



October 4, 2018

Ms. Angela Christian  
Town of Newport  
Town Manager  
PO Box 1869  
Newport, NC 28570

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**Re: Water and Sewer System Development Fee (SDF) Structure  
Results- Fee Basis Study  
Newport, NC**

Dear Ms. Christian:

The East Group has completed an analysis to develop a cost-based System Development Fee in following the requirements set out in North Carolina General Statute 162A, Article 8. Our findings are included in this letter and supporting calculations are contained in Attachment A.

**Legal Basis for the Water and Sewer System Development Fees**

In accordance with General Statute 162A-205, the fee study and adoption of the fee schedule must meet the following conditions:

- 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.
- Documents in reasonable detail the facts and data used in the analysis and their sufficiency and reliability.
- 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 the general statute.
- 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.
- Identifies all assumptions and limiting conditions affecting the analysis and demonstrates that they do not materially undermine the reliability of conclusions reached.
- 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.
- Covers a planning horizon of not less than 10 years nor more than 20 years.
- Is adopted by resolution or ordinance of the local governmental unit in accordance with G.S. 162A 209.

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**Adoption and Periodic Review:**

- 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.
- 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.
- 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.

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**Fee Strategy:**

There are three methodologies that are referenced in N.C.G.S.162A, Article 8 for setting up the Town's new development fee schedule:

**Buy-In Method:** This method calculates the total investment, less grant funds and debt service and sets the terms for new customers to buy into the existing capacity the Town currently holds. The fee can be treated as unrestricted and used to rehabilitate or expand as required to ensure the service to the new customer.

**Incremental/Marginal Cost:** This method is intended to provide capital for future development and expansion that you will require in order to serve new customers. It may be most appropriate where you have limited to no excess capacity to serve the new development. The fees paid under this methodology must only be spent on the expansion, extension, or improvements related to the new development which paid the fee.

**Combined Cost:** This is a combination of the two methods described above and is restricted in use in the same manner as the Incremental/Marginal cost method.

Based upon the analysis, the Combined Cost method is the appropriate basis for the SDF analysis. There is significant excess capacity at the waste treatment plant that could utilize the Buy-In Method. A large portion of the water infrastructure, however, has been depreciated over time and upgrades in the capital improvements plan are required for capacity to serve new customers. The indicated basis for the water system is the Incremental Cost method.

Note that for work included in the buy-in fee, funds provided by USDA backed loans are subtracted from the recoverable costs. Deductions for loan funds are required because existing user fees are calculated to cover the debt service. Applying a credit for USDA loans eliminates the problem of prospective new customers paying for improvements twice: once through user fees and once through the SDF. Grant funds are also excluded from the recoverable costs as they are not actually incurred as by the system.

The same rationale is applied to future improvements when it is known that funding will be applied for and anticipated to complete the project. The projected funding is subtracted from the future incremental costs since it is not recoverable under Article 8.

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**Basis of the Analysis:**

We used the following methods combined with data provided by Town staff:

- We obtained a listing of previous water and sewer loan funds as shown in the attached analysis. Based upon data from Town on its USDA funded loans and private lenders as applicable, we compiled the debt service for use as a credit in the fee structure. We determined the required setoffs against system value as required by HB 436.
- We performed a determination of "Replacement Cost Less Depreciation." The data was based upon data shown in the Town's insurance policy statement. Valuations were not given in the statement but the age and square footage (where appropriate) and other data were. We used the following methods to estimate a valuation:
  - For buildings we used previous bids or estimates on a square footage basis to arrive at an estimated valuation.
  - For other improvements such as plant features, elevated tanks, wells, pump stations and the like we also used bid pricing, previous engineering reports and other data to estimate values.
  - Where available, we used the actual project funding as given in Town records to check against valuations.
  - We used straight line depreciation. For buildings we used an expected life of 27.5 years. For plants, elevated tanks, wells and other such systems we used a life of 39.5 years. For sewer collection systems and water distribution systems, we use a maximum depreciation of 75% for systems that remain operational and effective.
- The current Replacement Value Less Depreciation (RCNLD) was divided by the current capacity (for Buy-In Method) or future capacity (for Incremental Cost Method) to determine a cost per gallon/day of capacity.
- A Level of Service (i.e. gallons for each residential customer) was determined. We used actual flow records to determine the water and sewer flow per connection. The Local water supply plan provides a breakdown of how much of the system flow is actually attributable to residential connections and provides the number of residential connections in the system. We used this data to determine the flow for water and for sewer per residential unit.
- We applied a peak factor of 1.4 to the flows in recognition that the system must be capable of supporting peak flows and the design at any given point in time must provide for a reasonable peaking factor.
- Using the Level of Service, (gallons per day) for each residential unit times the unit cost per gallon of capacity per day establishes the SDF amount for water and sewer capacity.
- Using the equivalent meter ratio table given in AWWA Manual M-1, Appendix B, we set up a table showing the proposed SDF for each size of water meter likely to be used in the Town's system. Please refer to the results below.

