

**NORTH CAROLINA
BRUNSWICK COUNTY**

**PROFESSIONAL SERVICES AGREEMENT
FOR ENGINEERING SERVICES
(Mini-Brooks Act/Qualification Based Selection)**

THIS PROFESSIONAL SERVICES AGREEMENT (hereinafter referred to as the “Agreement”) is made and entered into by and between Brunswick County, a body politic and corporate of the State of North Carolina, (hereinafter referred to as “County” or “Owner”), party of the first part and McKim & Creed, P.A., (hereinafter referred to as “Provider” or “Engineer”), party of the second part.

WITNESSETH:

1. SERVICES; FEES

Provider agrees to perform the services (hereinafter referred to as the “Services”) in connection with the project (hereinafter referred to as the “Project”), as more fully set forth in the Request for Qualifications entitled: “Comprehensive Wastewater Master Plan,” as published by Brunswick County on January 13, 2021, and an addenda thereto, and on Exhibit “A” and Exhibit “B” attached hereto, all of which are hereby incorporated by reference.

Any exhibits or attachments referenced herein are hereby incorporated by reference and made a part of this Agreement. Any conflict between the language in an exhibit or attachment and the main body of this Agreement shall be resolved in favor of the main body of this Agreement.

2. TERM OF AGREEMENT AND TERMINATION

The term of this Agreement begins one (1) business day after approval by the Brunswick County Board of Commissioners or execution of the Agreement by County, whichever is later (the “Effective Date”). Engineer shall complete the Services in accordance with the schedule set forth on Exhibit “B,” unless this Agreement is sooner terminated or amended as provided herein. The County may terminate this Agreement at any time without cause by giving written notice to Provider. The County may set the effective date of termination at a time up to thirty (30) days following notice to Engineer to allow Engineer ample time to complete tasks for which value would otherwise be lost, to prepare notes as to the status of completed and uncompleted tasks and/or to assemble Project materials in orderly files. As soon as practicable after receipt of a written notice of termination without cause, Provider shall submit a statement to County showing in detail the work performed under this Agreement through the effective date of termination. County may terminate this Agreement for cause by giving written notice of a breach of the Agreement. Provider shall have fifteen (15) days to cure the breach following receipt of the notification. Failure to cure the breach within the fifteen (15) days shall result in the immediate termination of the Agreement. Notwithstanding the foregoing, County may terminate this Agreement immediately and without notice to Provider if Provider becomes insolvent, makes or has made an assignment for the benefit of creditors, is the subject of proceedings in voluntary or involuntary bankruptcy instituted on behalf of or against Provider, or has a receiver or trustee appointed for substantially all of its property, or if Provider allows any final judgment to stand against it unsatisfied for a period of forty-eight (48) hours.

3. BRUNSWICK COUNTY GENERAL CONDITIONS OF THE CONTRACT

This Agreement, in addition to any construction documents prepared hereunder, shall be subject to the Brunswick County, North Carolina General Conditions of the Contract (for construction contracts), unless the County directs otherwise. In the event of a conflict between the General Conditions of the Contract and this Agreement, this Agreement shall prevail.

4. NONAPPROPRIATION

If the Board of County Commissioners does not appropriate the funding needed by the County to make payments under this Agreement for a given fiscal year, the County will not be obligated to pay amounts due beyond the end of the last fiscal year for which funds were appropriated. In such event, the County will promptly notify the Provider of the non-appropriation and this Agreement will be terminated at the end of the last fiscal year for which funds were appropriated. No act or omission by the County which is attributable to non-appropriation of funds shall constitute a breach of or default under this Agreement.

5. COMPENSATION

The County agrees to pay Provider as specified in the Exhibits attached hereto or as set out above for the Services satisfactorily performed in accordance with this Agreement. Unless otherwise specified, Provider shall submit monthly invoices to County and include detail of all Services delivered or performed under the terms of this Agreement. County shall pay all undisputed and properly completed invoices within forty-five (45) days of receipt. Notwithstanding the foregoing, County will not pay late fees on any charges under this Agreement. If County disputes any portion of the charges on any invoice received from Provider, the County shall inform Provider in writing of the disputed charges. Once the dispute has been resolved, Provider shall re-invoice County for the previously disputed charges, and, per any resolution between County and Provider, the County shall pay those charges in full at that time. No advance payment shall be made for the Services to be performed by Provider under this Agreement.

6. INDEPENDENT CONTRACTOR

Both County and Provider agree that Provider shall act as an independent contractor and shall not represent itself as an agent or employee of the County for any purpose in the performance of its duties under this Agreement. Provider represents that it has or will secure, at its own expense, all personnel required in performing the Services under this Agreement. Accordingly, Provider shall be responsible for payment of all federal, state and local taxes arising out of its activities in accordance with this Agreement, including, without limitation, federal and state income tax, social security tax, unemployment insurance taxes and any other taxes or business license fees as required. Provider shall not be entitled to participate in any plans, arrangements or distributions by the County pertaining to or in connection with any pension, stock, bonus, profit sharing or other benefit extended to County employees.

In the event the Internal Revenue Service should determine that Provider is, according to Internal Revenue Service guidelines, an employee subject to withholding and social security

contributions, then Provider hereby acknowledges that all payments hereunder are gross payments, and the Provider is responsible for all income taxes and social security payments thereon.

