Town of Niagara-on-the-Lake

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

DFA Infrastructure International Inc.

March 6, 2020

DFA Infrastructure International Inc.

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1593 Four Mile Creek Road
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Re: 2020 Water and Wastewater Rate Study and O. Reg 453/07 Financial Plan

Dear Kyle:

We are pleased to submit to you the final version of the above noted report entitled: "Water and Wastewater Rate Study and O. Reg 453/07 Financial Plan". Should you have any question please do not hesitate to contact me.

Yours truly,

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

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1 Introduction

1.1 Background

The Town of Niagara-on-the-Lake (the Town) owns and operates two (2) water distribution systems that service the approximately 7574 customers in Niagara-on-the-Lake and is therefore responsible for the costs and financing associated with managing these systems. Niagara Region (the Region) is responsible for the water treatment and transmission. The Area Municipalities purchase treated water from the Region and are responsible for the water distribution services to their respective customers.

The Town obtains its water from the Decew Water Treatment Plant (WTP) and the Niagara Falls WTP which are owned and operated by the Region. The Town distributes the drinking water through the two (2) distribution systems that are supplied by these two (2) Regional water treatment plants. The Niagara-on-the-Lake Distribution System is supplied from the Decew WTP and the Bevan Heights Distribution System is supplied from the Niagara Falls WTP. For the purposes of this report, the Niagara-on-the-Lake and Bevan Heights Water Distribution Systems are considered as one. The Region's charges to the Town for water supply include a fixed charge established by the Region plus an amount based on actual consumption multiplied by a unit rate per cubic metre. In simple terms, the Region is the "wholesaler" and the Town is the "retailer" of water services in Niagara-on-the-Lake.

The total cost of the Town's water services, including payments to the Region, are recovered from operating (non-rate) revenues (e.g. administrative fees, etc.) and through direct billing to customers (rate revenues)

The Town owns and operates the wastewater collection systems that service the approximately 6101 customers in Niagara-on-the-Lake and is therefore responsible for the costs and financing associated with managing these systems. In Niagara, the Area Municipalities provide the wastewater collection services and the Region is responsible for the wastewater treatment.

The Town transmits its wastewater for treatment by the Region at the treatment facilities located on Lakeshore Road in Niagara-on-the-Lake and the Stanley Avenue Wastewater Treatment Plant in Niagara Falls. The Region's charge to the Town for wastewater treatment services is an Annual Fixed Charge that is paid in equal monthly amounts. This is a major component of the Town's annual service delivery costs

The total cost of the Town's wastewater services, including payments to the Region, are recovered from non-rate revenues (e.g. administrative fees, etc.) and through the revenues from rates and charges to customers. In simple terms, the Region is the "wholesaler" and the Town is the "retailer" of wastewater services in Niagara-on-the-Lake.

The last Water and Wastewater Rate review was conducted by the Town was in 2014, as such Town staff and Council recognized the need to update the rate study. Accordingly, DFA Infrastructure International Inc. (DFA) was retained by the Town to conduct a comprehensive Water and Wastewater Rate Review. The study includes determination of the full cost of service for water and wastewater over ten (10) years from 2020 to 2029 inclusive, and the calculation of rates that adequately fund the cost of service, while treating ratepayers in a fair and equitable manner.

The Town is also required to prepare and submit an updated Water System Financial Plan to meet the requirements of the Drinking Water Quality Management System as defined under O.Reg. 453/07 for renewal of its water distribution system licence.

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;
- Update the Town's current rates and charges to its customers, using the existing structure of a base charge and uniform consumption rate per cubic metre 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 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 Niagara-on-the-Lake By-Law

Town By-law No. 5112-18 establishes the water and wastewater rates and charges that apply to the various customer classes in 2019. By-law 5112-18 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 2020 to 2029 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 Asset Management Plan 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 3-2 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)	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). Changes in regulations can result in additional (O&M) activities and added costs. This was evident when the	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

Cost Component	Cost Drivers	Future Cost Implications
	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 Environmnet and Climate Change (MOECC) would require more actions to be undertaken (and increased costs) ny municipalities.	administrative fees and grants offset these costs. 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. Operating costs are assumed to increase by 2% annually.
Regional Charges	*Regional Charges for the Supply of Treated Water to the Town.* The cost of water treatment and supply as billed by the Region includes a fixed charge and variable charges based on a uniform volumetric rate. The fixed charge represents the Town's proportionate share (based on the 3-year average volume consumed compared to other municipalities) of 25% of the Region's annual cost. The uniform rate is based on 75% of the Region's cost divided by the total volume of water produced by the Region. This cost is variable depending on consumption and is calculated as the product of the actual (metered) water purchased by the Town multiplied by the Regional uniform water rate. *Regional Charges to the Town for Wastewater Treatment*. The Region recovers 100% of its annual wastewater costs as a fixed charge to the Area Municipalities. The Region`s charge to the Town for treatment of wastewater is based on the Town's proportionate share of total Region-wide costs. A rolling historical three (3) year average volume (from October to September) is used by the Region to calculate the Town's proportionate share. The annual costs are paid by the Town in equal monthly instalments in year calendar year. At the end of each year the actual volumes treated are determined by the Region based on actual flows and an adjustment to the Town's cost share is made included in the charge two (2) years later.	Changes in Regional water costs and the level of the Town's future consumption will impact on the cost of water supplied to the Town. It is assumed that the Region's water costs increase by 3.80% annually The Region's total water flows are assumed to remain constant over the forecast period other than the increased flows generated by Town growth. Changes in Regional wastewater costs and the level of the Town's future wastewater flows will impact on the cost of wastewater treated by the Town It is assumed that the Region's wastewwater costs increase by 5.97% annually. The Region's total wastewater flows are assumed to remain constant over the forecast period other than the increased flows generated by Town growth.

Cost Component	Cost Drivers	Future Cost Implications
Effective Date of Annual Regional & Town Rates	Timing of the Regional rate increases will have an impact of the annual charge to the Town. Timing of the Town rate increase will have an impact on the level of revenue generated from users.	For the purposes of the study the annual Region rate increase and Town increase is assumed to occur on January 1.
Customer Growth	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	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. Customer Growth is based on projections contained within the Town's 2018 Development Charges Background Study.
Consumption Volume (m3)	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 is 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.	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.
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	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.) Growth related capital investments are as provided from the Town's 2020 - 2029 capital plan.
Asset preservation and renewal	This is mainly the replacement of aging Tangible Capital Assets (TCA) e.g. old water mains, plant components, well conponents etc. that have exceeded their service life.	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.

