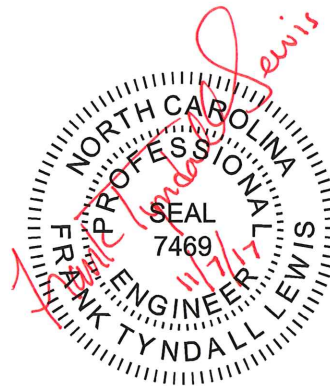


**WRITTEN ANALYSIS FOR
CALCULATION OF
FORK TOWNSHIP SANITARY DISTRICT
SEWER SYSTEM DEVELOPMENT FEE**

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PREPARED BY

**F. Tyndall Lewis, P.E.
McDAVID ASSOCIATES, INC.
109 EAST WALNUT STREET
P.O. BOX 1776
GOLDSBORO, NC 27533
919-736-7630**

**WRITTEN ANALYSIS FOR CALCULATION OF
FORK TOWNSHIP SANITARY DISTRICT
SYSTEM DEVELOPMENT FEE**

The NC General Assembly ratified House Bill 436 (Attachment A) entitled “AN ACT TO PROVIDE FOR UNIFORM AUTHORITY TO IMPLEMENT SYSTEM DEVELOPMENT FEES FOR PUBLIC WATER AND SEWER SYSTEMS IN NORTH CAROLINA AND TO CLARIFY THE APPLICABLE STATUTE OF LIMITATIONS” on June 29, 2017. The bill was signed by the Governor on July 20, 2017. The law defines “System development fee” as follows:

“System Development Fee – A charge or assessment for service imposed with respect to new development to fund costs of capital improvements necessitated by and attributable to such new development to recoup costs of existing facilities which serve such new development, or a combination of those costs, as provided in this Article. The term includes amortized charges, lump-sum charges, and any other fee that functions as described by this definition regardless of terminology. The term does not include any of the following:

- a. A charge or fee to pay the administrative, plan review, or inspection costs associated with permits required for development.
- b. Tap or hookup charges for the purpose of reimbursing the local governmental unit for the actual costs of connecting the service unit to the system.
- c. Availability charges.
- d. Dedication of capital improvements onsite, adjacent, or ancillary to a development absent a written agreement providing for credit or reimbursement to the developer pursuant to G.S. 153A-280, 153A-451, 160A-320, 160A-499 or Part 3A of Article 18, Chapter 153A or Part 3D of Article 19, Chapter 160A of the General Statutes.
- e. Reimbursement to the local governmental unit for its expenses in constructing or providing for water or sewer utility capital improvements adjacent or ancillary to the development if the owner or developer has agreed to be financially responsible for such expenses; however, such reimbursement shall be credited to any system development fee charged as set forth in G.S. 162A-207(c).”

The “system development fee” (SDF) must be calculated based on a written analysis that:

- (1) “Is prepared by a financial professional or a licensed professional engineer qualified by experience and training or education to employ generally accepted accounting, engineering, and planning methodologies to calculate system development fees for public water and sewer systems.
- (2) Documents in reasonable detail the facts and data used in the analysis and their sufficiency and reliability.
- (3) Employs generally accepted accounting, engineering, and planning methodologies, including the buy-in, incremental costs or marginal costs, and combined cost methods for each service, setting forth appropriate analysis as to the consideration and selection of a method appropriate to the circumstances and adapted as necessary to satisfy all requirements of this

Article.

- (4) Documents and demonstrates the reliable application of the methodologies to the facts and data, including all reasoning, analysis, and interim calculations underlying each identifiable component of the system development fee and the aggregate thereof.
- (5) Identifies all assumptions and limiting conditions affecting the analysis and demonstrates that they do not materially undermine the reliability of conclusions reached.
- (6) Calculates a final system development fee per service unit of new development and includes an equivalency or conversion table for use in determining the fees applicable for various categories of demand.
- (7) Covers a planning horizon of not less than 10 years nor more than 20 years.
- (8) Is adopted by resolution or ordinance of the local governmental unit in accordance with G.S. 162A-209.”

Simply stated, a SDF is a one-time charge for system capacity. New infrastructure, such as water treatment plants (WTP) and wastewater treatment plants (WWTP) typically require several years for construction and involve significant planning, permitting and financing costs. Due to the difficulties, time and costs associated with construction, WTPs and WWTPs are typically constructed with adequate capacity to meet future growth needs. Although capacity to accommodate future growth is included, the Sanitary District has no guarantee if and when growth occurs. Significant debt is usually required to finance new WTP and/or WWTP projects. In order to make debt payments, the Sanitary District’s system of user charges is in part based on the debt service requirements. The existing system users therefore face routine user charges that retire the debt, including the debt associated with the capacity earmarked for future development. The concept of SDFs offers a method of recovering some of the costs associated with capacity for new developments.

Fork Township Sanitary District (FTSD) has made significant investments in water and sewer infrastructure that includes capacity for new development. FTSD desires to implement SDFs in order to recover a portion of the costs associated with the sewer capacity provided for new development. FTSD desires to charge SDF’s for new sewer development since sewer is available only to a small fraction of FTSD water customers and significant water revenues were used for the initial construction costs for the FTSD sewer facilities. House Bill 436 sets forth basic criteria governing how SDFs may be charged. The definition of SDF states in part “A charge ... for service... to new developments... to recoup costs of existing facilities which serve such new development...”. Water systems typically include source, treatment, storage and distribution components. Sewer systems typically include collection, pumping and treatment components. The definition of “Service Development Fee” appears to require a connection between the SDF and the new development (“...to recoup costs of existing facilities which serve such new development...”). FTSD’s wastewater infrastructure that is guaranteed to serve new development, regardless of location, is limited to the pretreatment infrastructure adjacent to O’Berry Center and capacity fees paid Goldsboro. FTSD also has significant sewer infrastructure located at the intersection of NC 581 and US 70 that was initially constructed to serve a shopping center anchored by Walmart. These facilities were constructed in a manner to provide the capability for further expansion and future growth.

SELECTION OF ACCOUNTING METHOD FOR CALCULATION OF SYSTEM DEVELOPMENT FEES

House Bill 436 requires the written analysis in support of SDFs employ "... generally accepted accounting, engineering, and planning methodologies, including the buy-in, incremental costs or marginal costs, and combined cost methods for each service, setting forth appropriate analysis as to the consideration and selection of a method appropriate to the circumstances...". The 7th edition of AWWA's "Principles of Water Rates, Fees, and Charges" includes descriptions of various methods used to calculate system development fees using methods with names similar to those included in House Bill 436. It identifies the three most common methods as the "buy-in method", "incremental cost method" and "combined approach" and describes each as follows:

1. The *buy-in method* is based on the value of the existing system's capacity. This method is typically used when the existing system has sufficient capacity to serve new development now and into the future.
2. The *incremental cost method* is based on the value or cost to expand the existing system's capacity. This method is typically used when the existing system has limited or no capacity to serve new development and new or incremental facilities are needed to serve new development now and into the future.
3. The *combined approach* is based on a blended value of both the existing and expanded system's capacity. This method is typically used where some capacity is available in parts of the existing system (e.g., source of supply), but new or incremental capacity will need to be built in other parts (e.g., treatment plant) to serve new development at some point in the future.

FTSD completed significant sewer improvements in 2008 to provide sewer services to the intersection of NC 581 and US 70. The initial beneficiaries of the improvements included a new Walmart and other stores in the northwest quadrant of the intersection and existing businesses in the southeast quadrant of the intersection. Improvements included approximately 1,200 LF of 8" - 12" gravity sewer lines and one pump station near the intersection. The pump station pumps wastewater through approximately 14,000 LF of 8" force main to pre-treatment infrastructure adjacent to O'Berry Center. Following pretreatment the wastewater is conveyed to the City of Goldsboro sewer system. Total cost of the improvements amounted to \$2,093,726 with the FTSD non-grant share of these costs amounting to \$1,206,328. The completed facilities not only included capacity for the initial customers but also included capacity for future customers.

Following completion of construction, FTSD implemented a system of "impact fees" to be charged to new developments requesting sewer services. FTSD's intent was to re-coup its initial \$1,206,328 contribution to the sewer project since the source of these funds was revenues from FTSD's water customers. In essence, FTSD's board viewed the \$1,206,328 contribution as a "loan" from the water system to the new sewer system.

The "buy-in method" is typically used where the system has sufficient capacity to meet future needs, such as exists in the case of FTSD. Payment of an SDF under the "buy-in method" may be considered as providing access to capacity to new development in general at similar terms to that of existing users on the system. The aim under this method is to achieve capital equity between existing and new users. The SDF is designed to assess new users the approximate average equity, or debt-free, investment position of existing users.

The following paragraphs from “Principles of Water Rates, Fees and Charges” describe various methods to establish values to be used for the “by-in method”:

“Validation and system equity. There are different methods used to establish a value to the existing assets under the buy-in methodology. If the existing assets are valued at their original cost or depreciated original cost, this is often referred to as the *original cost method*. An alternative valuation approach is to value the existing assets at a replacement cost or a depreciated replacement cost. This is commonly referred to as the *replacement cost method*. According to the replacement cost method, the existing system components are valued at the current-day cost of replicating the existing assets. This is typically accomplished through the use of a construction cost index or other comparable valuation method to bring the historical costs up to current-day value. In summary form the four valuation approaches for system assets under the buy-in method are as follows:

1. **Original cost (OC)** is the cost of construction in the year of construction.
2. **Original cost less accumulated depreciation (OCLD)** is also known as the net book value of the system assets.
3. **Replacement cost new (RCN)** is the original cost escalated to current-day dollars, providing an estimate of the current-day cost of replicating the existing facilities.
4. **Replacement cost new less depreciation (RCNLD)** is the original cost escalated to current-day dollars, less accumulated replacement cost depreciation. This provides an estimate of the current-day cost of replicating the existing facilities that is then adjusted by an estimate of the replacement cost depreciation, resulting in a replacement cost valuation that reflects the remaining depreciable life of the facility.

A combination of the approaches may also be used. Using the OC and OCLD valuations, the SDC reflects the original investment in the existing capacity. The new customer “buys in” to the capacity at the OC or the net book value cost (OCLD) for the facilities and as a result pays an amount similar to what the existing customers paid for the capacity (OC) or the remaining value of the original investment (OCLD).

Using the RCN and the RCNLD valuations, the SDC reasonably reflects the cost of providing new expansion capacity to customers as if the capacity was added at the time the new customers connected to the system. It may also be thought of as a valuation method to fairly compensate the existing customers for the carrying costs of the excess capacity built into the system in advance of when the new customers connect to the system. This is because, up to the point of the new customer connecting to the system, the existing customers have been financially responsible for the carrying costs of that excess capacity that is available for development.

System liabilities and equity. Balance-sheet liabilities and equity that are recognized in the valuation method should equitably address the issue of the outstanding principal portion of long-term debt. When debt is issued to finance a growth- or expansion-related project, the principal portion of the debt service will be

repaid over time, possibly through a customer's rates after connection to the system and payment of an SDC. Given that, a debt credit may be applicable to avoid the potential double-charging of these debt costs through both the SDC and user rates. In a situation where the SDC is separated into functional components (source of supply, treatment, pumping, transmission, etc.), the analysis may provide these debt credits at the functional level or on a combined system level at the end of the analysis.