7. OPINIONS OF COST

If applicable, Provider shall provide opinions of probable construction costs, including but not limited to, designer fees, costs of construction, costs of equipment, furnishings, signage, permit fees and appropriate contingencies, at Project intervals determined by County. Such opinions of costs shall be representative of Provider's best judgment as an experienced and qualified professional generally familiar with the construction industry. The parties acknowledge that actual bids, proposals and costs may vary from Provider's opinions of costs based on the cost of labor, materials, equipment or services furnished by others, differing methods for determining prices, competitive bidding or other market conditions. When requested by County, Provider shall participate in rebidding, renegotiation and design adjustments to the extent such are necessary to reduce Project costs. Such services shall be performed by Provider without additional compensation.

8. ACCOUNTING RECORDS

Provider shall maintain accounting records in accordance with generally accepted accounting practices and shall make such records available for inspection by County upon reasonable request and during normal business hours for a period of three (3) years following completion of the Services.

9. PERMITS AND APPROVALS

Provider shall provide County with a schedule of all required approvals and the dates by which application for such approvals must be made in order to avoid any risk of delay to the Project. Provider shall prepare the necessary application forms, present documents requiring approval by County and submit documents with County approval to appropriate federal, state and local government or other agencies in a timely manner.

10. ENVIRONMENTAL CONDITIONS

County shall disclose to Provider the existence of all known and suspected hazardous substances, including, without limitation: asbestos; polychlorinated biphenyls (PCBs); petroleum; hazardous waste; or radioactive material located at or near the site where the Services are to be performed. If Provider discovers any undisclosed hazardous substances, or if investigative or remedial action or other professional services are necessary, Provider may, at its option and without liability for damages, suspend performance of the Services hereunder until County: (1) retains an appropriate specialist consultant or contractor to identify and, as appropriate, abate, remediate or remove the hazardous substances; and (2) warrants that the site where the Services are to be performed are in full compliance with applicable laws and regulations. Notwithstanding the foregoing, if the presence of any hazardous materials adversely affects the performance of Provider's duties under this Agreement, then Provider shall have the option of: (1) accepting an

equitable adjustment in its compensation or in the time of completion, or both; or (2) terminating this Agreement for cause upon thirty (30) days' written notice to County.

11. PROVIDER REPRESENTATIONS

- a. Provider is a duly organized entity or corporation qualified to do business and in good standing under the laws of the State of North Carolina;
- b. Provider has all requisite corporate power and authority to execute, deliver and perform its obligations under this Agreement;
- c. No approval, authorization or consent of any governmental or regulatory authority is required to be obtained or made by it in order for Provider to enter into and perform its obligations under this Agreement;
- d. In connection with Provider's obligations under this Agreement, it shall comply with all applicable federal, state and local laws and regulations and shall obtain all applicable permits and licenses;
- e. Provider shall not violate any agreement with any third party by entering into or performing the Services under this Agreement;
- f. Provider has not engaged in corrupt, fraudulent or coercive practices in competing for or executing this Agreement;
- g. Provider will perform all Services in conformity with the specifications and requirements of this Agreement;
- h. The Services provided by Provider under this Agreement will not violate, infringe or misappropriate any patent, copyright, trademark or trade secret rights of any third party, or any other third-party rights (including, without limitation, non-compete agreements);
- i. Provider shall exercise reasonable care and diligence when performing the Services hereunder and will ensure that it adheres to the highest generally accepted standards in the industry when performing said Services;
- j. Provider shall be responsible for all errors, omissions or deficiencies in technical accuracy in any drawings, specifications or other documents prepared or services rendered by Provider, its subcontractors or consultants and shall correct, at no additional cost to County, any and all errors, omissions, discrepancies, ambiguities, mistakes, deficiencies or conflicts;
- k. Provider acknowledges that if any specific licenses, certifications or related credentials are required in its performance of the Services, it will ensure that such credentials remain current and active and not in a state of suspension or revocation; and

1. Provider shall ensure that whenever its employees or agents are on County property, they will strictly abide by all instructions and directions issued by the County with respect to rules, regulations, policies and security procedures applicable to work on the County's premises. Such rules, regulations, policies and security procedures shall include, but not be limited to: (i) not possessing any controlled substances; (ii) smoking only in designated smoking areas, if any; and (iii) not possessing weapons, except for weapons possessed by law enforcement officials.

12. DAMAGE TO EQUIPMENT, FACILITIES, PROPERTY OR DATA

Provider shall be solely responsible for any damage to or loss of the County's equipment, facilities, property and/or data arising out of the negligent or willful act or omission of Provider or its subcontractors or consultants. In the event that Provider causes damage to the County's equipment or facilities, Provider shall, at its own expense, promptly repair or replace such damaged items to restore them to the same level of functionality that they possessed prior to such damage.

13. NON-ENDORSEMENT AND PUBLICITY

County is not endorsing Provider or its Services, and Provider is not permitted to reference this Agreement or County in any manner without the prior written consent of County. Notwithstanding the foregoing, the parties agree that Provider may list the County as a reference in response to requests for proposals and may identify County as a customer in presentations to potential customers.

14. NON-EXCLUSIVITY

Provider acknowledges that County is not obligated to contract solely with Provider for the Services covered under this Agreement.

15. DIVESTMENT FROM COMPANIES THAT BOYCOTT ISRAEL

Provider hereby certifies that it has not been designated by the North Carolina State Treasurer as a company engaged in the boycott of Israel pursuant to N.C.G.S. § 147-86.81.

16. DEBARMENT

Provider hereby certifies that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this Agreement by any governmental department or agency. Provider must notify County within thirty (30) days if debarred by any governmental entity during this Agreement.