Cost Component	Cost Drivers	Future Cost Implications
		Asset renewal needs are as provided from the Town's 2020-2029 Capital Plan, and supplemented with additional lifecycle needs as determined by the Town's 2014 Asset Management Plan.
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.	Would increase costs in the year the expenditure is required. Financing can be through a combination of debt and reserves. Other capital investments are as provided from the Town's 2020 - 2029 capital plan.
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 tend to drive up rates in the year the capital expenditure is required.	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 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
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 (2020 to 2029). The key cost areas include:

- Operations & Maintenance (O&M) cost projections;
- Cost of water supplied and wastewater treated by the Region;
- Capital Budget based on the approved capital forecast;
- 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 such as revenue from bulk water sales. 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 3-3. 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	• Town's TCA Policy and Asset Management Plan • Information Provided by the Town
Asset Replacement Costs	• Town's TCA Policy and Asset Management Plan • Historical Costs Provided by the Town indexed to 2020
Asset Values	• Town's TCA Policy and Asset Management Plan • Information Provided by the Town
O & M Costs and Revenue Projections	• Town's 2020 Water Operating Budget
Capital Cost Projections	• Town's 2020 Water Capital Budget and 2021-2029 Capital Forecasts
Debt	• Town's 2020 Water and Wastewater Operating Budgets and 2021-2029 Capital Budget Forecasts

Investments, Reserve balances etc.	• Information provided by the Town
Existing Customers	• Town's Customer count Provided by the Town
Growth	• Information Provided by the Town including information contained in the Town's 2018 DC Background Study
Water and Wastewater Volumes	• 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 current rate structure 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 7,574 metered water customers and 6,101 metered wastewater customers based on information provided by the Town. This number is expected to increase over the 2020 – 2029 forecast period. Table 4-1 shows the current total number of residential and commercial customers.

Table 4-1: 2020 Customer Count

Projected 2020 Water and Wastewater Customers		
Customers by Meter Size	**Water Customers**	**Wastewater Customers**
up to 3/4"	7,195	5,800
1"	185	139
1 1/2"	78	66
2"	74	62
3"	24	18
4"	16	14
6"	2	2
8"	-	-
10"	-	-
Total	**7,574**	**6,101**

4.2 Customer Growth Projections

Table 4-2 shows the increase in total customers over the 2020-2029 forecast period. Customer growth projections reflect the residential and commercial customer growth contained in the Town's 2018 Development Charges Background Study.

Customer growth over the 2020-2029 forecast period is projected to be 1,394 new residential units. Non-residential customer growth is also derived from the 2018 Development Charges Study. Projected employment growth is converted to reflect 54 new commercial customers over the 2020-2029 forecast period. Detailed customer growth projections by year are presented in Appendix B.

Table 4-2: Customer Growth Projection

Service	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Water	7,574	7,746	7,912	8,071	8,230	8,389	8,548	8,704	8,857	9,022
Wastewater	6,101	6,273	6,439	6,598	6,757	6,916	7,075	7,231	7,384	7,549

5 Volume Projections

5.1 2016 Water Consumption and Billed Wastewater Volume

Table 5-1 details the projected 2020 metered water consumption by customer class derived from billing records provided by the Town. There are approximately 7,574 metered customers projected to consume approximately 2,397,296 m^3 in 2020. Residential customers account for 52% of metered water consumption and non-residential customers account for 48%. 2020 Bulk water sales are projected at 87,747m^3.

When compared to the projected 3,309,802 m^3 of water to be supplied by the Region in 2020, it is estimated that there is approximately 824,759m^3, or 25% of water supplied by the Region that is considered to be "non-revenue" or "unaccounted for".

Table 5-1: 2020 Water Consumption (m^3)

Customer Type	Volume	Percentage
Residential	1,240,908	52%
Non-Residential	1,156,388	48%
Total	**2,397,296**	**100%**

Table 5-2 details the projected 2020 billed wastewater volume by customer class derived from billing records provided by the Town. It should be noted that the volume for wastewater billing are the metered water volumes for those wastewater customers that also have water services. This method of applying the wastewater rates

to the metered water consumption volumes for billing purposes is standard industry practice because wastewater flows are typically not metered by municipalities.

There are approximately 6,101 metered wastewater customers that are projected to generate approximately 1,826,129 m^3 of billed wastewater in 2020. Again, residential customers account for 53% of the projected billed wastewater volume and non-residential customers account for 47%.

It is projected that in 2020 approximately 3,141,000 m3 of wastewater volumes will be treated by the Region. These volumes include wastewater flows contributions from customers as well as inflow and infiltration (I&I) into the sanitary sewer system.

Table 5-2: 2020 Billed Wastewater Volume (m^3)

Customer Type	Volume	Percentage
Residential	977,282	54%
Non-Residential	848,848	46%
Total	**1,826,129**	**100%**

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 2020-2025 water consumption projections by customer class are shown below in Table 5-3 and billed wastewater volume in Table 5-4. Appendix C presents the 2020 – 2029 detailed water and wastewater volume projections including projected Regional water volume purchases, and wastewater volumes treated by the Region.

Table 5-3: 2020-2025 Water Consumption Projection (m^3)

	Water Customer Volume Projection					
Water Customer	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Projected Residential Water Consumption	1,240,908	1,269,403	1,296,868	1,323,131	1,349,395	1,375,658
Projected Non-Residential Water Consumption	1,156,388	1,164,426	1,172,465	1,180,504	1,188,542	1,196,581
Projected Total Water Consumption	**2,397,296**	**2,433,829**	**2,469,333**	**2,503,635**	**2,537,937**	**2,572,239**

Table 5-4: 2020-2025 Billed Wastewater Volume Projection (m^3)

Wastewater Customer	2020	2021	2022	2023	2024	2025
Projected Residential Wastewater Flows	977,282	1,005,777	1,033,242	1,059,505	1,085,769	1,112,032
Projected Wastewater Flows	848,848	856,886	864,925	872,963	881,002	889,041
Projected Total Wastewater Flows	**1,826,129**	**1,862,663**	**1,898,167**	**1,932,469**	**1,966,771**	**2,001,073**

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 2029 forecast. Additional asset management lifecycle provisions as determined by the Town's Asset Management plan were also included for both water and wastewater, thereby ensuring that sufficient annual capital funding was being provided from rates by 2029 to address the average annual capital lifecycle needs.

There is approximately $20.8 million in projected water related capital expenditures and approximately $11.2 million in projected wastewater related capital related expenditures required between 2020 and 2029. Contained within these capital forecasts are several growth-related projects that are needed to service anticipated residential and non-residential growth in the Town.

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 and developer contributions needed to fund growth related projects. The Town will only be required to incur debt to cashflow growth-related water projects as insufficient water development charges reserve funds are available over the forecast period. Debt financing and the reserve fund requirements are discussed in Sections 7.1 and 7.2.

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 note, the Town will only be required to incur debt to cashflow growth-related water projects as insufficient water development charges reserve funds are available over the forecast period.

Approximately $1.1 million in growth-related water debt is projected to be required to cash flow growth-related water projects between 2020 and 2029. It is assumed that new debt is issued with a term of 20 year and at an interest rate of 3.5%. The growth-related debt will be serviced from future development charge receipts and does not impact the rate payers and rates. Appendix F provides the details on 2020 - 2029 continuity of projected outstanding water and wastewater debt, showing annually new debt requirements and debt principal repayments.

6.2 Reserve Fund Requirements

There are two (2) separate capital related reserve funds for water and wastewater for which projections are made over the study period:

- The Capital Reserve Fund; and
- Development Charges Reserve Fund.

