Water and Sewer System Development Fee Study

Village of Walnut Creek, NC

February 2022

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A. INTRODUCTION

Cox-Edwards Company, Inc. (Cox-Edwards) has performed a Water and Sewer System Development Fee Study (Study) for the Village of Walnut Creek's (Village's) water and sewer systems. This reports presents the results of a Study that includes background and historical information, legal requirements, an explanation of the calculation method used, and the results of the analysis.

A.1 BACKGROUND

A system development fee is a one-time, upfront charge paid by new customers to recover a portion or all of the construction costs for capital improvements necessitated by and attributable to new development, to recoup costs of existing facilities, such as water and sewer system transmission lines, that serve the new development, or a combination of those costs. System development fees serve as the mechanism which growth can pay its way and minimize the costs to existing customers for the new facilities serving the new customers.

The Village currently requires a developer to only pay for the costs of the water and sanitary extensions that are required to provide frontage service to new customers and a $2,000 impact fee. The costs of maintenance on the existing facilities, such as existing wastewater pump stations and force mains and repairs on breaks or leaks in water mains or gravity sewer lines, have not been included in the costs of these extensions.

The Village purchases all it water supply from Eastern Wayne Sanitary District (EWSD). The water is already treated prior to transition to the Village's water line transmission system. EWSD has a meter in a meter vault located at the rear entrance to the Village of Walnut Creek on Lake Shore Drive off Lake Wackena Road. EWSD charges the Village $0.00327/gallon of potable water from the meter readings.

The Village abandoned its existing wastewater treatment facility in 2003 and constructed a new sewer pump station and 8" sewer force main that pumps the wastewater back to the City of Goldsboro's McCalls' pump station on Miller's Chapel Road and eventual treatment at the City's Wastewater Treatment Plant (Goldsboro Reclamation Facility). The Village of Walnut Creek and City of Goldsboro have a Utility Agreement dated June 26, 2003 which states that the Village can pump a maximum of 350 gallons per minute of wastewater such that the pump time intervals do not exceed 15 minutes per hour. The City has access to read the sewer flow meter located at the Village's pump station. The Village pays for all maintenance and recalibration of the flow meter and for sewer flow monitoring charges. The Village has purchased from the City a reserve capacity of 100,000 gallons per day monthly average at a rate of $3.39 per gallon. This is for the City's capital cost for the Village's reserve capacity of the 100,000 gpd from the City's wastewater treatment facility (Goldsboro Reclamation Facility). On a monthly basis, the Village pays the City for all metered wastewater flow treated by the City from the Village in the amount equal to the

City's prevailing rate for an outside the City user who has purchased reserve capacity ($0.00647/gallon as of this printing.

All of the Village's residences, Walnut Creek Country Club, and the Village of Walnut Creek Town Hall are connected to its water transmission lines. The Village has approximately 222 residential customers plus Walnut Creek Country Club, and the Village's Town Hall on sewer service. The approximately 238 other residences have on-property septic systems.

A.2 LEGAL REQUIREMENTS

The Public Water and Sewer System Development Fee Act, S.L. 2017-138, also known as House Bill 436 (HB 436 – referenced here as the law) went into effect July 1, 2018 (Fiscal Year 2019) clarifies a local government utility's authority to assess upfront charges for water and sewer service. The law grants the local government utilities specific authority access one type of upfront charge, the system development fee (SDF). The SDF does however have significant limitations. It preserves the Village's right to impose certain other upfront fees. Revisions to the law were made effective October 1, 2018 under Session Law 2018-34, House Bill 826.

The law applies to all local government entities that own or operate water and/or wastewater supply, treatment, storage, or distribution facilities. These entities could be municipalities, counties, sanitary districts, water and sewer authorities, county water and sewer districts, or others like these types. The law only applies to fee assessed for water and wastewater systems owned and operated by these government entities. According to authors writing for the UNC School of Government, Coates Canon: NC Local Government Law, it does not apply to local governments that purchase water and wastewater services from other government entities.

The law allows local governments to assess the SDF on new development within only its territorial boundaries to fund certain capital costs attributed to that new development. The fee cannot be assessed on existing development. Existing development is defined as land subdivisions, structures, and land uses in existence at the start of the written analysis (this "Study") process required by G.S. 162A-205, no more than 1 year prior to the adoption of the SDF. The law specifically defines what constitutes new development, how to calculate the fee, what capital projects can be funded with the fee, and what process must be used to assess the fee.