SDC calculation adjustment. Valuation adjustments may be necessary if grants or other contributions were used to develop the capacity-related facilities or if a facility is replaced and the resulting replacement provides additional capacity to accommodate future customers. This may be addressed within the valuation process by determining the percentage of the asset eligible for the SDC (i.e., percent SDC eligible). For example, if grants were provided specifically for the facilities, these grant contributions should be credited to the value (cost) of those specific facilities, and the grant-related portion of the facility's value should not be included in the SDC."

GS 162A-211. "Use and administration of revenue" paragraph (b) states in part "...The basis for the buy-in calculation for previously completed capital improvements shall be determined by using a generally accepted method of valuing the actual or replacement costs of the capital improvement for which the buy-in fee is being collected less depreciation, debt credits, grants, and other generally accepted valuation adjustments." Based on this paragraph's apparent requirement that depreciation be deducted when using the buy-in method, it is recommended FTSD use the buy-in method described in the AWWA document as the "**Replacement cost new less depreciation (RCNLD)**".

CALCULATION OF WATER AND SEWER SYSTEM DEVELOPMENT FEES

FTSD and Goldsboro approved a "Utility Agreement" (Attachment B) on November 16, 2005 that allowed FTSD discharge up to an average of 100,000 gpd of wastewater to the City of Goldsboro sewer system. The Agreement was modified September 18, 2008 by increasing the volume of wastewater allowed to be discharged from 100,000 gpd to 125,000 gpd. To date FTSD has used less than 8,000 gpd of the 125,000 gpd allocation and believes the remaining capacity is adequate for at least 10 years in the future. FTSD paid Goldsboro \$3.39 per gallon of capacity. The first payment amounted to \$339,000 and the second payment amounted to \$84,750. The Agreement specified if FTSD acquired the existing sewer facilities operated by the Wayne County Board of Education serving the three Rosewood schools and the Rosewood Baptist Church that the capacity used by these customers would not be charged against the capacity purchased by FTSD from Goldsboro. In addition, the capacity required to serve any properties within FTSD annexed by the City of Goldsboro served by the FTSD sewer facilities would not be counted against the capacity purchased by FTSD. The Agreement required FTSD identify the point of connection of the FTSD sewer facilities to the Goldsboro sewer system and install pretreatment facilities including fine solids removal and flow measuring facilities. FTSD subsequently purchased property on the south side of Old Smithfield Road across from the intersection with O'Berry Center Road and constructed the pretreatment infrastructure required by the Utility Agreement. All wastewater conveyed by FTSD sewer lines is discharged to the City of Goldsboro from this pretreatment complex. Since all existing and future FTSD sewer users will utilize these facilities, FTSD desires to assess SDF's for use of these facilities. In order to calculate the SDF for these facilities, it is necessary to differentiate between "in city" and "out of city" users since "out of city" users utilize capacity purchased by FTSD and "in city" users do not.

The SDF calculation is required to be expressed "... per service unit of new development...". "Service unit" is defined in HB 436 as "A unit of measure, typically an equivalent residential unit,...". It is recommended FTSD define an Equivalent Residential Unit (ERU) based on a demand of 360 gpd (reference NC Administrative Code 15A NCAC 02T.0114 for a three bedroom home @ 120 gpd per bedroom). Calculations of SDF's using the Buy-In RCNLD method for the FTSD sewer system are illustrated in Tables 1, 2 and 3.

Table 1 utilizes the original cost of the assets and their useful lives in calculating the RCNLD value for the Pretreatment infrastructure including the cost of the capacity purchased from Goldsboro. The SDF calculated in Table 1 would be applicable to “out of city” FTSD sewer customers.

**TABLE 1 - DEVELOPMENT OF SDF FOR FORK TOWNSHIP SANITARY DISTRICT
PRETREATMENT FACILITIES - O'BERRY CENTER
INCLUSIVE OF CAPACITY CHARGES PAID TO GOLDSBORO - SEWER SDF APPLICABLE TO ALL FTSD NON-CITY NEW DEVELOPMENT**

Asset Description	Useful Life, Years	Date Installed	Years in Service	Original Cost	Cost Index	Replace Cost Value	% Depreciated	% Not Depreciated	% SDF Eligible	Water System SDC Component
Pretreatment Facilities	40	2008	9	\$392,730	1.156	\$453,996	22.5%	77.5%	82.95%	\$291,857
Initial Capacity Purchase - 100,000 Gallons	N/A	N/A	N/A	\$339,000	N/A	N/A	N/A	N/A	82.95%	\$281,201
Land	N/A	N/A	N/A	\$60,603	N/A	N/A	N/A	N/A	82.95%	\$50,270
Additional 25,000 Gallon Capacity Purchase	N/A	N/A	N/A	\$84,750	N/A	N/A	N/A	N/A	100.00%	\$84,750
Equals Pretreatment Facilities Net Value Divided By: Pretreatment Capacity 125,000 gpd Equals: Unit Value (\$/gpd) Multiplied by: New Customer Demand 360 gpd (ERU) Equals: Sewer System Component Value of SDF										\$708,078 125,000 \$5.66 360 \$2,039

ERU = Equivalent Residential Unit

The Table 1 calculation excludes grants from the SDF (\$135,122 of Rural Center grant funds were used to construct the pretreatment infrastructure). The grant reduction is taken into account in the “% SDF Eligible” column (Pretreatment non-grant share of \$657,211 representing 82.95% of total cost). Attachment C further illustrates calculation of the “% SDF Eligible” column. R. S. Means Index (Attachment D) data was used for the Cost Index data illustrated in the “Cost Index” column. The total depreciated replacement cost is calculated as \$708,078. This valuation is not reduced by outstanding debt principal since there is no debt associated with these assets. The net value is then divided by the system capacity to determine the unit value. The system capacity is based on the Utility Agreement which limits FTSD’s capacity to 125,000 gpd. The unit value of capacity is then multiplied by the amount of capacity needed for a new customer (Equivalent Residential User). The amount of capacity needed for a new customer (Equivalent Residential User) is based on 360 gpd (reference NC Administrative Code 15A NCAC 02T.0114 for a three bedroom home @ 120 gpd per bedroom).

Calculation of the SDF using the Buy-In RCNLD method for the FTSD Pretreatment infrastructure excluding the cost of the capacity purchased from Goldsboro is illustrated in Table 2. This fee would be applicable to “in city” sewer users served by the FTSD sewer infrastructure.

TABLE 2 - DEVELOPMENT OF SDF FOR FORK TOWNSHIP SANITARY DISTRICT
 PRETREATMENT FACILITIES - O'BERRY CENTER
 EXCLUSIVE OF CAPACITY CHARGES PAID TO GOLDSBORO - SEWER SDF APPLICABLE TO ALL FTSD "IN-CITY" NEW DEVELOPMENT

Asset Description	Useful Life, Years	Date Installed	Years in Service	Original Cost	Cost Index	Replace Cost Value	% Depreciated	% Not Depreciated	% SDF Eligible	Water System SDC Component	
Pretreatment Facilities Exclusive of Capacity Purchases	40	2008	9	\$392,730	1.156	\$453,996	22.5%	77.5%	70.19%	\$246,961	
Land	N/A	N/A	N/A	\$60,603	N/A	N/A	N/A	N/A	70.19%	\$42,537	
										Equals Pretreatment Facilities Net Value	\$289,499
										Divided By: Pretreatment Capacity 125,000 gpd	125,000
										Equals: Unit Value (\$/gpd)	\$2.32
										Multiplied by: New Customer Demand 360 gpd (ERU)	360
										Equals: Sewer System Component Value of SDF	\$834

ERU = Equivalent Residential Unit

Table 2 utilizes the original cost of the Pretreatment infrastructure, not including capacity charges, and its useful life in calculating the RCNLD value. The Rural Center grant (\$135,122) represents 29.81% of costs in Table 2 since the total cost has been reduced by removing the capacity charges. The “% SDF Eligible” column entry is therefore 70.19% (100% - 29.81%). Attachment C further illustrates calculation of the “% SDF Eligible” column. R. S. Means Index data (Attachment D) was used for the Cost Index entry in the “Cost Index” column. The total depreciated replacement cost is calculated as \$289,499. This value is then divided by the system capacity to determine the unit value. The unit value of capacity is then multiplied by the amount of capacity needed for a new customer (Equivalent Residential User). The amount of capacity needed for a new customer (Equivalent Residential User) is based on 360 gpd (reference NC Administrative Code 15A NCAC 02T.0114 for a three bedroom home @ 120 gpd per bedroom).

Table 3 addresses the NC 581/US 70 pump station/force main infrastructure completed in 2008 to initially serve the intersection of NC 581 and US 70. New development, including Walmart and an adjoining strip center, spurred the construction of the sewer infrastructure. FTSD participated in the construction of the sewer infrastructure to provide additional capacity to serve future connections.

**TABLE 3 - DEVELOPMENT OF SDF FOR FORK TOWNSHIP SANITARY DISTRICT
NC 581/US 70 PUMP STATION AND FORCE MAIN
SEWER SDF APPLICABLE TO FTSD NEW DEVELOPMENT UTILIZING NC 581/US 70 PUMP STATION AND FORCE MAIN**

Asset Description	Useful Life, Years	Date Installed	Years in Service	Original Cost	Cost Index	Replace Cost Value	% Depreciated	% Not Depreciated	% SDF Eligible	Water System SDC Component	
Construction	40	2008	9	\$779,084	1.156	\$900,621	22.5%	77.5%	66.71%	\$465,623	
Land	N/A	N/A	N/A	\$20,000	N/A	N/A	N/A	N/A	66.71%	\$13,342	
										Equals PS & FM Facilities Net Value	\$478,965
										Divided By: Pretreatment Capacity 125,000 gpd	125,000
										Equals: Unit Value (\$/gpd)	\$3.83
										Multiplied by: New Customer Demand 360 gpd (ERU)	360
										Equals: Sewer System Component Value of SDF	\$1,379

ERU = Equivalent Residential Unit

The Table 3 calculation excludes grants from the SDF (\$266,001 of Rural Center grant funds were used to construct the NC 581/US 70 pump station/force main infrastructure). The grant reduction is taken into account in the “% SDF Eligible” column (NC 581/US 70 pump station/force main non-grant share of \$533,083 representing 66.71% of total cost). Attachment C further illustrates calculations of the “% SDF Eligible” column. R. S. Means Index (Attachment D) data was used for the Cost Index data illustrated in the “Cost Index” column. The total depreciated replacement cost is calculated as \$478,965. This valuation is not reduced by outstanding debt principal since there is no debt associated with these assets. The net value is then divided by the system capacity to determine the unit value. The system capacity is based on a total service area population of 1,500 population, which requires a 3.68 peaking factor. The pump station rated capacity of 320 gpm correlates to an average daily capacity of 125,000 gpd when adjusting for the 3.68 peaking factor. The calculated unit value of capacity is then multiplied by the amount of capacity needed for a new customer (Equivalent Residential User). The amount of capacity needed for a new customer (Equivalent Residential User) is based on 360 gpd (reference NC Administrative Code 15A NCAC 02T.0114 for a three bedroom home @ 120 gpd per bedroom).