There are also Rate Stabilization Reserves for both water and wastewater services. Rate stabilization reserves will provide a source of funding for water and wastewater to offset any year-end operating deficits that may occur during the year, thereby avoiding unplanned rate spikes in the subsequent year.

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 reserve fund 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 primary source of financing for water projects and has a projected opening balance in 2020 of approximately $4.3 million.

Annual contributions to the water capital reserve are increasing over the forecast period to ensure sufficient funds are available to finance the water capital program, which includes provisions for additional asset management needs as contained in the Town's Asset Management Plan. Average annual contribution over the forecast period are estimated at $2.2 million per year. The annual closing balance is projected to increase to approximately $7.8 million by 2029. The 2029 closing balance represents about 4% of the current water asset replacement value of $211 million, placing the Town in a strong 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 $1.0 million. The annual contributions to the wastewater capital reserve are increasing so that sufficient funds are available to finance the wastewater capital program, which includes provisions for additional asset management needs as contained in the Town's Asset Management Plan. Average annual contribution over the forecast period are estimated at $1.1 million per year. The annual closing balance is projected to increase to approximately $1.1 million by 2029. The 2029 closing balance represents about 1% of the current wastewater asset replacement value of $126 million, placing the Town in a fair position to begin funding water capital works beyond the study period.

Water Development Charges Reserve Fund

The Water Development Charges Reserve Fund has a negative opening balance in 2020 of ($442) thousand, with a small increase to ($507) thousand by 2020. There are three growth-related water projects which include the

Queenston Rd. (Airport to Coon) in 2010 at $1,060,00, Concession 6 Road – (RR55 to Line 2Road) in 2021 at $505,000, and Glendale Looping from ONL 40 in 2028 at $137,393. As there is currently a negative balance in the water development charges reserve fund it is expected that growth-related debt will be used to cash flow the growth components of these projects. Future debt servicing on the growth-related debt will be recovered from the development charges reserve and future development charge contributions. Annual contributions to the water development charge reserve are based on the customer growth projections detailed in Section 4, and current water development charge rates indexed annually by 3%.

Wastewater Development Charges Reserve Fund

The Wastewater Development Charges Reserve Fund has an opening balance in 2020 of approximately $356 thousand, increasing to approximately $3.3 million in 2029. All wastewater growth-related projects are expected to be funded from this reserve. Annual contributions to the wastewater development charge reserve are based on the customer growth projections detailed in Section 4, and current wastewater development charge rates indexed annually by 3%.

Water and Wastewater Rate Stabilization Reserves

As previously noted, this study recommends the use of a rate stabilization reserve for both water and wastewater services that will provide a source of funding to offset any year-end operating deficits that may occur during the period.

The water rate stabilization reserve is projected to achieve a balance of $203 thousand by 2029. The wastewater rate stabilization reserve is projected to achieve a balance of $307 thousand by 2029. These balances represent approximately 3% and 4% of their respective gross water and wastewater operating expenditures. Best practice in regards to a rate stabilization reserve, where volumetric rates are a major source of overall revenue, is to strive to maintain a reserve balance of between 5% - 10% of gross operating revenues.

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 purchases and water distribution), and the wastewater system (i.e. treated wastewater 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;
- Bulk water and water used on construction revenues;
- 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 draft Operating Budget. The assumptions used in arriving at these projections are as follows:

- 2021 and beyond, O&M costs (not including non-recurring costs, reserve transfers and debt servicing) will increase annually by 2%; and
- Regional water charges for the supply of treated water to the Town includes a fixed charge and variable charges based on the Region's uniform volumetric rate. The fixed charge represents the Town's proportionate share (based on the 3-year average volume consumed compared to other municipalities) of 25% of the Region's annual cost. It is assumed that the Town's proportionate share of those costs remain constant over the forecast period at 5.43%. The uniform rate is based on 75% of the Region's cost divided by the total volume of water produced by the Region. It is assumed that the Region's water costs increase by 3.8% annually. The Region's total water flows are assumed to remain constant over the forecast period.
- Regional wastewater treatment charges to the Town are based on the Town's proportionate share of total Region-wide costs. A rolling historical three (3) year average volume (from October to September) is used by the Region to calculate the Town's proportionate share. At the end of each year the actual volumes of wastewater treated are determined by the Region based on actual flows and an adjustment to the Town's cost share is made included in the charge two (2) years later. It is assumed that the Region's wastewater costs increase by 5.97% annually and that the Town's proportionate share of those costs remain constant over the forecast period at 4.28%

Table 8.1 and Table 8.2 shows the Town's 2020 draft operating budgets for water and wastewater services including the net amount to be recovered from customers.

Table 7-1: 2020 Water Operating Budget

Town of Niagara-on-the-Lake Water Service 2020 Operating Budget Forecast	
Operating Expenditures	
Program Administration	$ 1,251,509
Training Division	$ 11,390
Inventory Maintenance	$ 100
Compliance	$ 3,710
Bulk Water Stations	$ 13,310
Hydrants	$ 20,080
Irrigation from Hydrants	$ 7,500
Meter Installations	$ 10,500
Meter Repairs	$ 27,600
Repair & Replace Mains	$ 12,670
Repair & Replace Services	$ 55,960
Service Installations (New)	$ 17,530
Utility Locates	$ 74,810
Valves	$ 2,120
Water Sampling & Testing	$ 19,550
Watermain Cleaning	$ 2,760
Regional Water Charges - Fixed	$ 623,711
Regional Water Charges - Variable	$ 1,992,501
Sub Total Operating Expenditures	**$ 4,147,311**
Capital-Related	
Existing Debt (Principal) - Non-Growth Related	$ 256,888
Existing Debt (Interest) - Non-Growth Related	$ 8,153
Transfer to Capital Reserves and Reserve Funds	$ 2,000,000
Sub Total Capital Related Expenditures	**$ 2,265,041**
Total Expenditures	**$ 6,412,352**
Non-Rate Revenues	
Administrative Revenue	$ 3,500
On & Off Fees	$ 430
Water on Contruction	$ 105,850
Recoveries	$ 5,140
Water Sales	$ 68,030
Recovery: Hydrant Rentals	$ 75,000
Hydrants: Services Rendered	$ 10,560
Irrigation from Hydrants; Services Rendered	$ 8,000
Meter Installation; Services Rendered	$ 50,000
Meter Repairs	$ 370
Repair & Replace Services	$ 3,610
Service Installations (New)	$ 12,000
Total-Non Rate Revenues	**$ 342,490**
Operating Subsidies	
Contributions from Operating Reserve	$ 28,462
Total Operating Revenues	**$ 370,952**
Net Water Costs To Be Recovered From Users	**$ 6,041,400**

Appendix H summarizes the projected 2020 – 2029 water systems gross operating & maintenance costs, non-rate revenues and net costs to be recovered from customers through the Town's base and consumption charges. The net annual costs of the water system are expected to increase from $6.0 million in 2020 to approximately $7.8 million by 2029.

