
Town of Gananoque

2020 Water and Wastewater Rate Study & O. Reg 453/07 Financial Plan



DFA Infrastructure International Inc.

August 19, 2020



DFA Infrastructure International Inc.

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August 19, 2020

Melanie Kirkby
Treasurer
Corporation of the Town of Gananoque
PO Box 100, 30 King St E
Gananoque, Ontario
K7G 2T6

Re: 2020 Water and Wastewater Rate Study and O. Reg 453/07 Financial Plan

Dear Melanie:

We are pleased to submit to you the above noted report entitled: "Water and Wastewater Rate Study and O. Reg 453/07 Financial Plan". Please note, this Final version takes into consideration the August 11th direction from Town Council to ensure that the sustainable water and wastewater rates be set so as to ensure that impacts on a typical residential customer is averaged over the 2021 – 2025 period.

Yours truly,

DFA Infrastructure International Inc.
Derek Ali, MBA, P.Eng.
President

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Transmittal Letter

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1 Introduction

1.1 Background`

The Town of Gananoque (Town) has a population of approximately 5,200 with the Town providing full water and wastewater services to approximately 2,400 residential and non-residential customers. The Town's sanitary sewer system is comprised of 30.5 km gravity sewers, 3 km of force mains, 403 manholes, 4 sewage pumping stations, and a wastewater treatment lagoon. The Town's potable water system includes a water treatment plant, an elevated water storage tank, 34 km of watermain, 534 valves and 234 hydrants.

The total cost of the Town's water and wastewater services are recovered from operating (non-rate) revenues (e.g. administrative fees, etc.) and through direct billing to customers (rate revenues). Rate revenues consist of revenues from a uniform volumetric charge based on the volume of water consumed, revenues from a base charge based on the size of a customer's meter, and revenues from a quarterly capital charge levied on all customers.

DFA Infrastructure International Inc. (DFA) was retained by the Town to conduct a comprehensive Water and Wastewater Rate Review. The study includes an evaluation of the existing rate structure the determination of the full cost of service for water and wastewater over ten (10) years from 2021 to 2030 inclusive, and the calculation of rates that adequately fund the cost of service, while treating ratepayers in a fair and equitable manner.

1.2 Purpose

The primary purpose of this Water and Wastewater Rate Study is to:

- Identify the full costs of managing the Town's water and wastewater systems based on the most recent available information;
- Evaluate the existing rate structure against other commonly used rate structures available to Ontario municipalities;
- Update the Town's current rates and charges to its customers, using the preferred rate structure that will recover the full costs of supplying and distributing drinking water, and collection and treatment of wastewater.
- Prepare an updated Water System Financial Plan in accordance with the requirements of O.Reg. 453/07 for the February 2021 renewal of the licence for the Town's water distribution system; and
- Prepare a Sanitary Sewer System Financial Plan similar to that required for water under O.Reg 453/07.

2 Regulatory Requirements

2.1 Provincial Regulations

Provincial requirements governing water and wastewater services primarily include the following:

- The Environmental Assessment Act (EAA);

- The Safe Drinking Water Act (SDWA);
- The Municipal Act (MA);
- The Development Charges Act (DCA);
- The Sustainable Water and Sewage Systems Act, 2002 (SWSA); and
- The Water Opportunities and Conservation Act, 2010 (WOA).

The first two (2) set out the technical requirements related to service delivery. The EA Act applies to expansion of existing facilities and establishment of new capacity such as the installation of new pipes to service growth in customers.

The Safe Drinking Water Act, 2002 (SDWA) has significant implications to the daily operations as it sets out the water sampling and other operational requirements (in O. Reg. 170/03) for ensuring that the water delivered to consumers is of high quality and safe for consumption. The SDWA has been a major influence over the past decade in terms of adjustments to operational practices and water quality assurance. In addition, there is also a requirement under this Act (O.Reg. 188/07) for drinking water providers to establish a Drinking Water Quality Management System (DWQMS) and obtain licences for their respective water systems. As part of the DWQMS, and as required under O. Reg. 453/07 (Financial Plans Regulation), operating authorities must submit a financial plan for their respective water systems as a condition of licensing. There are also many regulations and guidelines that deal with design and operation standards that mandate certain activities be undertaken as part of service delivery.

The Municipal Act, Part VII, Section 293 requires municipalities to establish reserves for dealing with long-term liabilities. This applies directly to the water systems and the future liabilities associated with their age and condition. The Municipal Act also permits the municipalities to establish fees for cost recovery and requires public input prior to any fee adjustments. The Development Charges Act and regulations establishes the requirements for the recovery of portions of future growth-related capital expenditures to be incurred by municipalities. The Sustainable Water and Sewage Systems Act, 2002 requires that water systems be financially sustainable. The Water Opportunities and Conservation Act, 2010 is the most recent legislation to be enacted influencing water system management. It requires sustainability plans to be prepared for water systems and overlaps somewhat with the SWSA.

The Sustainable Water and Sewage Systems Act, 2002

One of the main recommendations contained in Justice O'Connor's report on the Walkerton incident is the need for municipalities to identify the full cost of water services and to develop a sustainable plan to finance these costs. This resulted in the establishment of the Sustainable Water and Sewage Systems Act, 2002 in December 2002 which requires operators of Water systems to report full costs and the method of cost recovery to the Province of Ontario. However, the Sustainable Water and Sewage Systems Act, 2002 was never proclaimed into force, nor were the regulations necessary for the act to operate ever developed. Under the Sustainable Water and Sewage Systems Act, 2002, the municipalities are required to submit to the Province of Ontario:

- A report prepared by a Professional Engineer, identifying the full cost of water services;
- A report identifying a sustainable method by which municipalities would recover these costs;
- The comments made by the Town's Auditor following a review of both reports; and

- Copies of Council resolutions accepting the recommendation of reports.

The Water Opportunities and Conservation Act, 2010

The WOA was enacted in November 2010 and the regulations are pending. This legislation promotes water conservation and requires municipalities to develop:

- Water conservation plans;
- Sustainability plans for water, wastewater & stormwater management; and
- Asset management plans.

Financial plans are required as a component of the water sustainability and asset management plans.

The DWQMS Requirements

Regulation 188/07 under the Safe Drinking Water Act requires Ontario municipalities to apply for and obtain Drinking Water System Licences as part of their overall DWQMS. One of the requirements to obtain a drinking water licence is to prepare and submit a financial plan in accordance with O.Reg. 453/07.

2.2 Town of Gananoque By-Law

Town By-law No. 2020-035 establishes the water and wastewater rates and charges that apply to the various customer classes in 2019. By-law 2020-035 is attached as Appendix A.

3 Methodology

The Rate Study gives consideration to the full costs (or the required investment) associated with managing the Town's water and wastewater systems over a ten (10) year period from 2021 to 2030 inclusive, and the recovery of those costs (or revenue plan) through proposed rates and charges to customers. Life cycle costs of assets from the Town's Capital Asset Inventory were also considered to determine the full replacement and/or rehabilitation needs given that some water and wastewater system assets (e.g. water mains and sewer mains) can have life expectancies in the 50 to 100 year range. Rates are then developed that recover the full costs of water and wastewater services.

3.1 Full Cost Considerations

Calculation of the Town's full cost of managing the water and wastewater systems is based on the draft 2020 budgets related to the primary activities required to deliver water and wastewater services to Town customers. Higher costs are generally expected in the future as the water and wastewater business environment changes. The impact can be mitigated however by fully understanding, assessing and planning for future water and wastewater system costs.

Determination of the full cost of managing the Town's water and wastewater systems takes into account the factors that have a bearing on the cost of providing reliable water and wastewater services to the customers

over the long-term. These included both current and future considerations that would influence the cost of managing the systems (and the revenues required to sustain them). Table 3-1 notes the main drivers of cost. The assumptions made are noted in the respective sections of this report.

Table 3-1: Cost Components and Drivers

Cost Component	Cost Drivers	Future Cost Implications
Water and Wastewater systems operations and maintenance (O&M)	<p>This is the annual cost of operating and maintaining the current system including direct (e.g. operations staff) and indirect costs (e.g overhead, charge backs etc).</p> <p>Changes in regulations can result in additional (O&M) activities and added costs. This was evident when the regulations under the Safe Drinking Water Act took effect. Municipalities were required to undertake specific activities in the interest of water quality management (e.g sampling, analysis and reporting of water quality). More recently, the DWQMS meant additional costs for water system operational plans and licensing albeit not annually. It is expected that pending regulations under the Water Opportunities Act and greater enforcement of compliance requirements by the Ministry of the Environment and Climate Change (MOECC) would require more actions to be undertaken (and increased costs) by municipalities.</p>	<p>This is a direct annual cost that is reasonably consistent (fixed) from year to year but requires adjustment to account for non-recurring items, operational changes, variable cost (e.g. chemical use) changes and inflation. Non-rate revenues from administrative fees and grants offset these costs.</p> <p>The long term impact of new regulations on costs are difficult to predict. However, the costs are expected to rise as more stringent requirements are established and compliance enforcement by the MOECC increases.</p> <p>Operating costs are assumed to increase by 2% annually.</p>
Customer Growth	<p>As the existing urban areas are developed, the addition of new customers would increase the total demand for water . A corresponding rise in wastewater volume requiring treatment would also be expected</p>	<p>The increase in demand, if significant, would increase volumes of water consumed and wastewater treated, and variable costs in the year the new customers are added.</p> <p>Customer Growth is based on projections provided by Town Staff</p>
Consumption Volume (m3)	<p>Consumption is a function of the number of customers (existing and new growth), weather conditions and the economic environment. The weather conditions have a significant influence on how much water is consumed in a given year. For example, lower temperatures and wet weather tend to result in less water consumption. Dry weather and higher temperatures increase water consumption. Wet weather would also mean more stormwater entering the wastewater system (known as inflow and infiltration) The loss of large (commercial or industrial) customers perhaps due to economic climate would reduce demand.</p>	<p>The annual consumption volume is unpredictable. Fluctuations can result in higher than anticipated costs or lower revenues and lead to budget deficits. An operating reserve would minimize the risk of deficits and stabilize rates (i.e. minimize rate spikes) It is assumed that consumption will continue to increase as a result of new customer growth.</p>

Cost Component	Cost Drivers	Future Cost Implications
New growth related services	This refers to installation of new assets to increase the system capacity to facilitate new development and build out of the approved service areas within the Town	<p>Would result in capital investments in the year the new infrastructure is needed. Note that financing of these costs can be through debt or cash from reserves after third party contributions are considered (e.g. grants, developer contributions etc.)</p> <p>Growth related capital investments are as provided from the Town's 2021 - 2030 capital forecast.</p>
Asset preservation and renewal	This is mainly the replacement of aging Tangible Capital Assets (TCA) e.g. old water mains, plant components, well components etc. that have exceeded their service life.	<p>Would result in future capital expenditures in the year in which the assets require replacement or rehabilitation to extend their useful lives. Allowances must be made as part of the annual costs to account for the future replacement of these assets. Financing can be through a combination of debt and reserve funds.</p> <p>Asset renewal needs are as provided from the Town's 2021-2030 Capital forecast, and supplemented with additional lifecycle needs as determined by the Town's 2019 Tangible Capital Asset Inventory.</p>
Other capital expenditures	These are capital expenditures other than those needed for growth and asset renewal. These would include cost of studies and implementation of operational improvements of the water and wastewater systems such as water loss reduction measures and wastewater I & I reduction programs.	<p>Would increase costs in the year the expenditure is required. Financing can be through a combination of debt and reserves.</p> <p>Other capital investments are as provided from the Town's 2021 - 2030 capital forecast.</p>
Capital Financing	Capital financing for projects can be from four (4) main sources: Debt financing, reserves, annual rates and third party contributions (grants etc.). Grant funding is available only when approved and is therefore not a predictable source of financing for financial planning purposes. The greater the debt financing, the higher the annual amount (costs) needed to repay the principal and interest on any current or future debt. Financing from reserves can only be used if sufficient funds are available. Therefore annual contributions to reserves are required to build balances for use in future years. Financing from rates do not increase annual costs but	<p>Annual costs would increase to provide for reserve contributions and debt repayment. It should be noted that using debt financing would minimize spikes in funding required for capital projects and allocates cost to future users</p> <p>It is assumed that debt financing will be used when funds from other sources (reserves, grants, etc) are insufficient to finance the current year's capital program</p>

Cost Component	Cost Drivers	Future Cost Implications
	tend to drive up rates in the year the capital expenditure is required.	
Inflation	This is the annual rate of inflation as reported by Statistics Canada for the provision for cost of living adjustments each year.	Annual inflation is assumed to be 2%
Market competition and pricing	The level of competition within the market place depends on the number of service providers available. Additionally, the capacity of industry service providers to meet the increasing demand for their services may tend to increase prices. Tender prices for future capital projects would be influenced by the market conditions at the time of tendering.	Potential higher prices depending on the future behaviour of the industry.

3.2 Full Cost Assessment

The full cost assessment identifies the current and future costs (i.e. the full costs) associated with the management of the water and wastewater systems over the next ten (10) years (2021 to 2030). The key cost areas include:

- Operations & Maintenance (O&M) cost projections;
- Capital Budget based on the capital forecast provided by the Town;
- Tangible Capital Asset (TCA) projections including asset replacement needs;
- Debt servicing requirements; and
- Reserve fund requirements.

The non-rate revenues associated with the systems are also identified. These are defined as revenues that are routinely generated each year by the daily operations and include administrative revenues such as service fees, penalties, operating grants and other direct user fees and service charges. It is important to note that the non-rate revenues do not include the revenues generated by the water and wastewater user rates. The full cost developed through the various analyses in this study identify the revenue requirements for the water and wastewater systems and form the basis for the future rates and charges.

3.3 Data Sources

The primary sources of data used in this review are listed in Table 3-2. In addition, information was also developed from discussions with input from Town staff, as required.

Table 3-2: Data Sources

Item	Data Source
Asset Life Expectancy	<ul style="list-style-type: none"> Town's TCA Policy Information Provided by the Town
Asset Replacement Costs	<ul style="list-style-type: none"> Town's TCA Policy Historical Costs Provided by the Town indexed to 2020
Asset Values	<ul style="list-style-type: none"> Town's TCA Policy Information Provided by the Town
O & M Costs and Revenue Projections	<ul style="list-style-type: none"> Town's 2020 Water Operating Budget
Capital Cost Projections	<ul style="list-style-type: none"> Town's 2020 Water Capital Budget and 2021-2030 Capital Forecasts
Debt	<ul style="list-style-type: none"> Town's 2020 Water and Wastewater Operating Budgets and 2021-2030 Capital Budget Forecasts
Investments, Reserve balances etc.	<ul style="list-style-type: none"> Information provided by the Town
Existing Customers	<ul style="list-style-type: none"> Town's Customer count Provided by the Town
Growth	<ul style="list-style-type: none"> Information Provided by the Town
Water and Wastewater Volumes	<ul style="list-style-type: none"> Town's actual historical Consumption Volumes provided by the Town

4 Customer Growth

The cost of service depends on the number and type of customers and corresponding demand. Although most costs are fixed, variable costs such as annual chemical use and hydro costs can increase depending on the level of customer growth and water consumption and wastewater treated. Capital costs related to increasing system capacity to accommodate customer growth can also be influenced by growth and demand. In addition, the rate structure to be considered is comprised of a fixed (base charge) per customer plus a consumption charge based on the metered volume of water consumed (billed wastewater flows). Therefore forecasting customer growth and annual water consumption volumes is essential to projecting future costs, revenue requirements and rates.

4.1 Current Customers

There are currently approximately 2,361 metered water customers and wastewater customers based on information provided by the Town. This number is expected to increase over the 2021 – 2030 forecast period. Table 4-1 shows the current total number of residential and commercial customers.

Table 4-1: 2020 Customer Count

Meter Size	Customers
5/8"	2,095
3/4"	54
1"	40
1 1/2"	35
2"	18
3"	4
4"	1
rural	-
unmetered units	114
Total Customers	2,361

4.2 Customer Growth Projections

Table 4-2 shows the increase in total customers over the 2021-2030 forecast period. Customer growth projections reflect the customer growth as provided by Town staff. Customer growth over the 2020-2030 forecast period is projected to be 211 units.

It is projected that in 2021 there will be an estimated 74 new units as a result of the completion of the RMP Condo Development, in 2022 there is an estimated 70 new units as a result of the completion of the Caraco Condo Development, and in 2023 there is an estimated 33 new units as a result of the completion of the Castlegrove Subdivision. It is further projected that there will be an additional 5 new units per year thereafter. It should be noted that for purposes of this study it is assumed that these units will be constructed evenly throughout the year with the average number of units in a year being reflected in the customer growth projections and consumption projections shown.

Detailed customer growth projections by year are presented in Appendix B.

Table 4-2: Customer Growth Projection

Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Customers	2,399	2,471	2,523	2,542	2,547	2,552	2,557	2,562	2,567	2,572

5 Volume Projections

5.1 2020 Water Consumption (Billed Wastewater) Volumes

Table 5-1 details the projected 2020 metered water consumption (billed wastewater flows) is projected from billing records provided by the Town. There are approximately 2,361 metered customers projected to consume approximately 439,926 m³ in 2020.

Table 5-1: 2020 Water Consumption (m³)

Meter Size	Consumption
5/8"	255,651.08
3/4"	14,773.95
1"	23,385.11
1 1/2"	59,358.15
2"	46,493.30
3"	39,014.61
4"	1,249.72
rural	-
unmetered units	-
Total Customers	439,926

5.2 Projected Water Consumption and Billed Wastewater Volume

Projected water consumption and billed wastewater flow increases are based on projected customer growth by customer type multiplied by the estimated average customer consumption in that customer type. The 2021-2030 water consumption projections by customer class are shown below in Table 5-3. Appendix C presents the 2021 – 2030 detailed water and wastewater volume projections.

Table 5-2: 2021-2030 Water Consumption Projection (m³)

Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Consumption	447,024	455,810	462,156	464,474	465,084	465,694	466,305	466,915	467,525	468,135

6 Capital Budget Requirements

The future water and wastewater capital budget requirements are presented in Appendices D and E respectively. These appendices reflect the projects identified by the Town in its 2020 Capital Budget and 2021 to 2030 forecast. Additional asset management lifecycle needs provisions as determined by an age-based analysis of the Town's tangible capital asset inventory were also included, thereby ensuring that sufficient annual capital funding is being provided from rates to address the average annual capital lifecycle needs. It

should be noted that the additional asset management lifecycle provisions were adjusted to reflect asset management related projects already contained in the Town's capital forecast.

There is approximately \$19.3 million in projected water related capital expenditures and approximately \$19.5 million in projected wastewater related capital related expenditures required between 2021 and 2030.

Appendices D and E also show the projected sources of financing for the annual water and wastewater capital requirements. The level of water and wastewater rates have a direct impact on the mix of capital financing. The Town will continue to finance its' capital requirements mainly through cash from capital reserves, with the projected availability of \$2.8 million in grant funding in 2021 for wastewater. Wastewater is also looking at borrowing \$4.0 million for the east end pumping station project. The Town will not be required to incur debt to cashflow water capital projects as sufficient capital reserve funds are projected to be available over the forecast period. Reserve fund requirements are discussed in Sections 7.1.