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**Results:**

We obtained the following results:

- The debt service for the water system is \$5,637,678 which greater than the depreciated value of the water system improvements we calculated. This means that the incremental cost method is the best method for determining the SDF appropriate to serve new customers.
- The debt service for the sewer system is \$9,753,304. The RCNLD for the sewer system is \$16,303,121. The net recoverable **buy-in** costs for the sewer system is \$6,549,817.
- We have provided a determination for net recoverable **incremental** costs based upon the capital improvements plan. We have determined an incremental cost per gallon of capacity created by these improvements for inclusion in the SDF. Refer to Attachment A for details.
- The level of service is 156 gallons per day of water delivered to each residential customer and 168 gallons per day of sewer flow treated for each residential sewer customer. The higher flow for sewer includes the apparent inflow and infiltration of the system as recorded in 18 months of monthly data provided by the Town.

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Water Meter Nominal Size (Inches)	Equivalent Meter Ratio - AWWA Manual M-1 Appendix B	Water	Sewer *	Water and Sewer Combined
0.75 or ERU	1	\$ 1,336	\$ 2,372	\$ 3,708
1.00	1.67	\$ 2,230	\$ 3,962	\$ 6,192
1.50	3.33	\$ 4,447	\$ 7,900	\$ 12,347
2.00	5.33	\$ 7,118	\$ 12,645	\$ 19,763
2.50	7.30	\$ 9,749	\$ 17,319	\$ 27,068
3.00	10.00	\$ 13,355	\$ 23,724	\$ 37,079
4.00	16.67	\$ 22,263	\$ 39,549	\$ 61,811
6.00	33.33	\$ 44,512	\$ 79,074	\$ 123,586
8.00	53.33	\$ 71,222	\$ 126,522	\$ 197,745
10.00	76.67	\$ 102,393	\$ 181,895	\$ 284,288
12.00	143.33	\$ 191,417	\$ 340,043	\$ 531,460

**\*Note: Sewer Development fee will be based upon water meter size required to serve the facility.**

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Please note that the above System Development Fee Schedule includes capacity but it does not include the costs of line extensions to serve specific proposed developments. These extensions are considered part of the development cost. A project for a new pump station near Heritage Point is included because it is necessary to deal with increasing service demands in the general area and required to divert additional flow from pump stations in the collection system that are unable to carry additional discharge.

Please let us know if you have questions.

Sincerely,

THE EAST GROUP, P.A.

*Todd Tripp*

Todd A. Tripp, PE

Sr. Civil Engineer

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Attachment A – System Development Fee Worksheets

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# Attachment A - System Development Fee Worksheets October 2018