New development is defined as any of the following that occurs after the beginning of the fee adoption process but no greater than 1 year prior to the date that the local government adopts the fee:

1. Subdivision of land
2. Construction, or change to an existing structure, that causes an increase in the need for service
3. Any use or extension of the use of land which increase the need for service

The Village must follow several procedural steps to adopting a SDF schedule:

1. Contract with a financial professional or licensed professional engineer to perform an analysis as to how to calculate the SDF schedule in accordance with statutory parameters. The NC General Statutes state that the professional must be "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. Post the professional's written analysis (Study) and proposed system development fee schedule on the Village's website and solicit and furnish means for written comments from the public. The Village should allow for electronic comments or provide a downloadable form. Also, the Village shall post a hard copy of the Study at the Village Hall for public viewing and have copies available for the public upon request. The Study must be posted for at least 45 days before the Village considers its adoption.
3. Submit any comments the Village receives from the public to the professional for consideration of possible modifications or revisions.
4. Hold a public hearing on the proposed system development fee schedule, including any modifications or revisions stemming from the public comment period.
5. The Village Council must adopt a final system development fee schedule by resolution or ordinance.
6. Publish the system development fee schedule in the Village's annual budget ordinance or incorporate it into its water and wastewater fee ordinance(s).
7. Update the system development fee analysis (Study) at least once every 5 years.

A.3 OBJECTIVES

The objectives of this Study are to:

1. Determine the complete costs recovery system developments fees for water and sewer service base upon he requirements of the Public Water and Sewer System Development Fee Act, S.L. 2017-138.
2. Provide a comparison of the system development fees calculated during the Study with the Village's current system development fees.

A.4 GENERAL METHODOLGY

The Village may not adopt a higher rate/fee schedule than that calculated using this Study. In preparing this Study, the professional must have done all of the following:

1. Consider and select an appropriate, generally accepted accounting, engineering, and planning methodology to calculate the fee. Three (3) possible methodologies include:
   - **Buy-In Method** – This approach determines the SDFs solely on the existing assets of the Village, charging new development a fee to compensate the Village for existing capacity costs. It is generally intended for use when the utility/local government does

not have plans to expand its capacity to serve future growth. The customers are essentially "buying-in" to the existing water and sewer facilities.

- **Incremental/Marginal Cost Method** – This method requires new development to pay the proportional share of new capital costs of the Capital Improvements Plan (CIP) that are attributable to the new development. This method is most appropriate when either the utility/local government has limited or no excess capacity for growth or the CIP has a significant number of projects that add additional system capacity for each functional system component that represents capacity for the entire system.
- **Combined Cost Method** – This method uses a combination of the 2 methods described above – both the costs of existing facilities and any planned new construction or expansion of facilities described in a CIP.

2. Document the facts and data used in the Study with sufficient detail to demonstrate their sufficiency and reliability.
3. Document the analysis performed in selecting the appropriate methodology and show the application off the methodology to the facts and data.
4. Identify the limitations and assumptions affecting the Study and show that they do not compromise the reliability of the conclusions.
5. Calculate the final SDF per service unit of new development. A service unit is defined per NCGS – Chapter 162A – Article 8, as "a unit of measure, typically an equivalent residential unit, calculated in accordance with generally accepted engineering or planning standards." The equivalent residential standard is referenced as the equivalent dwelling unit (EDU).
6. Incorporate a credit calculation for the value of costs of capital improvement that exceed the new development's proportional share of connecting facilities required to be oversized for the use of others outside of the new development. This could be the upsizing of the water or sewer main extended to service the new development, or installing the sewer main deeper than necessary for the new development, in order to allow for potentially future development beyond this new development. The credit will not be applied to on-site capital improvements or to the costs of connecting the new development to the Village's water and sewer facilities.
7. Depending the methodology used, incorporate a revenue or valuation credit to avoid double-dipping by the Village.
8. Incorporate a conversion/equivalency table that the Village can use to determine the fees applicable for various categories of demand. This will be the fee schedule.
9. Cover a planning horizon between 5-20 years.

While the law allows for any of the 3 methods to calculating the SDFs, it specifically restricts how the revenues generated by the fees calculated using each method may be utilized. Given that the Village collects its wastewater for those residents connected to its sewer system and pumps it all to the City of Goldsboro and the Village purchases all its water from the potable EWSD

system, it has a built-in "capacity use". Thus, the Village does not have plans currently to expand its capacity and the buy-in method is used for this Study.

B. BASIS OF ANALYSIS

The initial step in calculating water and sewer developments fees (SDFs) is to determine the cost basis or value for each of the 2 major systems, water and sewer. The net system value for use in determining the SDFs is calculated using the following approach:

1. The existing system assets are analyzed to determine the replacement cost new less depreciation (RCNLD) of the Village's existing major water and sewer components.
2. Addition of growth-related capital project spending over the next 10 years (if any).
3. Any donated assets and/or assets not funded by the Village (funded by grants, developers, etc.) are removed from the system assets.
4. The assets are further reduced by the outstanding principal on debt for each system, water and sewer.
5. The resulting net system value is used in the determination of the fee.

B.1 TOTAL SYSTEM VALUE

The Village provided an inventory of its assets from its accountants' depreciation expense statements. The RCNLDs for each asset were determined from these statements. Items such as vehicles, computers, and software are not included.

B.2 CREDITS

The law requires that the system development fee calculations include provisions for credits against the value of the Village's system to account for assets that were not funded by the Village or for assets with outstanding debt liabilities.