6.1 Debt Financing

Issuance of debt allows for funds to be available in the year the project is required to proceed, with repayment of the debt occurring in future years. This approach supports the principle of user pay such that the beneficiaries of the new assets pay for their use through the debt repayment. Financing from capital reserve requires that sufficient funds be available in the reserve in the year the project is undertaken, through annual contributions from the operating budget to the reserve in prior years. Therefore, without debt or reserve financing, major rate increases, or "spikes" would be required in the project year to raise sufficient funds to cover the project expenditures.

The Town has used debt in the past as a source of capital financing. As previously noted, the Town will be looking at borrowing \$4.0 million for the east end pumping station project, with no debt required to cashflow water projects.

6.2 Reserve Requirements

There are two (2) separate reserve/reserve funds identified in this study for water and wastewater for which projections are made over the study period:

- The Capital Reserve Fund; and
- Rate Stabilization Reserve.

The capital reserve funds are funded annually by operating budget transfers. Funds contained in the capital reserve fund are used in funding the annual capital needs reflected in the capital budget projections

The rate stabilization reserves will provide an account to transfer any projected revenue surpluses, as well as to offset any projected operating deficits in the operating budget. The transfers in and out of these reserves are to address a balanced operating budget only which may occur due to the rounding of rates and charges.

Appendix G shows the continuity schedule for each capital reserve fund and operating reserve projection. These schedules show the transfers to and from the respective reserves and the opening and closing balances. Reserve funds are assumed to earn 1.25 % annual interest on balances. Reserve balances do not earn interest.

Water Capital Reserve Fund

The Water Capital Reserve Fund is the only source of financing for water projects and has an opening balance in 2020 of approximately \$2.6 million.

Contributions to the water capital reserve are required increase by \$400,000 annually over the 2021 – 2024 period to ensure sufficient funds are available to finance the water capital program (which includes provisions for additional lifecycle needs) without the need for long-term debt. Average annual contributions over the 2021-2030 forecast period are estimated at \$1.8 million per year. The annual closing balance is projected to decrease to approximately \$0.8 million by 2030. The 2030 closing balance represents about 2% of the current water asset replacement value of \$40.1 million, placing the Town in a fair position to begin funding water capital works beyond the study period.

Wastewater Capital Reserve Fund

The Wastewater Capital Reserve Fund is the primary source of financing for wastewater projects and has an opening balance in 2020 of approximately \$2.8 million.

Contributions to the wastewater capital reserve remain constant over the forecast period at \$1.4 million annually. This level of contribution will ensure sufficient funds are available to finance the wastewater capital program (which includes provisions for additional lifecycle needs). The annual closing balance is projected to decrease to approximately \$1.9 million by 2030. The 2030 closing balance represents about 6% of the current wastewater asset replacement value of \$33.7 million, placing the Town in a strong position to begin funding wastewater capital works beyond the study period.

Water and Wastewater Rate Stabilization Reserves

As previously noted, a rate stabilization reserve for both water and wastewater services is used to provide an account to offset any operating budget surpluses or deficits that may occur during the period. The water rate stabilization reserve is projected to hold a nominal balance of \$4,589 by 2030, with the wastewater rate stabilization reserve being projected to hold a nominal balance of \$9,038 by 2030. These balances have been kept to a minimum over the forecast period.

7 Operations & Maintenance (O&M) Cost Projections

The annual operating budgets are based on the operations and maintenance needs of the Town's water and wastewater systems. These include operations and maintenance costs related to the water system (i.e. water

treatment and water distribution), and the wastewater system (i.e. wastewater treatment and wastewater collection). These costs generally include the staffing, materials, utilities and other costs related to the following:

- Administration;
- Contracted Services;
- Minor Capital; and
- Maintenance.

Transfers to reserves and debt servicing are typically included in the annual O&M budgets. These costs have however been addressed separately for the purposes of this report and are noted in Section 7.

A portion of the O&M costs is offset by non-rate revenues. These include:

- Penalties and late payment charges;
- Administrative service fees and charges;
- Connection Fees;
- Sprinkler Charges;
- Recoveries ,and
- Government grants (when available).

The projection of the gross costs and non-rate revenues over the study period is based on the Town's 2020 Operating Budget. It has been assumed that for 2021 and beyond, O&M costs (not including non-recurring costs, reserve transfers and debt servicing) will increase annually by 2%; and

Table 8.1 and Table 8.2 shows the Town's 2021 projected operating budgets for water and wastewater services including the net amount to be recovered from customers.

Appendix H summarizes the projected 2021 – 2030 water systems gross operating & maintenance costs, non-rate revenues and net costs to be recovered from customers through the Town's water rates and charges. The net annual costs of the water system are expected to increase from \$1.8 million in 2021 to approximately \$3.1 million by 2030.

Appendix I summarizes the projected 2021 – 2030 wastewater systems gross operating & maintenance costs, non-rate revenues and net costs to be recovered from customers through the Town's wastewater rates and charges. The net annual costs of the wastewater system are expected to increase from approximately \$2.2 million in 2021 to \$2.6 million by 2030.

Table 7-1: 2021 Water Operating Budget Forecast

Town of Gananoque Water Service 2021 Operating Budget Forecast	
<u>Operating Expenditures</u>	
Water Treatment Non-Union Wages	109,176
Water Treatment Union Wages	126,197
HR Management	23,307
Office Expenses	68,344
Facility Maintenance	185,607
Machine & Equipment Maintenance	87,363
Fleet Maintenance	15,237
Water Distribution Non-Union Wages	109,176
Water Distribution Union Wages	126,360
Water Tower	2,887
Water Servie Laterals	5,610
Water Meter Maintenance	510
Hydrants	23,766
Watermain Repairs	27,540
<u>Rate Stabilization Contributions</u>	
Transfer to Operating Reserve	38,784
Sub Total Operating Expenditures	949,863
<u>Capital-Related</u>	
Existing Debt (Principal) - Non-Growth Related	38,709
Existing Debt (Interest) - Non-Growth Related	37,166
Transfer to Capital Reserves and Reserve Funds - #2	870,516
Sub Total Capital Related Expenditures	946,392
Total Expenditures	1,896,255
<u>Non-Rate Revenues</u>	
MISCELLANEOUS REVENUE	510
INTEREST REVENUE EARNED	9,996
WORK RECOVERABLE REVENUE	510
HYDRANT CHARGES (Sprinklers)	29,519
OCCUPANCY CHARGE	332
TOWER ANTENNA RENTAL	14,280
SPRINKLER FEES	29,474
CONNECTION FEES	19,890
LATE PENALTY	13,770
Total-Non Rate Revenues	118,280
Operating Subsidies	
Contributions from Operating Reserve	-
Total Operating Revenue	118,280
Net Water Costs To Be Recovered From Users	1,777,975

Table 7-2: 2021 Wastewater Operating Budget Forecast

Town of Gananoque Wastewater Service 2021 Operating Budget Forecast	
<u>Operating Expenditures</u>	
Wastewater Treatment non-Union Wages	109,176
Wastewater Treatment Union Wages	126,682
HR Management	11,832
Office Expenses	40,644
Facility Maintenance	143,006
Machine & Equipment Maintenance	11,220
Fleet Maintenance	15,237
Wastewater Collection Non-Union Wages	109,176
Wastewater Collection Union Wages	126,681
Facility Maintenance	16,983
Wastewater Service Laterals	7,650
Pumping Stations	23,511
Wastewater Collection Mains	21,012
<u>Rate Stabilization Contributions</u>	
Transfer to Operating Reserve	35,107
Sub Total Operating Expenditures	797,916
<u>Capital-Related</u>	
Existing Debt (Principal) - Non-Growth Related	26,702
Existing Debt (Interest) - Non-Growth Related	19,778
Transfer to Capital Reserves and Reserve Funds - #2	1,426,009
Sub Total Capital Related Expenditures	1,472,490
Total Expenditures	2,270,406
<u>Non-Rate Revenues</u>	
CONNECTION FEES	19,890
SEWER PENALTY	13,770
SEWER-BANK INTEREST EARNING	49,776
WORK RECOVERABLE REVENUE	1,020
Total-Non Rate Revenues	84,456
Net Wastewater Costs To Be Recovered From Users	2,185,950

8 Rate Structure Review

Prior to undertaking the full cost assessment of water and wastewater services and developing water and wastewater rates and charges, an evaluation of the existing rate structure was undertaken.

At the April 28th 2020 Council meeting Town staff presented Council Report FIN-2020-11 Water Rate Study Interim Report (see Appendix J). This report discussed the water and wastewater rate study. Staff was seeking direction from Council on possible changes to the current rate structure. Also at this meeting DFA presented to

Council. Among other things DFA discussed the current water and wastewater rate situation, reviewed rate principles and structures that could be considered by the Town in setting future water and wastewater rates, evaluated the different rate structures against those principles, and recommended a preferred rate structure to be used in setting future water and wastewater rates.

8.1 Rate Design Guiding Principles

The following eight (8) rate design principles were used in evaluating the rate structures presented to Council:

1. Full Cost Recovery – The full costs of managing the water and wastewater systems should be recovered through the rates and charges to sustain adequate financing for each system in the future including asset replacement based on life cycle costs (consistent with Sustainable Water & Sewer Systems Act, 2002 & Water Opportunities Act 2010);
2. Promote Conservation (reduce wasteful uses of water) - This promotes water conservation and encourages customers with peak demands that are significantly higher than their normal demands to reduce consumption (consistent with requirements of the Water Opportunities Act, 2010);
3. Fair and Equitable (avoid discrimination) - The rate structure should not unduly benefit or adversely affect one customer class over another;
4. Ease of Administration - Rate structure should be simple; this would serve to minimize administration costs and facilitate easy understanding by customers;
5. Rate/Revenue Stability – Major fluctuations in the rates and charges from year to year should be avoided by establishing and utilizing a rate stabilization reserve fund. The rates should also provide predictability in terms of revenues each year i.e. the portion of revenues from fixed and/or base charges should be sufficient to reduce risk of running deficits;
6. Defensible – Rate structures should be transparent and defensible;
7. Affordable/Minimize Shifts in Burden- Major changes in rate structures should be phased in to manage the potential magnitude of shifts in burden; and
8. Support Economic Development – The Town may wish to support economic growth by providing some incentives in the rate structure.

8.2 Rate Structure Options

The following rate structures are widely employed by Ontario municipalities in the development of water and wastewater rates. Each of these rate structure options were evaluated in relation to the underlying rate design

guiding principles noted in Section 8.1 (all options except Fixed Fee and Uniform Charge are assumed to include a base charge component):

- Fixed Fee – A single flat fee that applies to all customers;
- Uniform Rate – Constant volumetric charge that applies to all customers;
- Uniform (with Base Charge) – Constant volumetric charge and base charge (the Town’s existing rate structure and most common in Ontario);
- Declining Block – Volumetric charge that decreases as water use increases; and
- Increasing Block – Volumetric charge that increases as water use increases.

8.3 Evaluation of Rate Structure Options

Table 8-1 presents the qualitative analysis of rate structure options. A uniform volumetric rate with a base charge was considered the structure to be further analysed with three options presented to Council.

Table 8-1: Evaluation of Rate Structures

	Flat Fee	Uniform Charge	Uniform (with Base Charge)	Declining Block	Increasing Block
Full Cost Recovery	✓	✓	✓	✓	✓
Promote Conservation		✓	✓		✓
Fair & Equitable		✓	✓		
Ease of Administration	✓	✓	✓		
Rate/Revenue Stability	✓		✓	✓	
Affordable/Minimize Shifts in Burden		✓	✓	✓	✓
Defensible			✓		
Support Economic Development			✓	✓	

8.4 Recommended Rate Structure

The following three rate structure options were reviewed with Council:

- Base Option – Current Method (Operating costs recovered from Volumetric Rates and Base Charges, with capital costs being recovered from Capital Charges)

- Option 1 – Elimination of the Capital Charge, with Operating costs now being recovered from Volumetric Rates only, and capital costs now being recovered from Base Charges
- Option 2 – Same as Option 1, except the American Water Works Association (AWWA) recommended meter ratios would replace the current meter ratios used by the Town to allocate capital costs

The AWWA is an internationally recognized organization with expertise in water and wastewater system management. The AWWA guidelines recommend using certain meter equivalency ratios (the size of the water meter) to determine the fixed charge. The logic is that properties with larger diameter meters would be able to access more water from the system compared to single family residential properties with smaller size water meters and should therefore pay more. The meter equivalency ratio for a particular size water meter refers to increased volume that could be taken through the meter compared to a residential water meters. Using the AWWA meter ratios provides a more fair and equitable basis for rates and charges than is currently used by the Town, and is widely used and acceptable in Ontario and across North America. Table 8-2 provides a comparison of the current meter ratios and those recommended by AWWA.

Table 8-2: Meter Ratio Comparison

Meter Size	Current Meter Ratios	AWWA Recommended Meter Ratios
5/8"	1.00	1.00
3/4"	1.10	1.50
1"	1.60	2.50
1 1/2"	2.80	5.00
2"	4.60	8.00
3'	4.80	9.00
4"	13.20	25.00

It was noted by DFA that all options generate the same level of total rate revenue from customers, with only a reallocation of cost among customers.

The Staff report recommended to Council to adopt Option 2, but with a 5-Year phase-in of the AWWA meter ratios. Table 8-3 details the phase-in of the AWWA meter ratios from 2021-2025. Upon receiving the Staff report and DFA's presentation, Council adopted the change in rate structure as noted above as Option 2, with a 5- year phase-in of the AWWA meter ratios.

Table 8-3: AWWA Meter Ratio Phase-In

Meter Size	Current Meter Ratios	2021 Meter Ratios	2022 Meter Ratios	2023 Meter Ratios	2024 Meter Ratios	2025 (AWWA Recommended) Meter Ratios
5/8"	1.00	1.00	1.00	1.00	1.00	1.00
3/4"	1.10	1.18	1.26	1.34	1.42	1.50
1"	1.60	1.78	1.96	2.14	2.32	2.50
1 1/2"	2.80	3.24	3.68	4.12	4.56	5.00
2"	4.60	5.28	5.96	6.64	7.32	8.00
3"	4.80	5.64	6.48	7.32	8.16	9.00
4"	13.20	15.56	17.92	20.28	22.64	25.00

8.5 Council Direction to Average Impacts on Typical Residential Customers

At the August 11th Council meeting the 2020 Water and Wastewater Rate Study was presented for approval. At this meeting Council deferred the report and directed staff that the water and wastewater rates as detailed in the study be adjusted to ensure that the annual impact on a typical residential water customer over the 2021 – 2025 period be averaged.

In undertaking this analysis it was determined that to maintain the same level of financial sustainability in the Town's water and wastewater systems over the 2021 – 2025 period, the water and wastewater volumetric rates would be adjusted accordingly where the typical residential water customer would see a 7% impact in their water bill each year over the 2021 – 2025 period. The sustainable water and wastewater rates and associated revenues are as detailed in Section 9 below.

9 Sustainable User Rates and Revenues

Appendix K presents the projected 2021 – 2030 sustainable water rates and revenues. Appendix L presents the projected 2021-2030 sustainable wastewater rates and revenues. These rates and revenues are based on the Town's recommended water and wastewater rate structure as detailed in Section 8, and includes the August 11th direction from Council that the sustainable rates over the 2021-2025 period be set to ensure an equal average impact on a typical residential customer. The costs and revenues contained in Section 6 (Capital Budget Requirements) and Section 7 (Operating & Maintenance Cost Projections), and the projected growth contained in Section 4 (Customer Growth) and Section 5 (Volume Projections) were considered in calculating the sustainable user rates and revenues as presented in this section.

9.1 Current Rates and Charges

The Town's current rate structure and rates are shown in Table 9-1. The rate structure includes:

- Capital replacement fixed charge dedicated to funding capital needs (amount based on whether consumption exceeds 1,000 cubic meters per year)

- Uniform volumetric rates and base charges dedicated to funding operating needs (base charge is based on meter size)

Table 9-1: Current 2020 Water and Wastewater Rates and Charges

Meter Size	Meter Ratio	Water Charge (Quarterly)	Wastewater Charge (Quarterly)
5/8"	1.00	\$ 14.60	\$ 0.75
3/4"	1.10	\$ 16.06	\$ 0.83
1"	1.60	\$ 23.36	\$ 1.20
1 1/2"	2.80	\$ 40.88	\$ 2.10
2"	4.60	\$ 67.16	\$ 3.45
3"	4.80	\$ 70.08	\$ 3.60
4"	13.20	\$ 192.72	\$ 9.90
Rural		\$ 29.20	\$ 1.50
Additional unmetered units		\$ 14.60	\$ 0.75
Outside area consumer charge		\$ 385.44	\$ 19.80
Volumetric Charge (per Cubic Metre)		\$ 1.60	\$ 1.60

Capital Replacement Fixed Charge (Quarterly)	Water & Wastewater
Annual Consumption less than 1,000 cubic metres	\$ 197.56
Annual Consumption greater than 1,000 cubic metres	\$ 395.11
Additional unmetered units	\$ 197.56

9.2 Water Rates and Revenue Projection

Table 9-2 presents the projected sustainable water rates and revenues for the five (5) year period 2021 – 2025. The 10-year projection of water rates and revenue is detailed in Appendix K. The water rates and charges as projected are required to ensure a sustainable level of water funding over the forecast period.

Table 9-2: Projected Water Rates and Revenues

Projected Annual Base Charges and Revenues					
Base Charge By Meter Size	2021	2022	2023	2024	2025
Annual Increase %Increases	94.66%	39.71%	26.98%	21.20%	-1.71%
5/8	\$ 330.65	\$ 461.95	\$ 586.58	\$ 710.92	\$ 698.79
3/4	\$ 390.16	\$ 582.06	\$ 786.02	\$ 1,009.51	\$ 1,048.19
1	\$ 588.55	\$ 905.43	\$ 1,255.29	\$ 1,649.34	\$ 1,746.98
1 1/2	\$ 1,071.30	\$ 1,699.98	\$ 2,416.72	\$ 3,241.80	\$ 3,493.95
2	\$ 1,745.82	\$ 2,753.23	\$ 3,894.91	\$ 5,203.94	\$ 5,590.32
3	\$ 1,864.85	\$ 2,993.45	\$ 4,293.78	\$ 5,801.12	\$ 6,289.11
4	\$ 5,144.88	\$ 8,278.18	\$11,895.89	\$16,095.26	\$17,469.76
rural	\$ 826.62	\$ 1,154.88	\$ 1,466.46	\$ 1,777.30	\$ 1,746.98
additional unmetered units	\$ 330.65	\$ 461.95	\$ 586.58	\$ 710.92	\$ 698.79
Projected Revenue from Base Charges	\$ 870,516	\$1,270,516	\$1,670,516	\$2,070,516	\$2,070,516
Projected Consumption Charges and Revenues					
	2021	2022	2,023	2,024	2,025
Annual Increase %Increases	4.14%	-2.46%	-3.54%	-7.85%	22.16%
Volumetric Water Rates	\$ 2.03	\$ 1.98	\$ 1.91	\$ 1.76	\$ 2.15
Projected Revenue from Consumption Charge	\$ 907,459	\$ 902,504	\$ 882,717	\$ 817,474	\$ 999,931
Total Water User Revenue	1,777,975	2,173,020	2,553,233	2,887,990	3,070,447

9.3 Wastewater Rates and Revenue Projection

Table 9-3 presents the current and projected sustainable wastewater rates and revenues for the five (5) year period 2021 – 2025. The 10-year projection of wastewater rates and revenue is detailed in Appendix L. The wastewater rates and charges as projected are required to ensure a sustainable level of wastewater funding over the forecast period.