## Buy -In

Item No.	Description	Water	Sewer
5	Infrastructure Replacement Cost New - Less Depreciation - (RCNLD)\$	\$ 3,343,389	\$ 16,303,121
6	Contributions		
7	Principal Debts (Covered by User Fees)	\$ 5,637,678	\$ 9,753,304
	Recoverable Net Costs (=5-6-7)	\$ -	\$ 6,549,817
	Capacity (MGD)	0.936 MGD	1.200 MGD
	<b>Recoverable Cost per Gallon of Capacity</b>	<b>\$0.00</b>	<b>\$5.46</b>
	<b>Gallons Allocated per Equivalent Residential Unit</b>	<b>156</b>	<b>168</b>
	<b>Charge per ERU for Buy-In</b>	<b>\$ -</b>	<b>\$ 919.30</b>
 <b>Incremental</b>			
8	Future Capital Costs	\$ 5,247,590	\$ 2,760,915
9	Contribution Credits		\$ 690,229
10	Principal Debts (Covered by User Fees)	\$ 3,250,000	\$ -
	Recoverable Net Costs (=8-9-10)	\$ 1,997,590	\$ 2,070,686
	Capacity Available due to Projects (MGD)	0.234	0.240
	<b>Recoverable Cost per Gallon</b>	<b>\$8.54</b>	<b>\$8.63</b>
	<b>Incremental Charge per ERU</b>	<b>\$ 1,335.50</b>	<b>\$ 1,453.15</b>
	<b>Total Development Cost per ERU</b>	<b>\$ 1,336</b>	<b>\$ 2,372 \$ 3,708</b>

# Debt Service for Water and Sewer Infrastructure

September 2018

Source: Town of Newport

Item No.	Description	Water	Sewer
1	Sewer Plant Project - SRF		\$ 8,053,304
2	Water Improvments -DWL	\$ 2,250,000	
3	Water Improvments -DWL	\$ 2,250,000	
4	Emergency Water Connection MHC	\$ 137,678	
5	Water/Sewer Bond 2001	\$ 1,000,000	
6	Water /Sewer Bond 2007		\$ 1,700,000
	Total	\$ 5,637,678	\$ 9,753,304

# Determination of Replacement Cost Less Depreciation

## September 2018

		1	2	3	4
		Original Cost	Replacement Cost	Accumulated Depreciation	RCNLD = (Column 2-3)
<b>Water System</b>					
W-1	Buildings	\$ 172,500	\$ 261,660	\$ 157,342	\$ 104,318
W-2	Treatment Plant	\$ 1,374,800	\$ 1,899,300	\$ 1,449,708	\$ 449,592
W-3	Elevated Tanks	\$ 700,000	\$ 900,000	\$ 787,180	\$ 112,820
W-4	Wells	\$ 1,500,000	\$ 1,250,000	\$ 717,949	\$ 532,051
W-5	Distribution System	\$ 4,012,800	\$ 4,815,360	\$ 3,370,752	\$ 1,444,608
W-6	Land	\$ 307,193	\$ 300,000	\$ -	\$ 300,000
W-7	Construction -In-Progress	\$ 356,460	\$ 400,000	\$ -	\$ 400,000
		\$ 8,423,753	\$ 9,826,320		\$ 3,343,389
<b>Sewer System</b>					
S-1	Buildings	\$ 295,760	\$ 351,400	\$ 82,349	\$ 269,051
S-2	Treatment Plant	\$ 13,470,344	\$ 16,312,304	\$ 5,884,924	\$ 10,427,380
S-3	Lift Stations	\$ 922,500	\$ 1,500,000	\$ 923,077	\$ 576,923
S-4	Gravity Lines & Manholes	\$ 7,022,400	\$ 10,032,000	\$ 7,022,400	\$ 3,009,600
S-5	Services (To the ROW Limit)	\$ 965,700	\$ 1,609,500	\$ 675,990	\$ 933,510
S-6	Land	\$ 1,086,657	\$ 1,086,657	\$ -	\$ 1,086,657
S-7	Construction -In-Progress				
		\$ 23,763,361	\$ 30,891,861		\$ 16,303,121



