plot the wetland boundaries on both a surveyed map (in a manner consistent with SCDOT's Road Design custom line style for wetlands and other waters of the U.S.), and a Digital Ortho Quad or other acceptable aerial photography. If a Clean Water Act (CWA) Section 404/401 permit is required, **MT** will include a separate biological assessment report regarding the project effects on any South Carolina State recognized rare, threatened, or endangered species.

MT will schedule a pre-application onsite meeting with the USACE Charleston District, SCDES, SCDNR, and USFWS to review the proposed project, discuss any particular regulatory concerns, and establish a timetable for acquisition of the permit. **MT** will make a determination of the aquatic significance of the stream and confirm these findings with resource and regulatory agency personnel.

12.3. Georgetown County Grading/Building Permit

MT will follow the **COUNTY's** grading/building permit process.

12.4. SCDOT Encroachment Permit

Coordination with SCDOT will be required for work completed along SCDOT-owned roadways, which include all the roads within the project limits. Encroachment permits will be prepared and submitted. Due to the impacts to SCDOT roads, a pre-design meeting will be held with District 5 representatives to discuss the project and intended design approach.

12.5. SCDES OCRM CZC

Due to the projects being within Georgetown County, a Coastal Zone Consistency (CZC) review will be obtained through SCDES OCRM. Wetlands will be flagged, mapped, and a verification from SCDES OCRM will be obtained. The project site is landward of the critical line. Impacts to wetlands are expected to accommodate outfall improvements, but those impacts will be a consideration during design development. **MT** intends to pursue coverage under the conditions of the General Permit.

12.6. SCDES NOI and C-SWPPP

Due to the area of disturbance, a Notice of Intent (NOI) and Comprehensive Stormwater Pollution Prevention Plan (C-SWPPP) will be developed and submitted to the **COUNTY** and SCDES for approval. Since Georgetown County is a designated Municipal Separate Storm Sewer System (MS4) permittee, it self-regulates stormwater discharges. **MT** will prepare the required forms and documents for MS4 approval through the **COUNTY**. The approved NOI and C-SWPPP will be sent for concurrence to SCDES.

12.7. USACE Nationwide Permit

Impacts to wetlands and Waters of the State are expected to accommodate the drainage improvements. A permit through USACE will be required. Impacts will be attempted to be reduced so that a Nationwide Permit will be applicable. This scope of services assumes that impacts to wetlands would be covered by a Nationwide Permit. If wetland impacts fall beyond the limits of Nationwide Permits, mitigation of impacts may be required by USACE. **MT** will help facilitate purchase of credits. Mitigation design is not within the scope.

12.8. FEMA No-Impact Certification

The project area is located outside of FEMA Special Flood Hazard Areas (SFHA) associated with Canaan Branch to the west and Whites Creek Tributary No. 3 to the east. It is anticipated that a no-impact to the SFHA base flood elevations (BFE) and floodway widths can be achieved. The project will follow the County's Flood Ordinance. A No-Impact certification will be prepared and submitted to the County's Floodplain Manager.

Assumptions:

- *Impacts within the project site may include outfall improvements, channel modifications, discharge of outlet and bank protection. The USACE Nationwide Permit will be utilized to authorize impacts.*
- *One (1) on-site meeting with the SCDES and USACE Districts to review the site will be required during the jurisdiction determination process.*
- *Three (3) conference call meetings with the regulatory agencies will be required during the permitting process.*
- *One (1) on-site meeting with the regulatory agencies will be required during the permitting process.*
- *Water quality requirements will be based on the County Guidelines and SCDES OCRM requirements.*
- *Mitigation is not anticipated for this project, in the event mitigation is required, a supplement will be prepared.*

Deliverables:

- *Jurisdiction determination package for submission to USACE (digital)*

- *JD Approval Letter from USACE*
- *GIS or CAD File of Delineation (NAD83 SC State Plane, Intnl Ft)*
- *A Section 404/401 permit application for submission to the USACE (digital)*
- *GP Approval Letter From USACE*
- *GIS or CAD File of Final Permit Drawings (NAD83 SC State Plane, Intnl Ft)*
- *Georgetown County Grading/Building/Zoning Permit*
- *SCDOT Encroachment Permit*
- *SCDES OCRM Coastal Zone Consistency Approval*
- *SCDES/Georgetown County NOI and C-SWPPP*
- *SCDES/USACE General Permit*
- *FEMA No-Impact Certification*

13. DOWNSTREAM IMPACT ANALYSIS

13.1. Downstream Analysis

The downstream analysis (10% rule) requires the engineer to consider the project's downstream effects in terms of volume and peak runoff. **MT** will utilize the revised PCSWMM model for this process. The downstream limit will consider the receiving water body and downstream analysis point until the project site is 10% of the overall watershed.

For this project, stormwater will discharge to the Canaan Branch on an adjacent parcel outside of the project area. The analysis point for the downstream impact analysis will be on Cannan Branch. Additionally, peak discharges will be compared for existing and proposed conditions to ensure the proposed improvements do not increase peak flows leaving the project area.

Deliverables:

- *One (1) electronic pdf copy of Downstream Impact Analysis Report*
- *Inclusion of findings within final Project Report*

14. MOT/SIGNING AND MARKING

14.1. Maintenance of Traffic (MOT) Design

14.1.1. **Preliminary MOT Plans:** **MT** will prepare preliminary plans for the maintenance of vehicular and pedestrian traffic during construction. Standard SCDOT traffic control standard drawings and details will be incorporated into the plans by reference only. Preliminary plans will include identification of vehicular lane closures. Plans will indicate the area of closure and related signage. **MT** will not complete traffic analyses to determine impacts of the MOT plan.

14.1.2. **MOT Plans.** Plans shall conform to SCDOT's Highway Design Manual and FHWA Manual on Uniform Traffic Control Devices, latest editions; SCDOT Standard Specifications (2007); Rule on Work Zone Safety and Mobility (October 1, 2007); SCDOT Standard Drawings; SCDOT Work Zone Traffic Control Procedures and Guidelines; and any applicable SCDOT supplemental specifications. The latest edition of each design manual or guide will be used if these are not the most current. MOT plans will accommodate both vehicular and pedestrian traffic throughout the project corridor.

14.1.3. **Final MOT Plans:** **MT** will include comments from the preliminary MOT meeting held with **SCOR, COUNTY**, and SCDOT to further develop the final MOT plans. Any additional quantities will be included in the Final Construction Plans.

14.2. Signing and Pavement Marking Plans

14.2.1. As the roadway typical section will not be changed, detailed pavement marking and signing plans will not be developed. The existing SCDOT and County owned roads do not currently have pavement markings within the Graves Station community. Therefore no pavement marking and signing plans will be developed.

14.2.2. **MT** will provide a note on the plans directing the contractor to remove and reset street signs that are impacted by construction and that no new signs will be identified or located.

15. FINAL (90%) DESIGN PLANS

15.1. Final (90%) Design

MT will develop final design plans as outlined below. **MT** will develop 90% plans in accordance with Chapter 5 of the OSE Manual for Planning and Execution of State Permanent Improvements. The hydrologic and hydraulic design and layout for the stormdrain systems are accounted for in Task 6

15.1. Final Construction Plans

15.2.1. **MT** will further develop the approved 60% Plans into Final (90%) design plans consisting of:

- Title sheet showing a location map, project layout, and index of drawings.
- Existing right-of-way, tabulation of drainage structures and pipes.
- A summary sheet of all estimated bid quantities, and reference data sheet(s) with pertinent survey data.
- Details, including applicable SCDOT standards, general construction notes, and additional clarifying construction details.
- A general inclusion sheet of clarifying or explanatory notes.
- Plan/profile sheets, at a scale of 1 inch equals 20 feet horizontal, and 1 inch equals 5 feet vertical, showing existing conditions, existing utilities (from field survey or information received from utility owners), survey baseline, demolition plans, utility plans, proposed centerline, edges of pavement, curb and gutter, medians, sidewalks, driveways, construction limits, drainage, right-of- way, control of access, and easements. Proposed horizontal and vertical geometry will also be shown.
- Proposed drainage infrastructure plan and profile sheets including piped and open-section systems. Proposed channel cross-sections will be included with cut and fill earthwork volumes. Drainage structure details will be included.
- Maintenance of Traffic Plans. The Manual on Uniform Traffic Control Devices, latest edition, and SCDOT details will be incorporated into the plans. **MT** will include pavement marking and signing quantities in the final construction cost estimate.

15.2.2. **MT** will prepare a project manual following OSE guidelines including OSE standard documents, specifications, special provisions, details, and other items necessary for project letting.

15.2.3. **MT** will prepare a 90% engineer's estimate. This cost estimate will reflect the Base Bid along with each associated Bid Alternative if required.

15.2.4. **MT** will provide Quality Control and Quality Assurance of the Final Plans for completeness, correctness, accuracy and consistency with the above referenced standards before submitting to **SCOR** and **COUNTY** for review.