Table 9-3: Projected Wastewater Rates and Revenues

Projected Annual Base Charges and Revenues					
Base Charge By Meter Size	2021	2022	2023	2024	2025
Annual Increase %Increases	5.40%	-4.27%	-3.43%	-2.22%	-1.71%
5/8	\$ 541.64	\$ 518.49	\$ 500.73	\$ 489.63	\$ 481.27
3/4	\$ 639.14	\$ 653.30	\$ 670.97	\$ 695.27	\$ 721.91
1	\$ 964.12	\$ 1,016.24	\$ 1,071.55	\$ 1,135.93	\$ 1,203.18
1 1/2	\$ 1,754.91	\$ 1,908.04	\$ 2,062.99	\$ 2,232.70	\$ 2,406.36
2	\$ 2,859.86	\$ 3,090.19	\$ 3,324.82	\$ 3,584.07	\$ 3,850.18
3	\$ 3,054.85	\$ 3,359.80	\$ 3,665.32	\$ 3,995.36	\$ 4,331.45
4	\$ 8,427.92	\$ 9,291.31	\$ 10,154.73	\$ 11,085.15	\$ 12,031.80
rural	\$ 1,354.10	\$ 1,296.22	\$ 1,251.82	\$ 1,224.07	\$ 1,203.18
additional unmetered units	\$ 541.64	\$ 518.49	\$ 500.73	\$ 489.63	\$ 481.27
Projected Revenue from Base Charge	\$1,426,009	\$1,426,009	\$1,426,009	\$1,426,009	\$1,426,009
Projected Annual Base Charges and Revenues					
	2021	2022	2023	2024	2025
Annual Increase %Increases	4.49%	-3.53%	1.22%	6.02%	38.64%
Volumetric Wastewater Rates	\$ 1.70	\$ 1.64	\$ 1.66	\$ 1.76	\$ 2.44
Projected Revenue from Consumption Charge	759,941	747,528	767,178	817,474	1,134,806
Total Wastewater User Revenue	2,185,950	2,173,537	2,193,187	2,243,483	2,560,815

10 O.Reg 453/07 Water System Financial Plan No. 156-301

Regulation 188/07 under the Safe Drinking Water Act requires Ontario municipalities to apply for and obtain Drinking Water System Licences as part of their overall DWQMS. One of the requirements of holding a valid drinking water licence is preparing and submitting to the Province an updated financial plan in accordance with O.Reg. 453/07. The financial plan must include financial statements on the following:

- The proposed or projected financial position of the drinking water systems;
- The proposed or projected gross cash receipts and gross cash payments;
- The proposed or projected financial operations of the drinking water system; and
- Details on the extent to which the above information applies to the replacement of lead service pipes, if applicable.

Appendix M lists each requirement of the regulation and references the respective financial statements and other relevant information required under each regulatory requirement. The financial plan must apply to a period of at least six (6) years with the first year being the year the existing license expires. In the Town's case an updated Water System Financial Plan is required for the period 2021 to 2026. This plan is based on the results of the rate study. Upon Council's approval the financial plan would be made available to the public at no charge and posted on the Town's website. It will also be submitted to the Province as part of the Town's drinking water license renewal application.

This section presents an updated water system financial plan as defined in O.Reg. 453/07, thereby allowing the Town to fulfil its obligations under the drinking water licensing regulations for the renewal of its drinking water systems license. The number for the updated financial plan is 156-301.

10.1 Water Tangible Capital Assets (TCA) Analysis

The results of the rate study contained in this report are used as the basis for preparing the water system financial plan. The Town's Tangible Capital Asset inventories were also used in the preparation of the water system financial plan. The amortization of the tangible capital assets is shown as a "non-cash" annual cost that reflects the annual "use" of assets until the end of their respective useful lives. Allowances are made to finance the replacement and/ or rehabilitation of the existing assets once they "expire" and can no longer play a role in providing the required drinking water service to customers. It should be noted however that since amortization is based on the original (historical) cost at the time the asset was placed in service it does not account for inflation since the year of installation. Therefore, basing asset replacement costs on amortization alone is not sufficient to cover the future replacement needs.

The TCA projections contained in the Town's water financial plan are based on the following assumptions:

- Amortization of existing assets is based on the Town's Tangible Capital Assets Policies and Procedures. Amortization of new infrastructure investments is based on straight line depreciation with half year depreciation charged in the year of acquisition;
- Historical costs, life expectancy and remaining useful life are as identified in the TCA data provided by the Town;
- Fully depreciated assets continue to be used in service i.e. no asset removals; and
- New assets to be acquired are based on the capital forecast presented. The forecast includes projects in the Town's Capital Budget Forecast and asset replacement projections based on an analysis of the Town's tangible capital asset inventories.

Water Asset Value

The water system is comprised of the following asset classes:

- Buildings
- Land
- Linear Assets
- Equipment; and
- Vehicles.

Table 10-1 shows the current capital asset value based on historical cost and accumulated amortization to 2021. This is reflected as the net book value (NBV) i.e. the "accounting" value, and indicates that the water system as a whole is approximately 55% depreciated or has approximately 45% remaining life based on the TCA data. This suggests that the water system assets are relatively old.

Table 10-1: Water – Asset Amortization and Book Value (NBV)

2021 Water Asset Details			
Historical Cost	\$	26,514,015	100%
Accumulated Amortization	\$	14,654,084	55%
Net Book Value	\$	11,859,931	45%

10.2 Water Financial Statements

This financial plan involves the review, analysis and assessment of financial information contained in the rate study including costs, revenues, debt, cash transactions and Tangible Capital Assets (TCA) to prepare the following three (3) financial statements covering the period 2021 – 2026 as required under O.Reg 453/07:

- Statement of Financial Position;
- Statement of Operations; and
- Statement of Cash Flow

10.2.1 Water - Statement of Financial Position

The Statement of Financial Position is presented in Table 10-2. This statement summarizes the Town's water-related financial and non-financial assets i.e. Tangible Capital Assets (TCA) and liabilities, and provides the net financial asset (or net debt) position and accumulated surplus related to managing the water system. The financial assets are primarily cash balances in the water reserves and reserve funds. Liabilities consist of the water long-term debt. The non-financial assets (TCA) include the Town's water infrastructure. The historical costs are amortized over the asset life to arrive at the net book value each year from 2021 to 2026. New assets are added in the years acquired, developed or built. Contributed assets are primarily new infrastructure and facilities that would be transferred to the Town's ownership and control by developers as they are completed. However this is assumed to be zero. It is also assumed that other non-financial assets such as inventory and prepaid expenses are zero.

Contained within the Statement of Financial Position are important indicators, the first being net financial assets (or net debt) which is defined as the difference between financial assets and liabilities. This indicator provides a measure of the water system's "future revenue requirement". Table 9-2 indicates that in 2021, the Town's water system will be in a net debt position of \$0.3 million. This will increase to a net debt position of \$0.7 million by 2026. The net debt position indicates that additional financial resources will be required to fund future operations. The increase in net debt is due to a reduction in cash resources, offset by a slight reduction of long-term debt.

The next important indicator contained in the Statement of Financial Position is the net book value of TCA. Table 10-2 shows that net TCA are expected to increase over the forecast period by about \$6.1 million. This indicates that the Town has plans to invest in tangible capital assets greater than the consumption of existing assets.

Further, a consumption ratio consisting of the accumulated amortization of the Town's TCA as a percent of historical cost ratio highlights the aged condition of the assets and their potential replacement needs. The Town's Water Asset Consumption Ratio decreases over the forecast period from 55% to 49%, suggesting that the water system would be approximately half through its life expectancy by 2026. As this percentage is decreasing over time, it indicates the Town is allocating adequate funds to finance the replacement or rehabilitation of aging assets as they expire.

Another important indicator in the Statement of Financial Position is the accumulated surplus. This indicator provides a measure of the resources available to the Town for managing its water system. The accumulated surplus is projected to increase from approximately \$11.6 million in 2021 to approximately \$17.3 million by 2026. The accumulated surplus consists of non-financial assets that are made up of the net TCA balance representing past investments in water infrastructure, offset by the net debt balances.

Table 10-2: Water – Statement of Financial Position

	2021	2022	2023	2024	2025	2026
Financial Assets						
Cash, Receivables and Investment	\$822,620	\$200,641	\$21,541	(\$9,973)	\$178,744	\$226,745
Total Financial Assets	\$822,620	\$200,641	\$21,541	(\$9,973)	\$178,744	\$226,745
Financial Liabilities						
Long-term Liabilities	\$1,094,634	\$1,055,006	\$1,014,429	\$972,869	\$930,292	\$886,665
Total Financial Liabilities	\$1,094,634	\$1,055,006	\$1,014,429	\$972,869	\$930,292	\$886,665
Net Financial Assets (Net Debt)	(\$272,014)	(\$854,366)	(\$992,888)	(\$982,842)	(\$751,548)	(\$659,920)
Non-Financial Assets						
Tangible Capital Assets	\$26,514,015	\$28,297,289	\$29,955,091	\$31,782,183	\$33,466,342	\$35,245,053
Accumulated Amortization	(\$14,654,084)	(\$15,167,651)	(\$15,678,760)	(\$16,236,955)	(\$16,740,835)	(\$17,333,510)
Total Non-Financial Assets	\$11,859,931	\$13,129,638	\$14,276,331	\$15,545,228	\$16,725,507	\$17,911,542
Accumulated Surplus	\$11,587,917	\$12,275,272	\$13,283,443	\$14,562,386	\$15,973,958	\$17,251,623
Financial Indicators	2021	2022	2023	2024	2025	2026
Increase (Decrease) in Net Financial Assets	(\$926,172)	(\$582,352)	(\$138,522)	\$10,046	\$231,293	\$91,629
Increase (Decrease) in Tangible Capital Assets	\$1,279,877	\$1,269,707	\$1,146,693	\$1,268,897	\$1,180,279	\$1,186,036
Increase (Decrease) in Accumulated Surplus	\$353,705	\$687,355	\$1,008,171	\$1,278,943	\$1,411,572	\$1,277,664
Water Asset Consumption Ratio	55%	54%	52%	51%	50%	49%

10.2.2 Water - Statement of Operations

The Statement of Operations is presented in Table 10-3. It summarizes the annual revenues and expenses associated with managing the Town's water system. It provides a report on the transactions and events that have an influence on the accumulated surplus. The main revenue items included are:

- Revenues from Water Rates and Charges; and

- Other Revenues (bulk water revenues, miscellaneous fees and charges).

The main expense items are:

- The annual cost of operating and maintaining the water systems;
- Interest on long-term debt; and
- Amortization expenses on existing and added TCA.

The operating surplus (or deficit) is an important indicator contained in the Statement of Operations. An operating surplus (deficit) measures whether operating revenues generated in a year were sufficient to cover operating expenses incurred in that year. It is important to note that an annual surplus is necessary to ensure funds will be available to address non-expense items such as TCA acquisitions over and above amortization expenses, reserve/reserve fund contributions for asset replacement and rate stabilization, and repayment of outstanding debt principal. A ratio of operating surplus to total revenue is shown in Table 9-3 and reflects the percent of total revenue that can be allocated to funding the non-expense items noted above.

Table 10-3: Water – Statement of Operation

	2021	2022	2023	2024	2025	2026
Water Revenue						
Rate Revenue	\$1,777,975	\$2,173,020	\$2,553,233	\$2,887,990	\$3,070,447	\$3,020,533
Earned Revenue	\$0	\$0	\$0	\$0	\$0	\$0
Other Revenue	\$118,280	\$120,646	\$123,059	\$125,520	\$128,030	\$135,867
Total Revenues	\$1,896,255	\$2,293,666	\$2,676,292	\$3,013,510	\$3,198,478	\$3,156,399
Water Expenses						
Operating Expenses	\$911,079	\$929,301	\$947,887	\$966,845	\$986,182	\$1,005,905
Interest on Debt	\$37,166	\$36,256	\$35,314	\$34,340	\$33,332	\$32,289
Amortization	\$594,304	\$640,754	\$684,920	\$733,383	\$767,392	\$840,540
Total Expenses	\$1,542,550	\$1,606,311	\$1,668,121	\$1,734,567	\$1,786,905	\$1,878,735
Annual Surplus/(Deficit)	\$353,705	\$687,355	\$1,008,171	\$1,278,943	\$1,411,572	\$1,277,664
Accumulated Surplus/(Deficit), Beginning of Year	\$11,234,213	\$11,587,917	\$12,275,272	\$13,283,443	\$14,562,386	\$15,973,958
Accumulated Surplus/ (Deficit), End of Year	\$11,587,917	\$12,275,272	\$13,283,443	\$14,562,386	\$15,973,958	\$17,251,623
Financial Indicators	2021	2022	2023	2024	2025	2026
Increase (Decrease) in Total Revenues	\$452,223	\$397,411	\$382,626	\$337,218	\$184,967	(\$42,078)
Increase (Decrease) in Total Expenses	\$50,509	\$63,761	\$61,810	\$66,447	\$52,338	\$91,830
Increase (Decrease) in Annual Surplus	\$401,713	\$333,650	\$320,816	\$270,772	\$132,629	(\$133,908)
Operating Surplus Ratio	18.7%	30.0%	37.7%	42.4%	44.1%	40.5%

10.2.3 Water - Statement of Cash Flows

The Statement of Cash Flow is presented in Table 10-4. This statement summarizes the main cash inflows and outflows related to the water system in four (4) main areas - operating, capital, investing and financing, and shows the annual changes in cash.

The operating cash transactions begin with the surplus or deficit identified in the Statement of Operations. This figure is adjusted to add or subtract non-cash items that were included as revenues or expenses (e.g. amortization expenses and earned revenues). It is assumed that there are no “investing activities” over the period. The capital section indicates the amounts to be spent to acquire capital assets (TCA) or to be received from the sale of assets. In the Town’s case, it is assumed that there are no assets to be sold to generate cash. The financing section identifies funds external sources, proceeds from the issuance of debenture as cash inflows, and the portion of debt repaid as cash outflows.

Table 9-4 indicates that cash is being generated from operations, which is used in funding the acquisition of TCA and towards building internal reserves. The Town's cash position is projected to decrease over the forecast period from \$0.8 million in 2021 to a \$0.2 million in 2026.

Table 10-4: Water – Statement of Cash Flow

	2021	2022	2023	2024	2025	2026
Cash Provided by:						
Operating Activities						
Annual Surplus/(Deficit)	\$353,705	\$687,355	\$1,008,171	\$1,278,943	\$1,411,572	\$1,277,664
Non-Cash Items						
Amortization	\$594,304	\$640,754	\$684,920	\$733,383	\$767,392	\$840,540
Earned Revenue	\$0	\$0	\$0	\$0	\$0	\$0
Net Change in Cash Provided by Operating Activities	\$948,009	\$1,328,109	\$1,693,091	\$2,012,326	\$2,178,964	\$2,118,205
Capital Activities						
Purchase of TCA	(\$1,874,181)	(\$1,910,461)	(\$1,831,613)	(\$2,002,280)	(\$1,947,671)	(\$2,026,576)
Net Change in Cash Used in Capital Activities	(\$1,874,181)	(\$1,910,461)	(\$1,831,613)	(\$2,002,280)	(\$1,947,671)	(\$2,026,576)
Financing Activities						
External Financing	\$0	\$0	\$0	\$0	\$0	\$0
Proceeds From Long-Term Debt	\$0	\$0	\$0	\$0	\$0	\$0
Repayment of Long-Term Debt	(\$38,709)	(\$39,628)	(\$40,577)	(\$41,560)	(\$42,576)	(\$43,628)
Net Change in Cash Used in Financing Activities	(\$38,709)	(\$39,628)	(\$40,577)	(\$41,560)	(\$42,576)	(\$43,628)
Net Change in Cash and Cash Equivalents	(\$964,881)	(\$621,980)	(\$179,099)	(\$31,514)	\$188,717	\$48,001
Cash and Cash Equivalents, Beginning of the Year	\$1,787,501	\$822,620	\$200,641	\$21,541	(\$9,973)	\$178,744
Cash and Cash Equivalents, End of the Year	\$822,620	\$200,641	\$21,541	(\$9,973)	\$178,744	\$226,745

10.3 Lead Service Pipe Removal

The financial plan is also required to detail the extent to which the information described above relates directly to the replacement of lead service pipes. There are approximately 286 municipal lead services in the Town, with the lead service pipes being replaced during full reconstruction projects. The Town also provides an interest free loan for lead service replacements for homeowners. As well, the Town has a corrosion control plan for lead services.

11 Wastewater System Financial Plan

Preparing a Wastewater System Financial Plan is not mandatory but has become a municipal best practice over the past few years. It is typically prepared in accordance with the requirements of O.Reg 453/07 which applies to water systems.

This financial plan involves the review, analysis and assessment of financial information contained in the rate study including costs, revenues, debt, cash transactions and Tangible Capital Assets (TCA) to prepare the following three (3) financial statements covering the period 2021 to 2026 as required under O.Reg. 453/07:

- Statement of Financial Position;
- Statement of Operations; and
- Statement of Cash Flow.

The wastewater system financial plan applies to a period of (6) six years from 2021 to 2026 to be consistent with the period covered by the water system financial plan. It is anticipated that the financial plan would be made available to the public at no charge on the Town's website following final approval of the rate study and financial plan by Council.

11.1 Wastewater Tangible Capital Assets (TCA) Analysis

The results of the rate study contained in this report are used as the basis for preparing the wastewater system financial plan. The Town's Asset Inventories were also used in the preparation of the wastewater system financial plan. The amortization of the tangible capital assets is shown as a "non-cash" annual cost that reflects the annual "use" of assets until the end of their respective useful lives. Allowances are made to finance the replacement and/ or rehabilitation of the existing assets once they "expire" and can no longer play a role in providing the required wastewater service to customers. However, it should be noted that since amortization is based on the original (historical) cost at the time the asset was placed in service it does not account for inflation since the year of installation. Therefore, basing asset replacement costs on amortization alone is not sufficient to cover the future replacement needs.

The TCA projections contained in the Town's wastewater financial plan are based on the following assumptions:

- Amortization of existing assets is based on the Town's Tangible Capital Assets policies and procedures. Amortization of new infrastructure investments is based on straight line depreciation with half year depreciation charged in the year of acquisition.
- Historical costs, life expectancy and remaining useful life as per the TCA data provided by the Town;
- Fully depreciated assets continue to be used in service i.e. no asset removals; and
- New assets to be acquired are based on the capital forecast. The forecast includes projects in the Town's Capital Budget Forecast and asset replacement projections based on the Town's Asset Management Plan.

Wastewater Asset Value

The wastewater system is comprised of the following asset classes:

- Buildings
- Land
- Linear Assets
- Equipment; and
- Vehicles.

Table 11-1 shows the current capital asset value based on historical cost and accumulated amortization to 2021. This is reflected as the net book value (NBV) i.e. the “accounting” value, and indicates that the wastewater system as a whole is approximately 39% depreciated or has approximately 61% remaining life based on the TCA data. This suggests that the water system assets are relatively new.

Table 11-1: Wastewater – Asset Amortization and 2020 Net Book Value (NBV)

2021 Wastewater Asset Details			
Historical Cost	\$	20,997,804	100%
Accumulated Amortization	\$	8,132,818	39%
Net Book Value	\$	12,864,987	61%

11.2 Wastewater Financial Statements

This financial plan involves the review, analysis and assessment of financial information contained in the rate study including costs, revenues, debt, cash transactions and Tangible Capital Assets (TCA) to prepare the following three (3) financial statements covering the period 2021 – 2026 as required under O.Reg 453/07:

- Statement of Financial Position;
- Statement of Operations; and
- Statement of Cash Flow.