In summary, the three calculated SDFs for an Equivalent Residential User (ERU) are as follows:

Pretreatment SDF Including Goldsboro Capacity Fee	\$ 2,039.00
Pretreatment SDF Excluding Goldsboro Capacity Fee	\$ 834.00
NC 581/US 70 Pump Station/Force Main	\$ 1,379.00

The three calculated SDFs expressed on a per gallon basis are as follows:

Pretreatment SDF Including Goldsboro Capacity Fee	\$ 5.66/gpd
Pretreatment SDF Excluding Goldsboro Capacity Fee	\$ 2.32/gpd
NC 581/US 70 Pump Station/Force Main SDF	\$ 3.83/gpd

“Out of city” users served by FTSD will be required to pay the SDF including the Goldsboro capacity fee. “In city” users served by FTSD will be required to pay the SDF excluding the Goldsboro capacity fee. One of these two fees, not both, will be assessed to all new development served by FTSD sewer infrastructure. New development connecting to the NC 581/US 70 pump station/force main infrastructure will also be required to pay the SDF calculated for that infrastructure. For example, a new development locating near the NC 581/US 70 intersection utilizing FTSD sewer facilities would be required to pay a SDF of \$9.49/gpd ($\$5.66 + \3.83) if “out of city” or \$6.15/gpd ($\$2.32 + \3.83) if “in city”. The District Board may adopt an SDF fee schedule less than the calculated SDFs but is prohibited by House Bill 436 from adopting SDFs greater than calculated.

CALCULATION OF EQUIVALENT RESIDENTIAL UNITS FOR VARIOUS CATEGORIES OF DEMAND

Fork Township Sanitary District must have the capability to convert different types of users into Equivalent Residential Units (ERUs) as specified in House Bill 436. The Division of Water Resources (DWR) Water Quality Permitting Section issues permits for sewer system extensions and/or modifications. In order to determine the flow from new developments, DWR requires the applicant quantify the projected flow based on design flow rates for different types of establishments identified in NC Administrative Code 15A NCAC 02T.0114. Table 3 illustrates the guidance provided in 15A NCAC 02T.0114 to project future flows from different establishments.

**TABLE 3
15A NCAC 02T .0114 WASTEWATER DESIGN FLOW RATES**

- (a) This Rule shall be used to determine wastewater flow rates for all systems covered by this Subchapter unless alternate criteria are provided by a program specific rule and for flow used for the purposes of 15A NCAC 02H.0105. These are minimum design daily flow rates for normal use and occupancy situations. Higher flow rates may be required where usage and occupancy are atypical, including, those in Paragraph (e) of this Rule. Wastewater flow calculations must take hours of operation and anticipated maximum occupancies/usage into account when calculating peak flows for design.
- (b) In determining the volume of sewage from dwelling units, the flow rate shall be 120 gallons per day per bedroom. The minimum volume of sewage from each dwelling unit shall be 240 gallons per day and each additional bedroom above two bedrooms shall increase the volume by 120 gallons per day. Each bedroom or any other room or addition that can reasonably be expected to function as a bedroom shall be considered a bedroom for design purposes. When the occupancy of a dwelling unit exceeds two persons per bedroom, the volume of sewage shall be determined by the maximum occupancy at a rate of 60 gallons per person per day.
- (c) The following table shall be used to determine the minimum allowable design daily flow of wastewater facilities. Design flow rates for establishments not identified below shall be determined using available flow data, water-using fixtures, occupancy or operation patterns, and other measured data.

Type of Establishments	Daily Flow for Design
Barber and Beauty Shops	
Barber Shops	50 gal/chair
Beauty Shops	125 gal/booth or bowl
Businesses, offices and factories	
General business and office facilities	25 gal/employee/shift
Factories, excluding industrial waste	25 gal/employee/shift
Factories or businesses with showers or food preparation	35 gal/employee/shift
Warehouse	100 gal/loading bay
Warehouse – self storage (not including caretaker residence)	1 gal/unit
Churches	
Churches without kitchens, day care or camps	3 gal/seat
Churches with kitchen	5 gal/seat
Churches providing day care or camps	25 gal/person (child & employee)
Fire, rescue and emergency response facilities	
Fire or rescue stations without on site staff	25 gal/person
Fire or rescue stations with on-site staff	50 gal/person/shift
Food and drink facilities	
Banquet, dining hall	30 gal/seat
Bars, cocktail lounges	20 gal/seat
Caterers	50 gal/100 sq ft floor space
Restaurant, full Service	40 gal/seat
Restaurant, single service articles	20 gal/seat

Restaurant, drive-in	50 gal/car space
Restaurant, carry out only	50 gal/100 sq ft floor space
Institutions, dining halls	5 gal/meal
Deli	40 gal/100 sq ft floor space
Bakery	10 gal/100 sq ft floor space
Meat department, butcher shop or fish market	75 gal/100 sq ft floor space
Specialty food stand or kiosk	50 gal/100 sq ft floor space
Hotels and Motels	
Hotels, motels and bed & breakfast facilities, without in-room cooking facilities	120 gal/room
Hotels and motels, with in-room cooking facilities	175 gal/room
Resort hotels	200 gal/room
Cottages, cabins	200 gal/unit
Self service laundry facilities	500 gal/machine
Medical, dental, veterinary facilities	
Medical or dental offices	250 gal/practitioner/shift
Veterinary offices (not including boarding)	250 gal/practitioner/shift
Veterinary hospitals, kennels, animal boarding facilities	20 gal/pen, cage, kennel or stall
Hospitals, medical	300 gal/bed
Hospitals, mental	150 gal/bed
Convalescent, nursing, rest homes without laundry facilities	60 gal/bed
Convalescent, nursing, rest homes with laundry facilities	120 gal/bed
Residential care facilities	60 gal/person
Park, recreation, camp grounds, R-V parks and other outdoor activity facilities	
Campground with comfort station, without water or sewer hookups	75 gal/campsite
Campground with water and sewer hookups	100 gal/campsite
Campground dump station facility	50 gal/space
Construction, hunting or work camps with flush toilets	60 gal/person
Construction, hunting or work camps with chemical or portable toilets	40 gal/person
Parks with restroom facilities	250 gal/plumbing fixtures
Summer camps without food preparation or laundry facility	30 gal/person
Summer camps with food preparation and laundry facilities	60 gal/person
Swimming pools, bathhouses and spas	10 gal/person
Public access restrooms	325 gal/plumbing fixture
Schools, preschools and day care	
Day care and preschool facilities	25 gal/person (child & employee)
Schools with cafeteria, gym and showers	15 gal/student
Schools with cafeteria	12 gal/student
Schools without cafeteria, gym or showers	10 gal/student
Boarding schools	60 gal/person (student & employee)
Service stations, car wash facilities	
Service stations, gas stations	250 gal/plumbing fixtures
Car wash facilities (if recycling water see Rule .0235)	1,200 gal/bay
Sports centers	
Bowling center	50 gal/lane
Fitness exercise, karate or dance center	50 gal/100 sq ft
Tennis, racquet ball	50 gal/court
Gymnasium	50 gal/100 sq ft
Golf course with only minimal food service	250 gal/plumbing fixture
Country clubs	60 gal/member or patron
Mini golf, putt-putt	250 gal/plumbing fixture
Go-kart, motocross	250 gal/plumbing fixture
Batting cages, driving ranges	250 gal/plumbing fixture
Marinas without bathhouse	10 gal/slip
Marinas with boathouse	30 gal/slip
Video game arcades, pool halls	250 gal/plumbing fixtures
Stadiums, auditoriums, theaters, community centers	5 gal/seat
Stores, shopping centers, malls and flea markets	
Auto, boat recreational vehicle dealerships/showrooms with restrooms	125 gal/plumbing fixture
Convenience stores, with food preparation	60 gal/100 sq ft
Convenience stores, without food preparation	250 gal/plumbing fixtures
Flea markets	30 gal/stall

Shopping centers and malls with food service	130 gal/1,000 sq ft
Stores and shopping centers without food service	100 gal/1,000 sq ft
Transportation terminals – air, bus, train, ferry, port and dock	5 gal/passenger

Once flow for a new establishment has been estimated in accordance with 15A NCAC 02T.0114, the flow may be converted to Equivalent Residential Units (ERUs) by dividing the total flow by 360 gpd, which is the design flow associated with an ERU. It is recognized that the design flow figures in 15A NCAC 02T.0114 may be questioned for any given establishment; however, these are the figures developed by the State and are the figures the Sanitary District must use in seeking permits from the State.

USE OF SDF RECEIPTS

House Bill 436 requires “System development fee revenues shall be accounted for by means of a capital reserve fund established pursuant to Part 2 of Article 3 of Chapter 159 of the General Statutes and limited as to expenditure of funds in accordance with this section.”. Funds may be “...expended for previously completed capital improvements for which capacity exists and for capital rehabilitation projects...”. A Capital Rehabilitation Project is defined as “Any repair, maintenance, modernization, upgrade, update, replacement, or correction of deficiencies of a facility, including any expansion or other undertaking to increase the preexisting level of service for existing development.”.

Detailed records must be maintained that track all SDF revenues and expenditures to document compliance with the requirements of House Bill 436.

TIME FOR COLLECTION OF SYSTEM DEVELOPMENT FEES

162A-213 states “for new development involving the subdivision of land, the system development fee shall be collected by a local government unit either at the time of plat recordation or when water or sewer service for the subdivision or other development is committed by the local governmental unit. For all other new development, the local governmental unit shall collect the system development fee at the time of application for connection of the individual unit of development to the service or facilities.”.

Fork Township Sanitary District will be required to design and implement in-house procedures to collect SDFs in accordance with the requirements in House Bill 436.

ADOPTION AND PERIODIC REVIEW

162A-209. Adoption and Periodic Review reads as follows:

- (a) For not less than 45 days prior to considering the adoption of a system development fee analysis, the local governmental unit shall post the analysis on its Web site and solicit and furnish a means to submit written comments, which shall be considered by the preparer of the analysis for possible modifications or revisions.
- (b) After expiration of the period for posting, the governing body of the local governmental unit shall conduct a public hearing prior to considering adoption of the analysis with any modifications or revisions.
- (c) The local governmental unit shall publish the system development fee in its annual budget or rate plan or ordinance. The local governmental unit shall update the system development fee analysis at least every five years.

The written analysis for calculating the SDF must be adopted by resolution or ordinance by the District Board.

CONSTRUCTION OR CONTRIBUTIONS CREDIT

The definition of “System development fee” excludes capital improvements on-site, adjacent, or ancillary to a development unless a written agreement providing for credit or reimbursement to the developer provides otherwise. The definition also excludes “Reimbursement to the local governmental unit for its expenses in constructing or providing for water or sewer utility capital improvements adjacent or ancillary to the development if the owner or developer has agreed to be financially responsible for such expenses; however, such reimbursement shall be credited to any system development fee charged as set forth in G. S. 162A-207(c).”. G. S. 162A-207(c) states “In calculating the system development fee with respect to new development, the local governmental unit shall credit the value of costs in excess of the development’s proportionate share of connecting facilities required to be oversized for use of others outside of the development. No credit shall be applied, however, for water or sewer capital improvements on-site or to connect new development to water or sewer facilities.”.

ATTACHMENT A

House Bill 436

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2017

HOUSE BILL 436
RATIFIED BILL

AN ACT TO PROVIDE FOR UNIFORM AUTHORITY TO IMPLEMENT SYSTEM DEVELOPMENT FEES FOR PUBLIC WATER AND SEWER SYSTEMS IN NORTH CAROLINA AND TO CLARIFY THE APPLICABLE STATUTE OF LIMITATIONS.

The General Assembly of North Carolina enacts:

SECTION 1. Chapter 162A of the General Statutes is amended by adding a new Article to read:

"Article 8.

"System Development Fees.

"§ 162A-200. Short title.

This Article shall be known and may be cited as the "Public Water and Sewer System Development Fee Act."

"§ 162A-201. Definitions.