17. INDEMNIFICATION

Provider shall indemnify and hold harmless County, its officers, officials, agents and employees from and against all actions, liability, claims, suits, damages, costs or expenses of any kind (collectively, "Claims") which may be brought or made against County or which County must

pay and incur arising out of this Agreement should fault or negligence on the part of the Provider or its subcontractors or consultants be the proximate cause of such Claims. Provider shall be fully responsible to County for the acts and omissions of its subcontractors or consultants and of persons either directly or indirectly employed by it. This Section shall survive any expiration or termination of this Agreement.

18. INSURANCE

Provider shall procure and maintain in full force and effect at all times and at its sole cost and expense, and shall ensure that any of its consultants maintains in full force and effect at all times and at its sole cost and expense, Commercial General Liability, Commercial Automobile Liability, Professional Liability and Workers' Compensation insurance, if applicable, and any additional insurance as may be required by County with limits acceptable to County. All insurance policies (with the exception of Workers' Compensation, if applicable, and Professional Liability) shall be endorsed, specifically or generally, to include County as an additional insured and as a certificate holder. Provider shall furnish a Certificate of Insurance from a licensed insurance agent in North Carolina with a rating of A-VII or better by A.M. Best verifying the existence of any insurance coverage required by County. The Certificate will provide for thirty (30) days' advance notice in the event of termination or cancellation of coverage. Provider shall have no right of recovery or subrogation against County (including its officers, agents and employees), it being the intention of the parties that the insurance policies so affected shall protect both parties and be primary coverage for any and all losses covered by the aforementioned insurance.

19. WORKERS' COMPENSATION

To the extent required by law, Provider shall comply with the North Carolina Workers' Compensation Act and shall provide for the payment of workers' compensation to its employees in the manner and to the extent required by such Act. In the event Provider is excluded from the requirements of such Act and does not voluntarily carry workers' compensation coverage, Provider shall carry or cause its employees to carry adequate medical/accident insurance to cover any injuries sustained by its employees or agents while fulfilling Provider's obligations under this Agreement.

Provider agrees to furnish County proof of compliance with said Act or adequate medical/accident insurance coverage upon request.

20. REMEDIES

- a. **RIGHT TO COVER.** If Provider fails to meet any completion date or resolution time set forth, due to no fault of County, the County may take any of the following actions with or without terminating this Agreement, and in addition to, and without limiting, any other remedies it may have:
 - i. Employ such means as it may deem advisable and appropriate to perform itself or obtain the Services from a third party until the matter is resolved and Provider is again able to resume performance under this Agreement; and

- ii. Deduct any and all expenses incurred by County in obtaining or performing the Services from any money then due or to become due Provider and, should the County's cost of obtaining or performing the Services exceed the amount due Provider, collect the amount due from Provider.
- b. **RIGHT TO WITHHOLD PAYMENT.** County reserves the right to withhold any portion, or all, of a scheduled payment if Provider fails to perform under this Agreement until such breach has been fully cured.
- c. **SETOFF.** Each party shall be entitled to set off and deduct from any amounts owed to the other party pursuant to this Agreement all damages and expenses incurred or reasonably anticipated as a result of the other party's breach of this Agreement.
- d. **OTHER REMEDIES.** Upon breach of this Agreement, each party may seek all legal and equitable remedies to which it is entitled. The remedies set forth herein shall be deemed cumulative and not exclusive and may be exercised successively or concurrently in addition to any other available remedy.
- e. **NO SUSPENSION.** In the event that County disputes in good faith an allegation of breach by Provider, notwithstanding anything to the contrary in this Agreement, Provider agrees that it will not terminate this Agreement or suspend or limit any Services or warranties, unless: (i) the parties agree in writing; or (ii) an order of a court of competent jurisdiction determines otherwise; provided, however, this dispute period shall be limited to ninety (90) days.

21. TAXES

Provider shall be responsible for paying all taxes, fees, assessments and premiums of any kind payable on its employees and operations. Provider shall substantiate, on demand by the County, that all taxes and other charges are being properly paid.

22. HEALTH AND SAFETY

Provider shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with performing the Services. Provider shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to all employees in connection with performing the Services and other persons who may be affected thereby.

23. NON-DISCRIMINATION IN EMPLOYMENT

Provider shall not discriminate against any employee or applicant for employment because of race, ethnicity, gender, gender identity, sexual orientation, age, religion, national origin, disability, color, ancestry, citizenship, genetic information, political affiliation or military/veteran status, or any other status protected by federal, state or local law or other unlawful form of discrimination. Provider shall take affirmative action to ensure that applicants are employed and

that employees are treated fairly during employment. In the event Provider is determined by the final order of an appropriate agency or court of competent jurisdiction to be in violation of any non-discrimination provision of federal, state or local law or this provision, this Agreement may be cancelled, terminated or suspended in whole or in part by County, and Provider may be declared ineligible for further County agreements.

24. COMPLIANCE WITH E-VERIFY PROGRAM

Pursuant to N.C.G.S. § 143-133.3, Provider understands that it is a requirement of this Agreement that Provider and its subcontractors or consultants must comply with the provisions of Article 2 of Chapter 64 of the North Carolina General Statutes. In doing so, Provider agrees that, unless it is exempt by law, it shall verify the work authorization of its employees utilizing the federal E-Verify program and standards as promulgated and operated by the United States Department of Homeland Security, and Provider shall require its subcontractors and consultants to do the same. Upon request, Provider agrees to provide County with an affidavit of compliance or exemption.