Table 7-2: 2016 Wastewater Operating Budget

Town of Niagara-on-the-Lake Wastewater Service 2020 Operating Budget Forecast	
Operating Expenditures	
Program Adminstration	$ 410,399
Training Division	$ 2,140
Lateral Cleaning & Maintenance	$ 25,440
Manhole Maintenance	$ 50
Sewer CCTV Inspections	$ 48,790
Sewer Lateral Installations	$ 36,800
Sewer Main Cleaning	$ 59,620
Sewer Main Repairs	$ 1,060
Reimburse/Disconnect Program	$ 5,260
Trenchless Repair Program	$ 50,380
Grinder Pumps	$ 7,000
Regional Wastewater Charges - Fixed	$ 3,300,220
Transfer to Operating Reserve	$ 47,854
Sub Total Operating Expenditures	**$ 3,995,013**
Capital-Related	
Existing Debt (Principal) - Growth Related	$ 67,581
Existing Debt (Interest) - Growth Related	$ 9,143
Transfer to Capital Reserves and Reserve Funds	$ 750,000
Sub Total Capital Related Expenditures	**$ 826,724**
Total Expenditures	**$ 4,821,737**
Non-Rate Revenues	
Administrative Revenue	$ 1,480
Miscellanous Revenue	$ 10,000
Adminstrative Services Rendered	$ 210,000
Lateral Cleaning & Maintenance - Services Rendered	$ 80
Sewer Lateral Installations - Services Rendered	$ 21,570
Sewer Main Cleaning - Services Rendered	$ 110
Transfer from DC Wastewater	$ 1,841
Total-Non Rate Revenues	**$ 245,081**
Operating Subsidies	
Contributions from Development Charges Reserve Fund	$ 76,724
Total Operating Revenue	**$ 321,805**
Net Wastewater Costs To Be Recovered From Users	**$ 4,499,932**

Appendix I summarizes the projected 2020 – 2029 wastewater systems gross operating & maintenance costs, non-rate revenues and net costs to be recovered from customers through the Town's base and consumption charges. The net annual costs of the wastewater system are expected to increase from approximately $4.5 million in 2020 to $7.6 million by 2029.

8 Sustainable User Rates and Revenues

Appendix J presents the projected 2020 – 2029 sustainable water rates and revenues. Appendix K presents the projected 2020-2029 sustainable wastewater rates and revenues. These rates and revenues are based on the Town's current water and wastewater rate structure. 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.

8.1 Current Rates and Charges

The Town's current rate structure and rates are shown in Table 8-1. The rate structure includes a fixed charge to the customer based on the size of the water meter plus a uniform consumption rate. This rate structure is consistent with industry best practice.

Table 8-1: Current 2019 Water and Wastewater Rates and Charges

Rate Component	Meter Size	Rate	
Uniform Rate ($/M^3 of Metered Water Consumed)		$ 1.4969	$ 1.2663
Fixed Annual Charge Based on Meter Size ($/Year)	up to 3/4"	$ 294.12	$ 325.20
	1"	$ 412.08	$ 455.28
	1 1/2"	$ 529.80	$ 585.36
	2"	$ 853.44	$ 929.64
	3"	$ 3,237.36	$ 3,577.20
	4"	$ 4,120.20	$ 4,552.92
	6"	$ 6,180.24	$ 6,829.32
	8"	$ 8,534.76	$ 9,430.92
	10"	$ 11,771.88	$ 13,008.24

8.2 Water Rates and Revenue Projection

Table 8-2 presents the current and projected sustainable water rates and revenues for the five (5) year period 2019 – 2023. Based on the full cost assessment of the Town's water system the current rates are considered sufficient to financially sustain the system until 2023, where a 1% increase in rates is recommended. The 10-year projection of water rates and revenue is detailed in Appendix J. As noted at the bottom of Table 8-2, the split between the revenue generated from the base charge and revenue generated from the volumetric rate stays constant with 41% fixed and 59% variable. This is consistent with industry best practice as the majority of the Town's cost related to the delivery of water is fixed in nature, including the 25% fixed portion of the cost of water purchased by the Town from the Region.

Table 8-2: Projected Water Rates and Revenues

Projected Annual Water Base Charges and Revenues					
Customer Type	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Increase %Increases	**Current Rates**	**0.00%**	**0.00%**	**0.00%**	**1.00%**
up to 3/4"	294.12	$ 294.12	$ 294.12	$ 294.12	$ 297.06
1"	412.08	$ 412.08	$ 412.08	$ 412.08	$ 416.20
1 1/2"	529.80	$ 529.80	$ 529.80	$ 529.80	$ 535.10
2"	853.44	$ 853.44	$ 853.44	$ 853.44	$ 861.97
3"	3,237.36	$ 3,237.36	$ 3,237.36	$ 3,237.36	$ 3,269.73
4"	4,120.20	$ 4,120.20	$ 4,120.20	$ 4,120.20	$ 4,161.40
6"	6,180.24	$ 6,180.24	$ 6,180.24	$ 6,180.24	$ 6,242.04
8"	8,534.76	$ 8,534.76	$ 8,534.76	$ 8,534.76	$ 8,620.11
10"	11,771.88	$11,771.88	$11,771.88	$11,771.88	$11,889.60
Projected Annual Revenue Generated from Base Charges	**2,427,593**	**$2,452,887**	**$2,503,476**	**$2,552,300**	**$2,625,056**
Projected Annual Uniform Water Rates & Revenues					
Customer Type	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Increase %Increases	**Current Rates**	**0.00%**	**0.00%**	**0.00%**	**1.00%**
Uniform Rate per Metre 3	$ 1.4969	$ 1.4969	$ 1.4969	$ 1.4969	$ 1.5119
Projected Annual Uniform Water Rate Revenues	**3,561,169**	**3,588,512**	**3,643,199**	**3,696,345**	**3,785,168**
Total Water User Revenue	**5,988,762**	**$6,041,400**	**$6,146,675**	**$6,248,645**	**$6,410,224**
Projected Base (Fixed) Revenues vs. Uniform (Variable) Revenues					
	2019	**2020**	**2021**	**2022**	**2023**
Base Rate Revenue Percentage	41%	41%	41%	41%	41%
Uniform Rate Revenue Percentage	59%	59%	59%	59%	59%

8.3 Wastewater Rates and Revenue Projection

Table 8-3 presents the current and projected sustainable wastewater rates and revenues for the five (5) year period 2019 – 2023. Based on the full cost assessment of the Town's wastewater system the current rates are sufficient to financially sustain the system until 2021, where a 2% increase in rates is recommended, followed by a 4% increase starting in 2022. The 10 year projection of wastewater rates and revenue is detailed in Appendix K. .As noted at the bottom of Table 8-3, the split between the revenue generated from the base charge and revenue generated from the volumetric rate stays constant with 49% fixed and 51% variable. This is consistent with industry best practice as the majority of the Town's cost related to the wastewater services delivered by the Town is fixed in nature, including 100% of the cost for the treatment of wastewater by the Region.