Principal on Outstanding Debt

Once the system values were identified for each functional component of the water and then the sewer system, an adjustment was made in the form of a credit for the principal of all outstanding debt that will be recovered by way of usage rates after new customers connect to the water and/or sewer systems. See **D. Appendix** for the sheet titled "Village of Walnut Creek, Debt and Debt Rollforward 2021" and Form LGC 129 titled "State of North Carolina, Local Government Commission, Annual Principal and Interest Requirements, 2021-2022 Fiscal Year" for the outstanding debt on the 8" sewer force main from the Village back to the City of Goldsboro.

Contributed and Grant Funded Assets

Water and sewer system assets that were given the Village by developers or funded with grants must be excluded from the system development fee calculation. If the Village did not incur the

cost of purchasing the asset, it cannot include the costs in the system value to calculate or determine the system development fee.

B.3 CAPACITIES

Water and sewer capacities are determined based on the notes below.

Table B.3.1 – Village of Walnut Creek Water and Sewer System Available Capacity

System Capacity – Million Gallons Per Day (MGD)	Design Capacity	Average Daily	Available Capacity
Water System	0.100	0.076	0.024
Sewer System	0.100	0.041	0.059

Notes:

Water system design capacity is based on the highest daily reading average from Eastern Wayne Sanitary District (EWSD) in the highest total month of reading in the 4-year period from November 2017 through December 2021. The estimated design capacity is approximately 10% higher than that highest daily reading average. EWSD has not set an actual limit on the volume of water that it is willing to supply the Village of Walnut Creek.

Sewer system design capacity is based on the Utility Agreement-Goldsboro and Village of Walnut Creek dated June 26, 2003. The average daily flow is based on the 41,135 GPD average of the monthly readings from January 2015 – December 2021.

Table B.3.2 – Water System Cost per GPD of Existing Utility Assets Providing Available Capacity

Village of Walnut Creek Water SDF Buy-In Valuation

System Asset Description	RCNLD	Excluded	Amount Eligible
Water Main – 7/1/1977	750.00	--	750.00
EWSD Water Tap @ Front Entrance – 9/15/1993	2,579.33	--	2,579.33
Water Line Extension (Ray Prop.) – 6/30/1997	2,619.29	--	2,619.29
EWSD Water Tap @ Rear Entrance – 7/1/2017	36,217.96	--	36,217.96
Subtotal Water System Assets	42,166.58		42,166.58
Less Revenue Credit: Outstanding Debt Principal			0.00
Equals New Water Value			42,166.58
Divided by: Water System Capacity (MGD)			0.100
Equals: Unit Valuation of Water System ($/MGD)			421,666
Divided by: 1,000,000 gallons ($/GPD)			0.422

Table B.3.3 – Sewer System Cost per GPD of Existing Utility Assets Providing Available Capacity

Village of Walnut Creek Sewer SDF Buy-In Valuation

System Asset Description	RCNLD	Excluded	Amount Eligible
Lift Station Building – 3/8/2012	378,962.06	--	378,962.06
Sewer Mains – 8/15/1993	882.22	--	882.22
Meyers Pump – 6/20/2016	0.00	--	0.00
Flow Meter – 6/20/2016	0.00	--	0.00
(Main PS) Homa Pump – 11/3/2016	3,282.64	--	3,282.64
Pearson Pump – 5/31/2018	2,886.12	--	2,886.12
Sewer Force Main – 6/30/2006	1,174,086.95	--	1,174,086.95
Sewer and Water Project - 7/1/2017	56,659.20	--	56,659.20
Land for Pump Station No. 2 – 5/20/2011	65,083.50	--	65,083.50
Subtotal – Sewer System Assets	1,681,842.69		1,681,842.69
Less Revenue Credit: Outstanding Debt Principal			(312,979.40)
Equals New Sewer Value			1,368,863.29
Divided by: Sewer System Capacity (MGD)			0.100
Equals: Unit Valuation of Sewer System ($/MGD)			13,688,633
Divided by: 1,000,000 gallons ($/GPD)			13.69

C. RESULTS

C.1 EXISTING WATER AND SEWER FEES

The Village currently charges connection fees per residential EDU as well as connection fees for commercial customers. For water fees, residents are charge $35/month minimum. For over 2000 gallons used, residents are charged additionally per 1000 gallons as follows:

- $6.14/1000 gallons – 2001 to 6000
- $6.51/1000 gallons - 6001 to 10,000
- $9.79/1000 gallons – 10,001 to 20,000
- $11.40/1000 gallons- 20,001 and up

For sewer fees, residents and commercial customers on the sewer system are charged $60/month minimum and for each gallon over 5,000 gallons of use, $15/1000 gallons used. In addition to connection fees, the Village charges an impact fee of $2000 per new home.

Water taps fees for new homes are $600 ($500 plus $100 for backflow preventer) and $500 for sewer.

C.2 SERVICE UNIT CALCULATIONS: EQUIVALENT REDIDENTIAL UNITS

The law requires that the SDF calculations be applied to various categories of customer demands based on service units or Equivalent Residential Units (ERU). ERU is defined as the water and sewer capacities necessary to serve the most typical user type on the system. This user would be a 3-bedroom single family dwelling. The North Carolina Department of Environmental Quality, Division of Water Resources design standards for the construction of water and sewer systems, NC Administrative Code 15A NCAC 18C .0409 establishes that an ERU uses 400 gallons per day of water while 15A NCAC 02T .0114 establishes 360 gallons per day for sewer.