# Capital Projects for Water and Sewer

September 2018

Source: Town of Newport

Item No.	Description	Water	Sewer
1	Water Main Extension Highway 70 @Roberts Road	\$ 80,690	
2	Water Main Loop Ashley Place to Heritage Point	\$ 120,000	
3	Water Main Loop for Newport Middle School	\$ 170,000	
4	Water Main for Roberts Road	\$ 225,000	
5	Water Main for 9 Foot Road	\$ 225,000	
6	New Truck	\$ 13,500	
7	Water Plant Phase I	\$ 3,250,000	
8	New Well #6	\$ 350,000	
9	New Well #7	\$ 650,000	
10	Backhoe	\$ 58,400	
11	Generator Well #4	\$ 35,000	
12	SCADA Improvements- Wells	\$ 70,000	
		\$ 5,247,590	
1	East Chatham Street Gavity Sewer		\$ 216,915
2	Lift Station #2- Additional Storage		\$ 300,000
3	Lift Station #1 Electrical/Flow Pacing/Raise Panel for Flood Protection		\$ 50,000
4			
5	Lift Station #8		\$ 10,000
6	Lift Station #9		\$ 10,000
7	New Force Main for Lift Station #1		\$ 517,000
8	SCADA		\$ 163,000
9	WWTP- Replace two Pumps		\$ 40,000
10	WWTP- Replace two Pumps		\$ 40,000
11	New Sludge Belt Press		\$ 500,000
12	New Employee		\$ 20,000
13	New Truck		\$ 14,000
14	Heritage Point Pump Station and Force Main		\$ 880,000
	<b>Totals</b>	<b>\$ 5,247,590</b>	<b>\$ 2,760,915</b>

# Cost Projection

## Heritage Point Pump Station and Force Main

### September 2018

Item No.	Description	Quantity	Unit	Projected Unit Price	Projected Extended Price
1	New 500 gpm Pump Station	1	LS	\$ 390,000	\$ 390,000
2	8-inch Force Main	6,300	LF	\$ 26	\$ 163,800
3	Dry Bore and Jack Crossing of US 70	220	LF	\$ 250	\$ 55,000
4	Dry Bore and Jack Crossing of NCDOT Secondary Road	60	LF	\$ 180	\$ 10,800
5	Manhole Penetration and Connection	1	LS	\$ 2,500	\$ 2,500
6	Erosion and Sedimentation Contro/Mobilization	1	LS	\$ 15,000	\$ 15,000
7	US 70 Fence Repair	1	LS	\$ 10,000	\$ 10,000
8	Miscellaneous Stone for Drive Repairs	200	TN	\$ 45	\$ 9,000
9	Air Release Valve and Manhole	2	EA	\$ 3,200	\$ 6,400
10	Standby Generator	1	LS	\$ 50,000	\$ 50,000
					\$ 712,500
	Design, Permitting, and Construction Administration				86,000
	Soil Testing Allowance				2,300
	<b>Contingency</b>				<b>\$ 80,000</b>
	<b>Total Capital Cost Projection</b>				<b>\$ 880,800</b>

# Determination of Overall Level of Service Residential and Non-Residential Services Combined September 2018

Description	Metered Connections	Metered Use-Water (MGD)	Usage Per Connection (GPD)
Metered Connections-Residential	1,947	0.184	95
Metered Connections-Commercial	145	0.053	366
Metered Connections-Industrial	5	0.002	400
Metered Connections-Institutional	49	0.148	3,020
<b>Total</b>	<b>2,146</b>	<b>0.387</b>	<b>180</b>

PerCentage Residential                                      90.7%                                      47.5%

Apply these percentages to the record data of water and sewer treatment plant to determine flowrates for typical Town of Newport residential customer.