25. CONFIDENTIAL INFORMATION

For purposes of this Agreement, the party disclosing Confidential Information is the “Discloser,” and the party receiving Confidential Information is the “Recipient.” “Confidential Information” shall mean any nonpublic information concerning the parties’ respective businesses including, but not limited to, all tangible, intangible, visual, electronic, present or future information such as: (a) trade secrets; (b) financial information, including pricing; (c) technical information, including research, development, procedures, algorithms, data, designs and know-how; (d) business information, including operations, planning, marketing interests and products; and (e) the terms of any agreement between the parties and the discussions, negotiations and proposals related thereto. Confidential Information disclosed to the other party must be clearly identified. Written Confidential Information must be clearly marked in a conspicuous place with an appropriate legend identifying the information as “Confidential.” Confidential Information that is not written must be identified as confidential at the time of disclosure and confirmed in writing delivered to Recipient within fifteen (15) days of disclosure.

The restrictions regarding the use and disclosure of Confidential Information do not apply to information that is:

- a. in the public domain through no fault of the Recipient;
- b. within the legitimate possession of the Recipient, with no confidentiality obligations to a third party;
- c. lawfully received from a third party having rights in the information without restriction, and without notice of any restriction against its further disclosure;
- d. independently developed by the Recipient without breaching this Agreement or by parties who have not had, either directly or indirectly, access to or knowledge of the Confidential Information;

- e. disclosed with the prior written consent of the Discloser; or
- f. required to be disclosed by law, regulation or court or governmental order, specifically including requests pursuant to the Public Records Laws of North Carolina contained in Chapter 132 of the North Carolina General Statutes. In the event Recipient receives such a request, it shall notify Discloser and Discloser shall have the opportunity to defend against production of such records at Discloser's sole expense.

26. OWNERSHIP OF WORK PRODUCT

- a. All work product created by Provider pursuant to this Agreement, including, without limitation, design drawings, construction documents, photographs and models and any derivative works and compilations, and whether or not such work product is considered a "work made for hire" or an employment to invent (hereinafter referred to collectively as "Work Product") shall be the exclusive property of County. County and Provider agree that such original works of authorship are "works made for hire" of which County is the author within the meaning of the United States Copyright Act. To the extent that County is not the owner of the intellectual property rights in and to such Work Product, Provider hereby irrevocably assigns to County any and all of its rights, title and interest in and to all original Work Product created pursuant to this Agreement, whether arising from copyright, patent, trademark, trade secret or any other state or federal intellectual property law or doctrine. Upon County's request, Provider shall execute such further documents and instruments or obtain such documents from third parties, including consultants and subcontractors, if applicable, necessary to fully vest such rights in County. Provider forever waives any and all rights relating to original Work Product created pursuant to this Agreement, including without limitation, any and all rights arising under 17 U.S.C. § 106A or any other rights of identification of authorship or rights of approval, restriction or limitation on use or subsequent modifications.
- b. In the event the use of any of Provider's intellectual property, including any derivative work created with the use of third-party intellectual property, is necessary for the use of any Work Product, Provider hereby grants to County an irrevocable, non-exclusive, non-transferable, perpetual, royalty-free license to use the intellectual property for the purposes set forth in this Agreement and will ensure that any third-party grants the same.
- c. County may use Work Product for any other purpose and on any other project without additional compensation to Provider. Notwithstanding the foregoing, the use of Work Product by County for any purpose other than as set forth in this Agreement shall be at County's risk.

27. NO ASSIGNMENT WITHOUT CONSENT

Neither party shall assign this Agreement (or assign any right or delegate any obligation contained herein whether such assignment is of service, of payment or otherwise) without the prior written consent of the other party hereto. Any such assignment without the prior written consent

of the other party hereto shall be void. An assignee shall acquire no rights, and County shall not recognize any assignment in violation of this provision.

28. GOVERNING LAW AND VENUE

This Agreement shall be governed by applicable federal law and by the laws of the State of North Carolina without regard for its choice of law provisions. All actions relating in any way to this Agreement shall be brought in the General Court of Justice of the State of North Carolina in Brunswick County or in the Federal District Court for the Eastern District of North Carolina, Wilmington division.

29. DISPUTE RESOLUTION

Should a dispute arise as to the terms of this Agreement, both parties agree that neither may initiate binding arbitration. The parties may agree to non-binding mediation of any dispute prior to the bringing of any suit or action.

30. GOVERNMENTAL IMMUNITY

County, to the extent applicable, does not waive its governmental immunity by entering into this Agreement and fully retains all immunities and defenses provided by law with regard to any action based on this Agreement.

31. NON-WAIVER

Failure by County at any time to require the performance by Provider of any of the provisions of this Agreement shall in no way affect County's right hereunder to enforce the same, nor shall any waiver by County of any breach be held to be a waiver of any succeeding breach or a waiver of this Section.

32. ENTIRE AGREEMENT

This Agreement constitutes the entire agreement between the parties with respect to the subject matter herein. There are no other representations, understandings or agreements between the parties with respect to such subject matter. This Agreement supersedes all prior agreements, negotiations, representations and proposals, written or oral. Notwithstanding the foregoing, all documents included in the Request for Qualifications and the qualifications statement submitted by Provider, if applicable, including, but not necessarily limited to: General Conditions; Supplementary General Conditions; Scope of Work; Specifications; Addenda; Accepted Proposal; Notice to Proceed; Performance Bond; Payment Bond; MBE forms; Power of Attorney; Insurance Certificates; Approval by County Commissioners; Tax Statement and Certification; Notice of Substantial Completion; Notice of Final Completion and Acceptance; and Drawings are incorporated herein by reference and made an integral part of this Agreement. To the extent the terms of such documents conflict with the terms of this Agreement, the terms of this Agreement shall prevail.