Table C.2.1 – Cost-Justified System Development Fee: Equivalent Residential Unit Water and Sewer

Village of Walnut Creek Development Fees: Equivalent Residential Unit Calculation

Cost-Justified System Development Fee Calculation	Cost of Capacity $/GPD	Customer Demand GPD	Cost per Unit Capacity ($)
Water System	0.422	400	169
Sewer System	13.69	360	4,928
Total ERU			5,097

C.3 APPLICATION OF SYSTEM DEVELOPMENT FEES AND SERVICE UNIT EQUIVALENCY

NC Administrative Code 15A NCAC 18C .0409 and 15A NCAC 02T .0114 noted in **D. Appendix** further define other service connections types and the associated water and sewer service design daily flow rates per gallon. These tables therefore serve as an equivalency or conversion for use in determining applicable system development fees for various categories of demand.

For new services in new development areas, the SDF should be adjusted as:

Table C.3.1 – System Development Fees – Water Meter Size-Based

Meter Size	Meter Ratio	Water	Wastewater	Combined
0.75"	1.00	169	4,928	5,097
1"	1.67	282	8,230	8,512
2"	5.33	901	26,266	27,167

The meter ratios are from the AWWA Manual section on equivalent meter ratios.

C.4 CONCLUSION AND RECOMMENDATIONS

Cox-Edwards Company has calculated the costs for water and sewer capacity on a per gallon per day basis for the Village of Walnut Creek. The calculations were performed using the Buy-in Method to account for the Village's existing capacity to provide water and sewer demands for developments. This calculation results in a development fee ceiling of $5,097 for an Equivalent Residential Unit (ERU). ERU is defined as the water and sewer capacities required to serve the most typical user type – the 3-bedroom, single family dwelling. The fee can be calculated for other types of development by applying the calculated cost of capacity per gallon of flow per day to the water and sewer demands for various uses as outlined by the NC Administrative Code 15A NCAC 18C .0409 and 15A NCAC 02T .0114. Using these sections of the code ensures that the same standard used to plan, design, construct, and finance capital assets is applied on the same cost recovery basis for all new development within the Village of Walnut Creek.

As mentioned earlier, the Village has customers only on the water system, while others are on both the water and wastewater system. At this time, we recommend only assessing water and sewer system development fees for the new customers from new development that will be connected onto the Village's water and sewer system. Further, the Village can charge system development fees up to the total calculated in this Study but not above the total. The Village may choose to charge a lower amount. Likewise, the new customers that are only receiving water services can only be charged up to the calculated system development fee on the water portion of the Study.

We recommend that if there is new development or other changes to the water and sewer system needs in the Village in a given year, that the Village revisit its system development fees at the close of each year.

The Village has plans to replace existing Sewer Pump Stations No. 4 and No. 5. They have set up a loan for $1.7 million to pay for this project. The project has not started and funds have yet to be used so the financing does not reflect in this version of the SDF.

The Village should consider forming a Capital Improvements Plan (CIP) for next 5 – 10 years and beyond.

D. APPENDIX

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2017

SESSION LAW 2017-138
HOUSE BILL 436

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

s/ Roy Cooper
Governor

Approved 4:13 p.m. this 20th day of July, 2017

15A NCAC 18C .0409 SERVICE CONNECTIONS

(a) Local Water Supply Plan. Units of local government that are operating under a local water supply plan in accordance with G.S. 143-355(l) shall not be limited in the number of service connections.

(b) No local water supply plan. A public water system that does not have a local water supply plan as stated in Paragraph (a) shall limit its number of service connections as follows:

(1) A public water system shall meet the daily flow requirements specified in Table 1:

Table 1: Daily Flow Requirements

Type of Service Connection	Daily Flow for Design
Residential	400 gallon/connection
Mobile Home Parks	250 gallon/connection
Campgrounds and Travel Trailer Parks	100 gallon/space
Marina	10 gallon/boat slip
Marina with bathhouse	30 gallon/boat slip
Rest Homes and Nursing Homes	
with laundry	120 gallon/bed
without laundry	60 gallon/bed
Schools	15 gallon/student
Day Care Facilities	15 gallon/student
Construction, work, or summer camps	60 gallon/person
Business, office, factory (exclusive of industrial use)	
without showers	25 gallon/person/shift
with showers	35 gallon/person/shift
Hospitals	300 gallon/bed

or:

(2) A public water system shall meet the daily flow requirements calculated as follows:

(A) If records of the previous year are available that reflect daily usage, the average of the two highest consecutive days of record of the water treated shall be the value used to determine if there is capacity to serve additional service connections. Unusual events, such as massive line breaks or line flushings, shall not be considered.

(B) If complete daily records of water treated are not available, the public water system shall multiply the daily average use based on the amount of water treated during the previous year of record by the appropriate factor to determine maximum daily demand, as follows:

(i) A system serving a population of 10,000 or less shall multiply the daily average use by 2.5; or

(ii) A system serving a population greater than 10,000 shall multiply the daily average use by 2.0.