Table 8-3: Projected Wastewater Rates and Revenues

Projected Annual Wastewater Base Charges and Revenues					
Customer Type	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Increase %Increases	**Current Rates**	**0.00%**	**2.00%**	**4.00%**	**4.00%**
up to 3/4"	325.20	$ 325.20	$ 331.70	$ 344.97	$ 358.77
1"	455.28	$ 455.28	$ 464.39	$ 482.96	$ 502.28
1 1/2"	585.36	$ 585.36	$ 597.07	$ 620.95	$ 645.79
2"	929.64	$ 929.64	$ 948.23	$ 986.16	$ 1,025.61
3"	3,577.20	$ 3,577.20	$ 3,648.74	$ 3,794.69	$ 3,946.48
4"	4,552.92	$ 4,552.92	$ 4,643.98	$ 4,829.74	$ 5,022.93
6"	6,829.32	$ 6,829.32	$ 6,965.91	$ 7,244.54	$ 7,534.32
8"	9,430.92	$ 9,430.92	$ 9,619.54	$10,004.32	$10,404.49
10"	13,008.24	$13,008.24	$13,268.40	$13,799.14	$14,351.11
Projected Annual Revenue Generated from Base Charges	**$ 2,159,537**	**$2,187,504**	**$2,288,308**	**$2,437,105**	**$2,591,634**
Projected Annual Uniform Wastewater Rates & Revenues					
Customer Type	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Increase %Increases	**Current Rate**	**0.00%**	**2.00%**	**4.00%**	**4.00%**
Uniform Rate per Metre 3	$ 1.2663	$ 1.2663	$ 1.2916	$ 1.3433	$ 1.3970
Projected Annual Uniform Wastewater Rate Revenues	**2,289,296**	**$2,312,428**	**$2,405,864**	**$2,549,790**	**$2,699,703**
Total Wastewater User Revenue	**$ 4,448,834**	**$4,499,932**	**$4,694,172**	**$4,986,896**	**$5,291,337**
Projected Base (Fixed) Revenues vs. Uniform (Variable) Revenues					
Revenue Type	**2019**	**2020**	**2021**	**2022**	**2023**
Base Rate Revenue Percentage	49%	49%	49%	49%	49%
Uniform Rate Revenue Percentage	51%	51%	51%	51%	51%

9 O.Reg 453/07 Water System Financial Plan No. 069-301A

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 L 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 2020 to 2025. 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 licence. The number for the updated financial plan is 069-301A.

9.1 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 the Town's Asset Management Plan.

Water Asset Value

The water system is comprised of the following asset classes:

- Water Mains:
- Hydrant Leads
- Curb Stops
- Water Connections
- Water Valves; and
- Water Meters.

Table 10-2 shows the current capital asset value based on historical cost and accumulated amortization to 2020. 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 24% depreciated or has approximately 76% remaining life based on the TCA data. This suggests that the water system assets are relatively new.

Table 9-1: Water – Asset Amortization and Book Value (NBV)

2020 Water Asset Details		
Historical Cost	$68,729,544	100%
Accumulated Amortization	$16,272,769	24%
Net Book Value	$52,456,775	76%

9.2 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 2020 - 2025 as required under O.Reg 453/07:

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

9.2.1 Water - Statement of Financial Position

The Statement of Financial Position is presented in Table 9-2. 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 development charge reserve fund balances (i.e. deferred revenues) and 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 2020 to 2025. 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 2020, the Town's water system will be in a net financial asset position of $3.3 million. This will increase to a net financial asset position of $7.0 million by 2025. The net financial asset position indicates that financial resources will be available to fund future operations. The increase in net financial assets is due to a reduction in long-term debt, and an increase in financial assets.

The next important indicator contained in the Statement of Financial Position is the net book value of TCA. Table 9-2 shows that net TCA are expected to increase over the forecast period by about $2.6 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 increases over the forecast period from 24% to 26%, suggesting that the water system would be approximately 26% through its life expectancy by 2025. As this percentage is increasing over time, consideration should be given to 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 slightly from approximately $55.8 million in 2020 to approximately $62.1 million by 2025. 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 9-2: Water – Statement of Financial Position

	2020	2021	2022	2023	2024	2025
Financial Assets						
Cash,Receivables and Investment	$3,949,513	$5,208,595	$6,083,595	$6,759,529	$7,066,004	$7,319,875
Total Financial Assets	$3,949,513	$5,208,595	$6,083,595	$6,759,529	$7,066,004	$7,319,875
Financial Liabilities						
Accounts Payable & Deferred Revenue	($393,081)	($408,189)	($424,892)	($440,160)	($453,927)	($466,123)
Long-term Liabilities	$997,580	$932,161	$864,469	$829,185	$792,665	$754,867
Total Financial Liabilities	$604,499	$523,972	$439,578	$389,025	$338,738	$288,743
Net Financial Assets (Net Debt)	$3,345,014	$4,684,624	$5,644,017	$6,370,504	$6,727,266	$7,031,132
Non-Financial Assets						
Tangible Capital Assets	$68,729,544	$69,481,179	$70,501,018	$71,707,067	$73,214,321	$74,837,391
Accumulated Amortization	($16,272,769)	($17,076,422)	($17,816,871)	($18,518,846)	($19,153,052)	($19,773,026)
Total Non-Financial Assets	$52,456,775	$52,404,757	$52,684,146	$53,188,221	$54,061,269	$55,064,365
Accumulated Surplus	$55,801,789	$57,089,381	$58,328,163	$59,558,725	$60,788,535	$62,095,497

Financial Indicators	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Increase (Decrease) in Net Financial Assets	($803,524)	$1,339,609	$959,394	$726,486	$356,762	$303,866
Increase (Decrease) in Tangible Capital Assets	$2,102,264	($52,017)	$279,389	$504,075	$873,047	$1,003,097
Increase (Decrease) in Accumulated Surplus	$1,298,740	$1,287,592	$1,238,782	$1,230,562	$1,229,810	$1,306,963
Water Asset Consumption Ratio	24%	25%	25%	26%	26%	26%

9.2.2 Water - Statement of Operations

The Statement of Operations is presented in Table 9-3 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;
- Earned Revenues (capital and operating contributions from development 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 and non-TCA capital;
- 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 9-3: Water – Statement of Operation

	2020	2021	2022	2023	2024	2025
Water Revenue						
Rate Revenue	$6,041,400	$6,146,675	$6,248,645	$6,410,224	$6,574,410	$6,807,984
Earned Revenue	$0	$65,541	$65,541	$65,541	$65,541	$65,541
Other Revenue	$394,040	$415,242	$433,087	$440,213	$460,638	$471,406
Total Revenues	$6,435,440	$6,627,459	$6,747,273	$6,915,979	$7,100,589	$7,344,931
Water Expenses						
Operating Expenses	$4,147,311	$4,299,831	$4,458,142	$4,621,973	$4,792,333	$4,969,493
Interest on Debt	$8,153	$34,619	$32,491	$30,256	$29,021	$0
Amortization	$981,236	$1,005,417	$1,017,857	$1,033,188	$1,049,426	$1,068,476
Other	$0	$0	$0	$0	$0	$0
Total Expenses	$5,136,700	$5,339,867	$5,508,491	$5,685,417	$5,870,780	$6,037,969
Annual Surplus/(Deficit)	$1,298,740	$1,287,592	$1,238,782	$1,230,562	$1,229,809	$1,306,962
Accumulated Surplus/(Deficit), Beginning of Year	$54,503,049	$55,801,789	$57,089,381	$58,328,163	$59,558,725	$60,788,534
Accumulated Surplus/ (Deficit), End of Year	$55,801,789	$57,089,381	$58,328,163	$59,558,725	$60,788,534	$62,095,496