11.2.1 Wastewater - Statement of Financial Position

The Statement of Financial Position is presented in Table 11-2. This statement summarizes the Town’s wastewater related financial and non-financial assets (Tangible Capital Assets – TCA) and liabilities, and provides the net financial asset/ (net debt) position and accumulated surplus related to managing the wastewater system. The financial assets are primarily cash balances in the wastewater reserves and reserve funds. Liabilities consist of wastewater long-term debt. The non-financial assets (TCA) include the Town’s wastewater infrastructure. The historical costs are amortized over the asset life to arrive at the net book value each year from 2020 to 2025. New assets are added in the years acquired, developed or built. Contributed assets are primarily new infrastructure that would be transferred to the Town’s ownership and control by developers as

they are completed. However, this is assumed to be zero. It is also assumed that other non-financial assets such as inventory and prepaid expenses are zero.

Contained within the Statement of Financial Position are important indicators, the first being net financial assets (or net debt) which is defined as the difference between financial assets and liabilities. This indicator provides a measure of the wastewater system's "future revenue requirement". Table 11.2 indicates that in 2021, the Town's wastewater system will be in a net financial asset position in the amount of \$1.2 million. There will be change to a net debt position of \$2.2 million by 2026. The net debt position indicates that additional financial resources will be required to fund future operations. The change to a net debt position is due to a combination of a decrease in the cash position with an increase in liabilities, mainly through the increase of long-term debt.

The next important indicator contained in the Statement of Financial Position is the net book value of TCA. Table 11-2 shows that net TCA are expected to grow by \$7.9 million over the forecast period, or from \$12.9 million in 2021 to \$20.8 million in 2026. This indicates that the Town has plans to invest in tangible capital assets in excess of the consumption of existing assets. Further, a consumption ratio consisting of the accumulated amortization of the Town's TCA as a percent of historical cost ratio highlights the aged condition of the assets and their potential replacement needs. The Town's Wastewater Asset Consumption Ratio will decrease from 39% in 2021 to 33% in 2026. As this percentage is decreasing over time, it indicates the Town is allocating adequate funds to finance the replacement or rehabilitation of aging assets as they expire.

Another important indicator in the Statement of Financial Position is the accumulated surplus. This indicator provides a measure of the resources available to the Town for managing its water system. The accumulated surplus is projected to increase from approximately \$14.1 million in 2021 to approximately \$18.6 million by 2026. The accumulated surplus consists of non-financial assets that are made up of the net TCA balance representing past investments in water infrastructure, offset by the net debt balances.

Table 11-2: Wastewater - Statement of Financial Position

	2021	2022	2023	2024	2025	2026
Financial Assets						
Cash, Receivables and Investment	\$2,250,721	\$2,370,312	\$2,553,246	\$2,425,206	\$1,920,853	\$1,826,769
Total Financial Assets	\$2,250,721	\$2,370,312	\$2,553,246	\$2,425,206	\$1,920,853	\$1,826,769
Financial Liabilities						
Long-term Liabilities	\$1,053,306	\$1,008,004	\$1,961,135	\$4,377,281	\$4,202,107	\$4,020,821
Total Financial Liabilities	\$1,053,306	\$1,008,004	\$1,961,135	\$4,377,281	\$4,202,107	\$4,020,821
Net Financial Assets (Net Debt)	\$1,197,416	\$1,362,307	\$592,111	(\$1,952,074)	(\$2,281,254)	(\$2,194,053)
Non-Financial Assets						
Tangible Capital Assets	\$20,997,804	\$22,123,335	\$24,221,876	\$28,056,980	\$29,894,706	\$31,143,328
Accumulated Amortization	(\$8,132,818)	(\$8,507,415)	(\$8,960,352)	(\$9,419,571)	(\$9,902,750)	(\$10,348,239)
Total Non-Financial Assets	\$12,864,987	\$13,615,920	\$15,261,524	\$18,637,409	\$19,991,956	\$20,795,090
Accumulated Surplus	\$14,062,402	\$14,978,227	\$15,853,635	\$16,685,335	\$17,710,703	\$18,601,037
Financial Indicators	2021	2022	2023	2024	2025	2026
Increase (Decrease) in Net Financial Assets	(\$1,039,226)	\$164,892	(\$770,196)	(\$2,544,185)	(\$329,179)	\$87,201
Increase (Decrease) in Tangible Capital Assets	\$4,858,047	\$750,933	\$1,645,604	\$3,375,885	\$1,354,547	\$803,133
Increase (Decrease) in Accumulated Surplus	\$3,818,822	\$915,825	\$875,408	\$831,699	\$1,025,368	\$890,335
Water Asset Consumption Ratio	39%	38%	37%	34%	33%	33%

11.2.2 Wastewater - Statement of Operations

The Statement of Operations is presented in Table 11-3. It summarizes the annual revenues and expenses associated with managing the Town's wastewater system. It provides a report on the transactions and events that have an influence on the accumulated surplus. The main revenue items included are:

- Revenues from Wastewater Rates and Charges;
- Earned Revenues (capital grants); and
- Other Revenues (miscellaneous fees and charges).

The main expense items are:

- The annual cost of operating and maintaining the wastewater system and non-TCA capital;
- Interest on long-term debt; and
- Amortization expenses on existing and new TCA.

The operating surplus/ (deficit) is an important indicator contained in the Statement of Operations. An operating surplus/ (deficit) measures whether operating revenues generated in a year were sufficient to cover operating expenses incurred in that year. It is important to note that an annual surplus is necessary to ensure funds will be available to address non-expense items such as TCA acquisitions over and above amortization expenses, reserve/reserve fund contributions for asset replacement and rate stabilization, and repayment of outstanding

debt principal. A ratio of operating surplus to total revenue is shown in Table 11-3 and reflects the percent of total revenue that can be allocated to funding the non-expense items noted above.

Table 11-3: Wastewater - Statement of Operations

	2021	2022	2023	2024	2025	2026
Water Revenue						
Rate Revenue	\$2,185,950	\$2,173,537	\$2,193,187	\$2,243,483	\$2,560,815	\$2,501,763
Earned Revenue	\$2,775,000	\$0	\$0	\$0	\$0	\$0
Other Revenue	\$84,456	\$86,145	\$87,868	\$89,625	\$91,418	\$93,246
Total Revenues	\$5,045,406	\$2,259,683	\$2,281,055	\$2,333,109	\$2,652,233	\$2,595,009
Water Expenses						
Operating Expenses	\$762,809	\$778,065	\$793,627	\$809,499	\$825,689	\$842,203
Interest on Debt	\$19,778	\$36,368	\$34,807	\$68,192	\$152,784	\$146,680
Amortization	\$443,997	\$529,425	\$577,214	\$623,718	\$648,392	\$715,791
Total Expenses	\$1,226,584	\$1,343,857	\$1,405,647	\$1,501,410	\$1,626,865	\$1,704,675
Annual Surplus/(Deficit)	\$3,818,822	\$915,825	\$875,408	\$831,699	\$1,025,368	\$890,334
Accumulated Surplus/(Deficit), Beginning of Year	\$10,243,581	\$14,062,402	\$14,978,227	\$15,853,635	\$16,685,334	\$17,710,702
Accumulated Surplus/ (Deficit), End of Year	\$14,062,402	\$14,978,227	\$15,853,635	\$16,685,334	\$17,710,702	\$18,601,037
Financial Indicators	2021	2022	2023	2024	2025	2026
Increase (Decrease) in Total Revenues	\$2,823,443	(\$2,785,723)	\$21,373	\$52,054	\$319,124	(\$57,223)
Increase (Decrease) in Total Expenses	\$99,042	\$117,273	\$61,790	\$95,762	\$125,455	\$77,810
Increase (Decrease) in Annual Surplus	\$2,724,401	(\$2,902,996)	(\$40,417)	(\$43,709)	\$193,669	(\$135,033)
Operating Surplus Ratio	75.7%	40.5%	38.4%	35.6%	38.7%	34.3%

11.2.3 Wastewater - Statement of Cash Flows

The Statement of Cash Flow is presented in Table 11-4. This statement summarizes the main cash inflows and outflows related to the wastewater system in four (4) main areas - operating, capital, investing and financing, and shows the annual changes in cash.

The operating cash transactions begin with the surplus or deficit identified in the Statement of Operations. This figure is adjusted to add or subtract non-cash items that were included as revenues or expenses (e.g. amortization expenses and earned revenues). It is assumed that there are no “investing activities” over the period. The capital section indicates the amounts to be spent to acquire capital assets (TCA) or to be received from the sale of assets. In the Town’s case, it is assumed that there are no assets to be sold to generate cash. The financing section identifies funds external sources, proceeds from the issuance of debenture as cash inflows, and the portion of debt repaid as cash outflows.

Table 11-4 indicates that cash is being generated from operations, which is used in funding the acquisition of TCA and towards building internal reserves. The Town's cash position is projected to decrease over the forecast period from \$2.2 million in 2021 to a \$1.8 million in 2026.

Table 11-4: Wastewater - Statement of Cash Flows

	2021	2022	2023	2024	2025	2026
Cash Provided by:						
Operating Activities						
Annual Surplus/(Deficit)	\$3,818,822	\$915,825	\$875,408	\$831,699	\$1,025,368	\$890,334
Non-Cash Items						
Amortization	\$443,997	\$529,425	\$577,214	\$623,718	\$648,392	\$715,791
Earned Revenue	(\$2,775,000)	\$0	\$0	\$0	\$0	\$0
Net Change in Cash Provided by Operating Activities	\$1,487,818	\$1,445,250	\$1,452,622	\$1,455,417	\$1,673,759	\$1,606,125
Capital Activities						
Purchase of TCA	(\$5,302,044)	(\$1,280,358)	(\$2,222,818)	(\$3,999,603)	(\$2,002,939)	(\$1,518,924)
Net Change in Cash Used in Capital Activities	(\$5,302,044)	(\$1,280,358)	(\$2,222,818)	(\$3,999,603)	(\$2,002,939)	(\$1,518,924)
Financing Activities						
External Financing	\$2,775,000	\$0	\$0	\$0	\$0	\$0
Proceeds From Long-Term Debt	\$500,000	\$0	\$1,000,000	\$2,500,000	\$0	\$0
Repayment of Long-Term Debt	(\$26,702)	(\$45,301)	(\$46,870)	(\$83,854)	(\$175,173)	(\$181,286)
Net Change in Cash Used in Financing Activities	\$3,248,298	(\$45,301)	\$953,130	\$2,416,146	(\$175,173)	(\$181,286)
Net Change in Cash and Cash Equivalents	(\$565,928)	\$119,590	\$182,934	(\$128,039)	(\$504,353)	(\$94,085)
Cash and Cash Equivalents, Beginning of the Year	\$2,816,649	\$2,250,721	\$2,370,312	\$2,553,246	\$2,425,206	\$1,920,853
Cash and Cash Equivalents, End of the Year	\$2,250,721	\$2,370,312	\$2,553,246	\$2,425,206	\$1,920,853	\$1,826,769

12 Conclusions & Recommendations

The following are the main conclusions regarding the water system:

1. Approximately \$19.3 million in water capital expenditures is identified between 2021 and 2030, with funding coming from the capital reserves.
2. The net annual water expenditures are expected to increase approximately \$1.3 million, from \$1.8 million in 2021 to \$3.1 million by 2030.
3. The financial statements for the water system are prepared based on the results of the rate study analyses and projections, indicate the following:
 - The accumulated surplus is projected to increase from approximately \$11.6 million in 2021 to approximately \$17.3 million by 2026.
 - The operating surplus ratio is projected to increase from approximately 17% in 2021 to \$40% in 2026.
 - The cash position is projected to decrease from \$0.8 million in 2021 to a \$0.2 million in 2026.

These indicate that the financial outlook for the water system over the 6-year period 2021 to 2026 is good.

The following are the main conclusions regarding the wastewater system:

4. Approximately \$22.3 million in wastewater capital expenditures is identified between 2021 and 2030. Approximately 15.5 million in financing will be required from the wastewater capital reserve, \$4.0 million in long-term debt, and \$2.8 million from other sources.
5. The net annual wastewater expenditures are expected to increase approximately \$0.4 million, from \$2.2 million in 2021 to \$2.6 million by 2030.
6. The financial statements for the wastewater system are prepared based on the results of the rate study analyses and projections, indicate the following:
 - The accumulated surplus is projected to increase from approximately \$14.1 million in 2021 to approximately \$18.6 million by 2026.
 - The operating surplus ratio is projected to decrease from approximately 76% in 2021 to 34% in 2026
 - The cash position is projected to decrease from \$2.2 million in 2022 to \$2.8 million in 2026.

These indicate that the financial outlook for the wastewater system over the 6-year period 2021 to 2026 is good.

The following are the main recommendations resulting from the water and wastewater rate study:

7. That implementation of Water Rates and Charges as contained in Appendix K be approved to achieve full cost recovery and long-term sustainable financing of the Town's water system.
8. That implementation of Wastewater Rates and Charges as contained in Appendix L be approved to achieve full cost recovery and long-term sustainable financing of the Town's wastewater system.
9. That transfers to the water capital reserve be increased to levels as presented in Appendix G to adequately fund the capital requirements, subject to annual reviews, of the water system's capital needs.
10. That transfers to the wastewater capital reserve be maintained at current levels as presented in Appendix G to adequately fund the capital requirements, subject to annual reviews, of the wastewater system's capital needs.
11. That the O.Reg. 453/07 Water System Financial Plan No. 156-301 including the Financial Statements contained herein be approved by Council and submitted to the Province of Ontario in accordance with the Drinking Water System License renewal requirements and O. Reg. 453/07.
12. That the Wastewater System Financial Plan including the Financial Statements contained herein be received by Council.
13. That a copy of the Water Financial Plan No. 156-301 and the Wastewater Financial Plan be posted on the Town's website and made available to the public at no charge.

APPENDICIES

Appendix A

**2020 Water and Wastewater Rate
By-Law No. 2020-035**

**CORPORATION OF THE TOWN OF GANANOQUE
BY-LAW NO. 2020-035**

**A BY-LAW TO ADOPT THE 2020 WATER AND WASTEWATER OPERATING
AND CAPITAL BUDGET AND ESTABLISH FEES AND RATES FOR WATER
AND WASTEWATER SERVICES PROVIDED BY THE MUNICIPALITY**

WHEREAS pursuant to Section 391(1) of the *Municipal Act*, 2001, a municipality may impose fees and charges on any class of persons for services or activities provided or done by or on behalf of it;

AND WHEREAS Section 398 of the *Municipal Act*, 2001 allows the municipality to add unpaid fees and charges to the collector's roll for the property and collect in the same manner as taxes;

AND WHEREAS pursuant to Bill 175, the *Sustainable Water and Sewage Systems Act*, 2002, each municipality must provide full cost recovery financial plans to pay the full cost of providing water services or waste water services to Minister for approval;

AND WHEREAS the Committee of the Whole reviewed COW Report-FIN-2020-05, and concurs with the staff recommendation to adopt the 2020 Water and Wastewater Operating and Capital Budget and, establish fees and rates for Water and Wastewater Services provided by the municipality.

NOW THEREFORE the Council of the Corporation of the Town of Gananoque enacts as follows:

1. That the Water/ Wastewater Operating Budget attached hereto as Schedule 'B' and Water/Wastewater Capital Budget attached hereto as Schedule 'C' and forming part of this By-law is hereby adopted.
2. That quarterly billing Water and Wastewater Rates as set out in Schedule 'A', attached hereto and forming part of this By-law are hereby established.
3. That Other Charges and Fees shall be established as:

Occupancy Charges	\$25.00
Collection Charge	\$25.00
Late payment charges	5% of current charges
Turning water off/on for summer services	\$75/meter
Turning water off/on for non-payment	\$75
Cost of Plumber or Other Contractor	100%

Services connected to the municipal water system but not connected to the municipal sewer system, commonly referred to as 'Water Only Accounts', shall be charged the Water Basic Charge plus the Water Rate per Cubic Meter charge times the water consumption.

4. That the fees established by this By-law shall come into full force and effect on January 1st, 2020.

5. That any By-law or Motion inconsistent with this By-law is hereby amended.

Read a first and second time, this 25th day of March 2020.



Ted Lojko, Mayor




Penny Kelly, Clerk

(Seal)

Read a third time and finally passed this 7th day of April 2020.