(c) A supplier of water shall include the impact that demands from anticipated in-ground irrigation systems, multi-family units, or vacation rental homes will have on the daily flow needs determined in Paragraph (b) of this Rule.

(d) If two years of metered usage data exists, a supplier of water may recalculate the daily flow requirements based on the actual usage. If actual demands are lower than the projected demand, recovered supply may be used to support additional connections in accordance with Paragraph (b) of this Rule.

(e) A supplier of water shall be exempt from using Table 1 in Subparagraph (b)(1) of this Rule and any other design flow standards established by the Department or the Commission to determine the daily flow requirements, provided that a professional engineer licensed pursuant to G.S. 89C prepares, seals, and signs documentation supporting alternative daily flow requirements that are sufficient to sustain the water usage required in the engineering design by using low-flow fixtures or flow reduction technologies.

History Note: *Authority G.S. 130A-315; 130A-317; P.L. 93-523;*
Eff. July 1, 1994;
Readopted Eff. July 1, 2019.

15A NCAC 02T .0114 WASTEWATER DESIGN FLOW RATES

(a) This Rule shall be used to determine wastewater flow rates for all systems governed by this Subchapter unless alternate criteria are provided by a program-specific rule or for flow used for the purposes of 15A NCAC 02H .0105. Higher flow rates shall be required where usage and occupancy are atypical, including those in Paragraph (e) of this Rule. Wastewater flow calculations shall take hours of operation and anticipated maximum occupancies and 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 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
Parks, recreation, camp grounds, R-V parks and other outdoor activity facilities	
Campgrounds with comfort station, without water or sewer hookups	75 gal/campsite
Campgrounds 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 fixture
Summer camps without food preparation or laundry facilities	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 fixture
Car wash facilities	1200 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 bathhouse	30 gal/slip
Video game arcades, pool halls	250 gal/plumbing fixture
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 fixture
Flea markets	30 gal/stall
Shopping centers and malls with food service	130 gal/1000 sq ft
Stores and shopping centers without food service	100 gal/1000 sq ft
Transportation terminals – air, bus, train, ferry, port and dock	5 gal/passenger

(d) Design daily flow rates for proposed non-residential developments where the types of use and occupancy are not known shall be designed for a minimum of 880 gallons per acre, or the applicant shall specify an anticipated flow based upon anticipated or potential uses.

(e) Design daily flow rates for residential property on barrier islands and similar communities located south or east of the Atlantic Intracoastal Waterway and used as vacation rental as defined in G.S. 42A-4 shall be 120 gallons per day per habitable room. Habitable room shall mean a room or enclosed floor space used or intended to be used for living or sleeping, excluding kitchens and dining areas, bathrooms, shower rooms, water closet compartments, laundries, pantries, foyers, connecting corridors, closets, and storage spaces.

(f) An adjusted daily sewage flow design rate shall be granted for permitted but not yet tributary connections and future connections tributary to the system upon showing that the capacity of a sewage system is adequate to meet actual daily wastewater flows from a facility included in Paragraph (b) or (c) of this Rule without causing flow violations at the receiving wastewater treatment plant or capacity-related sanitary sewer overflows within the collection system as follows:

(1) Documented, representative data from that facility or a comparable facility shall be submitted by an authorized signing official in accordance with Rule .0106 of this Section to the Division for all flow reduction requests, as follows:

(A) dates of flow meter calibrations during the time frame evaluated and indication if any adjustments were necessary;

(B) a breakdown of the type of connections (e.g. two bedroom units, three bedroom units) and number of customers for each month of submitted data as applicable. Identification of any non-residential connections including subdivision clubhouses and pools, restaurants, schools, churches and businesses. For each non-residential connection, information identified in Paragraph (c) of this Rule (e.g. 200 seat church, 40 seat restaurant, 35 person pool bathhouse);

(C) a letter of agreement from the owner or an official, meeting the criteria of Rule .0106 of this Section, of the receiving collection system or treatment works accepting the wastewater and agreeing with the adjusted design rate;

(D) age of the collection system;

(E) analysis of inflow and infiltration within the collection system or receiving treatment plant, as applicable;

(F) if a dedicated wastewater treatment plant serves the specific area and is representative of the residential wastewater usage, at least the 12 most recent consecutive monthly average wastewater flow readings and the daily total wastewater flow readings for the highest average wastewater flow month per customers, as reported to the Division;

(G) if daily data from a wastewater treatment plant cannot be used or is not representative of the project area: 12 months worth of monthly average wastewater flows from the receiving treatment plant shall be evaluated to determine the peak sewage month. Daily wastewater flows shall then be taken from a flow meter installed at the most downstream point of the collection area for the peak month selected that is representative of the project area. Justification for the selected placement of the flow meter shall also be provided; and

(H) an estimated design daily sewage flow rate shall be determined by calculating the numerical average of the top three daily readings for the highest average flow month. The calculations shall also account for seasonal variations, excessive inflow and infiltration, age and suspected meter reading and recording errors.