The following definitions apply in this Article:

- (1) Capital improvement. – A planned facility or expansion of capacity of an existing facility other than a capital rehabilitation project necessitated by and attributable to new development.
- (2) Capital rehabilitation project. – Any repair, maintenance, modernization, upgrade, update, replacement, or correction of deficiencies of a facility, including any expansion or other undertaking to increase the preexisting level of service for existing development.
- (3) Existing development. – Land subdivisions, structures, and land uses in existence at the start of the written analysis process required by G.S. 162A-205, no more than one year prior to the adoption of a system development fee.
- (4) Facility. – A water supply, treatment, storage, or distribution facility, or a wastewater collection, treatment, or disposal facility, including for reuse or reclamation of water, owned or operated, or to be owned or operated, by a local governmental unit and land associated with such facility.
- (5) Local governmental unit. – Any political subdivision of the State that owns or operates a facility, including those owned or operated pursuant to local act of the General Assembly or pursuant to Part 2 of Article 2 of Chapter 130A, Article 15 of Chapter 153A, Article 16 of Chapter 160A, or Articles 1, 4, 5, 5A, or 6 of Chapter 162A of the General Statutes.
- (6) New development. – Any of the following occurring after the date a local government begins the written analysis process required by G.S. 162A-205, no more than one year prior to the adoption of a system development fee, which increases the capacity necessary to serve that development:
 - a. The subdivision of land.



- b. The construction, reconstruction, redevelopment, conversion, structural alteration, relocation, or enlargement of any structure which increases the number of service units.
 - c. Any use or extension of the use of land which increases the number of service units.
- (7) Service. – Water or sewer service, or water and sewer service, provided by a local governmental unit.
- (8) Service unit. – A unit of measure, typically an equivalent residential unit, calculated in accordance with generally accepted engineering or planning standards.
- (9) System development fee. – A charge or assessment for service imposed with respect to new development to fund costs of capital improvements necessitated by and attributable to such new development, to recoup costs of existing facilities which serve such new development, or a combination of those costs, as provided in this Article. The term includes amortized charges, lump-sum charges, and any other fee that functions as described by this definition regardless of terminology. The term does not include any of the following:
- a. A charge or fee to pay the administrative, plan review, or inspection costs associated with permits required for development.
 - b. Tap or hookup charges for the purpose of reimbursing the local governmental unit for the actual cost of connecting the service unit to the system.
 - c. Availability charges.
 - d. Dedication of capital improvements on-site, adjacent, or ancillary to a development absent a written agreement providing for credit or reimbursement to the developer pursuant to G.S. 153A-280, 153A-451, 160A-320, 160A-499 or Part 3A of Article 18, Chapter 153A or Part 3D of Article 19, Chapter 160A of the General Statutes.
 - e. Reimbursement to the local governmental unit for its expenses in constructing or providing for water or sewer utility capital improvements adjacent or ancillary to the development if the owner or developer has agreed to be financially responsible for such expenses; however, such reimbursement shall be credited to any system development fee charged as set forth in G.S. 162A-207(c).
- (10) System development fee analysis. – An analysis meeting the requirements of G.S. 162A-205.

"§ 162A-202. Reserved.

"§ 162A-203. Authorization of system development fee.

(a) A local governmental unit may adopt a system development fee for water or sewer service only in accordance with the conditions and limitations of this Article.

(b) A system development fee adopted by a local governmental unit under any lawful authority other than this Article and in effect on October 1, 2017, shall be conformed to the requirements of this Article not later than July 1, 2018.

"§ 162A-204. Reserved.

"§ 162A-205. Supporting analysis.

A system development fee shall be calculated based on a written analysis, which may constitute or be included in a capital improvements plan, that:

- (1) Is prepared by a financial professional or a licensed professional engineer qualified by experience and training or education to employ generally accepted accounting, engineering, and planning methodologies to calculate system development fees for public water and sewer systems.
- (2) Documents in reasonable detail the facts and data used in the analysis and their sufficiency and reliability.
- (3) Employs generally accepted accounting, engineering, and planning methodologies, including the buy-in, incremental cost or marginal cost, and combined cost methods for each service, setting forth appropriate analysis as to the consideration and selection of a method appropriate to the circumstances and adapted as necessary to satisfy all requirements of this Article.
- (4) Documents and demonstrates the reliable application of the methodologies to the facts and data, including all reasoning, analysis, and interim calculations underlying each identifiable component of the system development fee and the aggregate thereof.
- (5) Identifies all assumptions and limiting conditions affecting the analysis and demonstrates that they do not materially undermine the reliability of conclusions reached.
- (6) Calculates a final system development fee per service unit of new development and includes an equivalency or conversion table for use in determining the fees applicable for various categories of demand.
- (7) Covers a planning horizon of not less than 10 years nor more than 20 years.
- (8) Is adopted by resolution or ordinance of the local governmental unit in accordance with G.S. 162A-209.

"§ 162A-206. Reserved.

"§ 162A-207. Minimum requirements.

(a) Maximum. – A system development fee shall not exceed that calculated based on the system development fee analysis.

(b) Revenue Credit. – In applying the incremental cost or marginal cost, or the combined cost, method to calculate a system development fee with respect to water or sewer capital improvements, the system development fee analysis must include as part of that methodology a credit against the projected aggregate cost of water or sewer capital improvements. That credit shall be determined based upon generally accepted calculations and shall reflect a deduction of either the outstanding debt principal or the present value of projected water and sewer revenues received by the local governmental unit for the capital improvements necessitated by and attributable to such new development, anticipated over the course of the planning horizon. In no case shall the credit be less than twenty-five percent (25%) of the aggregate cost of capital improvements.

(c) Construction or Contributions Credit. – In calculating the system development fee with respect to new development, the local governmental unit shall credit the value of costs in excess of the development's proportionate share of connecting facilities required to be oversized for use of others outside of the development. No credit shall be applied, however, for water or sewer capital improvements on-site or to connect new development to water or sewer facilities.

"§ 162A-208. Reserved.

"§ 162A-209. Adoption and periodic review.

(a) For not less than 45 days prior to considering the adoption of a system development fee analysis, the local governmental unit shall post the analysis on its Web site and solicit and furnish a means to submit written comments, which shall be considered by the preparer of the analysis for possible modifications or revisions.

(b) After expiration of the period for posting, the governing body of the local governmental unit shall conduct a public hearing prior to considering adoption of the analysis with any modifications or revisions.

(c) The local governmental unit shall publish the system development fee in its annual budget or rate plan or ordinance. The local governmental unit shall update the system development fee analysis at least every five years.

"§ 162A-210. Reserved.

"§ 162A-211. Use and administration of revenue.

(a) Revenue from system development fees calculated using the incremental cost method or marginal cost method, exclusively or as part of the combined cost method, shall be expended only to pay:

- (1) Costs of constructing capital improvements including, and limited to, any of the following:
 - a. Construction contract prices.
 - b. Surveying and engineering fees.
 - c. Land acquisition cost.
 - d. Principal and interest on bonds, notes, or other obligations issued by or on behalf of the local governmental unit to finance any costs for an item listed in sub-subdivisions a. through c. of this subdivision.
- (2) Professional fees incurred by the local governmental unit for preparation of the system development fee analysis.
- (3) If no capital improvements are planned for construction within five years or the foregoing costs are otherwise paid or provided for, then principal and interest on bonds, notes, or other obligations issued by or on behalf of a local governmental unit to finance the construction or acquisition of existing capital improvements.

(b) Revenue from system development fees calculated using the buy-in method may be expended for previously completed capital improvements for which capacity exists and for capital rehabilitation projects. The basis for the buy-in calculation for previously completed capital improvements shall be determined by using a generally accepted method of valuing the actual or replacement costs of the capital improvement for which the buy-in fee is being collected less depreciation, debt credits, grants, and other generally accepted valuation adjustments.

(c) A local governmental unit may pledge a system development fee as security for the payment of debt service on a bond, note, or other obligation subject to compliance with the foregoing limitations.

(d) System development fee revenues shall be accounted for by means of a capital reserve fund established pursuant to Part 2 of Article 3 of Chapter 159 of the General Statutes and limited as to expenditure of funds in accordance with this section.

"§ 162A-212. Reserved.

"§ 162A-213. Time for collection of system development fees.

For new development involving the subdivision of land, the system development fee shall be collected by a local governmental unit either at the time of plat recordation or when water or sewer service for the subdivision or other development is committed by the local governmental unit. For all other new development, the local governmental unit shall collect the system development fee at the time of application for connection of the individual unit of development to the service or facilities.

"§ 162A-214. Reserved.

"§ 162A-215. Narrow construction.

Notwithstanding G.S. 153A-4 and G.S. 160A-4, in any judicial action interpreting this Article, all powers conferred by this Article shall be narrowly construed to ensure that system development fees do not unduly burden new development."

SECTION 2. G.S. 130A-64 reads as rewritten:

"§ 130A-64. Service charges and rates.

(a) A sanitary district board shall apply service charges and rates based upon the exact benefits derived. These service charges and rates shall be sufficient to provide funds for the maintenance, adequate depreciation and operation of the work of the district. If reasonable, the service charges and rates may include an amount sufficient to pay the principal and interest maturing on the outstanding bonds and, to the extent not otherwise provided for, bond anticipation notes of the district. Any surplus from operating revenues shall be set aside as a separate fund to be applied to the payment of interest on or to the retirement of bonds or bond anticipation notes. The sanitary district board may modify and adjust these service charges and rates.

(b) The district board may require system development fees only in accordance with Article 8 of Chapter 162A of the General Statutes."

SECTION 3. G.S. 153A-277 reads as rewritten:

"§ 153A-277. Authority to fix and enforce rates.

(a) A county may establish and revise from time to time schedules of rents, rates, fees, charges, and penalties for the use of or the services furnished or to be furnished by a public enterprise. Schedules of rents, rates, fees, charges, and penalties may vary for the same class of service in different areas of the county and may vary according to classes of service, and different schedules may be adopted for services provided outside of the county. A county may include a fee relating to subsurface discharge wastewater management systems and services on the property tax bill for the real property where the system for which the fee is imposed is located.

...

(a2) A county may require system development fees only in accordance with Article 8 of Chapter 162A of the General Statutes.

...."

SECTION 4.(a) G.S. 160A-314 reads as rewritten:

"§ 160A-314. Authority to fix and enforce rates.

(a) A city may establish and revise from time to time schedules of rents, rates, fees, charges, and penalties for the use of or the services furnished or to be furnished by any public enterprise. Schedules of rents, rates, fees, charges, and penalties may vary according to classes of service, and different schedules may be adopted for services provided outside the corporate limits of the city.

...

(e) A city may require system development fees only in accordance with Article 8 of Chapter 162A of the General Statutes."

SECTION 4.(b) G.S. 160A-317 is amended by adding a new subsection to read:

"(a4) System Development Fees. – A city may require system development fees only in accordance with Article 8 of Chapter 162A of the General Statutes."

SECTION 5.(a) G.S. 162A-6(a) is amended by adding a new subdivision to read:

"(9a) To impose and require system development fees only in accordance with Article 8 of this Chapter."

SECTION 5.(b) G.S. 162A-9 is amended by adding a new subsection to read:

"(a5) An authority may require system development fees only in accordance with Article 8 of this Chapter."

SECTION 6.(a) G.S. 162A-36(a) is amended by adding a new subdivision to read:

"(8a) To impose and require system development fees only in accordance with Article 8 of this Chapter."

SECTION 6.(b) G.S. 162A-49 reads as rewritten:

"§ 162A-49. Rates and charges for services.