Ted Lojko, Mayor



Penny Kelly, Clerk

(Seal)

Water Rates:

2020

Fixed Quarterly Charge by Metre Size:

5/8 inch	\$ 14.60
3/4 inch	\$ 16.06
1 inch	\$ 23.36
1 1/2 inch	\$ 40.88
2 inch	\$ 67.16
3 inch	\$ 70.08
4 inch	\$ 192.72
rural 5/8 inch	\$ 29.20
additonal unmetred units on 5/8 or 3/4 services	\$ 14.60
outside area consumer charge	\$ 385.44

Water Consumption per Cubic Metre	\$ 1.60
-----------------------------------	---------

Wastewater Rates:

Fixed Quarterly Charge by Metre Size:

5/8 inch	\$ 0.75
3/4 inch	\$ 0.83
1 inch	\$ 1.20
1 1/2 inch	\$ 2.10
2 inch	\$ 3.45
3 inch	\$ 3.60
4 inch	\$ 9.90
rural 5/8 inches	\$ 1.50
additonal unmetred units on 5/8 or 3/4 services	\$ 0.75
outside area consumer charge	\$ 19.80

Wastewater Consumption per Cubic Metre	\$ 1.60
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Capital Replacement Fixed Quarterly Charge

Users of Annual Consumption less than 1,000 m3	\$ 197.56
Users of Annual Consumption greater than 1,000 m3	\$ 395.11
additonal unmetred units on 5/8 or 3/4 services	\$ 197.56
outside area consumer charge	\$ 395.11

Sprinkler Charges - Fixed Quarterly Charge

2" Unmetred Sprinkler	\$ 89.30
4" Unmetred Sprinkler	\$ 213.36
6" Unmetred Sprinkler	\$ 342.35
8" Unmetred Sprinkler	\$ 466.36
Rural Hydrant Charge	\$ 789.34

TOWN OF GANANOQUE
General Ledger Trial Balance

By-law No. 2020-035 - Schedule 'B'

GL5030 (T)

Page : 1

Date : Mar 05, 2020

Time : 2:10 pm



Fiscal Year : 2020
Account : 1-4-081??-???? To 1-5-082??-????
Period : 1 To 12

Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV
FU'	1					
CLASS	4			REVENUE		
CATEGORY	8100			SANITARY SEWER		
1-4-08100-4081				SEWER - BANK INTEREST EARNI	0.00	-48,800
1-4-08100-4098				WORK RECOVERABLE REVENUE	-2,341.18	-1,000
Category Total					-2,341.18	-49,800
CATEGORY	8140			User Fees - Sanitary Sewer		
1-4-08140-4116				RESIDENTIAL SEWER BASE FEE:	-8,582.28	-7,427
1-4-08140-4119				RESIDENTIAL SEWER METERED	-114,695.96	-703,880
1-4-08140-4316				COMMERCIAL SEWER BASE FEE	-1,383.90	0
1-4-08140-4319				COMMERCIAL SEWER METERED	-63,683.61	0
1-4-08140-4416				INDUSTRIAL SEWER BASE FEES	-223.85	0
1-4-08140-4419				INDUSTRIAL SEWER METERED F	-4,844.91	0
1-4-08140-4916				RURAL SEWER FEE	-253.59	0
1-4-08140-4918				Multi Unit Rate	-639.93	0
1-4-08140-4935				CONNECTION FEES	0.00	-19,500
1-4-08140-4980				SEWER PENALTY	88.37	-13,500
1-4-08140-4982				Capital Replacement	-430,221.65	-1,426,009
Category Total					-624,441.31	-2,170,316
REVENUE Total					-626,782.49	-2,220,116
CLASS	5			EXPENDITURE		
CATEGORY	8100			Wastewater Treatment Non Union Wages		
1-5-08100-5101				FT SALARIES	16,819.94	81,911
1-5-08100-5103				OT SALARIES	37.85	0
1-5-08100-5115				EHT - EMPLOYER PORTION	332.27	1,619
1-5-08100-5116				SOURCE DEDUCTIONS	1,215.26	4,130
1-5-08100-5118				WSIB	276.76	2,118
1-5-08100-5119				MANULIFE BENEFITS	4,342.69	8,365
1-5-08100-5121				OMERS	1,849.58	8,892
Category Total					24,874.35	107,035
CATEGORY	8110			Wastewater Treatment Union Wages		
1-5-08110-5101				FT Wages	14,508.15	73,914
1-5-08110-5102				PT Wages	0.00	5,395
1-5-08110-5103				OT Wages	1,418.12	12,500
1-5-08110-5105				Standby	925.50	9,068
1-5-08110-5115				EHT	317.14	1,864
1-5-08110-5116				Source Deductions	1,154.85	5,357
1-5-08110-5117				Other Benefits	0.00	450
1-5-08110-5118				WSIB	179.87	967
1-5-08110-5119				Manulife	0.00	7,637
1-5-08110-5121				OMERS	1,072.14	7,021
1-5-08110-5123				Employee Programs	0.00	25

By-law No. 2020-035 - Schedule 'B'

TOWN OF GANANOQUE

General Ledger Trial Balance

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Date : Mar 05, 2020

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Fiscal Year : 2020
 Account : 1-4-081??-???? To 1-5-082??-????
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Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV
FU	1					
CLASS	5			EXPENDITURE		
CATEGORY	8110			Wastewater Treatment Union Wages		
				Category Total	19,575.77	124,198
CATEGORY	8120			HR Management		
1-5-08120-5112				Uniforms	0.00	2,500
1-5-08120-5302				Memberships	0.00	3,400
1-5-08120-5303				Training of Staff	0.00	5,000
1-5-08120-5304				Conventions	0.00	700
				Category Total	0.00	11,600
CATEGORY	8130			Office Expenses		
1-5-08130-5301				Ads, Subscriptions & Memberships	117.33	680
1-5-08130-5306				Postage / Courier	0.00	7,500
1-5-08130-5310				Computers	0.00	2,000
1-5-08130-5318				Materials & Supplies	830.39	500
1-5-08130-5327				Cellular & Pagers	124.79	2,632
1-5-08130-5330				Internet	67.82	250
1-5-08130-5400				Contracted Services	2,942.19	8,500
1-5-08130-5401				Audit Services	0.00	3,000
1-5-08130-5405				Insurance	5,962.98	13,200
1-5-08130-5409				IT	264.58	1,585
				Category Total	10,310.08	39,847
CATEGORY	8140			Facility Maintenance		
1-5-08140-2530				Diesel Fuel	217.78	2,000
1-5-08140-5317				Repairs & Maintenance	0.00	500
1-5-08140-5318				Materials & Supplies	0.00	500
1-5-08140-5325				Lab Analysis	454.87	6,600
1-5-08140-5326				Treatment Chemicals	17,873.79	65,000
1-5-08140-5331				Hydro	0.00	38,000
1-5-08140-5400				Contracted Services	250.00	6,200
1-5-08140-5501				Property Taxes	0.00	21,402
				Category Total	18,796.44	140,202
CATEGORY	8170			Machine & Equipment Maintenance		
1-5-08170-5317				Repairs & Maintenance	0.00	3,500
1-5-08170-5318				Materials & Supplies	0.00	2,000
1-5-08170-5319				Small Equipment	0.00	500
1-5-08170-5400				Contracted Services	1,127.00	5,000
				Category Total	1,127.00	11,000
CATEGORY	8180			Fleet Maintenance		
1-5-08180-5321				Operating Expenses	514.27	9,813
1-5-08180-5322				Repairs & Maintenance	340.75	5,125

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Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV
FU	1					
CLASS	5			EXPENDITURE		
CATEGORY	8180			Fleet Maintenance		
				Category Total	855.02	14,938
CATEGORY	8190			Long Term Debt		
1-5-08190-5800				Principal	0.00	25,815
1-5-08190-5850				Inerest	0.00	20,440
				Category Total	0.00	46,255
CATEGORY	8195			Transfer to Capital Reserve		
1-5-08195-5903				Transfer to Reserves	0.00	1,426,009
				Category Total	0.00	1,426,009
CATEGORY	8200			Wastewater Collection Non Union Wages		
1-5-08200-5101				FT Wages	9,676.59	81,911
1-5-08200-5115				EHT	190.48	1,619
1-5-08200-5116				Source Deductions	686.79	4,130
1-5-08200-5118				WSIB	162.56	2,118
1-5-08200-5119				Manulife	0.00	8,365
1-5-08200-5121				OMERS	1,041.49	8,892
				Category Total	11,757.91	107,035
CATEGORY	8210			Wastewater Collection Union Wages		
1-5-08210-5101				FT Wages	9,431.25	73,913
1-5-08210-5102				PT Wages	0.00	5,395
1-5-08210-5103				OT Wages	1,414.28	12,500
1-5-08210-5105				Standby	277.50	9,068
1-5-08210-5115				EHT	190.20	1,864
1-5-08210-5116				Source Deductions	707.77	5,357
1-5-08210-5117				Other Benefits	0.00	450
1-5-08210-5118				WSIB	110.56	967
1-5-08210-5119				Manulife	0.00	7,637
1-5-08210-5121				OMERS	933.35	7,021
1-5-08210-5123				Employee Programs	0.00	25
				Category Total	13,064.91	124,197
CATEGORY	8215			Distributed Wages		
1-5-08215-5101				FT Wages	1,162.33	0
1-5-08215-5103				OT Wages	666.81	0
1-5-08215-5115				EHT	22.77	0
1-5-08215-5116				Source Deductions	81.45	0
1-5-08215-5118				WSIB	36.82	0
1-5-08215-5121				OMERS	100.82	0
				Category Total	2,071.00	0
CATEGORY	8240			Facility Maintenance		

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Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV
FU	1					
CLASS	5			EXPENDITURE		
CATEGORY	8240			Facility Maintenance		
1-5-08240-2530				Diesel Fuel	71.51	850
1-5-08240-5330				Internet	0.00	1,800
1-5-08240-5331				Hydro	0.00	14,000
				Category Total	71.51	16,650
CATEGORY	8245			Wastewater Service Laterals		
1-5-08245-5318				Materials & Supplies	36.08	3,000
1-5-08245-5319				Small Equipment	0.00	1,500
1-5-08245-5400				Contracted Services	2,700.71	3,000
				Category Total	2,736.79	7,500
CATEGORY	8250			Pumping Stations		
1-5-08250-5317				Repairs & Maintenance	0.00	3,500
1-5-08250-5318				Materials & Supplies	0.00	2,000
1-5-08250-5400				Contracted Services	254.40	13,000
1-5-08250-5411				Electrical Services	0.00	3,000
1-5-08250-5501				Property Taxes	0.00	1,550
				Category Total	254.40	23,050
CATEGORY	8260			Wastewater Collection Mains		
1-5-08260-5318				Materials & Supplies	0.00	3,100
1-5-08260-5319				Small Equipment	2,175.25	4,500
1-5-08260-5400				Contracted Services	193.34	13,000
				Category Total	2,368.59	20,600
				EXPENDITURE Total	107,863.77	2,220,116
				OPERATING Total	-518,918.72	0
				REPORT TOTAL	-518,918.72	0

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Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV
FU	1					
CLASS	4			REVENUE		
CATEGORY	8300			Water Works		
1-4-08300-4000				MISCELLANEOUS REVENUE	-91.09	-500
1-4-08300-4081				INTEREST REVENUE EARNED	0.00	-9,800
1-4-08300-4098				WORK RECOVERABLE REVENUE	0.00	-500
1-4-08300-4102				HYDRANT CHARGES	0.00	-28,940
1-4-08300-4936				OCCUPANCY CHARGE	0.00	-325
Category Total					-91.09	-40,065
CATEGORY	8302			Water Storage Tower		
1-4-08302-4047				TOWER ANTENNA RENTAL	0.00	-14,000
Category Total					0.00	-14,000
CATEGORY	8303			Water Service Lateral		
1-4-08303-4098				SPRINKLER FEES	0.00	-28,896
Category Total					0.00	-28,896
CATEGORY	8340			User Fees - Water		
1-4-08340-4131				RESIDENTIAL WATER BASE FEES	-7,901.83	-149,024
1-4-08340-4134				RESIDENTIAL WATER METERED	-108,347.94	-703,880
1-4-08340-4331				COMMERCIAL WATER BASE FEE	-1,333.79	0
1-4-08340-4334				COMMERCIAL WATER METERED	-67,684.48	0
1-4-08340-4431				INDUSTRIAL WATER BASE FEES	-410.20	0
1-4-08340-4434				INDUSTRIAL WATER METERED R	-4,559.93	0
1-4-08340-4918				Multi Unit Rate	-633.82	0
1-4-08340-4931				RURAL WATER FEES	-1,489.73	0
1-4-08340-4934				RURAL WATER METERED RATE	-1,578.68	0
1-4-08340-4935				CONNECTION FEES	0.00	-19,500
1-4-08340-4980				LATE PENALTY	0.00	-13,500
1-4-08340-4982				Capital Replacement	0.00	-470,516
Category Total					-193,940.40	-1,356,420
REVENUE Total					-194,031.49	-1,439,381
CLASS	5			EXPENDITURE		
CATEGORY	8300			Water Treatment Non Union Wages		
1-5-08300-5101				FT SALARIES-WATER WORKS	16,819.94	81,911
1-5-08300-5103				OT SALARIES	45.42	0
1-5-08300-5115				EHT - EMPLOYER PORTION	330.74	1,619
1-5-08300-5116				SOURCE DEDUCTIONS	1,191.77	4,130
1-5-08300-5118				WSIB	273.13	2,118
1-5-08300-5119				BENEFITS - MANULIFE	4,342.69	8,365
1-5-08300-5121				OMERS	1,813.50	8,892
Category Total					24,817.19	107,035
CATEGORY	8310			Water Treatment Union Wages		

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Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV
FU	1					
CLASS	5			EXPENDITURE		
CATEGORY	8310			Water Treatment Union Wages		
1-5-08310-5101				FT Wages	9,431.25	73,914
1-5-08310-5102				PT Wages	0.00	5,395
1-5-08310-5103				OT Wages	1,823.47	12,500
1-5-08310-5105				Standby	2,752.50	9,068
1-5-08310-5115				EHT	190.22	1,864
1-5-08310-5116				Source Deductions	912.30	5,357
1-5-08310-5118				WSIB	142.11	967
1-5-08310-5119				Manulife	0.00	7,637
1-5-08310-5121				OMERS	1,207.09	7,021
Category Total					16,458.94	123,723
CATEGORY	8320			HR Management		
1-5-08320-5112				Uniforms	0.00	2,500
1-5-08320-5302				Memberships	445.98	9,050
1-5-08320-5303				Training	0.00	10,000
1-5-08320-5304				Conferences	0.00	1,300
Category Total					445.98	22,850
CATEGORY	8330			Office Expenses		
1-5-08330-5301				Ads & Subscriptions	117.33	680
1-5-08330-5306				Postage / Courier	343.38	7,500
1-5-08330-5310				Computers	0.00	2,000
1-5-08330-5318				Materials & Supplies	142.00	2,000
1-5-08330-5327				Cellular & Pagers	343.30	4,854
1-5-08330-5330				Internet	414.06	3,337
1-5-08330-5335				Telephone	817.09	5,748
1-5-08330-5400				Contracted Services	6,081.40	7,500
1-5-08330-5401				Audit Services	0.00	3,000
1-5-08330-5404				Source Water Protection	0.00	11,000
1-5-08330-5405				Insurance	5,962.98	13,200
1-5-08330-5409				IT	0.00	5,285
1-5-08330-5502				Lease Payments	0.00	900
Category Total					14,221.54	67,004
CATEGORY	8340			Facility Maintenance		
1-5-08340-2530				Diesel Fuel	305.48	3,000
1-5-08340-5318				Materials & Supplies	449.96	0
1-5-08340-5324				Building Maintenance	2,030.26	2,700
1-5-08340-5325				Lab Analysis	2,251.95	17,000
1-5-08340-5326				Treatment Chemicals	-9,463.68	20,664
1-5-08340-5331				Hydro	0.00	81,204
1-5-08340-5332				Natural Gas	784.90	10,600
1-5-08340-5411				Electrical Services	772.48	6,000

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Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV
FU	1					
CLASS	5			EXPENDITURE		
CATEGORY	8340			Facility Maintenance		
1-5-08340-5501				Property Taxes	0.00	40,800
				Category Total	-2,868.65	181,968
CATEGORY	8370			Machine & Equipment Maintenance		
1-5-08370-5317				Repairs & Maintenance	1,901.34	28,750
1-5-08370-5318				Materials & Supplies	684.90	11,000
1-5-08370-5319				Small Equipment	0.00	1,500
1-5-08370-5400				Contracted Services	5,002.28	42,600
1-5-08370-5404				Other Professional Services	0.00	1,800
				Category Total	7,588.52	85,650
CATEGORY	8380			Fleet Maintenance		
1-5-08380-5321				Operating Expenses	514.26	9,813
1-5-08380-5322				Repairs & Maintenance	0.00	5,125
				Category Total	514.26	14,938
CATEGORY	8390			Long Term Debt		
1-5-08390-5800				Principal	6,487.22	37,570
1-5-08390-5850				Interest	8,209.82	38,080
				Category Total	14,697.04	75,650
CATEGORY	8395			Transfer to Capital Reserve		
1-5-08395-5903				Transfer to Reserve	0.00	470,516
				Category Total	0.00	470,516
CATEGORY	8400			Water Distribution Non Union Wages		
1-5-08400-5101				FT Salaries	9,676.56	81,911
1-5-08400-5115				EHT	190.46	1,619
1-5-08400-5116				Source Deductions	686.79	4,130
1-5-08400-5118				WSIB	162.56	2,118
1-5-08400-5119				Manulife	0.00	8,365
1-5-08400-5121				OMERS	1,041.49	8,892
				Category Total	11,757.86	107,035
CATEGORY	8410			Water Distribution Union Wages		
1-5-08410-5101				FT Salaries	9,431.23	73,913
1-5-08410-5102				PT wages	0.00	5,395
1-5-08410-5103				OT wages	1,073.00	12,660
1-5-08410-5105				Standby Wages	277.50	9,068
1-5-08410-5115				EHT	190.20	1,864
1-5-08410-5116				Source Deductions	683.58	5,357
1-5-08410-5118				WSIB	106.83	967
1-5-08410-5119				Manulife	0.00	7,637
1-5-08410-5121				OMERS	933.35	7,021

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Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV
FU'	1					
CLASS	5			EXPENDITURE		
CATEGORY	8410			Water Distribution Union Wages		
				Category Total	12,695.69	123,882
CATEGORY	8415			Distributed wages		
1-5-08415-5101				FT Wages	383.04	0
1-5-08415-5102				PT Wages	108.41	0
1-5-08415-5103				OT Wages	629.79	0
1-5-08415-5115				EHT	14.70	0
1-5-08415-5116				Source Deductions	53.31	0
1-5-08415-5118				WSIB	23.74	0
1-5-08415-5121				OMERS	31.19	0
				Category Total	1,244.18	0
CATEGORY	8440			Water Tower		
1-5-08440-5318				Materials & Supplies	0.00	500
1-5-08440-5331				Hydro	0.00	2,330
				Category Total	0.00	2,830
CATEGORY	8445			Water Service Laterals		
1-5-08445-5318				Materials & Supplies	0.00	4,500
1-5-08445-5400				Contracted Services	0.00	1,000
				Category Total	0.00	5,500
CATEGORY	8450			Water Metre Maintenance		
1-5-08450-5318				Materials & Supplies	0.00	500
				Category Total	0.00	500
CATEGORY	8455			Hydrants		
1-5-08455-5318				Materials & Supplies	0.00	10,600
1-5-08455-5400				Contracted Services	0.00	12,700
				Category Total	0.00	23,300
CATEGORY	8460			Watermain Repairs		
1-5-08460-5318				Materials & Supplies	0.00	14,000
1-5-08460-5319				Small Equipment	3,347.90	5,500
1-5-08460-5400				Contracted Services	0.00	7,500
				Category Total	3,347.90	27,000
				EXPENDITURE Total	104,920.45	1,439,381
				OPERATING Total	-89,111.04	0
				REPORT TOTAL	-89,111.04	0

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Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV
FUND	2					
CLASS	4			REVENUE		
CATEGORY	8101			Wastewater		
2-4-08101-5901				Trans from reserves	0.00	-2,352,115
				Category Total	0.00	-2,352,115
CATEGORY	8125			Sewage Pumping Station Study		
2-4-08125-4034				Clean Water Wastewater Fund Grar	0.00	-575,000
				Category Total	0.00	-575,000
CATEGORY	8300			Water		
2-4-08300-4029				Modernization Grant	0.00	-661,440
				Category Total	0.00	-661,440
CATEGORY	8302			Water		
2-4-08302-5901				Trans from reserves	0.00	-1,420,210
				Category Total	0.00	-1,420,210
				REVENUE Total	0.00	-5,008,765
CLASS	5			EXPENDITURE		
CATEGORY	8103			Sewer - Lagoon Upgrades		
2-5-08103-5400				Contracted Services	0.00	224,100
				Category Total	0.00	224,100
CATEGORY	8104			Sewer - Pumping Station Upgrades		
2-5-08104-5400				Contracted Services	0.00	606,125
				Category Total	0.00	606,125
CATEGORY	8105			Sewer - Lagoon Cleaning		
2-5-08105-5400				Sewage Lagoon Cleaning	0.00	442,135
				Category Total	0.00	442,135
CATEGORY	8110			Stone St Pumping Station		
2-5-08110-5318				Materials & Supplies	0.00	25,000
				Category Total	0.00	25,000
CATEGORY	8112			East End Pump Stn VFD 1 & 2		
2-5-08112-5400				Contracted services	0.00	7,600
				Category Total	0.00	7,600
CATEGORY	8121			Sewer - Water & Wastewater Rate Study		
2-5-08121-5403				ARCHITECT, ENGINEERING, CON	0.00	25,000
				Category Total	0.00	25,000
CATEGORY	8122			Lagoon Cell 1		
2-5-08122-5400				Contracted Services	0.00	115,000
				Category Total	0.00	115,000
CATEGORY	8123			Lagoon Diversion Chamber		