15.2.5. **MT** will address and respond up to one (1) rounds of **SCOR** and **COUNTY** comments for the 90% Submission.

15.2.6. Representatives from the **SCOR**, **COUNTY**, and **MT** will perform one (1) field reconnaissance meeting during the final construction plan development. All information gathered during these field investigations will be evaluated and plans revised accordingly.

Deliverables:

- Two (2) hard copies of the full-size set of 90% plans and one set of electronic pdf files. Prior to

submittal for review, all plans will be thoroughly reviewed by MT for completeness, correctness, accuracy, and consistency with the above referenced standards.

- *One (1) electronic copy of all CAD files.*
- *One (1) electronic pdf copy of the 90% engineer's cost estimate. Utility relocation costs and construction duration estimate shall be included.*
- *One (1) electronic pdf copy and one Microsoft Word copy of the project manual containing technical specifications.*
- *One (1) electronic copy of the 90% Report including methodologies, design, and quantity calculations.*

16. ADVERTISEMENT (100%) PACKAGE

16.1. Advertisement (100%) Design

MT will develop the Advertisement Package as outlined below. **MT** will develop the Advertisement Package in accordance with Chapter 5 of the OSE Manual for Planning and Execution of State Permanent Improvements. The hydrologic and hydraulic design and layout for the stormdrain systems are accounted for in Task 6

16.2. Advertisement Package

16.2.1. **MT** will further develop the approved 90% Plans into the Advertisement Package consisting of:

- Title sheet showing a location map, project layout, and index of drawings.
- Existing right-of-way, tabulation of drainage structures and pipes.
- A summary sheet of all estimated bid quantities, and reference data sheet(s) with pertinent survey data.
- Details, including applicable SCDOT standards, general construction notes, drainage details, and additional clarifying construction details.
- A general inclusion sheet of clarifying or explanatory notes.
- Plan/profile sheets, at a scale of 1 inch equals 20 feet horizontal, and 1 inch equals 5 feet vertical, showing existing conditions, existing utilities (from field survey or information received from utility owners), survey baseline, proposed centerline, edges of pavement, curb and gutter, medians, sidewalks, driveways, construction limits, drainage, right-of- way, control of access, and easements. Proposed horizontal and vertical geometry will also be shown.
- Proposed drainage infrastructure plan and profile sheets including piped and open-section systems. Proposed channel cross-sections will be included with cut and fill earthwork volumes. Drainage structure details will be included.
- Maintenance of Traffic Plans. The Manual on Uniform Traffic Control Devices, latest edition, and SCDOT details will be incorporated into the plans. **MT** will include pavement marking and signing quantities in the final construction cost estimate.

16.2.2. **MT** will prepare special provisions, special details, and other necessary bid items outside the normal SCDOT or OSE specifications for project letting.

16.2.3. **MT** will prepare a final construction estimate. This cost estimate will reflect the Base Bid along with each associated Bid Alternative (up to three) if required.

16.2.4. **MT** will provide Quality Control and Quality Assurance of the Final Plans for completeness, correctness, accuracy and consistency with the above referenced standards before submitting to **SCOR** and **COUNTY** for review.

16.2.5. **MT** will address and respond up to two (2) rounds of **SCOR** and **COUNTY** comments for the Advertisement Package.

16.2.6. **Signed** and sealed Construction Plans shall be provided to **SCOR**.

16.2.7. **MT** will provide the bid package to requested bidders digitally

16.2.8. **MT** will attend the pre-bid conference on-site

16.2.9. **MT** will answer questions and help develop/issue addenda as needed

Deliverables:

- *Five (5) full size set of signed and sealed plans and one set of electronic pdf files of Advertisement Package. Prior to submittal to **SCOR**, all plans will be thoroughly reviewed by **MT** for completeness, correctness, and accuracy and consistency with the above referenced standards.*
- *One (1) electronic copy of all CAD files.*
- *One (1) electronic pdf copy of the final engineer's cost estimate. Utility relocation costs and construction duration estimate shall be included.*
- *One (1) electronic pdf copy and one Microsoft Word copy of the Construction Specifications and Special Provisions.*
- *One (1) electronic copy of construction quantity calculation*
- *One (1) electronic copy of the Final Design Report including methodologies and design calculations.*

17. CONSTRUCTION PHASE SERVICES

MT will provide construction phase services. For the basis of this proposal, it is assumed that the construction duration will not exceed 18 months. In the event the construction duration exceeds 18 months, a supplement may be required. **MT** will provide the items detailed below.

- 17.1. **MT** will attend a Pre-Construction Conference and respond to questions by the Contractor pertinent to **MT**'s design.
- 17.2. **MT** will review and approve of shop drawings. Shop drawings will be reviewed for compliance with the intent of plans, specifications, and contract provisions. Shop drawing reviews of subcontract work will be performed on an advisory basis. **MT** will provide a letter of recommendation and/or comments as appropriate.
- 17.3. Design activities resulting from requests by the contractor or a change in existing field conditions that are not considered an errors or omissions. Plan preparation resulting from the above-mentioned design activities.
- 17.4. Interpretations of plans, specifications and contract provisions.
- 17.5. Attendance at field review meetings deemed necessary by the **SCOR**, up to 6 meetings.
- 17.6. Construction Utility Coordination Meeting: **MT** will attend the Construction Utility Coordination meeting.
- 17.7. Respond to Request(s): **MT** shall respond to request(s) made via email, telephone, written, etc. by the **SCOR**, **COUNTY**, SCDOT, utility companies and/or the Contractor including PayApp review and approval.
- 17.8. Record Drawings: **MT** will review the as-built surveys provided by the Contractor and prepare the record drawing package to be submitted to **SCOR** and the **COUNTY**.
- 17.9. **MT** will conduct Davis Bacon interviews including collecting Certified Payroll and comparing with field interviews and final wage determinations to determine compliance. **MT** will collect and review monthly Section 3 reports provided by the Contractor. **MT** will submit all Davis Bacon and Section 3 documentation to SCOR with approved pay applications.
- 17.10. **MT** will perform a substantial completion and final completion inspection. This includes coordinating with the contractor, SCOR, and the County on punch-list items to ensure satisfactory completion.
- 17.11. **MT** will perform a 10 month warranty site inspection.
- 17.12. **MT** will assist with project close-out including closing permits and preparing SCOR and County close-out forms.

18. EXCEPTIONS/EXCLUSIONS

- *Services requested by SCOR that are not included in one of the items above will be classified as out of scope services. MT may provide such additional services to support the project on a time and expense basis in accordance with MT's standard rate and reimbursable expense schedule.*
- *This proposal was prepared under the assumption that the roadways will be restored to previous geometric layout and typical cross section which includes roadway resurfacing.*
- *Drainage improvements are limited to the project outline depicted in Figure 1 and will not include areas outside of this boundary. If additional improvements are desired outside these limits, a supplement will be required.*
- *Utility relocation design is not included in this proposal and may be performed through a supplement.*
- *In the event street light poles are impacted, direction will be provided to the contractor to temporarily remove and replace the light poles, no design or replacement with new fixtures will be provided.*
- *Additional street lighting design is not included in this scope of services.*
- *Utility house connections will be impacted, individual designs for these connections will not be provided beyond providing typical detail to guide the contractor in relocating the connection.*
- *Roadway signage and pavement markings will be restored to pre-construction layout, additional markings and signage design is not included with this scope of services.*
- *Traffic studies or analysis are not provided within this scope of services.*
- *As this project is a drainage improvement project, the scope of services does not include retrofitting the roads within the project limits up to current SCDOT roadway design requirements. Only the drainage system will be designed to meet current design requirements. The roadway will be restored to pre-construction state.*
- *McCormick Taylor shall not be held liable for the Contractors means and methods selected to construct the project.*
- *Pre and Post Construction property condition surveys and vibration monitoring*
- *MT will utilize flowable fill within all pipe trenches as required by SCDOT and to limit vibration resulting from compaction.*
- *Review and analysis of contractor's claims for significant differing subsurface and physical conditions.*
- *Construction staking*
- *Meetings with local, State, or Federal agencies to discuss project-related issues; assistance with response to permit requirements that become effective subsequent to the date of agreement for this scope of work.*
- *Appearances at public hearings or before special boards, not related to public relations support included in this Scope.*
- *Preparation for litigation, arbitration, or other legal or administrative proceedings, or appearances in court or at arbitration sessions in connection with construction incidents.*
- *Phase 1 or 2 environmental site assessments.*
- *Field investigations in support of cultural resources and archaeological assessments only include site photographs which will be supplemented by desktop analysis. Test pits and other field assessments are not included in this scope.*
- *Construction Inspection and associated activities beyond what is included in Task 17.*
- *Laboratory and field testing required during construction and of any special reports or studies on materials and equipment.*
- *Observing factor tests and/or field testing of equipment that fails to pass the initial test.*
- *Assistance in financially related transactions for the project.*
- *Where field conditions differ above and beyond those included in the Construction Contract Documents, preparing documentation including sketches of construction work for approval by SCOR, to supplement the drawings and specifications as may be required; and providing redesign if required.*
- *Services 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.*
- *Services resulting from significant delays, changes, or price increases caused directly or indirectly by shortages of materials, labor, equipment, or energy.*
- *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 the contractor, (3) acceleration of the progress schedule involving service beyond normal working hours, (4) default by contractor, and (5) failure of the contractor complete the work within the contract times.