(a) The district board may fix, and may revise from time to time, rents, rates, fees and other charges for the use of land for the services furnished or to be furnished by any water system or sewerage system or both. Such rents, rates, fees and charges shall not be subject to supervision or regulation by any bureau, board, commission, or other agency of the State or of any political subdivision. Any such rents, rates, fees and charges pledged to the payment of revenue bonds of the district shall be fixed and revised so that the revenues of the water system or sewerage system or both, together with any other available funds, shall be sufficient at all times to pay the cost of maintaining, repairing and operating the water system or the sewerage system or both, the revenues of which are pledged to the payment of such revenue bonds, including reserves for such purposes, and to pay the interest on and the principal of such revenue bonds as the same shall become due and payable and to provide reserves therefor. If any such rents, rates, fees and charges are pledged to the payment of any general obligation bonds issued under this Article, such rents, rates, fees and charges shall be fixed and revised so as to comply with the requirements of such pledge. The district board may provide methods for collection of such rents, rates, fees and charges and measures for enforcement of collection thereof, including penalties and the denial or discontinuance of service.

(b) The district board may require system development fees only in accordance with Article 8 of this Chapter."

SECTION 7.(a) G.S. 162A-69 is amended by adding a new subdivision to read:

"(8a) To impose and require system development fees only in accordance with Article 8 of this Chapter."

SECTION 7.(b) G.S. 162A-72 reads as rewritten:

"§ 162A-72. Rates and charges for services.

(a) The district board may fix, and may revise from time to time, rents, rates, fees and other charges for the use of and for the services furnished or to be furnished by any sewerage system. Such rents, rates, fees and charges shall not be subject to supervision or regulation by any bureau, board, commission, or other agency of the State or of any political subdivision. Any such rents, rates, fees and charges pledged to the payment of revenue bonds of the district shall be fixed and revised so that the revenues of the sewerage system, together with any other available funds, shall be sufficient at all times to pay the cost of maintaining, repairing and operating the sewerage system the revenues of which are pledged to the payment of such revenue bonds, including reserves for such purposes, and to pay the interest on and the principal of such revenue bonds as the same shall become due and payable and to provide reserves therefor. If any such rents, rates, fees and charges are pledged to the payment of any general obligation bonds issued under this Article, such rents, rates, fees and charges shall be fixed and revised so as to comply with the requirements of such pledge. The district board may provide methods for collection of such rents, rates, fees and charges and measures for enforcement of collection thereof, including penalties and the denial or discontinuance of service.

(b) The district board may require system development fees only in accordance with Article 8 of this Chapter."

SECTION 8. G.S. 162A-85.13 is amended by adding a new subsection to read:

"(a1) The district board may require system development fees only in accordance with Article 8 of this Chapter."

SECTION 9. G.S. 162A-88 reads as rewritten:

"§ 162A-88. District is a municipal corporation.

(a) The inhabitants of a county water and sewer district created pursuant to this Article are a body corporate and politic by the name specified by the board of commissioners. Under that name they are vested with all the property and rights of property belonging to the corporation; have perpetual succession; may sue and be sued; may contract and be contracted with; may acquire and hold any property, real and personal, devised, sold, or in any manner conveyed, dedicated to, or otherwise acquired by them, and from time to time may hold, invest, sell, or dispose of the same; may have a common seal and alter and renew it at will; may establish, revise and collect rates, fees or other charges and penalties for the use of or the services furnished or to be furnished by any sanitary sewer system, water system or sanitary sewer and water system of the district; and may exercise those powers conferred on them by this Article.

(b) The district board may require system development fees only in accordance with Article 8 of this Chapter."

SECTION 10.(a) G.S. 1-52(15) reads as rewritten:

"(15) For the recovery of taxes paid as provided in ~~G.S. 105-381~~.G.S. 105-381 or for the recovery of an unlawful fee, charge, or exaction collected by a county, municipality, or other unit of local government for water or sewer service or water and sewer service."

SECTION 10.(b) This section is to clarify and not alter G.S. 1-52.

SECTION 11. Sections 1 through 9 of this act become effective October 1, 2017, and apply to system development fees imposed on or after that date. Section 10 of this act, being a clarifying amendment, has retroactive effect and applies to claims accrued or pending prior to and after the date that section becomes law. Nothing in this act provides retroactive authority for any system development fee, or any similar fee for water or sewer services to be furnished, collected by a local governmental unit prior to October 1, 2017. The remainder of this act is effective when it becomes law and applies to claims accrued or pending prior to and after that date.

In the General Assembly read three times and ratified this the 29th day of June, 2017.

s/ Daniel J. Forest
President of the Senate

s/ Tim Moore
Speaker of the House of Representatives

Roy Cooper
Governor

Approved _____ .m. this _____ day of _____, 2017

ATTACHMENT B

**Utility Agreement
Goldsboro and Fork Township Sanitary District
dated November 16, 2006**

and

**First Amendment
dated September 18, 2008**

STATE OF NORTH CAROLINA

COUNTY OF WAYNE

**FIRST AMENDMENT TO UTILITY AGREEMENT-GOLDSBORO AND FORK
TOWNSHIP SANITARY DISTRICT**

THIS AMENDMENT, made and entered into this the 18th day of September, 2008, by and between the CITY OF GOLDSBORO, a municipal corporation existing under the laws of the State of North Carolina (hereinafter called "**the City**"), and FORK TOWNSHIP SANITARY DISTRICT, a body politic existing under the laws of the State of North Carolina (hereinafter called "**Fork**").

W I T N E S S E T H:

WHEREAS, **the City** and **Fork** entered into a Utility Agreement dated November 16, 2005; and

WHEREAS, **the City** and **Fork** have had a disagreement as to the rates to be charged under the terms of the original Agreement; and

WHEREAS, **the City** has agreed to sell and **Fork** has agreed to purchase an additional capacity of 25,000 GPD; and

WHEREAS, there is a dispute as to the amount owed by **Fork** to **the City** for past billings on the sewer account.

NOW, THEREFORE, FOR AND IN CONSIDERATION of the respective rights, powers, duties and obligations hereinafter set forth to be performed by **the City** and **Fork**, the parties mutually agree as follows;

1. The original Paragraph 9 entitled "**City's Rates**" is hereby amended to include the wording that "**the City** agrees to bill **Fork** for satellite annexed areas which hook onto the **Fork** sewer system and do not count against **Fork's** reserve capacity at **the City's** in-town rate." All the remaining provisions in the existing Paragraph 9 shall remain the same.

2. Paragraph 7 of the original Agreement entitled "**Capital Cost - Reserve Capacity**" shall be amended by **the City** agreeing to sell and **Fork** agreeing to purchase an additional capacity of 25,000 GPD monthly average. **Fork** shall pay **the City** the sum of \$3.39 per gallon for the purchase of the reserve capacity in **the City's** waste water treatment facility. Said sum shall be paid within ten (10) days after the signing of this Amendment. All other provisions of Paragraph 7 shall remain the same.

3. There is a dispute between **the City** and **Fork** in the amount of \$12,277.40 for previously billed sewer use. The parties have agreed to split said sum and **Fork** agrees to pay to **the City** the sum of \$6,138.70 upon the execution of this Agreement.

IN WITNESS WHEREOF, **the City** and **Fork** have caused this First Amendment to be executed by **the City's** Mayor, and **Fork's** Chairman of its Board, the corporate seal to be affixed and attested by **the City's** Clerk, all by authority of their respective governmental bodies the day and year first above written.

CITY OF GOLDSBORO

BY: 
Mayor

ATTEST:


City Clerk

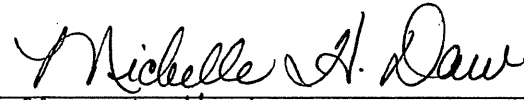
FORK TOWNSHIP SANITARY DISTRICT

BY: 
Chairman

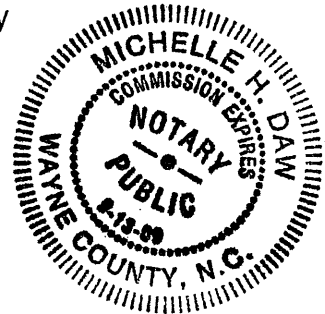
NORTH CAROLINA
WAYNE COUNTY

This the 24th day of September, 2008, personally came before me, Michelle H. Daw, a Notary Public in and for said State and County, MELISSA BREWER, personally known to me, who by me duly sworn, says that she knows the common seal of the CITY OF GOLDSBORO and is acquainted with ALFONZO KING, who is the Mayor of said municipal corporation; that she, the said MELISSA BREWER, is its Clerk; and that she saw the Mayor sign the foregoing instrument; and that she, the said Clerk, saw the said common seal of said corporation affixed thereto, and that she, the said Clerk, signed her name in attestation of said instrument in the presence of said Mayor of said municipal corporation.

WITNESS my hand and official seal or stamp this the 24th day of September, 2008.


Michelle H. Daw, Notary Public
Printed Name of Notary

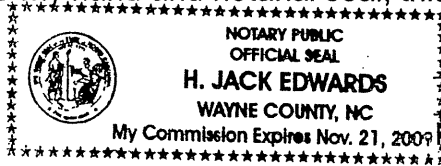
My Commission Expires: 9-13-09



NORTH CAROLINA
WAYNE COUNTY

I, H. Jack Edwards, a Notary Public in and for the aforesaid State and County, do hereby certify that Henry Braswell, Chairman of the Board of FORK TOWNSHIP SANITARY DISTRICT, personally appeared before me this day, personally known to me -OR- proved to me by satisfactory evidence, and acknowledged the due execution of the foregoing instrument for its stated purpose.

WITNESS my hand and notarial seal, this the 18th day of September, 2008.



H. Jack Edwards
H. Jack Edwards Notary Public
Printed Name of Notary

My Commission Expires: _____

STATE OF NORTH CAROLINA

COUNTY OF WAYNE

**UTILITY AGREEMENT-GOLDSBORO
AND FORK TOWNSHIP SANITARY DISTRICT**

THIS AGREEMENT, made and entered into this 16th day of November, 2005 by and between **THE CITY OF GOLDSBORO**, a municipal corporation existing under the laws of the State of North Carolina (hereinafter called "**the City**"), and **FORK TOWNSHIP SANITARY DISTRICT**, a body politic existing under the laws of the State of North Carolina (hereinafter called "**Fork**").

W I T N E S S E T H:

WHEREAS, the **City** is the owner and operator of a wastewater treatment plant, which has 14.2 MGD of treated capacity; and

WHEREAS, **Fork** has reviewed and analyzed many different options to provide wastewater treatment to customers in its District; and

WHEREAS, the most cost effective, environmentally sound, and best long term method of providing wastewater disposal for **Fork** is achieved by conveying wastewater to the **City's** wastewater collection system for treatment at the **City's** wastewater treatment plant.

NOW, THEREFORE, for and in consideration of the respective rights, powers, duties and obligations hereinafter set forth to be performed by the **City** and **Fork**, the parties mutually agree as

follows:

1. Definitions
 - a. Fork - Fork Township Sanitary District
 - b. City - City of Goldsboro
 - c. MGD - Million Gallons Per Day
 - d. GPD - Gallons Per Day
 - e. GPM- Gallons Per Minute
 - f. NPDES - National Pollutant Discharge Elimination System
 - g. SUO - Sewer Use Ordinance
 - h. EPA - Environmental Protection Agency
 - i. CERCLA - Comprehensive Environmental Response, Compensation and Liability Act
 - j. DENR - Department of Environment and Natural Resources
 - k. SIU- Significant Industrial User
 - l. IUP- Industrial User Permit
 - m. IU- Industrial User
 - n. RU- Residential User
 - o. NRU- Non-residential User
 - p. SCADA- Supervisory Control and Data Acquisition

2. Service Area: The service area as referred to in this Agreement shall only include the boundaries of the Fork Township Sanitary District as shown on Exhibit 1. Sewer service to any additional area by **Fork** shall require the **City's** written concurrence and approval. Further, the extension of sewer service to any other governmental entity shall require the **City's** written approval and/or a separate agreement.