(2) The Division shall evaluate all data submitted but shall also consider other factors in granting, with or without adjustment, or denying a flow reduction request including: applicable weather conditions during the data period (i.e. rainy or drought), other historical monitoring data for the particular facility or other similar facilities available to the Division, the general accuracy of monitoring reports and flow meter readings, and facility usage, such as whether the facility is in a resort area.

(3) Flow increases shall be required if the calculations required by Subparagraph (f)(1) of this Rule yield design flows higher than that specified in Paragraphs (b) or (c) of this Rule.

(4) The permittee shall retain the letter of any approved adjusted daily design flow rate for the life of the facility and shall transfer such letter to a future permittee.

History Note: *Authority G.S. 143-215.1; 143-215.3(a)(1);*
Eff. September 1, 2006;
Readopted Eff. September 1, 2018.

Village of Walnut Creek Water Usage

Front Entrance					Back Entrance				
Date	# of Days	Consumption (gal)	gal/day	Costs	Date	# of Days	Consumption (gal)	gal/day	Costs
12/17/2021	30	1,511,370	50,379	5,181.49	12/17/2021	30	1,200,370	40,012	4,124.09
11/17/2021	31	946,610	30,536	3,261.30	11/17/2021	31	1,077,000	34,742	3,704.63
10/17/2021	30	997,280	33,243	3,433.58	10/17/2021	30	1,101,830	36,728	3,789.05
9/17/2021	31	1,143,130	36,875	3,929.47	9/17/2021	31	1,250,150	40,327	4,293.34
8/17/2021	31	1,087,750	35,089	3,741.18	8/17/2021	31	1,218,410	39,304	4,185.42
7/17/2021	30	1,082,210	36,074	3,722.34	7/17/2021	30	1,245,080	41,503	4,276.10
6/17/2021	31	1,269,920	40,965	4,360.56	6/17/2021	34	1,424,190	41,888	4,885.08
5/17/2021	30	1,062,410	35,414	3,483.00	5/14/2021	28	1,206,990	43,107	3,951.44
4/17/2021	31	829,010	26,742	2,726.78	4/16/2021	30	1,249,450	41,648	4,089.01
3/17/2021	28	766,190	27,364	2,523.25	3/17/2021	28	1,288,540	46,019	4,215.66
2/17/2021	31	862,600	27,826	2,835.61	2/17/2021	31	1,157,580	37,341	3,791.35
1/17/2021	31	913,480	29,467	3,000.47	1/17/2021	31	1,071,080	34,551	3,511.09
12/17/2020	30	863,220	28,774	2,837.62	12/17/2021	30	1,240,100	41,337	4,058.71
11/17/2020	31	925,880	29,867	3,040.64	11/17/2021	31	1,131,520	36,501	3,706.91
10/17/2020	30	927,920	30,931	3,047.25	10/17/2020	30	1,170,600	39,020	3,833.53
9/17/2020	31	1,048,200	33,813	3,436.96	9/17/2020	31	1,362,010	43,936	4,453.70
8/17/2020	31	962,360	31,044	3,012.53	8/17/2020	31	1,447,090	46,680	4,510.35
7/17/2020	30	1,399,340	46,645	4,362.80	7/17/2020	30	1,272,420	42,414	3,970.62
6/17/2020	31	1,373,980	44,322	4,284.44	6/17/2020	31	1,351,230	43,588	4,214.14
5/17/2020	30	1,303,480	43,449	4,066.59	5/17/2020	30	1,231,080	41,036	3,842.88
4/17/2020	31	1,232,000	39,742	3,845.72	4/17/2020	31	1,275,890	41,158	3,981.34
3/17/2020	29	894,420	30,842	2,802.60	3/17/2020	30	1,109,080	36,969	3,465.90
2/17/2020	31	866,000	27,935	2,714.78	2/16/2020	30	1,047,090	34,903	3,274.35
1/17/2020	31	931,050	30,034	2,915.78	1/17/2020	31	1,167,330	37,656	3,645.89
12/17/2019	30	977,390	32,580	3,058.98	12/17/2019	30	1,082,930	36,098	3,385.09
11/17/2019	31	894,440	28,853	2,802.66	11/17/2019	31	1,116,570	36,018	3,489.04
10/17/2019	30	905,720	30,191	2,837.51	10/17/2019	30	1,140,830	38,028	3,564.00
9/17/2019	31	854,680	27,570	2,679.80	9/17/2019	31	1,164,390	37,561	3,636.81
8/17/2019	31	1,097,070	35,389	3,428.79	8/17/2019	31	1,201,720	38,765	3,752.15