- *Special services in connection with partial utilization of any part of the project by the County or others prior to substantial completion which requires the project to work additional hours or requires the employment of additional onsite personnel.*
- *Duration of construction oversight and administration is limited to 18 months.*



JULY 15, 2025

PROPOSAL # 251081_R1

McCormick Taylor
Hassan Ismail, PE
1441 Main St., Suite 305
Columbia, SC 29201

RE: GRAVES STATION FRIENDFIELD STORMWATER — GEORGETOWN COUNTY

MR. ISMAIL:

McKim & Creed would like to present our proposal for professional surveying services in connection with the referenced project. We understand the scope of work from our communications to be as follows:

PROJECT UNDERSTANDING

It is our understanding that McCormick Taylor is requesting Aerial Mapping services for ± 70 acres with ground topographic survey within the road right of way of ± 20 acres and ± 6 acres of drainage survey along bypass ditch to support design services related to traditional (grey) infrastructure and nature-based resilient (green) stormwater improvements, and best management practices in Georgetown County, South Carolina along Graves Station Street, Henrietta Lane, Emily Court, Jessica Drive and Natalie Court as shown in the 'Project Area Map'.

PROJECT AREA MAP



PROJECT APPROACH

Below is a brief summary of our approach to the proposed work. It includes our methodology for simultaneous LiDAR and imagery collection and processing with ground survey support for the overall project limits defined in the attached google earth file.

We anticipate the following specific tasks of work to be completed:

TASK 1. FIELD SURVEY

- Survey work will be performed to the Standards of Practice for Land Surveying in South Carolina and prepared in accordance with the Standards of Practice for Surveying, Code of Regulations – Chapter 49, Article 4.
- The project survey control will be tied to the South Carolina State Plane coordinate system to be a basis for all surveys required on the project using the NAD83(current adjustment) horizontal datum, the NAVD88 vertical datum and the International Foot. Supplemental control will be established as needed.
- Locate Property Monuments (front monuments if sufficient numbers are found) within the project limits to facilitate the mapping of the properties from deed and/or plat information of record. The monuments that are found will be tied into the project's horizontal survey control network. This is considered a partial property survey and does not constitute a full boundary survey. (±71 parcels)
- Property corners found and field surveyed will be used to produce a property strip map which will show property lines calculated from existing deeds and/or plats of record. The Property Strip Map is considered a partial property survey and does not constitute a full boundary survey. (±71 parcels)
- Perform Cross Sections at 50-foot intervals along the roadway corridors for areas within road right of ways. The cross sections will include sufficient topographic breakline (3D) data (such as top bank, edge of asphalt, walls, etc.) to accurately develop the Digital Terrain Model for the project. (±12 acres)
- Perform detailed Planimetric (2D) surveys along the project corridors. The detailed survey will gather all planimetric information (such as buildings, fences, trees, poles, etc.) necessary for design of the project. (±12 acres)
- Tree Survey will be performed in areas within road right of way and proposed detention areas as shown on Project Area Map (blue areas) locating trees with 6" DBH or larger. (±5 acres)
- Perform Supplement Aerial Mapping by field surveying those planimetric (2D) and topographic breakline (3D) features (such as buildings, fences, trees, poles, top bank, edge of asphalt, walls, etc.) that are obscured on the aerial mapping within the project limits. (±5 acres)
- Perform Drainage Feature survey of bypass ditch along the eastern and southern area of the project and perform cross sections at 100-foot intervals along bypass ditch for ±4,900' beginning at Amelia Dr. Cross sections will extend 25' from the top bank of bypass ditch.
- Locate and field survey existing Storm Drainage Structures within the project limits. Information obtained will include top and invert elevations, pipe size and pipe material.
- Locate and field survey Gravity Sanitary Sewer Manholes with connectivity between manholes to include rim elevations, invert elevations, type and size of pipe.
- Locate and field survey Wetland Boundaries as delineated by the environmental engineer within the project limits.
- Locate utilities such as utility poles, area lights, transformer pads, pedestals, fire hydrants, water meters, water valves, cleanouts, sanitary sewer manholes – underground utilities will be located where above ground features are visible and locate paint markings by others.
- Submit CSX Rights of Enter General Access permit application

TASK 2. AERIAL MAPPING CONTROL

Prior to the acquisition, McKim & Creed personnel will establish survey control on the site and set and obtain coordinates on six (6) aerial targets and/or photo-identifiable points. These control points will be used for calibrating the LiDAR and triangulating the aerial imagery. Preferred locations for the points have been selected and are provided in the attached google earth file. Ground control accuracy and survey procedures will be established according to guidelines for network accuracy as detailed in the Geospatial Positioning Accuracy

Standards, Part 2: Standards for Geodetic Networks (FGDC-STD-007.2-1998), the NOAA Technical Memorandum NOS NGS 92, and Addendum II of ASPRS Positional Accuracy Standards for Digital Geospatial Data Edition 2, Version 2 (2024).

All control data will be adjusted to the State Plane Coordinate System, NAD83, NAVD 88, with an accuracy of 5 cm (at least twice the accuracy of the proposed derived mapping product of 10 cm). Points shall be surveyed on flat or uniformly sloped open terrain with slopes of 10% or less and will avoid vertical artifacts or abrupt changes in elevation.

Statistical report for vertical accuracy verification will be provided, based on an additional thirty (30) ground check shots (X,Y,Z) collected spatially distributed around the site. These points would be used in assessing the RMSEz of the collected data, with results provided in .txt or .pdf format.

TASK 3. LIDAR\IMAGE ACQUISITION

We will use a manned fixed-wing aircraft equipped with a full waveform LiDAR sensor coupled with a high performance IMU/GNSS unit and RGB camera.

The LiDAR data will be collected at a density of ~20 points per square meter (ppsm). The color aerial imagery will be collected simultaneously with the LiDAR at a minimum of 60% forward lap and 30% sidelap coverage with a Ground Sample Distance (GSD) of ~5 cm.

TASK 4. DATA PROCESSING

LiDAR Processing

To ensure geometric accuracy of the point cloud, we will calibrate the LiDAR swaths relative to each other and the ground control.

The LiDAR will be classified using a combination of automated and manual edit/reclassification processes to support the generation of one-foot contours, and will be coded as:

- 1 – processed, but unclassified
- 2 – Bare-earth ground
- 7 – noise (low or high; manually identified; if need)
- 14 – wire

Topographic Mapping

Map features will include visible/discernable features at a 1" = 50' scale as depicted in APPENDIX A - TOPOGRAPHIC FEATURE DEPICTION SPECIFICATION. The extracted/compiled topographic features will be merged with Keypoints derived from the classified LiDAR ground points, removing the minor variations and irregularities of the surface while still maintaining accuracy for a Digital Terrain Model (DTM) suitable for 1-foot contours. This surface model will be included in the delivered DTM file.

Obscured and Obstructed Features

The LiDAR sensor we propose for this project has proven successful for similar projects and is especially suited to collecting ground returns through vegetation. Based on the provided Area of Interest we do not expect to see any obscured areas; however, in areas that are obscured and/or obstructed, terrain and feature collection may be limited. These areas will be outlined with an "obscured area" polygon. Additional ground survey may be required to collect data in these areas.

Orthophotography

Collected imagery will be rectified to the new LiDAR surface model, and the individual 3-inch GSD ortho image files will be processed to ensure a seamless appearance and will be tonally balanced to produce a uniform

contrast and tone across the entire project area. The orthophotography will be delivered in tiled TIF/TFW and ECW/EWW formats.

DATA ACCURACIES

Based on ASPRS 1"=50' scale and 1' contours

Horizontal

Data set will be produced to meet ASPRS Positional Accuracy Standards for Digital Geospatial Data, Edition 2, Version 2 (2024) for a 15 cm RMSEh Horizontal Positional Accuracy Class.

Vertical

Data set will be produced to meet ASPRS Positional Accuracy Standards for Digital Geospatial Data, Edition 2, Version 2 (2024) for a 10 cm RMSEv Non-Vegetated Vertical Accuracy (NVA) Class.

DELIVERABLES

An electronic copy of all information will be delivered in the following specified formats (other formats can be provided upon request):

- CAD
 - "AOI"_DTM.dwg (containing surface model)
 - "AOI"_Tile_Index.shp
 - ALTA/NSPS Land Title Survey boundary
- Orthos
 - "tile#".tif/.tfw
 - "tile#".ecw/.eww
- LiDAR
 - Bare Earth LAS - "tile#".las
 - All Points LAS - "tile#".las
- Accuracy Report (file type: *.pdf)
- Final ALTA/NSPS Plat signed and sealed by Professional Land Surveyor (file type: *.pdf)

*Mapping deliverables do not include signed/sealed plan sheets

ASSUMPTIONS / CLARIFICATIONS

Information to be provided by Client: McKim & Creed shall rely on the completeness and accuracy of all information and technical data provided by the Client and Client's other consultants. The Client shall provide all necessary information required by McKim & Creed to complete its work, including any updates to previously provided information and any other information reasonably requested by McKim & Creed.