3. Existing Wayne County School System Sewer Line and Future Construction of Line, Meter and Maintenance, by **Fork**:

A. Currently there is an existing 6" force main sewer line owned by Wayne County School System which extends from

City's line at O'Berry Center to the Rosewood Schools. This line is maintained by Wayne County Schools and provides sewer service to three Rosewood schools and Rosewood Baptist Church. **Fork** has advised **City** that it may acquire the Wayne County School System's sewer line within **Fork**. These four locations shall continue to receive sewer service and their sewer capacity will not be included in the sewer capacity purchased by **Fork** from **City**. In addition, if any property owner within three (3) miles of the **City** limits petitions for "satellite annexation" and said annexation is approved by the **City**, then **Fork** may serve the annexed property with sewer and the amount of sewer capacity utilized to serve the annexed property will not be charged against **Fork's** 100,000 GPD capacity purchased from the **City**.

B. **Fork** shall be responsible for the design and construction of any additional wastewater conveyance system from **Fork** to the existing Wayne County School System sewer line or to the City's line near O'Berry Center or at such other location approved by **City**.

C. In order to limit flows to those specified in this Agreement, capacity of the wastewater conveyance system from **Fork** to the City's wastewater system shall be limited to 400 GPM for the maximum peak flow, (including 200 GPM

from the Wayne County School System facilities and Rosewood Baptist Church), provided however, pumping at this rate shall not exceed intervals in excess of 30 minutes per hour.

When and if **Fork** connects any sewer line to a customer other than the three Rosewood Schools and the Rosewood Baptist Church, the above limitations on capacity shall be designed into the **Fork** system and approved by the **City**. The methods of flow constraints shall include, but shall not be limited to, one or more of the following:

1. Pump station design;
2. Force main design;
3. Restricting valves;
4. A semi-permanent flow constriction designed into the system;
5. Variable speed pumps with governor to regulate flow.

D. When and if **Fork** connects any sewer line to a customer other than the three Rosewood Schools and the Rosewood Baptist Church, flow metering approved by the City shall be installed by **Fork** at such location or locations as approved by the City.

E. When and if **Fork** connects any sewer line to a customer other than the three Rosewood Schools and the Rosewood

Baptist Church, all wastewater shall flow through a bar screen with 3/8 inch spacing before entering the City's wastewater system.

F. When and if **Fork** connects any sewer line to a customer other than the three Rosewood Schools and the Rosewood Baptist Church, odor control/reaeration facilities shall be built by **Fork** and approved by **City** to prevent odors or septic conditions. The **City** reserves the right to require **Fork** to install such additional odor control facilities from time to time as **City** deems necessary.

G. When and if **Fork** connects any sewer line to a customer other than the three Rosewood Schools and the Rosewood Baptist Church, **Fork** shall be responsible for the operation and maintenance of the sewer collection lines and facilities as well as any additional pumping stations, force mains, or odor control/reaeration facilities.

4. Metering Facility - Maintenance: When and if **Fork** connects any sewer line to a customer other than the three Rosewood Schools and the Rosewood Baptist Church, flow measurement equipment shall be installed at a location or locations to be approved by the **City**. It shall be designed by **Fork's** engineer and approved by the City's Public Utilities Director, and shall utilize an electromagnetic flow meter installed on the force main. The force main shall be required

to remain full of wastewater at all times at the meter location. To ensure that the force main remains full of wastewater at the junction with the electromagnetic flow meter, its installation must be approved by the City Engineer. The electromagnetic flow metering device shall be capable of instantaneous measurement to a prescribed accuracy and totalized capacity. Both the instantaneous flow measurement and the totalized flow measurement shall be made accessible to the City at all times via SCADA or computer modem online. The in-line meter shall be recalibrated every 6 months or sooner, if needed, by an independent contractor employed by the **City**. The maintenance of the metering facility shall be performed by the **City**. **Fork** shall provide the **City** access to the metering facility. **Fork** shall reimburse the **City** for the actual cost of recalibration and maintenance which shall be billed by the **City** on a monthly basis. The **City** shall have access to the meter at all times and shall be responsible for reading the meter at least monthly.

5. Sampling Station: When and if **Fork** connects any sewer line to a customer other than the three Rosewood Schools and the Rosewood Baptist Church, **Fork** shall construct a suitable wastewater sampling station or stations at the junction with the City's wastewater system or at any other location approved by the **City** for use by the **City**. This facility shall be integrated with the metering facility as previously described under Section

4 above and approved by the **City**. The wastewater sampling station shall include a flow proportional, refrigerated, sequential sampler housed in a locked compartment. **Fork** shall provide the **City** access to the sampling station. The maintenance of the sampling station shall be performed by the **City**. **Fork** shall reimburse the **City** for the cost of the maintenance, including utility cost, which shall be billed by the **City** on a monthly basis.

6. **City** Review:

a. **Fork** shall provide the **City** with copies of the State-approved engineering drawings for **Fork's** additional wastewater conveyance system prior to the construction of these facilities, as well as a copy of the certificate of completion submitted by **Fork** to DENR and a copy of DENR's approval thereof.

b. When and if **Fork** acquires the Wayne County School system sewer facilities and/or additional customers are allowed to receive sewer service, **Fork** shall provide the **City** with a list of any existing industrial or non-residential users who discharge into the sewer system. All new non-residential users shall be required to obtain written permission from the **City** prior to connecting to the sewer system.

Any new industrial users shall comply with section 138 of the City's SUO, and especially sections 138.1 and 138.2. The **City** reserves the right to require a new discharge permit which

shall be in accordance with the **City's** current policies and procedures. Further, any new industrial user who discharges industrial and/or domestic waste into the sewer system shall obtain written permission or, in the **City's** discretion, a discharge permit from the **City** before connecting to the wastewater conveyance system.

c. **Fork** shall provide the **City** with copies of all proposed applications forwarded to DENR for any non-discharge permit for residential sewer main extensions and obtain the **City's** approval of the permit. The **City's** approval shall be based upon the subsequent approval by DENR, and **Fork's** reserve capacity. Any other body politic who request the **City's** permission to connect to this wastewater conveyance system shall show evidence that it is in compliance with the **City's** sewer use ordinance and further meets all federal, State and **City** requirements.

7. Capital Cost - Reserve Capacity: The **City** shall accept and treat the wastewater flow from **Fork's** service area provided **Fork** has purchased from the **City** a reserve capacity of 100,000 GPD monthly average. **Fork** shall pay the **City** the sum of \$3.39 per gallon for the purchase of **Fork's** reserve capacity of 100,000 GPD from the **City's** wastewater treatment facility. The amount of \$339,000 shall be paid to **City** at least 30 days before it connects to the **City's** wastewater system but no later than

November 1, 2006. In the event **City** agrees in writing to any portion of this payment after November 1, 2006, the \$339,000 or any lesser amount shall bear interest at the rate of six (6) percent from November 1, 2006 until paid.

8. Upgrades: Should changes in State or Federal laws, regulations, or NPDES permit conditions result in the need for plant upgrades, **Fork** shall pay a proportionate share of capital cost of said upgrades based upon the ratio of the capacity it has reserved to the total capacity of the plant.

"Upgrades" as used in this paragraph, would not include a wastewater reuse program if implemented by **City**, nor would it include other State-approved wastewater management programs which **City** may adopt from time to time in its discretion during the term of this Agreement.

The operational costs of a reuse program or other State-approved wastewater management programs would be reflected in the **City's** rates as set forth in Section 9, below.

9. City's Rates: On a monthly basis, **Fork** shall pay to the **City** for all metered wastewater flow treated by the **City** from **Fork** in an amount equal to the **City's** prevailing rate for an outside the **City** user who has purchased reserve capacity, currently \$3.26 per 100 cubic feet. **Fork** shall be responsible for the payment of all bills to the **City** for any and all users who are served on existing or any additional wastewater

conveyance system. In the event there are surcharges, these surcharges (see Exhibit 2, Resolution No. 2001-7, Roman Numeral III and any subsequent changes or amendments thereto) shall be paid monthly to the **City** by **Fork** in an amount equal to the **City's** prevailing rate charged other similar users.

All bills received by **Fork** under this Agreement, are due and payable within thirty (30) days after receipt thereof. The **City** shall provide **Fork** ninety (90) days written notice of any rate changes enacted by the **City**.

10. Monitoring Charges: In addition to the rates set forth in Section 9 above, **Fork** shall be required to pay to the **City** monitoring charges.

For the purpose of determining these monitoring charges, the **City** shall collect at the sampling station flow proportional composite samples as often as the City deems necessary, and shall analyze these samples. The results of the analyses of said samples shall be utilized in determining the sampling criteria as shown on Exhibit 3- Sewer Use Ordinance- Local Limitation, paragraph 51.012. Upon request, the **City** shall provide **Fork** equal split portions of the samples which have been taken for analyses by the **City**. These analyses shall be submitted monthly in writing to **Fork**. The discovery by the **City** of violations of the discharge limitations by **Fork** as shown on Exhibit 3 SUO shall be reported to **Fork** within 24 hours. **Fork**

shall reimburse the **City** monthly for its cost in collecting samples and preparing these analyses (See Exhibit 2).

11. Fines - Exceedances:

In the event **Fork** should exceed its average monthly flow of reserve capacity of 100,000 GPD as set forth in Section 3, **Fork** shall pay a double the outside non-capacity rate for sewer service for the daily flow that exceeds such capacity. If **Fork** has an exceedance on one occasion which does not exceed 10,000 GPD, then **Fork** shall not be fined and shall receive a warning. Thereafter, a fine shall be imposed on **Fork** for any month that the average monthly flow exceeds 100,000 GPD of reserve capacity. A \$2,500 fine shall be imposed when the average monthly exceedance is 3,000 GPD and an additional \$2,500 fine shall be imposed for each additional 3,000 GPD average month exceedance (For example, from 100,000 GPD to 103,000 GPD \$2,500; from 103,000 GPD to 106,000 GPD \$2,500 etc.). In the event the exceedance over 100,000 GPD is not corrected by **Fork** within 120 days, this exceedance shall constitute a breach of this Agreement and cause for the **City** to terminate this Agreement as provided for under Section 21.

12. **Fork's** User Charge System: **Fork** shall establish and maintain a User Charge system which shall generate sufficient revenue to provide for the complete and adequate operation of its sewerage system, including capital improvements and

maintenance. Such user charges shall be updated from time to time to remain in compliance with all federal and State laws and regulations.

13. Fork's Rates: **Fork** shall not resell its wastewater service at a rate lower than that sold by the **City** to **Fork**.