Financial Indicators	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Increase (Decrease) in Total Revenues	N/A	$192,019	$119,814	$168,706	$184,610	$244,342
Increase (Decrease) in Total Expenses	N/A	$203,167	$168,624	$176,927	$185,363	$167,189
Increase (Decrease) in Annual Surplus	N/A	($11,148)	($48,809)	($8,221)	($753)	$77,153
Operating Surplus Ratio	N/A	19.4%	18.4%	17.8%	17.3%	17.8%

9.2.3 Water - Statement of Cash Flows

The Statement of Cash Flow is presented in Table 9-4. 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 received from development charge receipts and interest earned on the reserve fund balance, and 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 increase over the forecast period from $3.9 million in 2020 to a $7.3 million in 2025.

Table 9-4: Water – Statement of Cash Flow

	2020	2021	2022	2023	2024	2025
Cash Provided by:						
Operating Activities						
Annual Surplus/(Deficit)	$1,298,740	$1,287,592	$1,238,782	$1,230,562	$1,229,809	$1,306,962
Non-Cash Items						
Amortization	$981,236	$1,005,417	$1,017,857	$1,033,188	$1,049,426	$1,068,476
Earned Revenue	$0	($65,541)	($65,541)	($65,541)	($65,541)	($65,541)
Net Change in Cash Provided by Operating Activities	$2,279,976	$2,227,468	$2,191,098	$2,198,208	$2,213,693	$2,309,897
Capital Activities						
Purchase of TCA	($3,083,500)	($953,400)	($1,297,246)	($1,537,263)	($1,922,473)	($2,071,572)
Net Change in Cash Used in Capital Activities	($3,083,500)	($953,400)	($1,297,246)	($1,537,263)	($1,922,473)	($2,071,572)
Financing Activities						
DC Collections	$49,004	$50,433	$48,839	$50,273	$51,774	$53,345
External Financing	$0	$0	$0	$0	$0	$0
Proceeds From Long-Term Debt	$931,500	$0	$0	$0	$0	$0
Repayment of Long-Term Debt	($256,888)	($65,419)	($67,692)	($35,285)	($36,520)	($37,798)
Net Change in Cash Used in Financing Activities	$723,616	($14,986)	($18,853)	$14,988	$15,255	$15,547
Net Change in Cash and Cash Equivalents	($79,908)	$1,259,082	$875,000	$675,933	$306,475	$253,872
Cash and Cash Equivalents, Beginning of the Year	$4,029,421	$3,949,513	$5,208,595	$6,083,595	$6,759,529	$7,066,004
Cash and Cash Equivalents, End of the Year	$3,949,513	$5,208,595	$6,083,595	$6,759,529	$7,066,004	$7,319,875

9.3 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.

The Town conducts sampling of water delivered to customers including via lead service pipes, in accordance with the standard sampling protocol outlined in Schedule 15.1 of O.Reg. 170/03. The Town's current approach for lead service pipe removal involves replacement upon discovery of service material. The financial statements do not include removal costs.

10 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 2020 to 2025 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 2020 to 2025 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.

10.1 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:

- Sewer Mains;
- Laterals; and
- Manholes.

Table 10-1 shows the current capital asset value based on historical cost and accumulated amortization to 2020. 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 30% depreciated or has approximately 70% remaining life based on the TCA data. This suggests that the water system assets are relatively new

Table 10-1: Wastewater – Asset Amortization and 2020 Net Book Value (NBV)

2020 Wastewater Asset Details		
Historical Cost	$40,943,067	100%
Accumulated Amortization	$12,185,502	30%
Net Book Value	$28,757,565	70%

10.2 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 2016 - 2021 as required under O.Reg 453/07:

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

10.2.1 Wastewater - Statement of Financial Position

The Statement of Financial Position is presented in Table 10-2. 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 the development charge reserve fund balances (i.e. deferred revenues) and 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 10.2 indicates that in 2020, the Town's wastewater system will be in a net financial asset position in the amount of $1.5 million. There will be a slight decrease in the net financial asset position of $1.4 million by 2025. The net financial asset position indicates that financial resources will be available to fund future operations. The slight decrease in net financial assets position is due to a combination of an increase in the cash position, offset by an increase in liabilities, mainly through an increase in deferred revenue. 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 grow by $2.5 over the forecast period, or from $28.6 million in 2020 to $31.1 million 2025. 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 stays constant over the forecast period from 31%.

Another important indicator in the Statement of Financial Position is the accumulated surplus. This indicator provides measure of the resources available to the Town for managing its wastewater system. The accumulated surplus is projected to increase from approximately $30.0 million in 2020 to approximately $32.5 million by 2026. The accumulated surplus consists of non-financial assets that are made up of the net TCA balance representing past investments in wastewater infrastructure, and is either increased by net financial assets, or offset by the net debt balances.

Table 10-2: Wastewater - Statement of Financial Position

	2020	2021	2022	2023	2024	2025
Financial Assets						
Cash,Receivables and Investment	$2,382,177	$2,491,390	$2,653,438	$2,949,554	$3,235,205	$3,243,409
Total Financial Assets	$2,382,177	$2,491,390	$2,653,438	$2,949,554	$3,235,205	$3,243,409
Financial Liabilities						
Accounts Payable & Deferred Revenue	$581,275	$803,505	$1,039,637	$1,289,353	$1,553,070	$1,831,289
Long-term Liabilities	$337,904	$270,323	$202,742	$135,162	$67,581	$0
Total Financial Liabilities	$919,179	$1,073,828	$1,242,379	$1,424,514	$1,620,650	$1,831,289
Net Financial Assets (Net Debt)	$1,462,998	$1,417,562	$1,411,058	$1,525,039	$1,614,555	$1,412,120
Non-Financial Assets						
Tangible Capital Assets	$41,226,776	$42,039,082	$42,830,746	$43,543,841	$44,317,644	$45,371,620
Accumulated Amortization	($12,667,513)	($12,984,064)	($13,311,775)	($13,665,278)	($14,007,845)	($14,272,815)
Total Non-Financial Assets	$28,559,263	$29,055,018	$29,518,970	$29,878,563	$30,309,799	$31,098,804
Accumulated Surplus	$30,022,262	$30,472,580	$30,930,029	$31,403,602	$31,924,354	$32,510,924

Financial Indicators	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Increase (Decrease) in Net Financial Assets	$622,439	($45,436)	($6,504)	$113,981	$89,516	($202,435)
Increase (Decrease) in Tangible Capital Assets	($198,302)	$495,755	$463,952	$359,592	$431,236	$789,006
Increase (Decrease) in Accumulated Surplus	$424,138	$450,319	$457,449	$473,574	$520,752	$586,570
Water Asset Consumption Ratio	31%	31%	31%	31%	32%	31%

10.2.2 Wastewater - 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 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 contributions from development charges and 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 10-3 and reflects the percent of total revenue that can be allocated to funding the non-expense items noted above.