Items to be provided by Client/Team Partner include:

- Approval of flight plans and AOI delineation
- Coordinate site access with owner for survey crew

McKim & Creed Certifications: McKim & Creed shall not be required to sign any documents, no matter by whom they may be requested, that would result in the McKim & Creed 's having to certify, guarantee or warrant the existence of conditions which McKim & Creed cannot ascertain. The Client also agrees that it has no right to make the resolution of any dispute with McKim & Creed or the payment of any amounts due to McKim & Creed in any way contingent upon McKim & Creed signing any such certification.

SCHEDULE

We will perform the work described in the above Scope of Services as expeditiously as practical, weather permitting, to meet a mutually agreed schedule upon receipt of your written authorization to proceed. We anticipate ground survey to begin within 2 weeks from Notice to Proceed with aerial acquisition to occur +/- 1 week from placement of panels (weather dependent), and approximately 3-4 weeks from receipt of control and aerial data (from subconsultant) to complete the aerial mapping deliverables. We will conduct ground survey concurrent with aerial mapping and estimate 3-4 weeks from receipt of aerial mapping to complete the final deliverables. (± 9 -10 weeks from NTP)

BASIS OF COMPENSATION

We will invoice for our fixed fee services at the end of each billing cycle on a percentage complete basis. The Client is specifically requested to review the "Billing and Payment" Section of the attached McKim & Creed General Conditions. McKim & Creed's ability to continue providing services on your project is dependent on the timely payment of our invoices. McKim & Creed reserves the right, and the Client acknowledges this right by entering into this Agreement, to stop work and also withhold the submittal of our documents should the Client's invoices become past due.

For services described in the above Scope of Work, McCormick Taylor agrees to compensate McKim & Creed, Inc. on the following schedule:

Field Survey	\$74,345.00
CSX Right of Entry Permit	\$ 2,000.00
Aerial Acquisition and Processing:	<u>\$21,955.00</u>
Total Fixed Fee:	\$98,300.00

ATTACHMENTS

The following documents are attached hereto and incorporated herein by reference:

1. graves_station_aerial.kmz

Any work not described in the above scope of work will be deemed additional services and must be approved by authorized individuals of the client and McKim & Creed in writing prior to beginning the additional services.

If the proposal is not accepted within 30 days, we reserve the right to revise or withdraw the proposal entirely at our discretion.

We appreciate the opportunity to provide this proposal to you and look forward to working on the project with you.

Sincerely,
McKim & Creed, Inc.



DAVID E. LUKAC JR., PLS, EIT — SURVEY GROUP LEADER - GREENVILLE

DLUKAC@MCKIMCREED.COM

864-447-6477 OFFICE

APPENDIX A : TOPOGRAPHIC FEATURE DEPICTION SPECIFICATION

This appendix contains the features that will be collected at the target scale of 1"=50' as visible and discernable from the aerial dataset(s) to support 1 ft contours. Translations can be made to correlate these features to a client provided layer/feature list; however, any features that do not have a comparable translation will remain on our standard level/layer. Additional features can be added but must be independently identified and scheduled in the "project-specific requirement" section.

	FEATURES	DESCRIPTION	DTM FEATURE	SURFACE VOID
	Transportation			
	Paved Road	defined by edge of pavement (EP)	yes	
	Paved Shoulder	pavement between edge of paved road and edge of total paved surface (if greater than 5 ft wide)	yes	
		travel lane paint stripe takes precedence		
	Top of Curb	defined by either back or front of the top of curb	yes	
	Bottom of Curb	defined by bottom of curb	yes	
	Unpaved Road	dirt or gravel road maintained as a thoroughfare	yes	
		defined by edge of graded surface or edge of tire wear lines - whichever is appropriate		
	Trail	dirt passageway that is permanent in nature	yes	
		defined at edge if greater than 6 ft wide otherwise just centerline is collected		
	Paved Parking	defined by edge of pavement (EP) of parking lot and parking lot islands	yes	
	Unpaved Parking	dirt or gravel maintained parking area - defined at edge	yes	
	Railroad	defined at top of rail	yes	
	Runway	airport pavement used for takeoff, landing, or taxiing	yes	
	Paved Drive	residential driveway defined at edge of pavement	yes	
	Unpaved Drive	residential driveway defined by edge of gravel or dirt	yes	
	Sidewalk	public sidewalks defined at edge	yes	
		private sidewalks collected only if requested or if appropriate for surface definition		
	Guardrail	single or double sided defined at center of rail		
		does not include individual posts		
	Solid Paint Stripe	solid pavement marking on roadway (centerline or travel lane) - digitized at center	yes	
		double lines are digitized with single line in the center		
	Dashed Paint Stripe	dashed pavement marking on roadway (centerline or travel lane) - digitized at center	yes	
		if parallel to solid line a single solid line is digitized in the center		

	Bridge	structure erected over obstacle or depression - digitized at edge as a closed shape		used as clip boundary for surface
		includes automotive, railroad, and foot bridges		
	Bridge Features	Paved road, shoulder, curb, sidewalk, and paint stripes will be collected on a bridge_ "feature" level		
	Obscured Area	Outline of obscured/obstructed planimetric/surface features		
	Structures			
	Building	digitized as a closed shape at roof/gutter line of structure (residential and commercial)		used as clip boundary for surface
		includes covered porches, permanent overhangs, and carport roofs		
	Retaining Wall	fixed structure retaining ground - digitize centerline at the top with breakline at bottom	yes	
	Wall	freestanding wall (does not retain ground)		
		digitized centerline at top - if large digitized edges		
	Concrete Barrier	wall erected to impede traffic - mainly along roadways digitized centerline		
	Ruin or Under Construction	digitized outline of building, foundation slab, or remains		
		no other planimetric features are collected within boundary unless specifically requested		
	Dam	barrier across river, creek, or swamp to regulate or obstruct water flow - digitized at edge	yes	
		beaver dams large enough to affect water flow to be outlined and labeled		
	Cemetery	digitized outline of boundary		
		if fence delineates boundary, then just a label is provided		
		no other planimetric features are collected within boundary unless specifically requested		
	Tank	outline of public utility tanks, industrial storage tanks, and propane tanks		used as clip boundary for surface
	Silo	outline of cylindrical receptacle for farm product storage		used as clip boundary for surface
	Fence	digitized centerline at top		
		does not include individual fence posts		
		no distinction made between metal or wood		
	Gate	digitized centerline of gate as if it were closed		
	Slab	outline of miscellaneous concrete slabs such as flagpole base or concrete around structure	yes	
		also used for patios		
		if elevated above ground add breakline at the bottom		
	Pool	digitized edge concrete around in ground pools and centerline of walls in above ground pools	yes	used as clip boundary for surface
	Sign	digitized center of signpost - show direction		
		large signs such as billboards digitized centerline at top		

	Power Pole	utility pole from which power, telephone or cable lines are suspended - digitized center		
	Transmission Tower	large structure for supporting power lines - digitized outline of base of tower legs		
	Guy Anchor	anchor point for guy wire coming of pole - digitized center show direction to pole		
	Fire Hydrant	digitized center of element		
	Manhole	digitized center of manhole - can be sewer, conduit, etc.		
	Light Pole	pole supporting a street light		
		if pole has power lines collect as power pole		
	Miscellaneous Pole	center of poles greater than 6 ft in height		
	Miscellaneous Post	center of posts less than 6 ft in height		
	Mailbox	center of mailbox		
	Antenna	center of tower - if multiple legs collect outline		
	Miscellaneous Feature	outline or center point of unidentifiable items		
	Athletic Field	outline of athletic field		
		permanent basketball goals, football goal post, etc. shown as miscellaneous posts		
		tennis court nets or posts are not collected		
	Pile	digitized outline stacked material of piles of dirt, sand, gravel	yes	
	Pipe	centerline of individual single pipes used for transportation of liquids		
		cluster of pipes can be outlined as a single unit		
		does not include supporting structures		
	Pier/Dock	deck supported by posts extending over water - digitized edge		
	Riprap	rocks placed along slopes to lessen erosion - outline area	yes	
	Cattle Guard	barrier that prevents animals from crossing - digitized outline		
	Natural Features			
	Breakline	digitized line defining terrain breaks	yes	
	Masspoints	Individual points to support surface modeling	yes	
	Water	digitized edge of rivers/streams wider than 10 ft, and lakes/ponds larger than 1 acre	yes	
		tidal areas may contain discontinuities along shoreline		
	Swamp/Marsh	area of spongy, wet ground, usually harboring vegetation - digitized outline	yes	
	Top of Slope	digitized top of bank	yes	
	Toe of Slope	digitized bottom of slope if no water line is present	yes	
		if drainage channel is less than 5 ft wide only collect centerline		
	Treeline	outline of grouped trees or single large canopy that trunk cannot be determined		
	Tree	single tree over 8 ft tall - digitize center of base of trunk		
		no distinction made between deciduous and coniferous		