14. Fork's Sewer Use Ordinance:

Fork shall adopt a sewer use ordinance (including grease trap requirements and provisions that **Fork** will not accept waste from a private septic hauler) which shall be no less stringent than the **City's** Sewer Use Ordinance. Further, any additional governmental entity which shall become a user of **Fork** shall likewise adopt a similar sewer use ordinance. Any sewer use ordinance adopted by **Fork** or any other governmental entity shall comply with all current State and/or EPA regulations and shall be updated from time to time to meet all future federal and State requirements. **Fork's** SUO shall incorporate language that the **City** shall be the control authority and shall administer any and all Pretreatment Program requirements. Any sewer use ordinance adopted by **Fork** or any other governmental entity shall comply with all current State and/or EPA regulations and shall be updated from time to time to meet all future federal and State requirements. Any sewer use ordinance shall be approved by the **City** prior to its adoption by **Fork** or any other governmental entity.

15. Fork's Industrial Pretreatment Program: The **City** shall administer and issue all permits for the industrial pretreatment program for **Fork** or any other governmental entity. **Fork** and **City** shall approve all new and additional flow requests from its significant industrial users prior to the **City** issuing any permits. The **City** shall calculate the amounts for any industrial surcharges and add such amounts to **Fork's** monthly bill. **Fork** shall be responsible for billing and collecting the surcharges from the user. If any enforcement action is needed, the **City** shall follow its enforcement policy and, when necessary, **Fork** shall terminate the industrial user's water and/or sewer service after written notification to the significant industrial user from the **City**. The **City** shall notify **Fork** of any civil penalty to be assessed against a significant industrial user. The **City** shall assess and collect civil penalties of **Fork's** significant industrial users in accordance with the **City's** policies and procedures. The failure by **Fork** to terminate a significant industrial user's water and/or sewer service shall constitute a breach of this Agreement and cause for the **City** to terminate this Agreement as provided for under Section 21.

16. Overflow Condition: If the **City's** wastewater treatment system has an overflow condition not caused by **Fork**, **Fork**, upon written notification from the **City**, and the **City**

itself shall both proportionately reduce its flow until the overflow condition is resolved. In addition, if an overflow condition is caused by **Fork's** discharge of wastewater into the **City's** system, **Fork** shall immediately take remedial action, including, but not limited to, a reduction in its pumping rate, in order to eliminate the overflow condition. **Fork** shall reimburse the **City** for any cost incurred as a result of an overflow condition caused by **Fork**. Furthermore, **Fork** shall and does hereby assume and agree to indemnify and hold harmless the **City**, its successors and assigns, from and against any and all losses, fines, costs, and expenses, including attorney fees, from damage to the **City's** system or other property caused by, or in any way resulting from an overflow event caused by **Fork**. Finally, the **City** shall and does hereby assume and agree to indemnify and hold harmless **Fork**, its successors and assigns, from and against any and all losses, fines, costs, and expenses, including attorney fees, from damage to **Fork's** system or other property caused by, or in any way resulting from an overflow event caused by the **City**.

17. Biological Upset: **Fork** shall and does hereby assume and agree to hold harmless the **City**, its successors and assigns, from harm and against any and all losses, fines, costs, and expenses, including attorney fees, from damage caused by or in any way resulting from a biological upset of the **City's**

treatment facility as a result of the levels of metals or toxic contaminants contained in the wastewater being discharged by the Fork into the collection system of the **City**.

18. Environmental Liability: **Fork** shall and does hereby assume and agree to hold harmless the **City**, its successors and assigns, from and against all losses, costs, expenses, including attorney fees, fines and penalties caused by, or in any way resulting from, any federal "superfund" liability (CERCLA) or from DENR, or any other State agency or court resulting from wastewater being discharged by **Fork** into the collection system of the **City**, or as a result of any other discharges from **Fork** or any of its significant industrial users.

19. Force Majeure: In the event either the **City** or **Fork** is unable, in whole or in part, by reason of force majeure to carry out its obligations, other than to make payments for wastewater treatment services received, it is agreed that on giving notice of such force majeure as soon as possible after the occurrence of the cause relied upon, then the obligation of the **City** or **Fork**, so far as each may be affected by such force majeure, shall be suspended from performance hereunder during the continuance of any inability to obtain permit, but for no longer period and such cause shall be, as far as possible, be remedied with all due speed. The term "force majeure" shall mean acts of God, strikes, lockouts or other industrial

disturbances, acts of public enemy, war, blockades, riots, landslides, droughts, storms, floods or washouts, arrest and restraints of governments and people, civil disturbances, explosions, unavoidable breakage, accident to machinery and equipment and sanitary sewer lines, inability to obtain permits or materials and equipment and supplies, and any other cause not within the control of the **City** or **Fork**, which by the exercise of reasonable diligence by the **City** or **Fork**, is not preventable.

20. Resell By **Fork**; Sale of Capacity:

a. **Fork** shall not "charge or resell" wastewater sewer service to any user within its service area unless such "charge or resell" is at a rate equal or greater than the **City's** charges to supply wastewater sewer service to **Fork**. In no event, shall **Fork** provide wastewater sewer service to any user outside **Fork's** District without prior written approval of **City**.

b. **Fork** is specifically prohibited from selling, transferring or in any way disposing of any reserve capacity without written permission of the **City**.

21. Term: This Agreement shall be effective after the date of its approval by **Fork** and the **City**. It shall continue for a period of forty (40) years from the date upon which wastewater sewer service is first treated for **Fork**, pursuant to the terms of this Agreement. The **City** shall, prior to the beginning of the thirty seventh year of the term of this

Agreement, give notice to **Fork** of its desire to renew this Agreement. Upon giving such notice, the **City** and **Fork** shall negotiate in good faith with reference to a renewal agreement based upon the same rate format contained in this Agreement. However, without cause, **Fork** may terminate this Agreement at any time upon one year's written notice. In such event, **Fork** shall not be reimbursed for any payment made to the **City** for any of the **City's** reserve capacity.

22. Arbitration: Any dispute concerning this Agreement shall, at the request of either the **City** or **Fork**, be submitted to and determined by an arbitration panel of three (3) arbitrators, pursuant to the terms of this section and the Uniform Arbitration Act (hereafter "the Act") as adopted by the State of North Carolina, and its general statutes in Section 1-567.1 through 1-567.29, as amended. The **City** and **Fork** shall each appoint one (1) qualified member to the arbitration panel, and these appointees shall select a third member. A majority vote of the arbitration panel shall control and be binding on the **City** and **Fork** without recourse, except as otherwise provided in the Act. If the two (2) arbitrators first chosen can not agree on the selection of a third arbitrator, then, upon application by the **City** or **Fork**, such third arbitrator shall be appointed by the Court having jurisdiction over such matters as provided in the Act. To be qualified, such third arbitrator

shall be a professional engineer with experience in production and delivery of sanitary sewer service, a certified public accountant, or a practicing attorney with experience in municipal utility matters. Pursuant to the Act, the cost to be paid by the **City** and **Fork** associated with arbitration shall be determined by the arbitration panel. The **City** and **Fork** shall each continue to perform all other obligations under the terms of this Agreement pending final resolution of any dispute arising out of or relating to this Agreement which has been submitted to arbitration. Neither the **City** nor **Fork** may violate any federal, state, or local law or regulation regarding the wastewater sewer service being provided herein during the course of pursuing its rights under this section, or shall the user be denied the wastewater sewer service necessary to reasonably maintain the public health and safety.

23. Discrimination: It is specifically agreed by both parties hereto, as part of consideration of the signing of this Agreement, that neither **Fork** nor the **City**, its agents, officials, employees, or servants shall discriminate in any manner on the basis of race, color, creed, sexual orientation, or national origin with reference to the subject matter of this Agreement.

24. Nonpayment: The **City** may terminate this Agreement and terminate **Fork's** right to discharge wastewater into the

City's collection system one hundred and twenty (120) days after written notification to **Fork** by the **City** for the non-payment of fees, costs, charges or fines as set forth in this Agreement, or for the breach by **Fork** of any other condition contained in this Agreement.

25. Waivers: Neither the failure nor the delay on the part of the **City** or **Fork** hereto to exercise any right, power, or privilege hereunder shall operate as a waiver hereof, nor shall any single or partial exercise of any other right, power, or privilege, nor shall any custom or practice at variance with the terms of this Agreement constitute a waiver of the right of either party to demand exact compliance with such terms.

26. Invalid Terms: Should any one or more of the provisions contained in this Agreement be held invalid, illegal, or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained in this Agreement shall not in any way be affected or impaired thereby, and this Agreement shall otherwise remain in full force and effect.

27. Controlling Law: This Agreement and the rights and obligations of the parties hereunder shall be construed and interpreted in accordance with laws of the State of North Carolina, and shall be binding upon and inure to the benefit of

their successors and, with consent of the other party, the assigns of either party hereto.

28. Notices: Any notices required or permitted under this Agreement, including address changes, shall be made in writing either by mailing registered or certified mail, return receipt requested, and postage prepaid, to the other party at the address shown herein for that party, or at such different address for that party, notice of which has been properly given hereunder, or by personally delivering such a notice to an officer of the other party. The notice, if mailed as provided for herein, shall be deemed given on the day of receipt or refusal to accept receipt, and if personally delivered, on the date of delivery. The addresses are as follows:

To the City:

City Manager
City of Goldsboro
P. O. Drawer A
Goldsboro, NC 27533

To Fork Township Sanitary District:

Chairman, Fork Township Sanitary
District
P. O. Box 1515
Goldsboro, NC 27533

29. Entire Agreement: This Agreement reflects and contains the entire and only agreement between the parties related to the subject matter herein, and, as such, supersedes

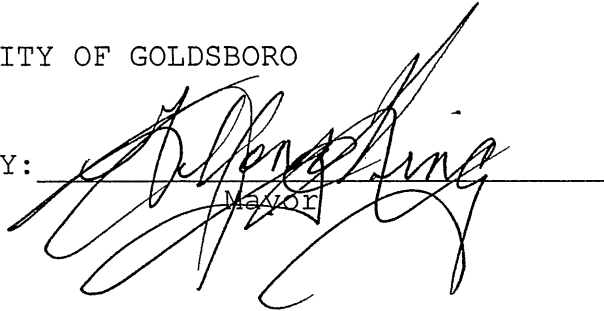
all negotiations, commitments and agreements, whether oral or otherwise.

30. Amendments: This Agreement may be amended only by an instrument in writing executed by both parties hereto.

IN WITNESS WHEREOF, **The City** and **Fork** have caused this Agreement to be executed by **City's** Mayor, and **Fork's** Chairman of its Board, the corporate seal to be affixed and attested by City's Clerk, all by the authority of their respective governmental bodies the day and year first written.


CITY OF GOLDSBORO

BY: _____




MAYOR

ATTEST:



Michelle H. Dew
City Clerk

APPROVED (as to form only)



J. L. Finnan
City Attorney

FORK TOWNSHIP SANITARY DISTRICT

BY: Henry Braswell
Chairman

APPROVED (as to form only)

H. Paul Edward
Fork Township Sanitary District Attorney

NORTH CAROLINA

WAYNE COUNTY

This the 4th day of December, 2005, personally came before me, Melissa C Brewer, a Notary Public in and for said State and ~~County~~ ^{Notary Public (NC)} MICHELLE H. DAW, who by me duly sworn, says that she knows the common seal of the CITY OF GOLDSBORO and is acquainted with ALFONZO KING, who is the Mayor of said municipal corporation; that she, the said MICHELLE H. DAW, is its Clerk; and that she saw the Mayor sign the foregoing instrument; and that she, the said Clerk, saw the said common seal of said corporation affixed thereto, and that she, the said Clerk, signed her name in attestation of said instrument in the presence of said Mayor of said municipal corporation.