Village of Walnut Creek Water Usage

Date	# of Days	Front Entrance Consumption (gal)	gal/day	Costs
7/172019	31	1,021,940	32,966	3,196.63
6/16/2019	30	1,346,190	44,873	4,198.57
5/17/2019	30	1,148,580	38,286	3,413.83
4/17/2019	31	909,340	29,334	2,710.46
3/17/2019	27	739,750	27,398	2,211.87
2/18/2019	32	849,220	26,538	2,533.71
1/17/2019	31	743,520	23,985	2,222.95
12/17/2018	30	838,760	27,959	2,502.95
11/17/2018	31	1,073,900	34,642	3,194.27
10/17/2018	30	768,980	25,633	2,297.80
9/17/2018	31	957,270	30,880	2,851.37
8/17/2018	31	816,110	26,326	2,436.36
7/17/2018	30	758,810	25,294	2,267.90
6/17/2018	31	854,380	27,561	2,548.88
5/17/2018	30	874,880	29,163	2,369.67
4/17/2018	31	825,820	26,639	2,238.58
3/17/2018	28	660,620	23,594	1,797.50
2/17/2018	31	664,250	21,427	1,807.19
1/17/2018	31	641,500	20,694	1,746.45
12/17/2017	30	857,080	28,569	2,322.04
11/17/2017	31	1,083,500	34,952	2,926.59
	1,522	48,363,510	31,776 (avg.)	$151,170.05

Date	# of Days	Back Entrance Consumption (gal)	gal/day	Costs
7/17/2019	30	1,245,630	41,521	3,887.84
6/17/2019	31	1,237,750	39,927	3,863.49
5/17/2019	30	1,116,290	37,210	3,318.89
4/17/2019	32	1,104,630	34,520	3,284.61
3/16/2019	26	818,760	31,491	2,444.15
2/18/2019	31	1,050,900	33,900	3,126.65
1/18/2019	33	1,259,090	38,154	3,738.72
12/16/2018	30	1,226,080	40,869	3,641.68
11/16/2018	30	1,096,920	36,564	3,261.94
10/17/2018	30	1,229,080	40,969	3,650.50
9/17/2018	31	1,388,990	44,806	4,120.63
8/17/2018	31	1,344,090	43,358	3,988.62
7/17/2018	30	1,527,790	50,926	4,528.70
6/17/2018	31	1,503,140	48,488	4,456.23
5/17/2018	30	1,232,110	41,070	3,323.37
4/17/2018	33	1,198,940	36,332	3,234.81
3/15/2018	27	919,520	34,056	2,488.76
2/16/2018	21	737,510	35,120	2,002.79
1/26/2018	43	2,037,000	47,372	5,472.43
12/14/2017	22	701,850	31,902	1,907.58
11/22/2017	36	1,128,800	31,356	3,047.54
	1,522	60,107,420	39,492 (avg.)	$186,391.60

Total - Both Sites	108,470,930	71,269 (avg.)	$337,561.65

NOTES PAYABLE

Governmental Unit	Village of Walnut Creek	Balance sheet date	6/30/2021
Prepared by		Date prepared	9/27/2021
Fund, Fund-type, or Opinion Unit	Business Activities		

Workpaper Index 5302

Fund	WP Ref	Note Description	Origination Date	Maturity Date	Interest Rate	Balance at 6/30/2020	Proceeds from Borrowings	Principal Payments	Balance at 6/30/2021	Interest Paid	Total Debt Service Payments
Water & Sewer		State Revolving Loan Fund E-SRF-T-03-0058	5/1/2006	5/1/2025	2.42%	391,224.25		(78,244.85)	312,979.40	9,467.62	87,712.47
						391,224.25	-	(78,244.85)	312,979.40	9,467.62	87,712.47

Source: The above amounts were obtained from PY Perm File, G/L Detail, Trial Balance provided which were provided by Peggy Page and testing of current year payment using PY confirmation of debt outstanding.

Purpose: To assist in compiling the necessary information for note disclosures and to assist in testing the completeness, existence, and accuracy of Debt and Debt Service at June 30, 2021. CRI also is testing the reasonableness of interest expense comparing the recorded amounts to the amortization schedules and recalculating the interest as well as comparing to the PY. This schedule displays the long term debt of the Village with no other debt issuance occuring during the CY.

Procedures: CRI tested the current year payment against the PY confirmed debt and compared recorded amounts against the debt, compiled the above information matching it to the amortization schedule for completion of the notes. CRI also recalculated the interest expense and compared to the amortization schedule and TB.

Scope: Because the schedule shown represents all debt & debt service and 1) further determination of which items are to be tested affects all financial statement assertions related to debt & debt service and 2) the analytic above implicitly tests a portion of all relevant financial statement assertions, we have applied scopes assessed to the highest RMM associated with a debt & debt service and related assertion (as documented in our risk assessment at 2500). The scope applied is current year balances greater than 50% TM and fluctuations from the prior year balance greater than 50% TM and 10%.

	Business Type Activities		*Utility Fund*
TM	$ 23,000		$ 23,000
Risk %	80%		80%
Scope	$ 18,400	0	$ 18,400

Conclusion: Based upon the above analysis and related testing, the recorded amounts are accurate and materially correct for principal and interest. No exceptions noted.