	Major Contour	Index Contour at 5 ft interval		
	Minor Contour	Intermediate Contour at 1 ft interval		
	Drainage Structures			
	Culvert	pipe drain usually located under roads or driveways	yes	
		use cell for small culverts and outline larger		
		only linework used for DTM, cells excluded		
	Concrete Drain	paved ditch - digitized outline	yes	
	Catch Basin	outline the drainage structure	yes	
	Inlet	opening to allow drainage - digitized outline	yes	
Project-Specific – marked with "X"				
	Pavement Markings	digitized centerline of parking stripes		
		outline of stopbars and turn arrows		
	Text Labels	labeling of planimetric features		
	Spot Elevations	labeling of heights absolute and/or height above ground		
X	Vectorized wires	Transmission/distribution wires (excludes substation)		
	Client Specified			
	Client Specified			
	Client Specified			
	Client Specified			
	Client Specified			
	Client Specified			
	Client Specified			
	Client Specified			
	Client Specified			

TASK 5 – GEOTECHNICAL EXPLORATION AND ENGINEERING SERVICES

General

The **CONSULTANT** shall provide final geotechnical exploration for drainage improvements. The exploration will be done by mechanical drill rig at seven (7) planned locations. The exploration will also include double ring infiltrometer tests for three (3) of the stormwater BMP's/LID's. The final boring locations may be off-set from the footprints of the storm water structures due to utility conflicts and to try to prevent damage to trees. A report will be prepared that will outline the necessary information to provide guidance to the contractor on foundation improvements, general recommendations for dewatering, and infiltration at stormwater BMP's.

Field Exploration (General) – 5.1.1

Prior to beginning the subsurface field exploration, the **CONSULTANT** will notify the **CITY** at least seven (7) days in advance so the **CITY** can coordinate with the SCDOT, City staff, and property owners. The **CONSULTANT** shall comply with all SCDOT lane closure restrictions.

Boring locations will be located in or adjacent to the proposed new stormwater structures. Boring locations in the final exploration are expected to occur inside SCDOT or **CITY** Right-of-Way. Borings and double ring infiltrometer tests will not occur on private property.

Clearance of utilities will be the responsibility of the **CONSULTANT**. A request for utility marking will be made to the Statewide Utility One-call Service (SC811) at least three (3) -days prior to field work. The **CONSULTANT** will mark utilities that are not marked by SC811 as part of the SUE Task. Information obtained from the SUE scope of work will be shared with geotechnical staff prior to field exploration work.

Proposed boring locations will be determined by the **CONSULTANT**. The **CONSULTANT** will provide copies of the proposed subsurface exploration plan to the **CITY** prior to initiation of field work for review and acceptance. The subsurface exploration plan will include, as a minimum, the following:

- Description of the soil or rock stratification anticipated
- Description of the proposed testing types
- Depth of tests
- Location of tests

Borings – The boring locations will be located within the proposed project boundary.

Final Field Exploration – 5.1.2

Subsurface Exploration – A soil test boring or double ring test will be performed at identified locations. The following is a summary of the quantity and depth.

- Seven (7) borings to ten (10) feet below the ground surface.

- Three (3) double ring infiltrometer tests at a depth of three (3) feet below existing ground surface.
- Two (2) composite bulk samples will be obtained from auger cuttings.

Other Testing Items – 5.1.3

CONSULTANT anticipates that up to two (2) days of traffic control lanes closures will be needed to safely access the boring and infiltrometer locations.

At the completion of field work, test locations will be measured for latitude and longitude, elevation, and station by **CONSULTANT** with survey grade GPS equipment.

Field Engineering – **CONSULTANT** will provide oversight of operations by a field engineer technician and/or field geologist. Field personnel will consist of one (1) field services supervisor and/or one (1) geologist per drill rig. Soil Classification will be in accordance with USCS (ASTM D-2487). The Field Services Supervisor will have a minimum of three (3) years of experience in supervision of field equipment and field personnel and will coordinate field activities including clearance of underground utilities through South Carolina 811.

Laboratory Testing – **CONSULTANT** will be AASHTO certified in the anticipated laboratory testing outlined below and/or any additional testing that may be required. See Chapter 5 of the SCDOT GDM for AASHTO and ASTM designations. The laboratory testing on selected samples will evaluate the types of soils encountered, confirm visual classifications, and estimate engineering properties for use in design. Laboratory testing for the exploration is estimated to include the following: Seven (7) natural moisture content tests, Seven (7) grain size distribution with wash no. 200 sieve, and Seven (7) moisture-plasticity relationship determinations (Atterberg Limits). The bulk samples will be tested for Standard Proctor, grain size, plasticity limits, and California bearing ratio testing.

Geotechnical Engineering Report – 5.1.4

The Final Geotechnical Engineering Report will be conducted in accordance with SCDOT GDM for new cross line culverts. The report will discuss stormwater structure foundation improvements, general recommendations for dewatering, available infiltration rate at stormwater BMP's, and pavement section recommendations.

Assumptions:

1. *Assumes City of Georgetown will provide access to the site or work will occur on SCDOT ROW under an encroachment permit.*
2. *Field work will occur on public property of the City of Georgetown and/or SCDOT. CONSULTANT is not responsible for obtaining permission to access private property.*
3. *Subgrade soils will be free of contamination. FME is not required to drum spoils.*
4. *Slope stability or settlement calculations for embankments and retaining walls are not needed and are not included.*
5. *Seismic design is not required and is not included.*

Deliverables:

1. *Final geotechnical report.*

Project ID:
County:

Graves Station
Georgetown



Date Prep.: 10/2/2025
Prepared By: AMC/AW
Org: FME

GEOTECHNICAL COST ESTIMATE

Type Work (FIELD)	Procedure	Procedure Description	Pay Unit	Quantity	Unit Rates	Total Cost
Mobilization						
a. Truck/Trailer Drill Rig and Crew			\$ per mile		\$5.50	\$0.00
b. Track/Rubber-Tire ATV Drill Rig and Crew; and barge mobilized over land			\$ per mile	320	\$7.50	\$2,400.00
c. Barge mobilized over water			\$ per hour		\$450.00	\$0.00
Use of All-terrain Vehicle			\$ per day		\$275.00	\$0.00
Use of Swamp/Marsh Buggy			\$ per day		\$6,100.00	\$0.00
Crane			\$ per hour		\$550.00	\$0.00
Barge						
a. small			\$ per day		\$3,275.00	\$0.00
b. large			\$ per day		\$5,600.00	\$0.00
Difficult Moving/ Standby/ Expendables			\$ per hour		\$285.00	\$0.00
Private Utility Locating			\$ per hour		\$280.00	\$0.00
Traffic Control						
a. Shoulder work > 15 ft.			\$ per day		\$365.00	\$0.00
b. Shoulder work 1-15 ft.			\$ per day		\$820.00	\$0.00
c. Lane Closure			\$ per day	2	\$2,650.00	\$5,300.00
d. Freeway/Expressway Shoulder Closure			\$ per day		\$280.00	\$0.00
e. Freeway/Expressway Lane Closure			\$ per day		\$4,150.00	\$0.00
Light Plant			\$ per day		\$220.00	\$0.00
Bridge Deck Coring			\$ per hole		\$280.00	\$0.00
Pavement Coring			\$ per hole		\$176.00	\$0.00
Survey Crew and Equipment			\$ per hour	4	\$225.00	\$900.00
Hand Clearing			\$ per hour	8	\$220.50	\$1,764.00
Mechanized Clearing			\$ per hour		\$412.00	\$0.00
Auger Probes or Wash Borings			\$ per foot		\$12.50	\$0.00
Soil Test Borings on Land with Standard Penetration Testing (SPT-N)	AASHTO T206, AASHTO T306 (ASTM D1586, ASTM D6151, ASTM D4633)	Standard Method of Test for Penetration Test & Split Barrel Sampling of Soils				
a. Borings from ground surface to a depth of 150 feet			\$ per foot	70	\$23.50	\$1,645.00
b. Borings from 150 feet to 250 feet			\$ per foot		\$49.00	\$0.00
Soil Test Borings Over Water with Standard Penetration Testing (SPT-N)	AASHTO T206 (ASTM D1586, ASTM D4633)	Standard Method of Test for Penetration Test & Split Barrel Sampling of Soils	\$ per foot		\$43.00	\$0.00
Standard Penetration Tests (Additional)	AASHTO T206 (ASTM D1586)	Standard Method of Test for Penetration Test & Split Barrel Sampling of Soils	\$ per test		\$32.50	\$0.00
Piezcone Penetration Test (CPTu)	ASTM D 5778	Standard Test Method for Electronic Friction Cone and Piezocone Penetration Testing of Soils	\$ per foot		\$22.50	\$0.00
CPTu Seismic Test	ASTM D 7400	Standard Test Methods for Downhole Seismic Testing	\$ per test		\$38.50	\$0.00