Data Taken from Water System Management Plan

Determination- Level of Service

Month and Year	Water Plant Flow	Average Daily Flow- Water	GPCD- Water	Waste Treatment Flow	Average Daily Flow- Sewer	GPCD- Sewer	Rain	Sewage to Water Ratio
Jan-16	12.9947	419,184	101	17.3285	558,984	135	7.6	1.33
Feb-16	11.8424	408,359	98	17.7172	610,938	147	11	1.50
Mar-16	12.7351	410,810	99	12.8609	414,868	100	3.1	1.01
Apr-16	12.2965	409,883	99	11.6989	389,963	94	3.2	0.95
May-16	13.1416	423,923	102	11.558	372,839	90	7.1	0.88
Jun-16	12.7081	423,603	102	12.7239	424,130	102	6.3	1.00
Jul-16	13.2355	426,952	103	13.079	421,903	102	6.4	0.99
Aug-16	15.6776	505,729	122	14.4994	467,723	113	6.3	0.92
Sep-16	14.1872	472,907	114	17.6982	589,940	142	8.2	1.25
Oct-16	14.2625	460,081	111	18.7869	606,029	146	6.4	1.32
Nov-16	13.2695	428,048	103	12.8183	413,494	100	0.9	0.97
Dec-16	12.9947	419,184	101	14.9841	483,358	116	7	1.15
<b>MGD Total Flow 2016</b>	<b>159.3454</b>			<b>175.7533</b>			<b>73.5</b>	<b>1.10</b>
Jan-17	11.7184	378,013	91	16.5549	534,029	129	4.4	1.41
Feb-17	10.2455	330,500	80	13.9672	450,555	109	1.8	1.36
Mar-17	11.5913	373,913	90	14.5221	468,455	113	4.1	1.25
Apr-17	11.2534	363,013	87	14.4421	465,874	112	5.2	1.28
May-17	12.4249	400,803	97	13.3459	430,513	104	6.1	1.07
Jun-17	12.3046	396,923	96	11.6408	375,510	90	3.7	0.95
Jul-17	13.662	440,710	106	12.6547	408,216	98	6.1	0.93
Aug-17	13.1524	424,271	102	12.9129	416,545	100	14.2	0.98
Sep-17	14.3721	463,616	112	16.2529	524,287	126	7.3	1.13
Oct-17	14.8713	479,719	116	14.9652	482,748	116	5.7	1.01
Nov-17	14.4606	466,471	112	11.038	356,065	86	1.2	0.76
Dec-17	14.713	474,613	114	13.0271	420,229	101	4.8	0.89
<b>MGD Total Flow 2017</b>	<b>154.7695</b>			<b>165.3238</b>			<b>64.6</b>	<b>1.07</b>
Jan-18	14.9461	482,132	116	16.6189	536,094	129	9	1.11
Feb-18	13.4938	435,284	105	14.752	475,871	115	3.9	1.09
Mar-18	15.6035	503,339	121	14.7396	475,471	115	5.1	0.94
Apr-18	15.2406	491,632	118	15.2442	491,748	118	4.6	1.00
May-18	15.4112	497,135	120	14.8698	479,671	116	7.6	0.96
Jun-18	14.8576	479,277	115	15.6549	504,997	122	9.1	1.05
Jul-18	13.662	440,710	106	16.3401	527,100	127	7.6	1.20
<b>MGD 6 Months Flow</b>	<b>103.2148</b>			<b>108.2195</b>			<b>46.9</b>	<b>1.05</b>
<b>MGD Total record</b>	<b>417.3297</b>	<b>457,598</b>	<b>110</b>	<b>449.2966</b>	<b>492,650</b>	<b>119</b>	<b>84.8</b>	<b>1.08</b>
Total Number of Metered Connections		2,146			2,146			
<b>Total Daily Flow per Connection</b>		213			230			
<b>Residential Connections</b>		1,947			1,947			

**Town of Newport  
Determination- Level of Service**

Month and Year	Water Plant Flow	Average Daily Flow- Water	GPCD- Water	Waste Treatment Flow	Average Daily Flow- Sewer	GPCD- Sewer	Rain	Sewage to Water Ratio
<b>Estimated Gallons For Residential Connections</b>		217,566	<b>*Note:1</b>		234,231			
<b>Total Daily Flow per Connection</b>		112			120			
<b>Peak Factor</b>		1.4			1.4			
<b>Peak Daily Flow per Residential Connection</b>		156			168			

**Note 1: The residential flow rate is based upon the percentages given in the Completed Local Water Supply Plan as filed and published on the Public Water Supply Section's website.**