33. HEADINGS

The headings in this Agreement are for convenience of reference only and shall not define or limit any of the terms or provisions hereof.

34. SEVERABILITY

The invalidity of one or more of the phrases, sentences, clauses or sections contained in this Agreement shall not affect the validity of the remaining portion of the Agreement so long as the material purposes of this Agreement can be determined and effectuated. If a provision of this Agreement is held to be unenforceable, then both parties shall be relieved of all obligations arising under such provision, but only to the extent that such provision is unenforceable, and this Agreement shall be deemed amended by modifying such provision to the extent necessary to make it enforceable while preserving its intent.

35. AMENDMENTS

No amendments or changes to this Agreement, or additional Proposals or Statements of Work, shall be valid unless in writing and signed by authorized agents of both Provider and County.

36. NOTICES

- a. **DELIVERY OF NOTICES.** Any notice, consent or other communication required or contemplated by this Agreement shall be in writing, and shall be delivered in person, by U.S. mail, by overnight courier, by electronic mail or by facsimile to the intended recipient at the address set forth below.
- b. **EFFECTIVE DATE OF NOTICES.** Any notice shall be effective upon the date of receipt by the intended recipient; provided that any notice which is sent by facsimile or electronic mail shall also be simultaneously sent by mail deposited with the U.S. Postal Service or by overnight courier.
- c. **NOTICE ADDRESS.** Communications that relate to any breach, default, termination, delay in performance, prevention of performance, modification, extension, amendment or waiver of any provision of this Agreement shall be sent to:

i. For the County: Brunswick County Manager
P.O. Box 249
Bolivia, NC 28422
Fax: 910-253-2022

ii. For the Provider: McKim & Creed, P.A.
243 N. Front Street
Wilmington, NC 28401

37. SIGNATURES

This Agreement, together with any amendments or modifications, may be executed in one or more counterparts, each of which shall be deemed an original and all of which shall be considered one and the same agreement. This Agreement may also be executed electronically. By signing electronically, the parties indicate their intent to comply with the Electronic Commerce in Government Act (N.C.G.S § 66-358.1 et seq.) and the Uniform Electronic Transactions Act (N.C.G.S § 66-311 et seq.). Delivery of an executed counterpart of this Agreement by either electronic means or by facsimile shall be as effective as a manually executed counterpart.

ATTEST:

BRUNSWICK COUNTY

Clerk to the Board /
Deputy Clerk to the Board

By: _____
Chairman, Board of Commissioners

[SEAL]

MCKIM & CREED, P.A.

By: Anthony Boahn

Printed Name: Anthony Boahn

Title: Vice President

Date: 3/19/2021

“This instrument has been preaudited in the manner required by the Local Government Budget and Fiscal Control Act.”

Julie A. Miller
Julie A. Miller, Director of Fiscal Operations
Brunswick County, North Carolina

APPROVED AS TO FORM

Bryan W. Batton
Robert V. Shaver, Jr., County Attorney /
Bryan W. Batton, Assistant County Attorney

This is **EXHIBIT A**, consisting of 9 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** to which is attached.

Engineer's Services

The Professional Services Agreement is supplemented to include the following agreement of the parties.

Engineer shall provide services in accordance with the Request for Qualifications, as applicable, and in accordance with the Basic and Additional Services as set forth below.

PART 1 – BASIC SERVICES

A1.01 Study and Report Phase

A. Engineer shall:

1. Consult with Owner to define and clarify Owner's requirements for the Project and available data.
2. Advise Owner of any need for Owner to provide data or services which are not part of Engineer's Basic Services.
3. Identify, consult with, and analyze requirements of governmental authorities having jurisdiction to approve the portions of the Project designed or specified by Engineer, including but not limited to mitigating measures identified in the environmental assessment, if included or required.
4. Identify and evaluate feasible alternate solutions as identified in Paragraph A1.01 A.6 of this document available to Owner and, after consultation with Owner, recommend to Owner those solutions which in Engineer's judgment meet Owner's requirements for the Project.
5. Prepare a report (the "Report") which will, as appropriate, contain schematic layouts, sketches, and conceptual design criteria with appropriate exhibits to indicate the agreed-to requirements, considerations involved, and those alternate solutions available to Owner which Engineer recommends. For each recommended solution Engineer will provide the following, which will be separately itemized: opinion of probable Construction Cost; proposed allowances for contingencies; the estimated total costs of design, professional, and related services to be provided by Engineer and its Consultants; and, on the basis of information furnished by Owner, a summary of allowances for other items and services included within the definition of Total Project Costs.
6. Perform or provide the following additional Study and Report Phase tasks or deliverables:

TASK 1 – PROJECT INITIATION MEETING & COORDINATION

McKim & Creed will schedule and conduct an initial workshop meeting with County staff to identify stakeholders, develop overall project goals, establish schedules, and lines of communication. The primary topics for the kick-off meeting will address:

- A. Goals & Objectives – as part of the scoping meeting and project initiation, an initial workshop meeting will be conducted to define goals and objectives. A clear understanding of goals and expectations, schedules, deliverables, and communication will be crucial to project success.