CPTu Pore Pressure Dissipation Test			\$ per hour		\$340.00	\$0.00
Field Vane Shear Tests	AASHTO T223 (ASTM D2573)	Standard Method of Test for Field Vane Shear Test in Cohesive Soil	\$ per test		\$350.00	\$0.00
Flat Plate Dilatometer Testing	ASTM D6635	Standard Test Method for Performing the Flat Plate Dilatometer	\$ per foot		\$22.50	\$0.00
Manual (Hand) Auger Borings			\$ per hour		\$180.00	\$0.00
Dynamic Cone Penetrometer Tests	Sowers & Hedges, 1966 (ASTM D6951)	Standard Test Method for Use of the Dynamic Cone Penetrometer in Shallow Pavement Applications	\$ per hour		\$249.00	\$0.00
Disturbed (Bulk) Soil Samples			\$ per sample	2	\$75.00	\$150.00
Test Pits			\$ per hour	18	\$275.00	\$4,950.00
Undisturbed (Shelby Tube) Soil Sampling						
a. 3" tube (Fixed Head Sampler)	AASHTO T207 (ASTM D1587)	Standard Method of Test for Thin Walled Tube Sampling of Soils	\$ per attempted sample		\$141.00	\$0.00
b. 3" tube (Alternative Sampler)	AASHTO T207 (ASTM D1587, ASTM D6519)	Standard Method of Test for Thin Walled Tube Sampling of Soils	\$ per attempted sample		\$235.00	\$0.00
Rock Coring						
a. Rock Coring from ground surface to a depth of 150 feet	AASHTO T225 (ASTM D2113)	Standard Method of Test for Diamond Core Drilling for Site Investigation	\$ per foot		\$84.00	\$0.00
b. Rock Coring from 150 feet to 500 feet	AASHTO T225 (ASTM D2113)	Standard Method of Test for Diamond Core Drilling for Site Investigation	\$ per foot		\$100.00	\$0.00
c. Rock Coring from ground surface to a depth of 150 feet for seismic downhole testing	AASHTO T225 (ASTM D2113)	Standard Method of Test for Diamond Core Drilling for Site Investigation	\$ per foot		\$110.00	\$0.00
Casing						
a. 4" PVC			\$ per foot		\$11.00	\$0.00
b. 4" Steel			\$ per foot		\$12.00	\$0.00
Grout Seal of Test Holes (SPT, CPT, DMT, auger/wash borings, geophysical holes, rock core holes)			\$ per foot		\$10.00	\$0.00
Geophysical Testing						
Geophysical Testing Setup			\$ per test location		\$650.00	\$0.00
Geophysical Testing using Downhole Methods	ASTM D7400	Standard Test Methods for Downhole Seismic Testing	\$ per test interval		\$66.00	\$0.00
Geophysical Testing using Spectral Analysis of Surface Waves/Multi-channel Analysis of Surface Waves/Refraction Microtremor			\$ per test		\$3,965.00	\$0.00
Geophysical Testing using Seismic Refraction Methods	ASTM D5777	Standard Guide for Using the Seismic Refraction Method for Subsurface Investigation	\$ per test		\$3,965.00	\$0.00
Geophysical Testing using Electric Resistivity (Corrosivity Testing)	ASTM G57	Standard Test Method for Field Measurement of Soil Resistivity Using the Wenner Four-Electrode Method	\$ per test		\$3,600.00	\$0.00

Geophysical Testing using Suspension Logging methods	ASTM D5753	Standard Guide for Planning and Conducting Borehole Geophysical Logging				\$0.00
Specialized Geophysical Testing (Seismic Reflection, Crosshole Shear Wave Velocity Method, Electrical Resistivity Tomography (ERT) or Electrical Resistivity Imaging (ERI), Gamma/Spontaneous Potential, Ground Penetrating Radar, Optical/Acoustic Televiewer, etc.)	AASHTO/ASTM	Applicable AASHTO or ASTM procedure and manufacturer's instruction for equipment in use.				\$0.00
Installation and Monitoring of geotech. Instr. (inclinometers, piezometers, settlement plates, vibration monitoring, etc.)	AASHTO/ASTM	Applicable AASHTO or ASTM procedure and manufacturer's instruction for equipment in use.				\$0.00

SUBTOTAL = \$17,109.00
% of TOTAL = 42.48

Type Work (LAB)	Procedure	Procedure Description	Pay Unit	Quantity	Unit Rates	Total Cost
UD Preparation			\$ each		\$225.00	\$0.00
Moisture Content	AASHTO T265 (ASTM D2216)	Standard Method of Test for Laboratory Determination of Moisture Content of Soils	\$ each	7	\$14.50	\$101.50
Atterberg Limits	AASHTO T89 AASHTO T90 (ASTM D4318)	Standard Method of Test for Determining the Liquid Limit of Soils And Determining the Plastic Limit and Plasticity Index of Soils	\$ each	9	\$105.00	\$945.00
Shrinkage Limits	AASHTO T92 (ASTM D4933)	Standard Method of test for Determining the Shrinkage Factors of Soils	\$ each		\$143.00	\$0.00
Swell Test	AASHTO T258	Standard Method of Test for Determining Expansive Soils	\$ each		\$400.00	\$0.00
Grain Size Analysis						
a. Wash 200	AASHTO T11 (ASTM D1140)	Standard Method of Test for Materials Finer Than 75-µm (No. 200) Sieve in Mineral Aggregates by Washing	\$ each		\$55.00	\$0.00
b. Grain Size	ASTM D6913	Standard Method of Test for Particle Size Analysis of Soils	\$ each	9	\$116.00	\$1,044.00
c. Hydrometer and Grain Size	ASTM D7928 & ASTM D6913	Standard Test Method for Particle-Size Distribution (Gradation) of Fine-Grained Soils Using the Sedimentation (Hydrometer) Analysis and Standard Method of Test for Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis	\$ each		\$200.00	\$0.00
d. Elutriation	SC T-34	Mechanical Analysis of Soils (Elutriation Method)	\$ each		\$160.00	\$0.00

Percentage of Fractured Particles in Coarse Aggregates	ASTM D5821	Standard Test Method for Determining the Percentage of Fractured Particles in Coarse Aggregates	\$ per bulk sample		\$120.00	\$0.00
Specific Gravity	AASHTO T100 (ASTM D854)	Standard Method of Test for Specific Gravity of Soils	\$ each		\$70.00	\$0.00
Unit Weight						
a. Standard Proctor	AASHTO T99 (ASTM D698)	Standard Method of Test for Moisture-Density Relations of Soils Using a 5.5 lb. Rammer and a 12-in. Drop	\$ each	2	\$155.00	\$310.00
b. Modified Proctor	AASHTO T180 (ASTM D1557)	Standard Method of Test for Moisture-Density Relations of Soils Using a 10 lb. Rammer and an 18-in. Drop	\$ each		\$176.00	\$0.00
c. Maximum Index Density and Unit Weight of Soils	ASTM D4253	Standard Method of Test for Maximum Index Density and Unit Weight of Soils Using a Vibratory Table	\$ each		\$335.00	\$0.00
d. Minimum Index Density and Unit Weight of Soils	ASTM D4254	Standard Method of Test for Minimum Index Density and Unit Weight of Soils Using and Calculation of Relative Density	\$ each		\$152.00	\$0.00
California Bearing Ratio	AASHTO T193 (ASTM D1883)	Standard Method of Test for The California Bearing Ratio	\$ each		\$250.00	\$0.00
Unconfined Compressive Strength of Cohesive Soil	AASHTO T208 (ASTM D2166)	Standard Method of Test for Unconfined Compressive Strength of Cohesive Soil	\$ each		\$145.00	\$0.00
Compressive Strength of Rock Cores	ASTM D7012	Standard Test for Compressive Strength and Elastic Moduli of Intact Rock Core Specimens under Varying States of Stress and Temperatures	\$ each		\$475.00	\$0.00
LA Abrasion						
a. Small-Size Coarse Aggregate	ASTM C131	Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Low Angeles Machine	\$ each		\$270.00	\$0.00
b. Large-Size Coarse Aggregate	ASTM C535	Standard Test Method for Resistance to Degradation of Large-Size Coarse Aggregate by Abrasion and Impact in the Low Angeles Machine	\$ each		\$290.00	\$0.00
Soundness of Aggregates	ASTM C88	Standard Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate	\$ each		\$610.00	\$0.00
Permeability Test						
a. Constant Head	AASHTO T215	Standard Method of Test for Permeability of Granular Soils (Constant Head)	\$ each		\$345.00	\$0.00
b. Falling Head	ASTM D5856	Standard Test Method for Measurement of Hydraulic Conductivity of Porous Material Using a Rigid-wall, Compaction-mold Permeameter	\$ each		\$340.00	\$0.00