Table 10-3: Wastewater - Statement of Operations

	2020	2021	2022	2023	2024	2025
Water Revenue						
Rate Revenue	$4,499,932	$4,694,172	$4,986,896	$5,291,337	$5,612,154	$5,950,171
Earned Revenue	$156,724	$199,989	$142,517	$93,818	$70,391	$68,771
Other Revenue	$262,085	$266,047	$270,577	$275,639	$282,595	$284,892
Total Revenues	$4,918,742	$5,160,208	$5,399,990	$5,660,794	$5,965,140	$6,303,835
Water Expenses						
Operating Expenses	$3,947,159	$4,157,121	$4,379,104	$4,613,815	$4,862,005	$5,124,466
Interest on Debt	$9,143	$7,573	$5,978	$4,383	$2,810	$0
Amortization	$538,302	$545,195	$557,460	$569,022	$579,575	$592,799
Other	$0	$0	$0	$0	$0	$0
Total Expenses	$4,494,604	$4,709,889	$4,942,541	$5,187,220	$5,444,389	$5,717,264
Annual Surplus/(Deficit)	$424,138	$450,319	$457,449	$473,574	$520,751	$586,570
Accumulated Surplus/(Deficit), Beginning of Year	$29,598,124	$30,022,262	$30,472,580	$30,930,029	$31,403,603	$31,924,354
Accumulated Surplus/ (Deficit), End of Year	$30,022,262	$30,472,580	$30,930,029	$31,403,603	$31,924,354	$32,510,924

Financial Indicators	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Increase (Decrease) in Total Revenues	N/A	$241,466	$239,782	$260,804	$304,346	$338,695
Increase (Decrease) in Total Expenses	N/A	$215,285	$232,652	$244,679	$257,169	$272,875
Increase (Decrease) in Annual Surplus	N/A	$26,181	$7,130	$16,125	$47,177	$65,819
Operating Surplus Ratio	N/A	8.7%	8.5%	8.4%	8.7%	9.3%

10.2.3 Wastewater - Statement of Cash Flows

he Statement of Cash Flow is presented in Table 10-4. 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). It is assumed that there were no “investing activities” over the period. The capital section indicates the amounts spent to acquire capital assets (TCA) or 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 received from development charge receipts and interest earned on the reserve fund balance, external financing such as provincial and federal grants, and proceeds from the issuance of debenture as cash inflows, and the portion of debt repaid as cash outflows.

Table 10-4 indicates that cash is 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 increase over the forecast period from $2.4 million in 2020 to approximately $3.2 million in 2025.

Table 10-4: Wastewater - Statement of Cash Flows

	2020	2021	2022	2023	2024	2025
Cash Provided by:						
Operating Activities						
Annual Surplus/(Deficit)	$424,138	$450,319	$457,449	$473,574	$520,751	$586,570
Non-Cash Items						
Amortization	$538,302	$545,195	$557,460	$569,022	$579,575	$592,799
Earned Revenue	($156,724)	($199,989)	($142,517)	($93,818)	($70,391)	($68,771)
Net Change in Cash Provided by Operating Activities	$805,715	$795,525	$872,391	$948,777	$1,029,935	$1,110,598
Capital Activities						
Purchase of TCA	($340,000)	($1,040,950)	($1,021,412)	($928,614)	($1,010,811)	($1,381,804)
Net Change in Cash Used in Capital Activities	($340,000)	($1,040,950)	($1,021,412)	($928,614)	($1,010,811)	($1,381,804)
Financing Activities						
DC Collections	$302,467	$314,069	$309,691	$321,679	$334,108	$346,991
External Financing	$80,000	$108,150	$68,959	$21,855	$0	$0
Proceeds From Long-Term Debt	$0	$0	$0	$0	$0	$0
Repayment of Long-Term Debt	($67,581)	($67,581)	($67,581)	($67,581)	($67,581)	($67,580)
Net Change in Cash Used in Financing Activities	$314,886	$354,638	$311,068	$275,953	$266,527	$279,410
Net Change in Cash and Cash Equivalents	$780,601	$109,213	$162,048	$296,116	$285,652	$8,203
Cash and Cash Equivalents, Beginning of the Year	$1,601,576	$2,382,177	$2,491,390	$2,653,438	$2,949,554	$3,235,205
Cash and Cash Equivalents, End of the Year	$2,382,177	$2,491,390	$2,653,438	$2,949,554	$3,235,205	$3,243,409

11 Conclusions & Recommendations

The following are the main conclusions regarding the water system:

1. Approximately $20.8 million in water capital expenditures is identified between 2020 and 2029. Approximately $19.5 million in financing will be required from the capital reserves, $1.1 million from growth-related debt which will be serviced from future development charge receipts, and $197 thousand from other sources.
2. The net annual water expenditures are expected to increase approximately $1.8 million, from $6.0 million in 2020 to $7.8 million by 2029.
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 $55.8 million in 2020 to approximately $62.1 million by 2025.
- The operating surplus ratio is projected to remain constant at approximately 18-19%.
- The cash position is projected to increase from $3.9 million in 2020 to a $7.3 million in 2025.

These indicate that the financial outlook for the water system over the 6-year period 2020 to 2025 is good.

The following are the main conclusions regarding the wastewater system:

4. Approximately $11.2 million in wastewater capital expenditures is identified between 2020 and 2029. Approximately 10.0 million in financing will be required from the capital reserve, $17 thousand from development charges, , and $279 thousand from other sources.
5. The net annual wastewater expenditures are expected to increase approximately $3.1 million, from $4.5 million in 2020 to $7.6 million by 2029.
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 $30.0 million in 2020 to approximately $32.5 million by 2025.
   - The operating surplus ratio is projected to remain constant at approximately 8-9%.
   - The cash position is projected to increase from $2.4 million in 2020 to $3.2 million in 2025.

   These indicate that the financial outlook for the water system over the 6-year period 2020 to 2025 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 J 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 K be approved to achieve full cost recovery and long-term sustainable financing of the Town's wastewater system.
9. That transfers to the water and wastewater capital reserves be increased to levels as presented in Appendix G to adequately fund the capital requirements, subject to annual reviews, of the water and wastewater system's capital needs.
10. That the O.Reg. 453/07 Water System Financial Plan No. 069-301A 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.
11. That the Wastewater System Financial Plan including the Financial Statements contained herein be received by Council.
12. That a copy of the Water Financial Plan No. 069-301A and the Wastewater Financial Plan be posted on the Town's website and made available to the public at no charge.