- B. Stakeholder Identification – as part of the initial workshop meeting, we would work with the County to identify potential stakeholders that may be involved in the master plan process. We anticipate stakeholders to include County utility, engineering, and planning representatives. This Scope of Work assumes that Brunswick County staff will coordinate and communicate with all other stakeholders to include wholesale customers and environmental groups.
- C. Deliverables & Workshop Schedule – we will conduct a series of workshops with the County based on the project schedule. We will coordinate critical milestones and workshops to engage all parties for a final plan that meets the County’s objectives.
- D. Obtain/Identify Required Information & Documentation – we will review all relevant data provided by the County to include reports, plans, etc. that can be used as base information to develop the proposed master plan. As a minimum, we anticipate the County will provide the following information:
- Record Drawings
 - 2006 Wastewater Master Plan
 - 2006 Water Master Plan dated
 - Biosolids/Residuals Management Plan
 - Current and proposed County Land Use Plans
 - Existing wastewater historical flow data as available (SCADA)
 - Treatment facilities permits, plans, and flow data.
 - Effluent disposal site plans permits and data.
 - Existing system GIS data
 - Existing wastewater model (SewerGEMs or SewerCAD format)
 - Status of County’s current and planned CIP Projects
 - Status of development project currently in process.
 - Known or planned future developments.

TASK 2 – UPDATE & CALIBRATE EXISTING SEWERCAD HYDRAULIC MODEL

We will update and calibrate the County’s existing SewerCAD hydraulic model as follows:

- A. SewerCAD Model Base Calibration – The County shall provide the existing SewerGEMS hydraulic model that will be utilized to evaluate the existing system and future improvements identified in the master plan. The model will be updated based on current GIS information and input from County staff on infrastructure that is not currently included in the document. The Scope of Work includes updating the model for primary pump station and force main conveyance and does not include incidental collection systems to include gravity sewers, low-pressure systems, or vacuum systems. Sources for updating the model will include the following:
- SCADA data
 - Historical records of pump stations, force mains, and record drawing
 - Existing Flow, Obligated Not Tributary, Permitted Flow information
 - Known/Planned Pump Stations & Force Mains

This Scope of Work does include field testing, drawdowns, or other physical investigations of the system.

- B. Inflow & Infiltration (I&I) – We will compile County-provided meter data and develop comparative analysis of rainfall records available from NOAA for an approximate evaluation of rainfall dependent impacts in the existing system. A limited review of dry weather and wet weather conditions will be evaluated to determine the approximate percentage or factors associated with I&I in the system. This Scope of Work does not include a Sanitary Sewer Evaluation Study, flow monitoring, or field testing to complete a detailed evaluation of system I&I.
- C. Existing Model Calibration Workshop - Our team will present the updated hydraulic model to the County staff in a workshop format. We will demonstrate the model operation, identifying challenges or deficiencies noted as a result of the model calibration. Input from County staff and operations will be valuable to ensure that the model is accurately representing real world conditions and follows the operational protocols that are currently in use.

TASK 3 – IDENTIFY EXISTING SYSTEM DEFICIENCIES

In conjunction with Task 2, we will evaluate the existing hydraulic model to determine deficiencies that exist in the existing wastewater system.

- A. Identification of Deficiencies - We will consult with the County on the results of the initial hydraulic model calibration and conduct a workshop discussion of deficiencies noted. Deficiencies are defined as lack of capacity, high pressures, or excessive velocities in the system.
- B. Mitigation Recommendations - Based on deficiencies identified, we will develop mitigation plans for correction or improvement. To include a cost opinion and exhibit that depicts the recommended improvements. We anticipate potential improvements may include:
 - Upgrades to pump stations for capacity
 - Upgrades or new pipelines to increase force main capacity.
- C. Existing Deficiency Identification Workshop - Our team will present the recommended deficiencies in workshop format for discussion with County staff. Comments received will be incorporated as part of the final recommendations for mitigation of existing deficiencies in the system.

TASK 4 – GROWTH PROJECTIONS & WASTEWATER LOADING

In conjunction with County staff and planning department recommendations, we will develop growth projections and resultant wastewater loadings for a 20-year planning period as follows:

GROWTH PROJECTIONS

- A. County Planning Department Master Plan Documents – We will utilize current and in-process planning documents that have been developed by the County Planning Department for acceptable growth rates across the County and areas to be served. If the growth rates vary

across the service area, these will be factored as part of the overall projections. A population growth rate can be applied based on current data and projected growth rates.

- B. Land Use & Zoning - Utilize the County's land use plan(s), GIS, and available databases, to identify the types of land use in the respective service areas to include industrial, commercial, residential, etc. Flow factors will be applied to specific land uses for projection of future wastewater loading.
- C. Final Growth Projections – Based on growth projections and land use evaluations, we will develop a final recommended growth projection for the identified service areas for a 20-year planning period. The growth projections will be stratified in 5-year increments over the 20-year planning period.

WASTEWATER LOADING

- A. Wastewater Loading- Based projections of growth developed for the service areas, will develop wastewater flow projections/loadings and peak demands. Primary elements of the wastewater loading will include the following:
 - Per Capita Growth Rate Flows
 - Growth Rate Adjusted Baseline Wastewater Flows
 - Land Use/Zoning Flow Factors
 - Known Developments
 - Undeveloped Properties (to be identified in consultation with County staff)
 - I&I Factor
- B. Final Wastewater Loading Projections – A final wastewater loading projection will be developed for the service area in 5-year increments for the 20-year planning period. The wastewater loadings will be stratified by average daily base flow, I&I factors, and peaking factors.
- C. Growth Projection & Wastewater Loading Workshop – we will present projected growth and wastewater loadings to County staff for review and input. Comments received will be incorporated and the final projections will be updated prior to completing Task 5 below. we will develop mitigation plans for correction or improvement. To include a cost opinion and exhibit that depicts the recommended improvements. We anticipate potential improvements may include:

TASK 5 – EVALUATION OF FUTURE INFRASTRUCTURE NEEDS

Once flow projections are established, McKim & Creed will utilize the calibrated SewerCAD wastewater model to evaluate the existing wastewater system to develop recommendations for future infrastructure needs based on the projected growth and wastewater loadings. Our scope of services includes the following primary tasks:

PRIMARY PUMP STATIONS & TRANSMISSION FORCE MAINS

- A. Develop Model Scenarios for 5, 10, 15, 20 Year Wastewater Flows – We will apply the projections for each time period to the wastewater model and evaluate necessary infrastructure improvements to meet the projected wastewater demand loadings for each time period.
- B. Existing Primary Pump Stations & Force Mains– the modeling scenarios will be utilized to identify improvements to the existing infrastructure necessary to accommodate the wastewater loadings. Improvements would be prioritized based on timing, criticality, and capacity impacts. Improvements recommendations would generally include:
- Upgrades to existing pump stations or replacement of existing pump stations.
 - New pump stations (existing service areas)
 - New or parallel force mains

This Scope of Work does not include evaluations, modeling, or recommendations for low pressure systems, vacuum systems, or gravity sewer systems.

- C. Known Developments & Infrastructure Needs – For developments that have been permitted, or may be planned, we will identify and incorporate anticipated infrastructure in the proposed master planning recommendations.
- D. Primary Infrastructure for Undeveloped Areas – For undeveloped and unsewered areas, we will provide strategic locations for primary pump stations and transmission. A conceptual plan will be developed for “back-bone” infrastructure necessary to serve the undeveloped areas based on the 20-year planning period, segmented in the 5-year planning increments. This Scope of Work does not include evaluations, modeling, or recommendations for low pressure systems, vacuum systems, or gravity sewer systems. This Scope of Work assumes that Brunswick County will provide direction and assistance on the location of undeveloped areas to include in the master planning effort.

WASTEWATER TREATMENT PLANT CAPACITY NEEDS

The various sub-basins and regions will be evaluated to determine the required treatment capacity at the County’s 6 wastewater treatment plants (WWTP), which have a combined total of 13 MGD of treatment and disposal. For the purposes of this Scope of Work, the evaluation of WWTP’s will be limited to determining capacity needs for the 20-year planning period and does not include a detailed evaluation of process, bio-solids, or plant configurations. Tasks associated with WWTP evaluations are as follows:

- A. Expansion of existing facilities - we will evaluate the capacity needs as well as the land available to expand existing facilities to meet projected wastewater loadings of the system.
- B. Construction of New Facilities – as the growth continues to expand in undeveloped areas, it may not be practical or cost effective to direct flow to existing WWTPs. Our team will evaluate the growth patterns and development potential for the County and provide recommendations for new WWTPs if the projections warrant. The recommendations for a new facility will be based on capacity needs only and do not include analysis of sites or feasibility for construction of the required infrastructure for the plant.

- C. Consolidation of Existing Facilities – per discussions with County staff, there may be a potential to consolidate the Sea Trail WWTP as part of the Ocean Isle Beach WWTP when the OIB facility is expanded. We will review this option as part of the planning process, to include a reuse force main from the OIB WWTP to continue to utilize the Sea Trails disposal systems.

EFFLUENT DISPOSAL NEEDS

- A. Effluent Disposal Alternatives - the County currently employs a combination of spray irrigation, high rate infiltration, drip irrigation, and NPDES discharge for effluent disposal. In conjunction with evaluation of the WWTP capacity needs, we will identify basic effluent disposal capacity needs. This may include the following:

- Expansion of existing land application systems currently permitted.
- New land application systems
- Identify current NPDES permits and what capacity may be required at each NPDES permit discharge location based on projections.

This Scope of Work is based on a cursory, desktop evaluation of potential disposal options and does not include detailed analysis of (or location of) sites, soils, permitting challenges, or regulatory negotiations.

TASK 6 – FUTURE RECOMMENDATIONS PLAN

Upon completion of Tasks 1-5 of this Scope of Work, we will provide the County with a final comprehensive plan or recommendations to meet future demands of the wastewater system. The major elements of the final plan include the following:

- A. Review and Incorporation of the County’s Current CIP – We will review and compare the County’s current CIP to the proposed recommendations of the master plan and note where the current CIP does not match the recommendations of the plan. Applicable triggers will be identified for each project.
- B. Opinions of Probable Project Cost - For all recommended improvements we will develop and provide an opinion o probable project costs for review and comment by the County utilizing current market conditions and historical construction data. This will include construction, contingency, technical fees, administrative fees, land acquisition, and other identified miscellaneous costs necessary for a total budgetary cost.
- C. Graphical Mapping Exhibits –We will develop exhibits that graphically depict the existing system and proposed improvements required at each 5-year increment. Each exhibit will build upon the previous incremental exhibit such that the County can easily determine the proposed improvements required based on projected growth and wastewater demand.
- D. Future Improvements Timeline – As part of the Future Project Recommendations, each project will be noted in a timeline format to include engineering and construction costs over the project cycle such that the project would be completed when (or prior to) it is needed.
- E. Funding Alternatives – The final plan will include a matrix of potential funding vehicles or agencies that may be feasible for implementation of the proposed improvements.