c. Flexible Wall	ASTM D5084	Standard Test Method for Measurement of Hydraulic Conductivity of Saturated Porous Material Using a Flexible Wall Permeameter	\$ each		\$450.00	\$0.00
Ignition Loss	SC T-36	Procedure for Determining % Ignition Loss of Inorganic Soils	\$ each		\$105.00	\$0.00
Triaxial Shear						
a. Unconsolidated Undrained (UU)	AASHTO T296 (ASTM D2850)	Standard Method of Test for Unconsolidated, Undrained Compression Strength of Cohesive Soils in Triaxial Compression	\$ each		\$630.00	\$0.00
b. Consolidated Undrained with pore pressure measurement (CU w/pp)	AASHTO T297 (ASTM D4767)	Standard Method of Test for Consolidated, Undrained Triaxial Compression Test on Cohesive Soils	\$ each		\$1,225.00	\$0.00
c. Consolidated Drained (CD)	ASTM D7181	Standard Test Method for Consolidated Drained Triaxial Compression Test for Soils	\$ each		\$1,600.00	\$0.00
Direct Shear	AASHTO T236 (ASTM D3080)	Standard Method of Test for Direct Shear Test of Soils Under Consolidated Drained Conditions	\$ each		\$995.00	\$0.00
Consolidation						
a. Consolidation Test (16 load increments)	AASHTO T216 (ASTM D 2435)	Standard Method of Test for One Dimensional Consolidation Properties of Soils	\$ each		\$1,175.00	\$0.00
b. Additional load increments			\$ each		\$80.00	\$0.00
c. Additional test time			\$ per day		\$115.00	\$0.00
Organic Content	AASHTO T267 (ASTM D2974)	Standard Method of Test for Determination of Organic Content in Soils by Loss on Ignition	\$ each		\$81.00	\$0.00
pH						
a. soil	AASHTO T289 (ASTM G51)	Standard Method of Test for Determining pH of Soil for Use in Corrosion Testing	\$ each		\$55.00	\$0.00
b. water	ASTM D1293	Standard Test Methods for pH of Water	\$ each		\$55.00	\$0.00
Chloride Content						
a. soil	AASHTO T291	Standard Method of Test for Determining Water-Soluble Chloride Ion Content in Soil	\$ each		\$115.00	\$0.00
b. water	ASTM D512	Standard Test Methods for Chloride Ion in Water	\$ each		\$115.00	\$0.00
Sulfate Content						
a. soil	AASHTO T290 (ASTM C1580)	Standard Method of Test for Determining Water-Soluble Sulfate Ion Content in Soil	\$ each		\$120.00	\$0.00
b. water	ASTM D516	Standard Test Methods for Sulfate Ion in Water	\$ each		\$120.00	\$0.00
Resistivity						
a. soil	AASHTO T288	Standard Method of Test for Determining Minimum Laboratory Soil Resistivity	\$ each		\$160.00	\$0.00
b. water	ASTM D1125	Standard Test Methods for Electrical Conductivity and Resistivity of Water	\$ each		\$148.00	\$0.00

Bituminous Mixture Extraction	SC-T-75	Standard Method of Test for Determination of Asphalt Binder Content for Asphalt Paving Mixtures by the Ignition Oven	\$ each		\$160.00	\$0.00
Aggregate Sieve Analysis	SC-T-4	Standard Method of Test for Sieve Analysis of Fine and Coarse Aggregates	\$ each		\$140.00	\$0.00
PLM asbestos Bulk Sample Analysis	EPA 600	Method for the Determination of Asbestos in Bulk Building Materials	\$ each		\$13.50	\$0.00
TEM Asbestos Bulk Sample Analysis	ASTM D 6281	Standard Test Method for Airborne Asbestos Concentration in Ambient and Indoor Atmospheres as Determined by Transmission Electron Microscopy Direct Transfer (TEM)	\$ each		\$75.00	\$0.00
XRF Analysis of Lead	Per SCDHEC Regulatory Requirements	Determining Lead Content	\$ per day		\$440.00	\$0.00
Total Lead Analysis	Per SCDHEC Regulatory Requirements	Determining Lead Content	\$ each		\$22.50	\$0.00

SUBTOTAL = \$2,400.50
% of TOTAL = 5.96

Hourly Rate Schedule			Pay Unit	Quantity	Unit Rates	Total Cost
Senior Principal			\$ per hour		\$375.00	\$0.00
Principal/Project Manager			\$ per hour	4	\$300.00	\$1,200.00
Senior Geotechnical Engineer			\$ per hour		\$250.00	\$0.00
Geotechnical Engineer			\$ per hour	30	\$175.00	\$5,250.00
Junior Geotechnical Professional			\$ per hour	32	\$130.00	\$4,160.00
Project Geologist			\$ per hour	10	\$130.00	\$1,300.00
Engineering Technician			\$ per hour	4	\$120.00	\$480.00
Senior Environmental Specialist			\$ per hour		\$175.00	\$0.00
Environmental Specialist			\$ per hour		\$120.00	\$0.00
Graphics Designer			\$ per hour	6	\$110.00	\$660.00
Administrative Assistant			\$ per hour	4	\$100.00	\$400.00
Lodging			\$ per day	4	\$250.00	\$1,000.00
Meals			\$ per day	5	\$40.00	\$200.00
Travel			\$ per mile	600	\$0.70	\$420.00
Outside Services Associated with Field and Laboratory Work	AASHTO/ASTM	Applicable AASHTO or ASTM procedure and manufacturer's instruction for equipment in use.	Double Ring Infiltrometer	3	\$1,900.00	\$5,700.00
					SUBTOTAL =	\$20,770.00
					% of TOTAL =	51.56
					GRAND TOTAL =	\$40,279.50



September 30, 2025

Hassan Ismail, Ph.D., P.E.
Manager, Water Resources
McCormick Taylor
(803) 978-2744

Graves Station Friendfield Stormwater Georgetown County, SC

Revised Fee Proposal for Utility Coordination and Right of Way Services

Pursuant to McCormick Taylor's request for TELICS to submit a proposal for Utility Coordination and Right of Way Services for the above project, the following is submitted for your consideration:

Utility Coordination Fee Schedule	
	Total Fee
Recon, Investigation, KO, Matrix	\$5,763.00
Prior Rights, PUE, SUE, Schedule	\$9,589.00
UBOs, SPs, Agreements, Meetings	\$12,494.00
Utility Authorizations, Meetings	\$11,525.00
Final UBO's	\$6,731.00
Total UC Fee Estimate	\$46,102.00

Utility Coordination Scope of Service: Design Services Only

- Identify, research, and contact all utility owners through the project corridor.
- Identify utility level impacts through the corridor.
- Coordinate and run all utility meetings and distribute minutes. (Kick Off, One on One w/ Utilities)
- Obtain documentation from utilities claiming prior rights.
- PUE requests and assistance.
- Review Utilities' markups.
- Full plan reviews to minimize and avoid utility impacts. (Roadway, Drainage)
- Assist Engineer in all areas for clarity of utility impacts, schedule, and relocation.
- URA packages assistance.
- Utility encroachment packages assistance.
- UBO plans
- Special provisions
- Deliverables:
 - Utility kick-off and meeting coordination
 - Utility meeting minutes
 - UBO (f)
 - Special provisions
 - Utility packages
- Exclusions:
 - WET Utility Design not included.
 - Private Utility Design not included.
 - Preparation of permit drawings not included.
 - Services during construction not included.

Subsurface Utility Engineering Fee Schedule	
	Total Fee
Quality Level B	\$34,857.00
Quality Level A (Up to 6 test holes – TBD)	\$8,349.00
Total SUE Fee Estimate	\$43,206.00

Subsurface Utility Engineering Scope of Service:

- Quality Level B investigation.
- Quality Level B data collection.
- Quality Level B data transfer.
- Quality Level A investigation.
- Quality Level A test hole and data collection. (Up to six holes – TBD)
- Quality Level A data collection transfer.
- Deliverables:
 - DGN and PDF files with Quality Level A & B data.
 - PDF Quality Level A reports.
- Exclusions:
 - Additional test holes outside the original six locations. (TBD)
 - Third Party Traffic Control.

Thank you for your consideration. Please contact us with questions or if you require additional information.

Respectfully,

Cory Wood

Cory Wood
TELICS Senior Manager – Utilities
(336) 705-8844 | corywood@telics.com
1598 Westbrook Plaza Drive, Suite 202
Winston Salem, NC 27103

Right of Way Fee Schedule		
	Unit Fee	Total Fee
Acquisition Services		
• ROW and/or Easement Acquisition (10 tracts)	\$4,200.00 / tract	\$42,000.00
*Appraisal Services		
• Nominal Appraisal (5 tracts)	\$1,500.00 / tract	\$7,500.00
• Standard Appraisal (5 tracts)	\$2,500.00 / tract	\$12,500.00
• Appraisal Review (10 tracts)	\$500.00 / tract	\$5,000.00
*Attorney Services		
• Preliminary Title Abstract (10 tracts)	\$450.00 / title	\$4,500.00
• Title Update (10 tracts)	\$150.00 / update	\$1,500.00
Total ROW Fee Estimate		\$73,000.00

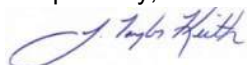
*Appraisal and Attorney Services will only be billed if required and at the above rates.