Current Portion	Interest Rate Calculated	Interest Paid Through	Days to 6/30/2021	Accrued Interest	Accrued Interest PY	Adjustment
78,244.85	2.42%	5/1/2021	60	1,245.06	1,556.32	(311.26)
78,244.85				1,245.06	1,556.32	(311.26)

Form LGC 129
Revised 7-2003

STATE OF NORTH CAROLINA
LOCAL GOVERNMENT COMMISSION
ANNUAL PRINCIPAL AND INTEREST REQUIREMENTS

Run Date: 9/21/2021

VILLAGE OF WALNUT CREEK NON GENERAL OBLIGATION — **2021-22**

UNIT — **Fiscal Year**

DATE OF ISSUE	DESCRIPTION	Outstanding at July 1	DUE	PRINCIPAL	INTEREST
05/20/2005	E-SRF-T-03-0058, SEWER	$ 312,979.40	11/01/21	$ -	$ 3,787.05
		-	05/01/22	78,244.85	3,787.05
	Totals	312,979.40		78,244.85	7,574.10

Total Bond Principal and Interest Requirements: 85,818.95

Sewer Discharge to City of Goldsboro
January 2015 - December 2021
Village of Walnut Creek, NC

Month	Discharge to City (gallons)	Days	Gal/day
Jan-2015	416,592	31	13,438
Feb-2015	737,208	28	26,329
Mar-2015	701,367	31	22,625
Apr-2015	587,744	30	19,591
May-2015	729,104	31	23,519
Jun-2015	915,320	30	30,511
Jul-2015	932,928	31	30,094
Aug-2015	882,512	31	28,468
Sep-2015	1,157,256	30	38,575
Oct-2015	349,544	31	11,276
Nov-2015	1,203,776	30	40,126
Dec-2015	1,403,992	31	45,290
Jan-2016	2,239,992	31	72,258
Feb-2016	1,931,520	29	66,604
Mar-2016	1,874,392	31	60,464
Apr-2016	1,771,448	30	59,048
May-2016	2,276,496	31	73,435
Jun-2016	667,296	23	29,013
Jul-2016	838,008	31	27,033
Aug-2016	853,080	31	27,519
Sep-2016	986,664	30	32,889
Oct-2016	2,102,632	31	67,827
Nov-2016	1,109,144	30	36,971
Dec-2016	1,066,512	31	34,404
Jan-2017	894,048	31	28,840
Feb-2017	684,464	28	24,445
Mar-2017	818,208	31	26,394
Apr-2017	1,002,216	30	33,407
May-2017	1,037,728	31	33,475
Jun-2017	883,920	30	29,464
Jul-2017	886,944	31	28,611
Aug-2017	840,080	31	27,099
Sep-2017	974,240	30	32,475
Oct-2017	861,440	31	27,788
Nov-2017	841,120	30	28,037
Dec-2017	1,310,018	31	42,259
Jan-2018	891,280	31	28,751
Feb-2018	1,261,458	28	45,052
Mar-2018	1,653,599	31	53,342

Sewer Discharge to City of Goldsboro
January 2015 - December 2021
Village of Walnut Creek, NC

Month	Discharge to City (gallons)	Days	Gal/day
Apr-2018	1,688,960	30	56,299
May-2018	1,739,084	31	56,099
Jun-2018	2,073,167	32	64,786
Jul-2018	1,461,113	29	50,383
Aug-2018	2,285,339	31	73,721
Sep-2018	2,720,233	30	90,674
Oct-2018	1,606,588	31	51,825
Nov-2018	1,618,142	30	53,938
Dec-2018	1,791,106	31	57,778
Jan-2019	992,374	31	32,012
Feb-2019	846,813	28	30,243
Mar-2019	1,394,130	31	44,972
Apr-2019	1,240,626	30	41,354
May-2019	1,183,124	31	38,165
Jun-2019	1,246,687	30	41,556
Jul-2019	863,369	31	27,851
Aug-2019	1,288,277	31	41,557
Sep-2019	1,241,722	30	41,391
Oct-2019	1,088,950	31	35,127
Nov-2019	1,254,138	30	41,805
Dec-2019	1,204,889	31	38,867
Jan-2020	1,096,407	31	35,368
Feb-2020	1,503,350	29	51,840
Mar-2020	1,223,736	31	39,475
Apr-2020	1,497,043	30	49,901
May-2020	1,213,951	31	39,160
Jun-2020	1,505,005	30	50,167
Jul-2020	1,183,385	31	38,174
Aug-2020	1,734,864	31	55,963
Sep-2020	1,265,702	30	42,190
Oct-2020	1,477,103	31	47,648
Nov-2020	1,385,649	30	46,188
Dec-2020	1,616,177	31	52,135
Jan-2021	1,190,889	31	38,416
Feb-2021	1,506,166	28	53,792
Mar-2021	1,398,141	31	45,101
Apr-2021	1,329,678	30	44,323
May-2021	1,083,298	31	34,945
Jun-2021	1,262,737	30	42,091
Jul-2021	1,391,100	31	44,874

Sewer Discharge to City of Goldsboro
January 2015 - December 2021
Village of Walnut Creek, NC

Month	Discharge to City (gallons)	Days	Gal/day
Aug-2021	1,543,439	31	49,788
Sep-2021	811,977	30	27,066
Oct-2021	1,097,550	31	35,405
Nov-2021	959,786	30	31,993
Dec-2021	1,214,180	31	39,167
	104,895,434	2,550	41,135