Witness my hand and seal this the 4 day of December, 2005.

Melissa C Brewer
Notary Public

My Commission Expires:

12/3/04

NORTH CAROLINA
WAYNE COUNTY

I, Tony McCabe, a Notary Public in and for the aforesaid State and County, do hereby certify that Henry Braswell, Chairman of the Board of FORK TOWNSHIP SANITARY DISTRICT personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

WITNESS my hand and notarial seal, this the 16 day of November, 2005.

Tony McCabe
Notary Public

My Commission Expires:

6-3-2009

ATTACHMENT C

FTSD Sewer Costs Itemization and Calculation of FTSD Non-Grant Share of Specified Sewer Infrastructure

**NC 581/US 70 PUMP STATION/FORCE MAIN PROJECT
COST ITEMIZATION AND SOURCE OF FUNDS**

	<u>RC Grant</u>	<u>Contribution (from Water Funds)</u>	<u>Contribution (from Impact Fees)</u>	<u>Total</u>
FTSD Pretreatment Facilities adjacent to O'Berry Center				
Construction	\$135,121.77	\$84,146.13	\$120,382.10	\$339,650.00
E/I	0.00	48,440.92	0.00	48,440.92
Legal/Admin	0.00	2,250.00	0.00	2,250.00
Land	0.00	60,603.00	0.00	60,603.00
Capacity Fee	0.00	339,000.00	0.00	339,000.00
Surveying	0.00	2,215.87	0.00	2,215.87
Other	0.00	173.46	0.00	173.46
Subtotal	<u>\$135,121.77</u>	<u>\$536,829.38</u>	<u>\$120,382.10</u>	<u>\$792,333.25</u>
FTSD-NC581/US 70 Pump Station & Force Main				
Construction	\$266,000.91	\$165,650.20	\$236,984.39	\$668,635.50
E/I	0.00	95,360.86	0.00	95,360.86
Legal/Admin	0.00	1,500.00	0.00	1,500.00
Land	0.00	20,000.00	0.00	20,000.00
Capacity Fee	0.00	0.00	0.00	0.00
Surveying	0.00	2,215.88	0.00	2,215.88
Other	0.00	11,371.53	0.00	11,371.53
Subtotal	<u>\$266,000.91</u>	<u>\$296,098.47</u>	<u>\$236,984.39</u>	<u>\$799,083.77</u>
FTSD-Gravity Sewers on NC 581/US 70				
Construction	\$98,877.32	\$0.00	\$0.00	\$98,877.32
E/I	0.00	0.00	14,101.90	14,101.90
Legal/Admin	0.00	0.00	250.00	250.00
Land	0.00	0.00	0.00	0.00
Capacity Fee	0.00	0.00	0.00	0.00
Surveying	0.00	0.00	0.00	0.00
Other	0.00	0.00	1,681.61	1,681.61
Subtotal	<u>\$98,877.32</u>	<u>\$0.00</u>	<u>\$16,033.51</u>	<u>\$114,910.83</u>
TOTAL	<u><u>\$500,000.00</u></u> *	<u><u>832,927.85</u></u>	<u><u>373,400.00</u></u>	<u><u>1,706,327.85</u></u> **

*Grant funds paid 100% of gravity sewer construction(\$98,872.22) with remaining grant funds pro-rated between Pretreatment facilities and NC 581/US 70 Pump Station and Force Main.

**In addition to FTSD and grant costs of \$1,706,327.85 an additional \$387,398.27 of private funds were utilized for collection sewer expenses. Total project costs from all sources amounted to \$2,093,712.12.

**CALCULATION OF FTSD NON-GRANT SHARE OF COSTS
FOR PRETREATMENT INFRASTRUCTURE - INCLUSIVE OF GOLDSBORO
CAPACITY FEES**

	RC Grant	Contribution (from Water Funds)	Contribution (from Impact Fees)	Total
Construction	\$135,121.77	\$84,146.13	\$120,382.10	\$339,650.00
E/I	0.00	48,440.92	0.00	48,440.92
Legal/Admin	0.00	2,250.00	0.00	2,250.00
Land	0.00	60,603.00	0.00	60,603.00
Capacity Fee	0.00	339,000.00	0.00	339,000.00
Surveying	0.00	2,215.87	0.00	2,215.87
Other	0.00	173.46	0.00	173.46
	<u>\$135,121.77</u>	<u>\$536,829.38</u>	<u>\$120,382.10</u>	<u>\$792,333.25</u>
	(17.05%)	(67.75%)	(15.20%)	(100%)

TOTAL FTSD Contributions = 67.75% + 15.20% = 82.95%

**CALCULATION OF FTSD NON-GRANT SHARE OF COSTS FOR
 PRETREATMENT INFRASTRUCTURE - EXCLUSIVE OF GOLDSBORO
 CAPACITY FEES**

	<u>RC Grant</u>	<u>Contribution (from Water Funds)</u>	<u>Contribution (from Impact Fees)</u>	<u>Total</u>
Construction	\$135,121.77	\$84,146.13	\$120,382.10	\$339,650.00
E/I	0.00	48,440.92	0.00	48,440.92
Legal/Admin	0.00	2,250.00	0.00	2,250.00
Capacity Fee	0.00	0.00	0.00	0.00
Surveying	0.00	2,215.87	0.00	2,215.87
Other	0.00	173.46	0.00	173.46
	<u>\$135,121.77</u>	<u>\$137,226.38</u>	<u>\$120,382.10</u>	<u>\$392,730.25</u>
Land	<u>0.00</u>	<u>60,603.00</u>	<u>0.00</u>	<u>60,603.00</u>
	<u>\$135,121.77</u>	<u>\$197,829.38</u>	<u>\$120,382.10</u>	<u>\$453,333.25</u>
	(29.81%)	(43.64%)	(26.55%)	

TOTAL FTSD Contributions = 43.64% + 26.55% = 70.19%.

**CALCULATION OF FTSD NON-GRANT SHARE OF COSTS FOR
NC 581/US 70 PUMP STATION & FORCE MAIN**

	<u>RC Grant</u>	<u>Contribution (from Water Lines)</u>	<u>Contribution (from Impact Fees)</u>	<u>Total</u>
Construction	\$266,000.91	\$165,650.20	\$236,984.39	\$668,635.50
E/I	0.00	95,360.86	0.00	95,360.86
Legal/Admin	0.00	1,500.00	0.00	1,500.00
Land	0.00	20,000.00	0.00	20,000.00
Capacity Fee	0.00	0.00	0.00	0.00
Surveying	0.00	2,215.88	0.00	2,215.88
Other	0.00	11,371.53	0.00	11,371.53
	<u>\$266,000.91</u>	<u>\$296,098.47</u>	<u>\$236,984.39</u>	<u>\$799,083.77</u>
	(33.29%)	(37.05%)	(29.66%)	(100%)

TOTAL FTSD Contributions = 37.05% + 29.66% = 66.71%

ATTACHMENT D

R.S. Means Historical Cost Indexes

Historical Cost Indexes

The table below lists both the RSMMeans historical cost index based on Jan. 1, 1993 = 100 as well as the computed value of an index based on Jan. 1, 2017 costs. Since the Jan. 1, 2017 figure is estimated, space is left to write in the actual index figures as they become available through the quarterly RSMMeans Construction Cost Indexes.

To compute the actual index based on Jan. 1, 2017 = 100, divide the historical cost index for a particular year by the actual Jan. 1, 2017 construction cost index. Space has been left to advance the index figures as the year progresses.

Year	Historical Cost Index Jan. 1, 1993 = 100		Current Index Based on Jan. 1, 2017 = 100		Year	Historical Cost Index Jan. 1, 1993 = 100		Current Index Based on Jan. 1, 2017 = 100		Year	Historical Cost Index Jan. 1, 1993 = 100		Current Index Based on Jan. 1, 2017 = 100	
	Est.	Actual	Est.	Actual		Actual	Est.	Actual	Actual		Est.	Actual		
Oct 2017*					July 2002	128.7	61.7			July 1984	82.0	39.3		
July 2017*					2001	125.1	60.0			1983	80.2	38.4		
April 2017*					2000	120.9	58.0			1982	76.1	36.5		
Jan 2017*	208.5		100.0	100.0	1999	117.6	56.4			1981	70.0	33.6		
July 2016		207.3	99.4		1998	115.1	55.2			1980	62.9	30.2		
2015		206.2	98.9		1997	112.8	54.1			1979	57.8	27.7		
2014		204.9	98.3		1996	110.2	52.9			1978	53.5	25.7		
2013		201.2	96.5		1995	107.6	51.6			1977	49.5	23.7		
2012		194.6	93.3		1994	104.4	50.1			1976	46.9	22.5		
2011		191.2	91.7		1993	101.7	48.8			1975	44.8	21.5		
2010		183.5	88.0		1992	99.4	47.7			1974	41.4	19.9		
2009		180.1	86.4		1991	96.8	46.4			1973	37.7	18.1		
2008		180.4	86.5		1990	94.3	45.2			1972	34.8	16.7		
2007		169.4	81.2		1989	92.1	44.2			1971	32.1	15.4		
2006		162.0	77.7		1988	89.9	43.1			1970	28.7	13.8		
2005		151.6	72.7		1987	87.7	42.1			1969	26.9	12.9		
2004		143.7	68.9		1986	84.2	40.4			1968	24.9	11.9		
2003		132.0	63.3		1985	82.6	39.6			1967	23.5	11.3		

Adjustments to Costs

The "Historical Cost Index" can be used to convert national average building costs at a particular time to the approximate building costs for some other time.

Time Adjustment Using the Historical Cost Indexes:

$$\frac{\text{Index for Year A}}{\text{Index for Year B}} \times \text{Cost in Year B} = \text{Cost in Year A}$$

Example:

Estimate and compare construction costs for different years in the same city.

To estimate the national average construction cost of a building in 1970, knowing that it cost \$900,000 in 2017:

INDEX in 1970 = 28.7

INDEX in 2017 = 208.5

$$\frac{\text{INDEX 1970}}{\text{INDEX 2017}} \times \text{Cost 2017} = \text{Cost 1970}$$

$$\frac{28.7}{208.5} \times \$900,000 = .138 \times \$900,000 = \$124,200$$

The construction cost of the building in 1970 was \$124,200.

Note: The city cost indexes for Canada can be used to convert U.S. national averages to local costs in Canadian dollars.

Example:

To estimate and compare the cost of a building in Toronto, ON in 2017 with the known cost of \$600,000 (US\$) in New York, NY in 2017:

INDEX Toronto = 110.6

INDEX New York = 134.6

$$\frac{\text{INDEX Toronto}}{\text{INDEX New York}} \times \text{Cost New York} = \text{Cost Toronto}$$

$$\frac{110.6}{134.6} \times \$600,000 = .822 \times \$600,000 = \$493,200$$

The construction cost of the building in Toronto is \$493,200 (CN\$).

$$\frac{2017}{1988} : \frac{208.5}{89.9} = 2.319$$

$$\frac{2017}{2001} : \frac{208.5}{125.1} = 1.667$$

$$\frac{2017}{2010} : \frac{208.5}{183.5} = 1.136$$

$$\frac{2017}{2012} : \frac{208.5}{194.6} = 1.071$$

$$\frac{2017}{2015} : \frac{208.5}{206.2} = 1.011$$

$$\frac{2017}{2008} : \frac{208.5}{180.4} = 1.156$$

*Historical Cost Index updates and other resources are provided on the following website: <http://info.thegordiangroup.com/RSMMeans.html>