## Depreciation Worksheet

### Utilizing Data from Town Insurance Policy Records

### September 2018

Code	Description	Year Built	Square Footage	Estimated Original Cost	Estimated Value New	Life	Years Deprecation	RCNLD	Reported Current Value	
									Value Ascribed to Water	Value Ascribed to Sewer
W-1	Public Works	1956	1,356	\$60,000	\$149,160	39.0	62	\$0		
W-1	Water Department Modular Building	2016	2,500	\$112,500	\$112,500	27.5	2	\$104,318	\$104,318	
W-2	Water Treatment Plant- New Building	1998	2,397	\$600,000	\$719,100	39.0	20	\$350,331	\$350,331	
W-2	Water Treatment Plant- Original Building	1980	3,048	\$550,000	\$914,400	39.0	38	\$23,446	\$23,446	
W-3	250,000 Gallon Water Plant Elevated Tank	1980	-	\$250,000	\$400,000	39.0	38	\$10,256	\$10,256	
W-2	Water Treatment Plant Chlorine Room	1995	182	\$40,000	\$54,600	39.0	23	\$22,400	\$22,400	
W-2	Water Treatment Plant Backwash Tank	1980	864	\$60,000	\$86,400	39.0	38	\$2,215	\$2,215	
W-2	Water Treatment Plant Generator Building	1995	144	\$43,200	\$43,200	39.0	23	\$17,723	\$17,723	
W-2	Water Treatment Plant Aerator & Clearwell	1995	272	\$81,600	\$81,600	39.0	23	\$33,477	\$33,477	
W-4	Well No.3	1980	256	\$300,000	\$400,000	39.0	38	\$10,256	\$10,256	
W-4	Well No. 4	1995	256	\$300,000	\$400,000	39.0	23	\$164,103	\$164,103	
W-4	Well No. 5	2010	256	\$400,000	\$450,000	39.0	8	\$357,692	\$357,692	
W-3	500,000 Gallon Elevated Tank	1987		\$450,000	\$500,000	39.0	31	\$102,564	\$102,564	
W-7	Raw Water Main-Well #6	2018		\$200,000	\$200,000	39.0	0	\$200,000	\$200,000	
W-7	Salt Tank Relocation	2018		\$156,460	\$156,460	39.0	0	\$156,460	\$156,460	
S-1	Wastewater Treatment Plant Administration	2016	2,368	\$260,480	\$273,000	39.0	2	\$259,000		\$259,000
S-2	Clarifier 1	1984	707	\$95,445	\$212,100	39.0	34	\$27,192		\$27,192
S-2	Aerobic Digester	1987	1,964	\$265,140	\$589,200	39.0	31	\$120,862		\$120,862
S-2	Bar Screens	2006	490	\$150,000	\$150,000	39.0	12	\$103,846		\$103,846
S-2	Parshall Flume	2006	400	\$120,000	\$120,000	39.0	12	\$83,077		\$83,077
S-2	Raw Pump Station	1987		\$67,500	\$150,000	39.0	31	\$30,769		\$30,769
S-2	Oxidation Ditch/Aeration Basin	1984	13,146	\$1,774,710	\$3,943,800	39.0	34	\$505,615		\$505,615
S-2	Clarifier 2	1987	707	\$95,445	\$212,100	39.0	31	\$43,508		\$43,508
S-2	Headworks	2015	1,144	\$343,200	\$343,200	39.0	3	\$316,800		\$316,800
S-2	Effluent Pump Station	2015	95	\$80,000	\$80,000	39.0	3	\$73,846		\$73,846
S-2	Sand Drying Beds	2006	8,064	\$806,400	\$806,400	39.0	12	\$558,277		\$558,277
S-2	Chlorine Storage/Pump	2004	646	\$193,800	\$193,800	39.0	14	\$124,231		\$124,231