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Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV
FUND	2					
CLASS	5			EXPENDITURE		
CATEGORY	8123			Lagoon Diversion Chamber		
2-5-08123-5400				Contracted Services	0.00	115,000
				Category Total	0.00	115,000
CATEGORY	8124			Lagoon Road		
2-5-08124-5400				Contracted Services	0.00	25,000
				Category Total	0.00	25,000
CATEGORY	8125			Sewage Pumping Station Study		
2-5-08125-5400				Contracted Services	10,716.87	727,900
				Category Total	10,716.87	727,900
CATEGORY	8131			East End Pumping Station AC		
2-5-08131-5400				Contracted Services	0.00	5,000
				Category Total	0.00	5,000
CATEGORY	8138			Sewer - Pine Street		
2-5-08138-5400				Contracted Services	0.00	421,155
				Category Total	0.00	421,155
CATEGORY	8147			Force Main Upgrades		
2-5-08147-5101				FT Wages	652.62	0
2-5-08147-5118				WSIB	17.42	0
2-5-08147-5400				Contracted Services	0.00	188,100
				Category Total	670.04	188,100
CATEGORY	8301			WTP Filter Air Scour Actuators		
2-5-08301-5400				CONTRACTED SERVICES	0.00	12,000
				Category Total	0.00	12,000
CATEGORY	8302			WTP Roof		
2-5-08302-5400				CONTRACTED SERVICES	0.00	125,000
				Category Total	0.00	125,000
CATEGORY	8303			WTP HVAC		
2-5-08303-5318				MATERIALS & SUPPLIES	0.00	15,000
2-5-08303-5400				CONTRACTED SERVICES	0.00	40,000
				Category Total	0.00	55,000
CATEGORY	8304			WTP Prog Logic Ctrls		
2-5-08304-5400				CAPITAL-WATER QUALITY -CONT	0.00	15,000
				Category Total	0.00	15,000
CATEGORY	8305			WTP FILTERS & Coating		
2-5-08305-5400				CONTRACTED SERVICES	0.00	130,000
				Category Total	0.00	130,000

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Period : 1 To 12

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Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV
FUND	2					
CLASS	5			EXPENDITURE		
CATEGORY	8306			WTP Turbidity Ananlyzers		
CATEGORY	8306			WTP Turbidity Ananlyzers		
2-5-08306-5415				EQUIPMENT	0.00	20,000
Category Total					0.00	20,000
CATEGORY	8307			WTP GAC & Sand Filters		
2-5-08307-5400				CONTRACTED SERVICES	0.00	160,000
Category Total					0.00	160,000
CATEGORY	8308			WTP Chlorine Feed Lines		
2-5-08308-5400				Contracted Services	0.00	10,000
Category Total					0.00	10,000
CATEGORY	8310			WTP SCADA Computers & Software		
2-5-08310-5400				Contracted Services	0.00	15,000
Category Total					0.00	15,000
CATEGORY	8311			Water - Tower Inspection		
2-5-08311-5400				Contracted Services	0.00	15,000
Category Total					0.00	15,000
CATEGORY	8312			Flush Stations		
2-5-08312-5410				Project Contracts	0.00	25,000
Category Total					0.00	25,000
CATEGORY	8313			SCBA Units		
2-5-08313-5318				MATERIALS AND SUPPLIES	4,728.26	10,000
Category Total					4,728.26	10,000
CATEGORY	8314			WTP Generator		
2-5-08314-5400				Contracted Services	614.63	198,635
Category Total					614.63	198,635
CATEGORY	8315			Hydrant Replacement		
2-5-08315-5318				Materials & Supplies	0.00	25,000
Category Total					0.00	25,000
CATEGORY	8317			Water - Corrosion Control		
2-5-08317-5400				Contracted Services	0.00	25,000
Category Total					0.00	25,000
CATEGORY	8321			Water - Water & Wastewater Rate Study		
2-5-08321-5403				ARCHITECT, ENGINEERING, CON	0.00	25,000
Category Total					0.00	25,000
CATEGORY	8322			Curb Stop Repair / Replacements		
2-5-08322-5400				Contracted Services	0.00	75,000

TOWN OF GANANOQUE
General Ledger Trial Balance



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Fiscal Year :	2020	By-law No. 2020-035 - Schedule 'C'
Account :	2-4-08???-???? To 2-5-08???-????	
Period :	1 To 12	

Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV
FUND	2					
CLASS	5			EXPENDITURE		
CATEGORY	8322			Curb Stop Repair / Replacements		
				Category Total	0.00	75,000
CATEGORY	8338			Water - Pine Street		
2-5-08338-5400				Contracted Services	0.00	409,575
				Category Total	0.00	409,575
CATEGORY	8345			Metres		
2-5-08345-5318				Metres	0.00	30,000
				Category Total	0.00	30,000
CATEGORY	8350			Meter Replacement Program		
2-5-08350-5400				Contracted Services	97,010.89	661,440
				Category Total	97,010.89	661,440
CATEGORY	8355			Neptune Reader & Software		
2-5-08355-5318				Materials & Supplies	0.00	35,000
				Category Total	0.00	35,000
CATEGORY	8360			Tools		
2-5-08360-5318				Materials & Supplies	0.00	5,000
				Category Total	0.00	5,000
				EXPENDITURE Total	113,740.69	5,008,765
				CAPITAL FUND Total	113,740.69	0
				REPORT TOTAL	113,740.69	0

Appendix B

2021 – 2030 Water and Wastewater Customer Growth Projections

APPENDIX B: 2021 – 2030 WATER AND WASTEWATER CUSTOMER GROWTH PROJECTIONS

Water and Wastewater Customer Growth Projections										
Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
5/8	2132	2204	2256	2275	2280	2285	2290	2295	2300	2305
3/4	54	54	54	54	54	54	54	54	54	54
1	40	40	40	40	40	40	40	40	40	40
1 1/2	35	35	35	35	35	35	35	35	35	35
2	19	19	19	19	19	19	19	19	19	19
3	4	4	4	4	4	4	4	4	4	4
4	1	1	1	1	1	1	1	1	1	1
rural	-	-	-	-	-	-	-	-	-	-
unmetered units	114	114	114	114	114	114	114	114	114	114
Customers	2,399	2,471	2,523	2,542	2,547	2,552	2,557	2,562	2,567	2,572

Appendix C

2021 – 2030 Water and Wastewater Volume Projections

APPENDIX C: 2021 – 2030 VOLUME PROJECTIONS

Water and Wastewater Volume Projections										
Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
5/8"	260,166	268,952	275,298	277,616	278,226	278,837	279,447	280,057	280,667	281,277
3/4"	14,774	14,774	14,774	14,774	14,774	14,774	14,774	14,774	14,774	14,774
1"	23,385	23,385	23,385	23,385	23,385	23,385	23,385	23,385	23,385	23,385
1 1/2"	59,358	59,358	59,358	59,358	59,358	59,358	59,358	59,358	59,358	59,358
2"	49,076	49,076	49,076	49,076	49,076	49,076	49,076	49,076	49,076	49,076
3"	39,015	39,015	39,015	39,015	39,015	39,015	39,015	39,015	39,015	39,015
4"	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250
rural	-	-	-	-	-	-	-	-	-	-
unmetered units	-	-	-	-	-	-	-	-	-	-
Consumption	447,024	455,810	462,156	464,474	465,084	465,694	466,305	466,915	467,525	468,135

Appendix D

2021 – 2030 Capital Forecast - Water

APPENDIX D: 2021 – 2030 WATER CAPITAL FORECAST

Water Service										
2021-2030 Capital Forecast										
Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Water Treatment Plant	-	-	-	-	-	-	-	-	-	-
Building Structure (Roofing)	-	-	-	-	-	-	-	-	-	-
Air Conditioner	-	-	-	-	-	-	-	-	-	-
HVAC Air Handler (#1 MCC Room)	-	-	-	-	-	-	-	-	50,000	-
Programmable Logic Controllers (PLC's) (7)	-	-	-	-	-	-	100,000	-	-	-
SCADA Computers / Software	-	-	-	-	110,000	-	-	-	-	-
Turbidity Analyzers (4)	-	-	-	-	-	-	-	-	-	-
Filters 1 & 2 GAC Filter Media	-	-	-	-	145,000	-	-	-	-	145,000
Filter #1 Underdrains	-	-	-	-	-	-	-	-	-	-
Filter #1 Coating	-	-	-	-	-	-	-	-	-	-
Filter #2 Underdrains	-	-	-	-	-	-	-	-	-	-
Filter #2 Coating	-	-	-	-	-	-	-	-	-	-
Filter Air Sour Actuators (2)	-	-	-	-	-	-	-	-	-	-
Chlorine Disinfection & Coagulant Solution Feed Lines	-	-	-	-	-	-	-	-	-	-
SCBA	-	-	-	-	-	-	-	-	-	-
Lab & Office	145,000	-	-	-	-	-	-	-	-	-
Chlorine Analyzers (2)	20,000	-	-	-	-	-	-	-	-	20,000
Pressure Transmitters (10)	5,000	5,000	5,000	-	-	-	-	-	-	-
Low Lift #3 Motor	10,000	-	-	-	-	10,000	-	-	-	-
Low Lift #3 Pump	10,000	-	-	-	-	20,000	-	-	-	-
Low Lift #3 Pump Discharge / Actuator	10,000	-	-	-	-	-	-	-	-	-
Low Lift #2 Motor	-	10,000	-	-	-	-	10,000	-	-	-
Low Lift #2 Pump	-	10,000	-	-	-	-	20,000	-	-	-
Low Lift #2 Pump Discharge / Actuator	-	10,000	-	-	-	-	-	-	-	-
Backwash #1 Motor	-	12,500	-	-	-	-	-	-	-	-
Backwash #1 Pump	-	12,500	-	-	-	-	-	-	-	-
High Lift #4 Motor	-	10,000	-	-	-	-	-	-	-	-
High Lift #4 Pump	-	25,000	-	-	-	-	-	-	-	-
High Lift #4 & #5 VFD 200 HP	-	100,000	-	-	-	-	-	-	-	-
Level Transmitters - Intake Well (1)	-	5,000	-	-	-	-	-	-	-	-
Level Transmitter - Rapid Mixer (1)	-	5,000	-	-	-	-	-	-	-	-
Level Transmitter - Filter #1 (1)	-	5,000	-	-	-	-	-	-	-	-
Level Transmitter - Filter #2 (1)	-	5,000	-	-	-	-	-	-	-	-
Chlorine Gas Leak Detection	-	-	10,000	-	-	-	-	-	-	-
Stationary Emergency Diesel Power Generator 400 KW	-	-	25,000	-	-	-	-	-	-	-
Low Lift #1 Motor	-	-	10,000	-	-	-	-	10,000	-	-
Low Lift #1 Pump	-	-	20,000	-	-	-	-	20,000	-	-
Low Lift #1 Pump Discharge / Actuator	-	-	10,000	-	-	-	-	-	-	-
Filter Air Scour Blower	-	-	5,000	-	-	-	-	-	-	5,000
Filter Air Scour Motor	-	-	5,000	-	-	-	-	-	-	5,000
High Lift #2 Motor	-	-	10,000	-	-	-	-	10,000	-	-
High Lift #2 Pump	-	-	20,000	-	-	-	-	20,000	-	-
Plant Discharge Pressure Relief valve	-	-	75,000	-	-	-	-	-	-	-
Waste Water Sludge Transfer Pumps (2)	-	-	15,000	-	-	-	-	-	-	-
Level Transmitter - Clearwell (1)	-	-	5,000	-	-	-	-	-	-	-
Level Transmitter - Backwash Waste Tank #1 & #2 (2)	-	-	5,000	-	-	-	-	-	-	-
Level Transmitter - Plant Sewage Station (1)	-	-	5,000	-	-	-	-	-	-	-
Electrical MCC	-	-	-	225,000	-	-	-	-	-	-
Low Lift #1, #2, #3 VFD (1)	-	-	-	50,000	-	-	-	-	-	-
High Lift HL #3 Motor	-	-	-	10,000	-	-	-	-	10,000	-
High Lift #3 Pump	-	-	-	20,000	-	-	-	-	20,000	-
Air Compressor	-	-	-	-	-	15,000	-	-	-	-
Lighting	-	-	-	-	-	50,000	-	-	-	-
Backwash #2 Motor	-	-	-	-	-	12,500	-	-	-	-
Backwash #2 Pump	-	-	-	-	-	12,500	-	-	-	-
ALUM (Coagulant) Feed Pumps (2)	-	-	-	-	-	-	20,000	-	-	-
ALUM (Coagulant) Feed Pump Controllers (2)	-	-	-	-	-	-	10,000	-	-	-
High Lift #5 Motor	-	-	-	-	-	-	10,000	-	-	-
High Lift #5 Pump	-	-	-	-	-	-	25,000	-	-	-
Chlorinators (3)	-	-	-	-	-	-	-	100,000	-	-
HVAC Air Handler (#2)	-	-	-	-	-	-	-	-	50,000	-
Water Distribution	-	-	-	-	-	-	-	-	-	-
FULL RECONSTRUTION PROJECTS	-	-	-	-	-	-	-	-	-	-
Pine Street (Stone Street to Charles Street)	-	-	-	-	-	-	-	-	-	-
Pine Street (Charles to William (not including storm from Wellington)	265,658	-	-	-	-	-	-	-	-	-
Hillside Drive	-	325,210	-	-	-	-	-	-	-	-
Ontario Street	-	-	245,117	-	-	-	-	-	-	-
Steel Street	-	-	-	322,657	-	-	-	-	-	-
Dempster	-	-	-	-	345,649	-	-	-	-	-
North Street (Assumption from William Street North to Herbert Street)	-	-	-	-	-	507,046	-	-	-	-
Arthur Street (Assumption from Stone Street South to Dead End)	-	-	-	-	-	-	664,811	-	-	-
Wellington St (Charles Street South to William Street South to finish off Pine Street Storm Sewer)	-	-	-	-	-	-	-	325,569	-	-
Wellington St (Stone Street South to Charles Street South)	-	-	-	-	-	-	-	-	312,758	-
Alberla	-	-	-	-	-	-	-	-	-	314,950
HYDRANTS & VALVES:	-	-	-	-	-	-	-	-	-	-
Hydrant Replacement Program	-	25,000	-	25,000	-	25,000	-	25,000	-	25,000
Valve Replacement Program	25,000	-	25,000	-	25,000	-	25,000	-	25,000	-
FLUSH BULK WATER STATIONS:	-	-	-	-	-	-	-	-	-	-
Flush Stations	-	25,000	-	25,000	-	25,000	-	25,000	-	25,000
Public Works Bulk Fill Station	45,000	-	-	-	-	-	-	-	-	-
SERVICES:	-	-	-	-	-	-	-	-	-	-
Corrosion Control (Lead Service Replacement Program)	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Meters	-	-	-	-	-	-	-	-	-	-
Curb Stop Repair Replacements	-	-	-	-	-	-	-	-	-	-
Meter Reading (Software Neptune 360) (2nd Belt Clip)	-	-	-	-	-	-	-	-	-	-
FLEET	-	-	-	-	-	-	-	-	-	-
Chevrolet Van (Mobile #3)	20,000	-	-	-	-	-	-	-	-	-
Chevrolet Silverado (Mobile #2)	-	-	20,000	-	-	-	-	-	-	-
Chevrolet Silverado (Mobile #4)	-	-	-	-	-	20,000	-	-	-	-
Transit Cargo Van (Mobile #1)	-	-	-	-	-	-	-	-	22,500	-
EQUIPMENT	-	-	-	-	-	-	-	-	-	-
Hydraulic Jack Hammer	-	-	-	-	-	-	-	-	-	-
SMALL EQUIPMENT	-	-	-	-	-	-	-	-	-	-
Generator Portable #2 (Honda 5000 W)	-	-	-	-	-	3,750	-	-	-	-
Pipe Saw	-	-	-	-	-	-	-	-	-	-
CONTINGENCY: Water Treatment Plant	10,000	10,750	11,250	15,250	12,750	6,000	9,750	8,000	6,500	8,750
CONTINGENCY: Water Distribution	-	18,033	20,011	14,756	19,883	19,782	29,102	35,741	20,028	18,138
CONTINGENCY: Fleet	-	1,000	-	1,000	-	-	-	-	1,125	-
Total Capital Expenditures - Capital Program	609,691	645,971	567,123	737,790	683,181	762,086	955,302	588,597	541,021	593,198
Inventory Replacement from Inventory Sheets	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Lifecycle Needs	-	-	-	-	-	-	-	-	-	-
Land	-	-	-	-	-	-	-	-	-	-
Land Improvements	-	-	-	-	-	-	-	-	-	-
Buildings	500,235	500,235	500,235	500,235	500,235	500,235	500,235	500,235	500,235	500,235
Linear Assets	711,935	711,935	711,935	711,935	711,935	711,935	711,935	711,935	711,935	711,935
Equipment	48,342	48,342	48,342	48,342	48,342	48,342	48,342	48,342	48,342	48,342
Vehicles	3,978	3,978	3,978	3,978	3,978	3,978	3,978	3,978	3,978	3,978
Total Capital Expenditures	1,874,182	1,910,461	1,831,614	2,002,281	1,947,672	2,026,577	2,219,792	1,853,088	1,805,512	1,857,688
Capital Financing	-	-	-	-	-	-	-	-	-	-
Provincial/Federal Grants (Investing in Ontario)	-	-	-	-	-	-	-	-	-	-
Non-Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-
Water Capital Reserve - Option 3	1,874,182	1,910,461	1,831,614	2,002,281	1,947,672	2,026,577	2,219,792	1,853,088	1,805,512	1,857,688
Total Capital Financing	1,874,182	1,910,461	1,831,614	2,002,281	1,947,672	2,026,577	2,219,792	1,853,088	1,805,512	1,857,688

