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November 21, 2017

Ms. Julie Miller  
Director of Fiscal Operations  
Brunswick County  
30 Government Center Drive, NE  
Bolivia, NC 28422

**Subject: Water and Wastewater System Development Fee Study**

Dear Ms. Miller

Raftelis Financial Consultants, Inc. (Raftelis) is pleased to submit this engagement letter to Brunswick County, NC (County) to perform a Water and Wastewater System Development Fee Study. The following scope of work outlines Raftelis's proposed work plan for completing this important project for the County.

**Project Understanding**

The County is seeking assistance with a water and wastewater system development fee study. House Bill 436 (HB 436) which was recently signed by the Governor, is prompting the County to review its water and wastewater system development fees and ensure it complies with HB 436. Revenues from system development fees provide financial sufficiency, along with retail revenues. If revenues from system development fees change, then retail rates may also have to change to ensure continued financial sufficiency.

**Scope of Work**

As mentioned, the County is seeking assistance with a water and wastewater system development fee study to ensure compliance with HB 436. Raftelis will conduct a system development fee study to ensure compliance with HB 436 but to also identify any changes in revenues from system development fees, which impact retail and bulk rates.

The Buy-In Methodology is most appropriate in cases where the existing system assets provide extra capacity to provide service to new customers. This approach calculates a fee based upon the proportional cost of each user's share of existing core assets. The cost of the facilities is based on fixed assets records and usually includes escalation of the depreciated value of those assets to current dollars. All core assets that provide benefit to the general transmission/collection and treatment systems are typically included, such as wastewater treatment plants, major wastewater interceptors, and pump/lift stations.

The Incremental Cost (or Marginal Cost) Methodology focuses on the cost of adding additional facilities to serve new customers. It is most appropriate in a situation where existing facilities do not have available capacity to provide service to new customers, and the cost for new capacity can be tied to an approved capital improvement plan (“CIP”), or where additional capacity is currently being added and costs can be tied to an on-going construction program.

The Combined Cost approach is used in cases where the existing assets provide some capacity to accommodate new customers, but where the CIP also identifies significant capital investment to add additional infrastructure to address future growth and capacity needs.

Raftelis will review the County’s CIP and fixed asset information to determine the most appropriate method to be used in calculating the water and wastewater system development fees. The tasks to be performed are explained below.

#### Task 1 – Project Initiation and Management

The project initiation and management task is designed to ensure the study progresses in an efficient and deliberate manner. This task will include administrative components related to project management, quality assurance and control processes, and the collection of all relevant data.

#### TASK 2: Data Collection and Review

Raftelis will prepare a detailed data request list that will identify the information needed to complete the study. Examples of data may include the following:

- Detailed water and wastewater fixed asset data as of June 30, 2017 – please provide a description of each asset, it’s original cost, accumulated depreciation, and net book value. Please identify if it is a water or sewer assets.
- Identify all individual assets in the fixed asset list that were contributed by developers (or others) or grant funded
- Outstanding utility debt and associated debt service – provide annual principal and interest for each outstanding loan for the term of the loan
- For each loan, identify the types of projects it funded (treatment plants, water/sewer lines, etc.)
- Proposed capital projects and construction work in progress (“CWIP”) related to assets necessary to maintain existing capacity and/or expand capacity
- Uncommitted fund balances as of June 30, 2017
- Current capacity in water and sewer systems
- History of system development fees collected for the past 5 years
- Quantity of lines / mains by size broken out between water and sewer (total length in feet for each diameter size)
- System peaking information for the water system
- Inflow and infiltration data for the wastewater collection system
- Most recent master plan for the water and sewer system
- Five or ten-year capital improvement plan that identifies projects as either expansion or replacement/rehabilitation

- Capacity to be added from expansion projects identified in the CIP
- Gallons per day usage from planning documents