TASK 7 – FINAL COMPREHENSIVE WASTEWATER MASTER PLAN

A draft Comprehensive Master Plan will be prepared that summarizes the findings of the work completed and presented at workshop setting via PowerPoint, MS Teams, or other means as appropriate. Review comments received will be incorporated where appropriate. Major components of the draft document will include:

- Executive Summary
- Introduction and Purpose
- Background and Project Scope
- Hydraulic Modeling Calibration & Update
- Existing System Configuration & Noted Deficiencies
 - ✓ Proposed Improvements for the Existing System
 - ✓ Cost Opinions
- Growth Projections & Wastewater Loading Scenarios
 - ✓ Proposed growth alternatives
 - ✓ Recommended Growth Projections
 - ✓ Projected Wastewater Loadings (5-year increments)
- Pump Station & Transmission System
 - ✓ Alternatives Evaluated
 - ✓ Recommended 5-Year Incremental Improvements
 - ✓ Pump Station & Force Main Improvements
 - ✓ Opinions of Probable Cost
 - ✓ Graphics & Exhibits
- Wastewater Treatment & Disposal
 - ✓ Alternatives Evaluated
 - ✓ Recommended 5-year Incremental Improvements.
 - ✓ Expansion of Existing WWTPs
 - ✓ New WWTPs
 - ✓ Consolidation of WWTP's
 - ✓ Effluent Disposal Options
 - ✓ Opinions of Probable Cost
 - ✓ Graphics & Exhibits
- Funding Alternatives
 - ✓ Grant Opportunities
 - ✓ Loan Opportunities
- Final Future Project Recommendations
 - ✓ Prioritized Recommendation by Year & Impact
 - ✓ Planning Level Cost Opinions
 - ✓ Project Identification Maps
- Appendices – Supporting Documentation

Comments received during the submittal of the draft plan will be evaluated and incorporated as part of the final plan. The final plan will be provided to the County as appropriate in both hard copy and electronic format, including the SewerGEMS model and all necessary components for integration into the GIS system.

TASK 8 – PRESENTATION TO COUNTY COMMISSIONERS

Upon direction of County staff, McKim & Creed will prepare a PowerPoint presentation for the County Commissioners summarizing the results of the completed Comprehensive Wastewater Master Plan Report.

7. Furnish two hard review copies of the Preliminary Report and any other deliverables to Owner and review it with Owner. Within fourteen calendar days of receipt, Owner shall submit to Engineer any comments regarding the Report and any other deliverables.
 8. Revise the Report and any other deliverables in response to Owner's comments, as appropriate, and furnish up to seven copies of the revised Report and any other deliverables to the Owner in accordance with the schedule outlined in Exhibit B.
- B. Engineer's services under the Study and Report Phase will be considered complete on the date when the revised Report and any other deliverables have been delivered to Owner.

PART 2 – ADDITIONAL SERVICES

A2.01 Additional Services Requiring Owner's Written Authorization

If authorized in writing by Owner, Engineer shall furnish or obtain from others Additional Services of the types listed below.

1. Sub-surface underground utility engineering or locate services.
2. Detailed analysis of the conditions of wastewater treatment plants, pump stations, force mains, or other infrastructure.
3. Field testing, drawdowns, or other testing activities.
4. Environmental Assessments or Impact Statements or Biological surveys
5. As-Built surveys of gravity mains, force mains, pump stations, or infrastructure
6. Flow monitoring or smoke testing of gravity mains and/or pump stations
7. Detailed investigations or reports by a soil scientist.
8. Hydrogeological Investigations
9. Wetlands delineation or mapping
10. Geotechnical Investigations
11. Design or Permitting
12. Consultations with NCDENR regarding NPDES permit negotiations.
13. Bidding & Award
14. Construction Phase Services
15. Easement Surveying and Mapping, to include deed and property research.
16. Legal advertisements for construction contracts
17. Application fees for plan approval or construction permits.
18. Court appearances for litigation, or preparation for the same
19. Evaluation of funding sources or opportunities

This is **EXHIBIT B**, consisting of 1 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** to which is attached.

Payments to Engineer for Services
Basic Services - Lump Sum

The Professional Services Agreement is supplemented to include the following agreement of the parties.

Compensation for Basic Services - Method of Payment

A. Owner shall pay Engineer for Basic Services as follows:

1. A Lump Sum amount based on the following estimated distribution of compensation:

	<u>Amount</u>	<u>Duration</u>
a. Study and Report Phase	\$ <u>120,000</u>	<u>214</u> days
Basic Services Total	\$ <u>120,000</u>	<u>214</u> days

2. Engineer may alter the distribution of compensation between individual phases noted herein to be consistent with services actually rendered but shall not exceed the total Lump Sum amount unless approved in writing by the Owner.
3. The Lump Sum includes compensation for Engineer's services and services of Engineer's Consultants, if any. Appropriate amounts have been incorporated in the Lump Sum to account for labor, overhead, profit, and Reimbursable Expenses.
4. The portion of the Lump Sum amount billed for Engineer's services will be based upon Engineer's estimate of the percentage of the total services actually completed during the billing period.
5. The date for project completion shall be determined by adding the above noted Total Duration, also known as the "Time for Completion" to the Effective Date of the agreement.
6. Engineer may alter the distribution of compensation between individual phases noted herein to be consistent with Services actually rendered, but shall not exceed the total Lump Sum amount unless approved in writing by the Owner.
7. The Lump Sum includes compensation for Engineer's services and services of Engineer's Consultants, if any. Appropriate amounts have been incorporated in the Lump Sum to account for labor, overhead, profit, and Reimbursable Expenses.
8. The portion of the Lump Sum amount billed for Engineer's services will be based upon Engineer's estimate of the percentage of the total services actually completed during the billing period.
9. The date for project completion shall be determined by adding the above noted Total Duration, also known as the "Time for Completion" to the Effective Date of the Agreement.