Right of Way Scope of Services:

- As part of our initial outreach efforts, we will deliver an introductory letter to each owner of record to provide them with basic project and contact information. TELICS will make a good faith attempt to meet with all local landowners. Out-of-town landowners will be given the opportunity to attend a site meeting.
- TELICS Agent will deliver a written offer based on the opinion of value per appraisal. Any appraisals and reviews will be provided by TELICS and will be submitted to the SCOR electronically for review prior to making an offer to the landowner. The type of appraisal required will be determined by the appraiser.
- A negotiation diary will be kept of each conversation and/or contact attempt.
- Special provisions, agreements, or negotiated settlements exceeding the budget must be approved in writing by SCOR.
- TELICS Agent will secure all required signatures on standard SCDOT forms unless alternative forms are provided by SCOR.
- TELICS will prepare and maintain a complete tract file for each claim containing a copy of the Title to Real Estate or Easement, contact letters, e-mails, contact information, negotiation diary and any other related documentation. TELICS will submit the tract file to the SCOR upon request.
- Upon completion of negotiations and acceptance of the negotiated settlement, TELICS will inform the landowner about the closing procedure and disbursement of money by the SCOR.
- TELICS will prepare and submit payment requests to SCOR.
- TELICS will provide preliminary title opinions, record documents, and coordinate closings.
- In the event a settlement cannot be reached with a property owner, TELICS will assist in the preparation of the condemnation packet to be submitted to SCOR Counsel.
- TELICS will perform all work in accordance with 49 CFR Part 24 – Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally-Assisted Programs.
- Negotiation fees include participation in up to 12 monthly project update meetings/calls (up to 1 hour in duration) with the Client/County as requested.
- Project Manager and Agents will provide email updates as requested.

Thank you for your consideration. Please contact us with questions or if you require additional information.

Respectfully,



J. Taylor Keith
TELICS | Vice President
(252) 375-5010 | taylorkeith@telics.com

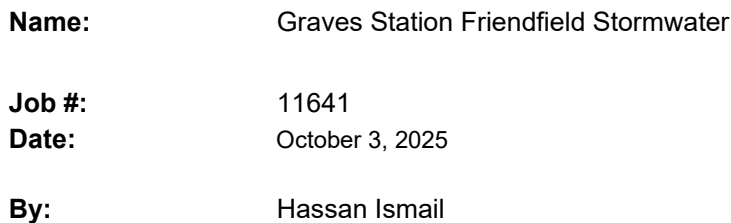


Proposal Summary

Graves Station Friendfield Stormwater

Job No. 11641

Billing Rate Total		\$ 420,735.00 (a)
Direct Costs Other Than Payroll		8,665.00 (b)
Direct Costs of Services and Work Performed by Others:		
F&ME	40,279.50	
McKim & Creed	98,300.00	
TELICS UC/SUE	89,308.00	
TELICS ROW	73,000.00	
		300,887.50 (c)
Subtotal (a)+(b)+(c)		730,287.50 (d)
Total Cost		\$ 730,287.50 (f)
Total Estimated Man-Hours:		
McCormick Taylor, Inc.		2,548
Subs:		
F&ME		-
McKim & Creed		-
TELICS ROW		-
Total		2,548
Engineer's Name:		
McCormick Taylor, Inc. 1441 Main Street Suite 305 Columbia, SC 29201		
Fed. I. D. No.:		
23-1683759		
Contact Person:		
Hassan Ismail Manager, Water Resources 803.978.2744		
Prepared By:		
Hassan Ismail		



Hours		
	Total Hours	Total Dollars
	-	-
	24	4,440.00
	8	1,700.00
	16	3,920.00
	44	9,480.00
	56	11,880.00
	40	7,200.00
	80	15,700.00
	50	12,500.00
	-	-
	-	-
	7	1,165.00
	5	965.00
	5	965.00
	5	965.00
	5	965.00
	6	1,340.00
	7	1,245.00
	7	1,245.00
	7	1,245.00
	7	1,245.00
	8	1,570.00
	24	3,810.00
	49	7,830.00
	26	3,850.00
	108	16,500.00
	108	16,500.00
	69	11,170.00
	64	10,180.00
	36	5,940.00
men	50	7,400.00
	8	1,700.00
	125	19,650.00
	38	6,060.00
	28	4,450.00
	16	3,400.00
	125	19,650.00
	52	8,020.00
	28	4,530.00
	6	1,470.00
	50	6,890.00
	50	6,890.00
	50	6,890.00
	46	7,070.00
	18	2,610.00
	34	4,890.00



Name: Graves Station Friendfield Stormwater

Job #: 11641

Date: October 3, 2025

By: Hassan Ismail

Hours		
Total Hours	Total Dollars	
11.1	Agency coordination	131,805.00
11.1	SHPO/THPO documentation	172,405.00
11.1	Wetlands documentation	253,765.00
11.1	Public notice preparation	131,845.00
11.1	EA preparation and HEROS submittal	172,325.00
11.1	Prepare ERR	609,220.00
.		
TASK 12 PERMITTING		
12.1	OVERALL PERMITTING COORDINATION	81,040.00
12.2	ENV Delineation and Jurisdictional Determination	244,040.00
12.3	Georgetown County Grading/Building Permit	6880.00
12.4	SCDOT Encroachment Permit	81,440.00
12.5	SCDES OCRM CZC	162,080.00
12.6	SCDES NOI and C-SWPPP	283,920.00
12.7	USACE Nationwide Permit	283,920.00
12.8	FEMA No-Impact Certification	131,925.00
TASK 13 DOWNSTREAM IMPACT ANALYSIS		
13.1	Downstream Analysis	344,970.00
TASK 14 MOT/SIGNING AND MARKING		
14.1.1	Preliminary MOT Plans	101,560.00
14.1.3	Final MOT Plans	101,560.00
TASK 15 FINAL (90%) DESIGN PLANS		
15.2.1	Plan Set Development	9313,760.00
15.2.1	90% Report	426,820.00
15.2.3	Engineers Estimate	182,970.00
15.2.2	Project Manual	447,220.00
15.2.6	Final Plans DFR	153,180.00
TASK 16 ADVERTISEMENT (100%) DESIGN PLANS		
16.2.1	Plan Set Development	517,800.00
16.2.1	100% Report	223,610.00
16.2.3	Engineers Estimate	162,610.00
16.2.2	Project Manual	356,510.00
TASK 17 CONSTRUCTION PHASE SERVICES		
17.1	Attend Pre-Construction Conference	81,960.00
17.2	Shop Drawing Review and Approval	396,480.00
17.3	Design Activites due to Unforeseen Conditions	417,350.00
17.4	Interpretation of Project Documents	204,120.00
17.5	Attendance at field review meetings	5210,400.00
17.6	Construction Utiltiy Coordination Meeting	81,440.00
17.7	Respond to Contractor Requests/RFIS and PayApps	609,880.00
17.8	As-built and record drawing review	101,930.00
17.9	Davis Bacon interviews and Section 3 reviews	253,790.00
17.10	Substantial completion/final inspections	162,080.00
17.11	Ten-month Warranty Site Inspection	81,040.00
TOTAL		2,548\$ 420,735.00

Proposal Summary

Graves Station Friendfield Stormwater
Job No. 11641

1) Travel				
a. Project Site				
20 trips @	300 miles r/t x \$0.70 per mile	= \$	4,200.00	
0 trips @	\$ - tolls per trip	=	-	
Subtotal			\$	4,200.00
2) Report Reproduction (For deliverables only, to be billed at cost)				
a. Color Printing				
500 x	\$ 0.60 /copy (8 1/2 x 11)	=	300.00	
Subtotal			\$	300.00
3) Meeting Expenses (For deliverables only, to be billed at cost)				
a. Color Printing				
150 x	\$ 1.00 /copy (11 x 17)	=	150.00	
b. Meeting Announcements - Double Sided w/ mailer on back				
150 x	\$ 1.80 per copy (Color)	=	270.00	
c. Display Boards Dry Mounted (2' x 3')				
12 x	\$ 60.00 per display	=	720.00	
Subtotal			\$	1,140.00
4) Engineering Products (For deliverables only, to be billed at cost)				
a. Engineering Blue Print (22" x 36")				
1,000 x	\$ 0.60 each	=	600.00	
Subtotal			\$	600.00
5) Rental Expenses (For deliverables only, to be billed at cost)				
a. Miscellaneous (Specify)		=	500.00	
Subtotal			\$	500.00
6) Other Miscellaneous Costs (For deliverables only, to be billed at cost)				
a. Yard signs (\$300); SCDES permit review fee (\$1625)		=	1,925.00	
Subtotal			\$	1,925.00
TOTAL DIRECT COSTS OTHER THAN PAYROLL			\$	8,665.00

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