Appendix E

2021 – 2030 Capital Forecast – Wastewater

APPENDIX E: 2021 – 2030 WASTEWATER CAPITAL FORECAST

Wastewater Service 2021-2030 Capital Forecast										
Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Wastewater Treatment Plant	-	-	-	-	-	-	-	-	-	-
WASTEWATER TREATMENT EAST END PUMP STATION : BLDG. & PROPERTY MNTCE:	-	-	-	-	-	-	-	-	-	-
Building/Structure	300,000	-	-	-	-	-	-	-	-	-
Security	-	-	-	-	-	-	-	-	-	-
MCC/Electrical	250,000	-	-	-	-	-	-	-	-	-
WASTEWATER TREATMENT EAST END PUMP STATION:	-	-	-	-	-	-	-	-	-	-
Process Treatment Upgrades	-	-	-	100,000	-	-	-	-	-	-
Chemical Feed Pumps & Controllers (2)	-	-	-	20,000	-	-	-	-	-	-
Wet Well	-	-	1,000,000	-	-	-	-	-	-	-
Pump #1	-	25,000	-	-	-	-	25,000	-	-	-
Pump #2	25,000	-	-	-	-	25,000	-	-	-	-
Pump #1 VFD	-	-	-	-	75,000	-	-	-	-	-
Pump #2 VFD	-	-	-	-	75,000	-	-	-	-	-
Diesel Engine/Generator (250KW)	325,000	-	-	-	-	-	-	-	-	-
Instrumentation/Controls	100,000	-	-	-	-	-	-	-	-	-
Spare Pump	125,000	-	-	-	-	-	-	-	-	-
Spare Pump	-	-	-	-	-	-	-	-	-	-
WASTEWATER TREATMENT LAGOON:	-	-	-	-	-	-	-	-	-	-
Forcemain 400mm	2,000,000	-	-	2,500,000	-	-	-	-	-	-
Cell #1 Influent / Bypass Chamber / Inlet Structure	775,000	-	-	-	-	-	-	-	-	-
Cell #1 Effluent Weir Chamber	-	-	-	-	-	-	-	-	-	-
Diversion Chamber	-	-	-	-	-	-	-	-	-	-
Cell #2 Lagoon	-	-	-	-	-	-	-	-	500,000	-
Cell #3 Lagoon	-	-	-	-	500,000	-	-	-	-	-
Roadway	-	25,000	-	25,000	-	25,000	-	25,000	-	25,000
Sludge Removal	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000
Wastewater Collection	-	-	-	-	-	-	-	-	-	-
FULL RECONSTURCTION PROJECTS	-	-	-	-	-	-	-	-	-	-
Pine Street (Stone Street to Charles Street)	312,285	-	-	-	-	-	-	-	-	-
Pine Street (Charles to William (not including storm from Wellington)	-	359,250	-	-	-	-	-	-	-	-
Hillside Drive	-	-	284,331	-	-	-	-	-	-	-
Ontario Street	-	-	-	371,508	-	-	-	-	-	-
Steel Street	-	-	-	-	364,923	-	-	-	-	-
Dempster	-	-	-	-	-	580,206	-	-	-	-
North Street (Assumption from William Street North to Herbert Street)	-	-	-	-	-	-	773,715	-	-	-
Arthur Street (Assumption from Stone Street South to Dead End)	-	-	-	-	-	-	-	377,803	-	-
Wellington St (Charles Street South to William Street South to finish off Pine Street Storm Sewer)	-	-	-	-	-	-	-	-	348,208	-
Wellington St (Stone Street South to Charles Street South)	-	-	-	-	-	-	-	-	-	335,514
Alberta	-	-	-	-	-	-	-	-	-	-
MAIN STREET PUMP STATION #3:	-	-	-	-	-	-	-	-	-	-
Building	-	-	-	-	-	-	-	-	-	-
Pump#1	10,000	-	-	-	-	-	-	10,000	-	-
Pump#2	-	10,000	-	-	-	-	-	-	10,000	-
Pump#3	-	-	10,000	-	-	-	-	-	-	10,000
Grinder	-	-	10,000	-	-	-	-	-	-	10,000
STONE STREET PUMP STATION:	-	-	-	-	-	-	-	-	-	-
MCC	-	-	-	-	100,000	-	-	-	-	-
Controls / Communications	-	-	-	-	-	-	-	-	-	-
North Pump	7,500	-	-	-	-	-	-	7,500	-	-
South Pump	-	7,500	-	-	-	-	-	-	7,500	-
Spare Pump	-	-	-	-	-	-	-	-	-	-
FLEET	-	-	-	-	-	-	-	-	-	-
Chevrolet Van (Mobile #3)	20,000	-	-	-	-	-	-	-	-	-
Chevrolet Silverado (Mobile #2)	-	-	20,000	-	-	-	-	-	-	-
Chevrolet Silverado (Mobile #4)	-	-	-	-	-	20,000	-	-	-	-
Transit Cargo Van (Mobile #1)	-	-	-	-	-	-	-	-	22,500	-
EQUIPMENT	-	-	-	-	-	-	-	-	-	-
Hydraulic Jack Hammer	-	-	-	-	-	-	-	-	-	-
SMALL EQUIPMENT	-	-	-	-	-	-	-	-	-	-
Generator Portable #2 (Honda 5000 W)	-	-	-	-	-	3,750	-	-	-	-
Pipe Saw	-	-	-	-	-	-	-	-	-	-
CONTINGENCY: Wastewater Treatment Plant	207,500	15,000	62,500	144,750	45,000	15,000	13,750	13,750	37,500	13,750
CONTINGENCY: Wastewater Collection	16,489	18,838	15,217	18,575	23,246	29,010	38,686	19,765	18,285	17,776
CONTINGENCY: Fleet	1,000	-	1,000	-	-	1,188	-	-	1,125	-
Total Capital Expenditures - Capital Program	4,724,774	710,588	1,653,048	3,429,833	1,433,169	949,154	1,101,151	703,818	1,195,118	662,040
Inventory Replacement from Inventory Sheets	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Lifecycle Needs	-	-	-	-	-	-	-	-	-	-
Land	-	-	-	-	-	-	-	-	-	-
Land Improvements	-	-	-	-	-	-	-	-	-	-
Buildings	38,722	38,722	38,722	38,722	38,722	38,722	38,722	38,722	38,722	38,722
Linear Assets	456,073	456,073	456,073	456,073	456,073	456,073	456,073	456,073	456,073	456,073
Equipment	70,997	70,997	70,997	70,997	70,997	70,997	70,997	70,997	70,997	70,997
Vehicles	3,978	3,978	3,978	3,978	3,978	3,978	3,978	3,978	3,978	3,978
Total Capital Expenditures	5,294,545	1,280,358	2,222,818	3,999,604	2,002,939	1,518,924	1,670,921	1,273,588	1,764,889	1,231,810
Capital Financing	-	-	-	-	-	-	-	-	-	-
Provincial/Federal Grants (Investing in Ontario)	2,775,000	-	1,000,000	2,500,000	-	-	-	-	-	-
Non-Growth Related Debenture Requirements	500,000	-	-	-	-	-	-	-	-	-
Wastewater Capital Reserve	2,019,545	1,280,358	1,222,818	1,499,604	2,002,939	1,518,924	1,670,921	1,273,588	1,764,889	1,231,810
Total Capital Financing	5,294,545	1,280,358	2,222,818	3,999,604	2,002,939	1,518,924	1,670,921	1,273,588	1,764,889	1,231,810

Appendix F

2021 – 2030 Water and Wastewater Debt Continuity Schedules

APPENDIX F: 2021 – 2030 DEBT CONTINUITY SCHEDULES

Water Services										
Non Growth-Related Debt										
Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Opening Debt Balance	\$1,133,343	\$1,094,634	\$1,055,006	\$1,014,429	\$972,869	\$930,292	\$886,665	\$841,950	\$796,110	\$749,106
Principal Repayment	(\$38,709)	(\$39,628)	(\$40,577)	(\$41,560)	(\$42,576)	(\$43,628)	(\$44,715)	(\$45,840)	(\$47,003)	(\$48,207)
New Debt Issue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Closing Debt Balance	\$1,094,634	\$1,055,006	\$1,014,429	\$972,869	\$930,292	\$886,665	\$841,950	\$796,110	\$749,106	\$700,899

Wastewater Services										
Non Growth-Related Debt										
Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Opening Debt Balance	\$580,008	\$1,053,306	\$1,008,004	\$1,961,135	\$4,377,281	\$4,202,107	\$4,020,821	\$3,833,210	\$3,639,051	\$3,438,118
Principal Repayment	(\$26,702)	(\$45,301)	(\$46,870)	(\$83,854)	(\$175,173)	(\$181,286)	(\$187,612)	(\$194,158)	(\$200,933)	(\$207,944)
New Debt Issue	\$500,000	\$0	\$1,000,000	\$2,500,000	\$0	\$0	\$0	\$0	\$0	\$0
Closing Debt Balance	\$1,053,306	\$1,008,004	\$1,961,135	\$4,377,281	\$4,202,107	\$4,020,821	\$3,833,210	\$3,639,051	\$3,438,118	\$3,230,174

Appendix G

2021 – 2030 Reserve and Reserve Fund Projections

APPENDIX G: 2021 – 2030 RESERVE AND RESERVE FUND PROJECTIONS

Water Service 2021 - 2030 Water Capital Reserve Fund Projections										
Description	2021	2022	2,023	2,024	2,025	2026	2027	2028	2029	2030
Opening Balance	1,805,136	811,488	173,687	12,746	81,993	207,397	254,478	106,517	327,994	600,410
Transfer from Operating	870,516	1,270,516	1,670,516	2,070,516	2,070,516	2,070,516	2,070,516	2,070,516	2,070,516	2,070,516
Transfer to Capital	1,874,182	1,910,461	1,831,614	2,002,281	1,947,672	2,026,577	2,219,792	1,853,088	1,805,512	1,857,688
Closing Balance	801,470	171,543	12,589	80,981	204,837	251,336	105,202	323,945	592,998	813,238
Interest	10,018	2,144	157	1,012	2,560	3,142	1,315	4,049	7,412	10,165

Wastewater Service 2021 - 2030 Wastewater Capital Reserve Fund Projections										
Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Opening Balance	2,849,987	2,284,657	2,460,687	2,697,176	2,656,376	2,105,439	2,037,681	1,815,179	1,992,195	1,673,981
Transfer from Operating	1,426,009	1,426,009	1,426,009	1,426,009	1,426,009	1,426,009	1,426,009	1,426,009	1,426,009	1,426,009
Transfer to Capital	2,019,545	1,280,358	1,222,818	1,499,604	2,002,939	1,518,924	1,670,921	1,273,588	1,764,889	1,231,810
Closing Balance	2,256,451	2,430,308	2,663,878	2,623,581	2,079,446	2,012,524	1,792,769	1,967,600	1,653,315	1,868,180
Interest	28,206	30,379	33,298	32,795	25,993	25,157	22,410	24,595	20,666	23,352

Water Service 2021 - 2030 Water Operating Reserve Projections										
Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Opening Balance	3,738	42,522	60,488	42,485	57,265	8,607	7,392	8,559	7,136	7,479
Contributions from Operating	38,784	17,965	-	-	65,872	-	1,167	-	342	-
Transfer to Operating	-	-	18,002	99,750	-	1,215	-	1,423	-	2,890
Closing Balance	42,522	60,488	42,485	57,265	8,607	7,392	8,559	7,136	7,479	4,589

Wastewater Service 2021 - 2030 Operating Reserve Projections										
Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Opening Balance	1,847	36,954	10,894	(9,363)	(63,809)	8,768	7,599	6,841	6,229	10,170
Contributions from Operating	35,107	-	-	-	72,577	-	-	-	3,941	-
Transfer to Operating	-	26,061	20,257	54,445	-	1,169	759	612	-	1,132
Closing Balance	36,954	10,894	(9,363)	(63,809)	8,768	7,599	6,841	6,229	10,170	9,038

Appendix H

2021 – 2030 Operating Budget Forecast - Water

APPENDIX H: 2021 – 2030 OPERATING FORECAST - WATER

2021- 2030 Operating Budget Forecast										
Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Operating Expenditures	-	-	-	-	-	-	-	-	-	-
Water Treatment Non-Union Wages	109,176	111,359	113,586	115,858	118,175	120,539	122,950	125,409	127,917	130,475
Water Treatment Union Wages	126,197	128,721	131,296	133,922	136,600	139,332	142,119	144,961	147,860	150,818
HR Management	23,307	23,773	24,249	24,734	25,228	25,733	26,247	26,772	27,308	27,854
Office Expenses	68,344	69,711	71,105	72,527	73,978	75,457	76,967	78,506	80,076	81,678
Facility Maintenance	185,607	189,320	193,106	196,968	200,907	204,926	209,024	213,205	217,469	221,818
Machine & Equipment Maintenance	87,363	89,110	90,892	92,710	94,565	96,456	98,385	100,353	102,360	104,407
Fleet Maintenance	15,237	15,541	15,852	16,169	16,493	16,823	17,159	17,502	17,852	18,209
Water Distribution Non-Union Wages	109,176	111,359	113,586	115,858	118,175	120,539	122,950	125,409	127,917	130,475
Water Distribution Union Wages	126,360	128,887	131,465	134,094	136,776	139,511	142,301	145,148	148,050	151,011
Water Tower	2,887	2,944	3,003	3,063	3,125	3,187	3,251	3,316	3,382	3,450
Water Servie Laterals	5,610	5,722	5,837	5,953	6,072	6,194	6,318	6,444	6,573	6,704
Water Meter Maintenance	510	520	531	541	552	563	574	586	598	609
Hydrants	23,766	24,241	24,726	25,221	25,725	26,240	26,764	27,300	27,846	28,403
Watermain Repairs	27,540	28,091	28,653	29,226	29,810	30,406	31,015	31,635	32,267	32,913
Transfer to Operating Reserve	38,784	17,965	-	-	65,872	-	1,167	-	342	-
Sub Total Operating Expenditures	949,863	947,266	947,887	966,845	1,052,053	1,005,905	1,027,190	1,046,544	1,067,817	1,088,824
Capital-Related	-	-	-	-	-	-	-	-	-	-
Existing Debt (Principal) - Non-Growth Related	38,709	39,628	40,577	41,560	42,576	43,628	44,715	45,840	47,003	48,207
Existing Debt (Interest) - Non-Growth Related	37,166	36,256	35,314	34,340	33,332	32,289	31,211	30,096	28,942	27,749
Transfer to Capital Reserves and Reserve Funds - #2	870,516	1,270,516	1,670,516	2,070,516	2,070,516	2,070,516	2,070,516	2,070,516	2,070,516	2,070,516
Sub Total Capital Related Expenditures	946,392	1,346,399	1,746,407	2,146,416	2,146,424	2,146,433	2,146,442	2,146,452	2,146,462	2,146,472
Total Expenditures	1,896,255	2,293,666	2,694,294	3,113,260	3,198,478	3,152,338	3,173,632	3,192,996	3,214,279	3,235,296
Non-Rate Revenues	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS REVENUE	510	520	531	541	552	563	574	586	598	609
INTEREST REVENUE EARNED	9,996	10,196	10,400	10,608	10,820	11,036	11,257	11,482	11,712	11,946
WORK RECOVERABLE REVENUE	510	520	531	541	552	563	574	586	598	609
HYDRANT CHARGES (Sprinklers)	29,519	30,109	30,711	31,326	31,952	32,591	33,243	33,908	34,586	35,278
OCCUPANCY CHARGE	332	338	345	352	359	366	373	381	388	396
TOWER ANTENNA RENTAL	14,280	14,566	14,857	15,154	15,457	15,766	16,082	16,403	16,731	17,066
SPRINKLER FEES	29,474	30,063	30,665	31,278	31,904	32,542	33,192	33,856	34,533	35,224
CONNECTION FEES	19,890	20,288	20,694	21,107	21,530	21,960	22,399	22,847	23,304	23,770
LATE PENALTY	13,770	14,045	14,326	14,613	14,905	15,203	15,507	15,817	16,134	16,456
Total-Non Rate Revenues	118,280	120,646	123,059	125,520	128,030	130,591	133,203	135,867	138,584	141,356
Operating Subsidies	-	-	-	-	-	-	-	-	-	-
Contributions from Operating Reserve	-	-	18,002	99,750	-	1,215	-	1,423	-	2,890
Total Operating Revenue	118,280	120,646	141,061	225,270	128,030	131,806	133,203	137,290	138,584	144,246
Net Water Costs To Be Recovered From Users	1,777,975	2,173,020	2,553,233	2,887,990	3,070,447	3,020,533	3,040,429	3,055,706	3,075,694	3,091,050

Appendix I

2021 – 2030 Operating Budget Forecast – Wastewater

APPENDIX I: 2021 – 2030 OPERATING FORECAST – WASTEWATER

2021 - 2030 Operating Budget Forecast										
Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Operating Expenditures	-	-	-	-	-	-	-	-	-	-
Wastewater Treatment non-Union Wages	109,176	111,359	113,586	115,858	118,175	120,539	122,950	125,409	127,917	130,475
Wastewater Treatment Union Wages	126,682	129,216	131,800	134,436	137,125	139,867	142,664	145,518	148,428	151,397
HR Management	11,832	12,069	12,310	12,556	12,807	13,063	13,325	13,591	13,863	14,140
Office Expenses	40,644	41,457	42,286	43,132	43,994	44,874	45,772	46,687	47,621	48,573
Facility Maintenance	143,006	145,866	148,783	151,759	154,794	157,890	161,048	164,269	167,554	170,905
Machine & Equipment Maintenance	11,220	11,444	11,673	11,907	12,145	12,388	12,636	12,888	13,146	13,409
Fleet Maintenance	15,237	15,541	15,852	16,169	16,493	16,823	17,159	17,502	17,852	18,209
Wastewater Collection Non-Union Wages	109,176	111,359	113,586	115,858	118,175	120,539	122,950	125,409	127,917	130,475
Wastewater Collection Union Wages	126,681	129,215	131,799	134,435	137,124	139,866	142,663	145,517	148,427	151,395
Facility Maintenance	16,983	17,323	17,669	18,022	18,383	18,751	19,126	19,508	19,898	20,296
Wastewater Service Laterals	7,650	7,803	7,959	8,118	8,281	8,446	8,615	8,787	8,963	9,142
Pumping Stations	23,511	23,981	24,461	24,950	25,449	25,958	26,477	27,007	27,547	28,098
Wastewater Collection Mains	21,012	21,432	21,861	22,298	22,744	23,199	23,663	24,136	24,619	25,111
Transfer to Operating Reserve	35,107	-	-	-	72,577	-	-	-	3,941	-
Sub Total Operating Expenditures	797,916	778,065	793,627	809,499	898,266	842,203	859,047	876,228	897,694	911,627
Capital-Related	-	-	-	-	-	-	-	-	-	-
Existing Debt (Principal) - Non-Growth Related	26,702	27,621	28,570	29,553	30,569	31,621	32,708	33,833	34,996	36,200
Existing Debt (Interest) - Non-Growth Related	19,778	18,868	17,926	16,952	15,944	14,901	13,823	12,708	11,554	10,361
Transfer to Capital Reserves and Reserve Funds - #2	1,426,009	1,426,009	1,426,009	1,426,009	1,426,009	1,426,009	1,426,009	1,426,009	1,426,009	1,426,009
Sub Total Capital Related Expenditures	1,472,490	1,507,678	1,507,686	1,578,055	1,753,967	1,753,975	1,753,985	1,753,994	1,754,004	1,754,014
Total Expenditures	2,270,406	2,285,743	2,301,312	2,387,554	2,652,233	2,596,178	2,613,031	2,630,222	2,651,698	2,665,642
Non-Rate Revenues	-	-	-	-	-	-	-	-	-	-
CONNECTION FEES	19,890	20,288	20,694	21,107	21,530	21,960	22,399	22,847	23,304	23,770
SEWER PENALTY	13,770	14,045	14,326	14,613	14,905	15,203	15,507	15,817	16,134	16,456
SEWER-BANK INTEREST EARNING	49,776	50,772	51,787	52,823	53,879	54,957	56,056	57,177	58,321	59,487
WORK RECOVERABLE REVENUE	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219
Total-Non Rate Revenues	84,456	86,145	87,868	89,625	91,418	93,246	95,111	97,013	98,954	100,933
Net Wastewater Costs To Be Recovered From Users	2,185,950	2,173,537	2,193,187	2,243,483	2,560,815	2,501,763	2,517,162	2,532,597	2,552,744	2,563,577

Appendix J

**Council Report FIN-2020-11 Water and
Wastewater Rate Study Interim Report**



GANANOQUE

Council Report – FIN-2020-11

Date: April 28, 2020

☐ **IN CAMERA**

Subject: Water Rate Study Interim Report

Author: Melanie Kirkby, Treasurer

☒ **OPEN SESSION**

RECOMMENDATION:

BE IT RESOLVED THAT THE COUNCIL OF THE TOWN OF GANANOQUE APPROVE OPTION _____, REGARDING THE 2021 CAPITAL RATE FEE, AS PRESENTED IN COUNCIL REPORT FIN-2020-11.