### Task 3: Data Analysis and Calculation of System Development Fees

Raftelis will develop a model which will provide the functionality to determine the cost basis for the water and wastewater system development fees, determine the water and wastewater capacity supported by the cost basis, and ultimately determine a cost per gallon per day for capacity in core assets. This cost of capacity per gallon per day will be multiplied by the amount of capacity needed to serve each customer, which becomes the basis for the utility's system development fees. The County currently uses state wastewater design flow rates<sup>1</sup> to establish an equivalent residential unit. This same methodology can be used to assess the calculated system development fees. Once all objectives are completed through Task 3, Raftelis will conduct a Webinar to discuss preliminary results. This will give the County staff the opportunity to react to, and provide insight on the preliminary results prior to the completion of the study. Raftelis will then make any modifications and finalize the calculation of system development fees.

### Task 4: Preparation of Written Analysis

Raftelis will document the study's process and findings in a letter report that will be made available to the public for comment. Raftelis will consider any responses to public comments.

### Project Team

Ms. Elaine Conti will serve as the Project Manager for this project. She has been with RFC for 17 years and has served as the project manager for numerous rate studies in North Carolina and across the country. She will be responsible for overseeing the development of the rate and financial planning model and the letter report. She will also be responsible for ensuring the project stays on budget and meets the project schedule. Ms. Vanessa Waller will serve as the lead consultant and will build the model under the direction of Ms. Conti.

### Project Schedule

It is our understanding that the County would like to complete the study by March 1, 2018. This schedule will allow the County to consider rate adjustment considerations prior to the beginning of the fiscal year (July 1, 2018) and to comply with the requirements of HB 436 regarding system development fees.

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<sup>1</sup> 15A NCAC 02T.0014 Wastewater Design Flow Rates

## Project Fees

We propose to complete the scope of work described above and in the attached work plan for fees and expenses not-to-exceed \$23,960. (It should be noted this fee does *not* include Raftelis presenting at a public hearing.) The attached work plan provides an estimate of the level of effort required to complete each task and we reserve the right to shift hours among tasks and personnel as circumstances change during the engagement. We will bill monthly for all work performed within the prior month. We require payment within 30 days upon receipt of the invoice.

Please let me know if you have any questions about the proposed scope of work and fees, or if there is any additional information that you need to move forward with this project. If you agree with the terms of this engagement letter, please have an authorized representative of the County sign below. We look forward to the opportunity to work with Brunswick County on this important project.

Sincerely,

*RAFTELIS FINANCIAL CONSULTANTS, INC.*



Elaine Conti  
Senior Manager

We accept the terms of this engagement letter:

_____ Signature	_____ Name of authorized agent
_____ Date	_____ Title

*Raftelis is registered with the U.S. Securities Exchange Commission (SEC) and the Municipal Securities Rulemaking Board (MSRB) as a Municipal Advisor. Registration as a Municipal Advisor is a requirement under the Dodd-Frank Wall Street Reform and Consumer Protection Act. All firms that provide financial forecasts that include assumptions about the size, timing, and terms for possible future debt issues, as well as debt issuance support services for specific proposed bond issues, including bond feasibility studies and coverage forecasts, must be registered with the SEC and MSRB to legally provide financial opinions and advice. Raftelis's registration as a Municipal Advisor means our clients can be confident that Raftelis is fully qualified and capable of providing financial advice related to all aspects of utility financial planning in compliance with the applicable regulations of the SEC and the MSRB.*

## WORK PLAN

Water and Wastewater System Development Fee Study				Total
	EVC	Staff	Admin	
Project Management and Administration	4			
Data Collection and Review	2	8		
Data Analysis and Calculation of System Development Fees	16	58		
Preparation of Letter Report	12	14	2	
Estimated Total Hours	34	80	2	
Billing Rate	\$255	\$175	\$75	
Total Fees	\$8,670	\$14,000	\$150	\$22,820
Estimated Expenses				1,140
Estimated Total Project Fees				<b>\$23,960</b>

EVC= Elaine Conti

VW = Vanessa Waller