# Depreciation Worksheet

## Utilizing Data from Town Insurance Policy Records

### September 2018

Code	Description	Year Built	Square Footage	Estimated Original Cost	Estimated Value New	Life	Years Deprecation	RCNLD	Reported Current Value	
									Value Ascribed to Water	Value Ascribed to Sewer
S-1	Control Building/Operations	1984	784	\$35,280	\$78,400	39.0	34	\$10,051		\$10,051
S-2	Belt Press Building	2015	540	\$185,483	\$185,483	39.0	3	\$171,216		\$171,216
S-2	Splitter Box	2006	140	\$42,000	\$42,000	39.0	12	\$29,077		\$29,077
S-2	Blower Building	1984	1,188	\$356,400	\$356,400	39.0	34	\$45,692		\$45,692
S-2	Sludge Storage	2015	5,000	\$1,000,000	\$1,000,000	39.0	3	\$923,077		\$923,077
S-2	125 kW Generator	1984		\$27,000	\$60,000	39.0	34	\$7,692		\$7,692
S-2	Electrical building	2015	144	\$49,462	\$49,462	39.0	3	\$45,657		\$45,657
S-2	Chlorine Contact Chamber	2015	1,135	\$259,906	\$259,906	39.0	3	\$239,913		\$239,913
S-2	Filters	2015		\$183,194	\$183,194	39.0	3	\$169,102		\$169,102
S-2	RAS/WAS Pump Station	2015		\$57,248	\$57,248	39.0	3	\$52,844		\$52,844
S-2	Clarifier 1&2	2015	6,634	\$2,278,699	\$2,278,699	39.0	3	\$2,103,415		\$2,103,415
S-2	Oxidation Ditch 1&2	2015	14,671	\$5,039,312	\$5,039,312	39.0	3	\$4,651,672		\$4,651,672
S-3	Lift Station 1	1965		\$67,500	\$150,000	39.0	53	\$37,500		\$37,500
S-3	Lift Station 2	1975		\$67,500	\$150,000	39.0	43	\$37,500		\$37,500
S-3	Lift Station 2A	1978		\$67,500	\$150,000	39.0	40	\$37,500		\$37,500
S-3	Lift Station 3	1984		\$75,000	\$150,000	39.0	34	\$37,500		\$37,500
S-3	Lift Station 4	1991		\$75,000	\$150,000	39.0	27	\$46,154		\$46,154
S-3	Lift Station 5	1992		\$75,000	\$150,000	39.0	26	\$50,000		\$50,000
S-3	Lift Station 6	1994		\$75,000	\$150,000	39.0	24	\$57,692		\$57,692
S-3	Lift Station 7	1991		\$120,000	\$150,000	39.0	27	\$46,154		\$46,154
S-3	Lift station 8	2007		\$150,000	\$150,000	39.0	11	\$107,692		\$107,692
S-3	Lift Station 9	2010		\$150,000	\$150,000	39.0	8	\$119,231		\$119,231
									\$1,555,241	\$11,273,354





# Water and Sewer Development Fees for Non-Residential Users

## September 2018

Water Meter Nominal Size (Inches)	Equivalent Meter Ratio - AWWA Manual M-1 Appendix B	Water	Sewer *	Water and Sewer Combined
0.75 or ERU	1	\$ 1,336	\$ 2,372	\$ 3,708
1.00	1.67	\$ 2,230	\$ 3,962	\$ 6,192
1.50	3.33	\$ 4,447	\$ 7,900	\$ 12,347
2.00	5.33	\$ 7,118	\$ 12,645	\$ 19,763
2.50	7.30	\$ 9,749	\$ 17,319	\$ 27,068
3.00	10.00	\$ 13,355	\$ 23,724	\$ 37,079
4.00	16.67	\$ 22,263	\$ 39,549	\$ 61,811
6.00	33.33	\$ 44,512	\$ 79,074	\$ 123,586
8.00	53.33	\$ 71,222	\$ 126,522	\$ 197,745
10.00	76.67	\$ 102,393	\$ 181,895	\$ 284,288
12.00	143.33	\$ 191,417	\$ 340,043	\$ 531,460

**\*Note: Sewer Development fee will be based upon water meter size required to serve the facility.**