RECOMMENDATION:

BE IT RESOLVED THAT THE COUNCIL OF THE TOWN OF GANANOQUE APPROVE OPTION _____, REGARDING THE 2021 WATER / WASTEWATER METER RATIOS, AS PRESENTED IN COUNCIL REPORT FIN-2020-11.

STRATEGIC PLAN COMMENTS:

Sector 2 – Infrastructure / Environment – Strategic Initiative #1 – Assess the Town’s current infrastructure to ensure sufficient capacity exists to support future growth.

Sector 3 – Financial Sustainability – Strategic Initiative #1 – Ensure that Gananoque is and remains an affordable place to do business and raise a family.

BACKGROUND:

For several years during the annual budget deliberations Councils have questioned the Water / Wastewater Rates, the billing methodology and how to adequately fund the Water & Wastewater System.

The Town Auditors have been recommending undertaking an updated Water Rate Study. There was a study commissioned in 2012, but the recommendations were not implemented and the projected revenues were not realized.

In the 2019 Capital Budget, Council approved \$50,000 to hire a consulting firm to undertake a Water / Wastewater Rate Study.

RFP UTIL-2019-02 for a Water / Wastewater study closed on October 7, 2019 and the proposal was awarded to DFA Infrastructure International.

INFORMATION/DISCUSSION:

Since the contract was awarded to DFA, staff has held virtual meetings with the consultants. The Consultants have reviewed the current rate methodology, the operating costs, the 10-year Capital forecast, current and forecasted customer statistics.

At this point in the project, DFA are looking for guidance from Council as to which routes Council would prefer to achieve appropriate funding levels. DFA staff have prepared a presentation for Council to review. The feedback from Council will be incorporated in the Final Study Report.

The 2 primary questions that Staff / DFA are asking are;

1. Whether to continue with separate operating and capital charges or fund operating from consumption and capital from a flat fee?
2. Whether to continue with the current meter ratios or move toward or implement AWWA ratios?

The results of the Rate Study will be the foundation of the Water / Wastewater Rates and Revenue Budgets for 2021 - 2025.

The Town of Gananoque must apply for the Provincial License to Provide Municipal Drinking Water by February 2021. The application is required on a 5 year cycle, and must be accompanied by a Financial Plan that demonstrates that the Water System is Financially Sustainable.

The first issue where Staff / DFA are looking for a consensus is the capital flat rate fee.

In 2016, the flat rate fee for capital was separated from the operating flat rate fee. Staff and Council felt that it was a more transparent fee system, similar to Hydro, as it allowed the customer to see what percentage of the bill funds operating vs capital.

The Manager of Public Works at that time, recommended that the capital fee be charged at rate levels, 1 for users of less than 1000m³ per year and double that rate for consumers of more than 1000 m³ per year. The capital rate each year is calculated by dividing the capital requirement by the weighted number of customers.

Currently the Operating expenses are funded by consumption fees and flat rate operating fees. Capital is funded through flat rate fees.

DFA are recommending that going forward, the operating expenses be funded through consumption fees and capital expenses be funded through flat rate fees. This decision is also impacted by the meter ratio decision, because the capital rate fees would no longer be based on consumption, but by meter ratio.

Council consensus regarding operating and capital funding methodology is required:

Option 1 – Continue to fund through consumption fees, operating flat rate fees and capital flat rate fees.

Option 2 – Fund operating expenses through consumption fees and capital expenses from meter ratio flat rate fees.

The second issue where staff / DFA are looking for a consensus is the Utility Billing Methodology.

There are many drastically different methodologies used to allocate Water / Wastewater System Costs.

Some Municipalities use flat rate charges, which simply divides the cost by the number of customers. This eliminates the need for water meters and reading, however there is no incentive to conserve water.

Some Municipalities charge different rates for residential vs commercial or industrial customers. Which customer is subsidized depends on that Council's priorities. Some may prefer to subsidize residential customers by charging higher rates to commercial / industrial. Some prefer to encourage economic development by offering reduced rates for higher use, i.e. commercial and residential customers, to the cost of residential customers.

Some municipalities allow a set amount of water consumption, which is included in the flat rate fees and only bill for consumption above the allotment.

The current Town meter size ratios have been in effect for many years. Staff have not been able to find any documentation regarding how they were initially calculated; they have just been standard practice.

DFA has discussed with staff that the majority of Water systems in North America use ratios described as AWWA, (American Water Works Association). As detailed in the presentation, the AWWA ratios are significantly higher than those currently adopted in Gananoque. AWWA ratios would shift a greater portion of the system costs to the larger meters, which are usually commercial. As these shifts are radical, staff are recommending that the shift be phased in over a 5-year timeframe.

Council consensus regarding meter ratios is required:

Option 1 – Keep the existing ratios.

Option 2 – Phase in the AWWA ratios over a 5 year timeframe (Recommended).

Option 3 – Adopt the AWWA ratios in 2021.

APPLICABLE POLICY/LEGISLATION:

Sustainable Water and Sewage Systems Act, 2002
Safe Drinking Water Act, 2002 (Ont Reg 453/07)

FINANCIAL CONSIDERATIONS:

As described

CONSULTATIONS:

Don Richards, Superintendent of Utilities

Paul McMunn, Manager of Public Works

ATTACHMENTS:

None.

APPROVAL	<div></div> <div><hr/></div> <div>Melanie Kirkby, Treasurer</div> <div>Certifies that unless otherwise provided for in this report the funds are contained within the approved Budgets and that the financial transactions are in compliance with Council's own policies and guidelines and the <i>Municipal Act</i> and regulations.</div> <div><hr/></div> <div>Shellee Fournier, CAO</div>
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Appendix K

2021 - 2030 Sustainable Water Rates and Charges

APPENDIX K: 2021 – 2030 SUSTAINABLE WATER RATES AND CHARGES

Projected Annual Base Charges and Revenues										
Base Charge By Meter Size	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Annual Increase %Increases	94.66%	39.71%	26.98%	21.20%	-1.71%	-0.17%	-0.17%	-0.17%	-0.17%	-0.17%
5/8	\$ 330.65	\$ 461.95	\$ 586.58	\$ 710.92	\$ 698.79	\$ 697.61	\$ 696.44	\$ 695.27	\$ 694.11	\$ 692.94
3/4	\$ 390.16	\$ 582.06	\$ 786.02	\$ 1,009.51	\$ 1,048.19	\$ 1,046.42	\$ 1,044.66	\$ 1,042.91	\$ 1,041.16	\$ 1,039.42
1	\$ 588.55	\$ 905.43	\$ 1,255.29	\$ 1,649.34	\$ 1,746.98	\$ 1,744.03	\$ 1,741.10	\$ 1,738.18	\$ 1,735.26	\$ 1,732.36
1 1/2	\$ 1,071.30	\$ 1,699.98	\$ 2,416.72	\$ 3,241.80	\$ 3,493.95	\$ 3,488.07	\$ 3,482.20	\$ 3,476.35	\$ 3,470.53	\$ 3,464.72
2	\$ 1,745.82	\$ 2,753.23	\$ 3,894.91	\$ 5,203.94	\$ 5,590.32	\$ 5,580.91	\$ 5,571.52	\$ 5,562.17	\$ 5,552.84	\$ 5,543.55
3	\$ 1,864.85	\$ 2,993.45	\$ 4,293.78	\$ 5,801.12	\$ 6,289.11	\$ 6,278.52	\$ 6,267.96	\$ 6,257.44	\$ 6,246.95	\$ 6,236.49
4	\$ 5,144.88	\$ 8,278.18	\$11,895.89	\$16,095.26	\$17,469.76	\$17,440.33	\$17,411.00	\$17,381.77	\$17,352.63	\$17,323.59
rural	\$ 826.62	\$ 1,154.88	\$ 1,466.46	\$ 1,777.30	\$ 1,746.98	\$ 1,744.03	\$ 1,741.10	\$ 1,738.18	\$ 1,735.26	\$ 1,732.36
addional unmetered units	\$ 330.65	\$ 461.95	\$ 586.58	\$ 710.92	\$ 698.79	\$ 697.61	\$ 696.44	\$ 695.27	\$ 694.11	\$ 692.94
Projected Revenue from Base Charges	\$ 870,516	\$1,270,516	\$1,670,516	\$2,070,516	\$2,070,516	\$2,070,516	\$2,070,516	\$2,070,516	\$2,070,516	\$2,070,516
Projected Consumption Charges and Revenues										
	2021	2022	2,023	2,024	2,025	2026	2027	2028	2029	2030
Annual Increase %Increases	4.14%	-2.46%	-3.54%	-7.85%	22.16%	-5.12%	1.96%	1.44%	1.90%	1.40%
Volumetric Water Rates	\$ 2.03	\$ 1.98	\$ 1.91	\$ 1.76	\$ 2.15	\$ 2.04	\$ 2.08	\$ 2.11	\$ 2.15	\$ 2.18
Projected Revenue from Consumption Charge	\$ 907,459	\$ 902,504	\$ 882,717	\$ 817,474	\$ 999,931	\$ 950,017	\$ 969,913	\$ 985,190	\$1,005,178	\$1,020,534
Total Water User Revenue	1,777,975	2,173,020	2,553,233	2,887,990	3,070,447	3,020,533	3,040,429	3,055,706	3,075,694	3,091,050

Appendix L

2021 - 2030 Sustainable Wastewater Rates and Charges

APPENDIX L: 2021 – 2030 SUSTAINABLE WASTEWATER RATES AND CHARGES

Base Charge By Meter Size	Projected Annual Base Charges and Revenues									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Annual Increase %Increases	5.40%	-4.27%	-3.43%	-2.22%	-1.71%	-0.17%	-0.17%	-0.17%	-0.17%	-0.17%
5/8	\$ 541.64	\$ 518.49	\$ 500.73	\$ 489.63	\$ 481.27	\$ 480.46	\$ 479.65	\$ 478.85	\$ 478.05	\$ 477.25
3/4	\$ 639.14	\$ 653.30	\$ 670.97	\$ 695.27	\$ 721.91	\$ 720.69	\$ 719.48	\$ 718.27	\$ 717.07	\$ 715.87
1	\$ 964.12	\$ 1,016.24	\$ 1,071.55	\$ 1,135.93	\$ 1,203.18	\$ 1,201.15	\$ 1,199.13	\$ 1,197.12	\$ 1,195.11	\$ 1,193.11
1 1/2	\$ 1,754.91	\$ 1,908.04	\$ 2,062.99	\$ 2,232.70	\$ 2,406.36	\$ 2,402.31	\$ 2,398.27	\$ 2,394.24	\$ 2,390.23	\$ 2,386.23
2	\$ 2,859.86	\$ 3,090.19	\$ 3,324.82	\$ 3,584.07	\$ 3,850.18	\$ 3,843.69	\$ 3,837.23	\$ 3,830.78	\$ 3,824.36	\$ 3,817.96
3	\$ 3,054.85	\$ 3,359.80	\$ 3,665.32	\$ 3,995.36	\$ 4,331.45	\$ 4,324.15	\$ 4,316.88	\$ 4,309.63	\$ 4,302.41	\$ 4,295.21
4	\$ 8,427.92	\$ 9,291.31	\$10,154.73	\$11,085.15	\$12,031.80	\$12,011.53	\$11,991.33	\$11,971.20	\$11,951.13	\$11,931.13
rural	\$ 1,354.10	\$ 1,296.22	\$ 1,251.82	\$ 1,224.07	\$ 1,203.18	\$ 1,201.15	\$ 1,199.13	\$ 1,197.12	\$ 1,195.11	\$ 1,193.11
addional unmetered units	\$ 541.64	\$ 518.49	\$ 500.73	\$ 489.63	\$ 481.27	\$ 480.46	\$ 479.65	\$ 478.85	\$ 478.05	\$ 477.25
Projected Revenue from Base Charge	\$1,426,009	\$1,426,009	\$1,426,009	\$1,426,009	\$1,426,009	\$1,426,009	\$1,426,009	\$1,426,009	\$1,426,009	\$1,426,009
	Projected Annual Base Charges and Revenues									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Annual Increase %Increases	4.49%	-3.53%	1.22%	6.02%	38.64%	-5.33%	1.30%	1.28%	1.69%	0.83%
Volumetric Wastewater Rates	\$ 1.70	\$ 1.64	\$ 1.66	\$ 1.76	\$ 2.44	\$ 2.31	\$ 2.34	\$ 2.37	\$ 2.41	\$ 2.43
Projected Revenue from Consumption Charge	759,941	747,528	767,178	817,474	1,134,806	1,075,754	1,091,153	1,106,588	1,126,735	1,137,568
Total Wastewater User Revenue	2,185,950	2,173,537	2,193,187	2,243,483	2,560,815	2,501,763	2,517,162	2,532,597	2,552,744	2,563,577

Appendix M

Requirements of O. Reg. 453/07

Appendix L: Requirements of O.Reg. 453/07

Requirements			How Requirements are Met
1.	The financial plans must be approved by a resolution that is passed by,		
	i.	The council of the municipality, if the owner of the drinking water system is a municipality.	<ul style="list-style-type: none"> It is expected the Council will approve the Updated Financial Plan prior to February 2021.
	ii.	The governing body of the owner, if the owner of the drinking water system has a governing body and is not a municipality.	<ul style="list-style-type: none"> N/A
2.	The financial plans must apply to a period of at least six years.		<ul style="list-style-type: none"> Applies for 6 years from 2021 to 2026 inclusive.
3.	The first year to which the financial plans must apply must be the year determined in accordance with the following rules:		
	i.	If the financial plans are required by subsection 2, the first year to which the financial plans must apply must be the year in which the drinking water system's existing municipal drinking water licence would otherwise expire.	<ul style="list-style-type: none"> The licence expires in 2016 for the water systems (No. 156-301). Therefore, the first year of the Updated Financial Plan is 2016
	ii.	If the financial plans are required by a condition that was included in a municipal drinking water licence under subsection 1 (3), the first year to which the financial plans must apply must be the later of 2010 and the year in which the first licence for the system was issued.	<ul style="list-style-type: none"> N/A
4.	Subject to subsection (2), for each year to which the financial plans apply, the financial plans must include the following:		
	i.	Details of the proposed or projected financial position of the drinking water system itemized by:	<ul style="list-style-type: none"> See Statement of Financial Position for all water systems combined in Financial Plan.
		a. Total financial assets	<ul style="list-style-type: none"> See Statement of Financial Position for all water systems combined in Financial Plan.
		b. Total liabilities	<ul style="list-style-type: none"> See Statement of Financial Position for all water systems combined in Financial Plan.
		c. Net financial assets (debt)	<ul style="list-style-type: none"> See Statement of Financial Position for all water systems combined in Financial Plan.
		d. Non-financial assets that are tangible capital assets, tangible capital assets under construction, inventories of supplies and prepaid expenses.	<ul style="list-style-type: none"> See Statement of Financial Position for all water systems combined in Financial Plan. TCA Projections in Financial Plan.
		e. Changes in tangible capital assets that are additions, donations, write downs and disposals.	<ul style="list-style-type: none"> See Statement of Financial Position for all water systems combined in Financial Plan. TCA Projections in Financial Plan.

Appendix L: Requirements of O.Reg. 453/07

	ii.	Details of the proposed or projected financial operations of the drinking water system itemized by,	<ul style="list-style-type: none"> See Statement of Operations for all water systems combined in Financial Plan.
		a. Total revenues, further itemized by water rates, user charges and other revenues.	<ul style="list-style-type: none"> See Statement of Operations for all water systems combined in Financial Plan.
		b. Total expenses, further itemized by amortization expenses, interest expenses and other expenses	<ul style="list-style-type: none"> See Statement of Operations for all water systems combined in Financial Plan.
		c. Annual surplus or deficit, and	<ul style="list-style-type: none"> See Statement of Operations for all water systems combined in Financial Plan.
		d. Accumulated surplus or deficit	<ul style="list-style-type: none"> See Statement of Operations for all water systems combined in Financial Plan.
	iii.	Details of the drinking water system's proposed or projected gross cash receipts and gross cash payments itemized by,	<ul style="list-style-type: none"> See Statement of Cash Flow for all water systems combined in Financial Plan.
		a. Operating transactions that are cash received from revenues, cash paid for operating expenses and finance charges, - done in full cost report	<ul style="list-style-type: none"> See Statement of Cash Flow for all water systems combined in Financial Plan.
		b. Capital transactions that are proceeds on the sale of tangible capital assets and cash used to acquire capital assets,	<ul style="list-style-type: none"> See Statement of Cash Flow for all water systems combined in Financial Plan.
		c. Investing transactions that are acquisitions and disposal of investments,	<ul style="list-style-type: none"> See Statement of Cash Flow for all water systems combined in Financial Plan.
		d. Financing transactions that are proceeds from the issuance of debt and debt repayment.	<ul style="list-style-type: none"> See Statement of Cash Flow for all water systems combined in Financial Plan.
		e. Changes in cash and cash equivalents during the year,	<ul style="list-style-type: none"> See Statement of Cash Flow for all water systems combined in Financial Plan.
		f. Cash and cash equivalents at the beginning and end of the year.	<ul style="list-style-type: none"> See Statement of Cash Flow for all water systems combined in Financial Plan.
	iv.	Details of the extent to which the information described in subparagraphs i, ii and iii relates directly to the replacement of lead service pipes as defined in section 15.1- 3 of Schedule 15.1 to Ontario Regulation 170/03 (Drinking Water Systems), made under the Act.	<ul style="list-style-type: none"> There is no dedicated lead service pipe removal program in place. If lead pipe is discovered during normal operations, it is replaced accordingly. Therefore, there are no significant material financial costs associated with lead pipe removal.
5.	The owner of the drinking water system must.		
	i.	Make the financial plans available, on request, to members of the public who are served by the drinking water system without charge,	<ul style="list-style-type: none"> This will be done by the municipality following Council approval.
	ii.	Make the financial plans available to members of the public without charge through publication on the Internet, if the owner maintains a website on the Internet,	<ul style="list-style-type: none"> The Financial Plan will be posted on the municipality's website and made available for public review at no charge.

Appendix L: Requirements of O.Reg. 453/07

	iii.	Provide notice advising the public of the availability of the financial plans under subparagraphs i and ii, if applicable, in a manner that, in the opinion of the owner, will bring the notice to the attention of members of the public who are served by the drinking water system.	<ul style="list-style-type: none"> A notice will be issued following Council approval.
6.		The owner of the drinking water system must give a copy of the financial plans to the Ministry of Municipal Affairs and Housing. O. Reg. 453/07, s. 3 (1).	<ul style="list-style-type: none"> Will be submitted following Council approval.
		Each of the following sub-subparagraphs applies only if the information referred to in the sub-subparagraph is known to the owner at the time the financial plans are prepared.	<ul style="list-style-type: none"> The Financial Plan was prepared using available information at the time of preparation and may not contain all desired items. Reasonable assumptions were made and these are noted in the Financial Plan.
	1.	Sub-subparagraphs 4 i A, B and C of subsection (1).	<ul style="list-style-type: none"> The Financial Plan was prepared using available information at the time of preparation and may not contain all desired items. Reasonable assumptions were made and these are noted in the Financial Plan.
	2.	Sub-subparagraphs 4 iii A, C, E and F of subsection (1). O. Reg. 453/07, s. 3 (2).	<ul style="list-style-type: none"> The Financial Plan was prepared using available information at the time of preparation and may not contain all desired items. Reasonable assumptions were made and these are noted in the Financial Plan.