APPENDICIES

Appendix A

Water and Wastewater Rate
By-Law No. 5112-18

THE CORPORATION OF THE

TOWN OF NIAGARA-ON-THE-LAKE

BY-LAW NO. 5112-18

A BY-LAW TO AMEND BY-LAW 814-77 BEING A BY-LAW TO ESTABLISH AND REGULATE WATER AND WASTEWATER RATES AND CHARGES WITHIN THE TOWN OF NIAGARA-ON-THE-LAKE AND TO REPEAL BY-LAW 5012-17

WHEREAS By-law No. 814-77 establishes and regulates the Town of Niagara-on-the-Lake water system and sets out water and wastewater rates in Schedule "A" attached thereto;

AND WHEREAS it is necessary to set the service charges for the Niagara-on-the-Lake water and wastewater systems as approved in Corporate Services Report CS-18-019.

NOW THEREFORE BE IT ENACTED AS A BY-LAW OF THE CORPORATION OF THE TOWN OF NIAGARA-ON-THE-LAKE as follows:

1. That Schedule "A" attached hereto and forming part of this by-law is hereby adopted and replaces Schedule "A" to By-law 814-77.
2. That any by-law which conflicts in part or in whole with any part of Schedule "A" is hereby amended to conform with Schedule "A" attached hereto.
3. That By-law 5012-17 is hereby repealed.
4. That this by-law takes effect February 1, 2019.

READ A FIRST, SECOND, AND THIRD TIME AND PASSED THIS17th DAY OF DECEMBER 2018.

LORD MAYOR BETTY DISERO

TOWN CLERK PETER TODD

SCHEDULE A TO BY-LAW 5112-18

1. WATER & WASTEWATER RATES

a) REGULAR CUSTOMERS

The monthly billing amount shall be calculated based on **Fixed Monthly Charge per the following schedule:**

Fixed Charge Per Month						
Meter Size	**Water**			**Wastewater**		
	2018	**2019**	% Increase	2018	**2019**	% Increase
Up to 3/4"	23.80	**24.51**	3%	26.32	**27.10**	3%
1"	33.34	**34.34**	3%	36.83	**37.94**	3%
1.5"	42.86	**44.15**	3%	47.36	**48.78**	3%
2"	69.05	**71.12**	3%	75.21	**77.47**	3%
3"	261.92	**269.78**	3%	289.42	**298.10**	3%
4"	333.35	**343.35**	3%	368.36	**379.41**	3%
6"	500.02	**515.02**	3%	552.53	**569.11**	3%
8"	690.51	**711.23**	3%	763.01	**785.91**	3%
12"	952.42	**980.99**	3%	1052.45	**1084.02**	3%

Plus **Variable Water Rate $1.4969 per cubic metre** and **Variable Wastewater Rate $1.2663 per cubic metre** multiplied by the water consumption, in cubic metres, from water meter readings.

A late payment charge shall apply to all unpaid balances owing past the payment due date at the interest rate of 1 ½% per month.

b) MULTIPLE OCCUPANCY CUSTOMERS

The fixed charge shall be applicable to each water meter separately regardless of the number of self contained dwelling units or commercial or industrial units supplied through a common water meter.

c) OTHER WATER RATES

Bulk Water Stations

A monthly billing amount shall be calculated for each Bulk Water Account as for Regular Customers in accordance with 1 a) above except that the fixed charge shall be based on a ¾ inch meter size.

Hydrant Irrigation Rates

The monthly billing amount shall be calculated as for Regular Customers in accordance with 1. a) above.

Water on Construction

On development lands where a water service is connected from the municipal main to a building(s) under construction, and the water meter is not yet installed, a flat fee shall be billed in accordance with the Town's current Water on Construction Fee Schedule.

Appendix B

Customer Growth Projections

APPENDIX B: CUSTOMER GROWTH PROJECTIONS

Water Customer Growth Projection										
Customer Type	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
up to 3/4”	7,195	7,367	7,533	7,692	7,851	8,010	8,169	8,325	8,478	8,643
1”	185	185	185	185	185	185	185	185	185	185
1 1/2”	78	78	78	78	78	78	78	78	78	78
2”	74	74	74	74	74	74	74	74	74	74
3”	24	24	24	24	24	24	24	24	24	24
4”	16	16	16	16	16	16	16	16	16	16
6”	2	2	2	2	2	2	2	2	2	2
8”	-	-	-	-	-	-	-	-	-	-
10”	-	-	-	-	-	-	-	-	-	-
Total	**7,574**	**7,746**	**7,912**	**8,071**	**8,230**	**8,389**	**8,548**	**8,704**	**8,857**	**9,022**

Wastewater Growth Projection										
Customer Type	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
up to 3/4”	5,800	5,972	6,138	6,297	6,456	6,615	6,774	6,930	7,083	7,248
1”	139	139	139	139	139	139	139	139	139	139
1 1/2”	66	66	66	66	66	66	66	66	66	66
2”	62	62	62	62	62	62	62	62	62	62
3”	18	18	18	18	18	18	18	18	18	18
4”	14	14	14	14	14	14	14	14	14	14
6”	2	2	2	2	2	2	2	2	2	2
8”	-	-	-	-	-	-	-	-	-	-
10”	-	-	-	-	-	-	-	-	-	-
Total	**6,101**	**6,273**	**6,439**	**6,598**	**6,757**	**6,916**	**7,075**	**7,231**	**7,384**	**7,549**

Appendix C

Volume Projections

APPENDIX C: CUSTOMER VOLUME PROJECTIONS

Water Customer Volume Projection										
Water Customer	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
Projected Residential Water Consumption	1,240,908	1,269,403	1,296,868	1,323,131	1,349,395	1,375,658	1,401,922	1,427,670	1,452,904	1,480,197
Projected non-Residential Water Consumption	1,156,388	1,164,426	1,172,465	1,180,504	1,188,542	1,196,581	1,204,619	1,212,658	1,220,697	1,228,735
Projected Total Water Consumption	**2,397,296**	**2,433,829**	**2,469,333**	**2,503,635**	**2,537,937**	**2,572,239**	**2,606,541**	**2,640,328**	**2,673,600**	**2,708,932**
Projected Region Water Volume Purchases	3,309,802	3,346,335	3,381,839	3,416,141	3,450,443	3,484,745	3,519,047	3,552,834	3,586,106	3,621,438

Wastewater Customer Volume Projection										
Customer	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
Projected Residential Wastewater Flows	977,282	1,005,777	1,033,242	1,059,505	1,085,769	1,112,032	1,138,296	1,164,044	1,189,278	1,216,571
Projected Wastewater Flows	848,848	856,886	864,925	872,963	881,002	889,041	897,079	905,118	913,156	921,195
Projected Total Wastewater Flows	**1,826,129**	**1,862,663**	**1,898,167**	**1,932,469**	**1,966,771**	**2,001,073**	**2,035,375**	**2,069,162**	**2,102,434**	**2,137,766**
Projected Wastewater Volumes Treated by the Region	3,141,000	3,195,800	3,231,304	3,265,606	3,299,908	3,334,210	3,368,512	3,402,299	3,435,571	3,470,903

Appendix D

Capital Forecast
WATER

APPENDIX D: WATER CAPITAL FORECAST

Water Service 2020 - 2029 Capital Forecast Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Paxton Lane - (South End to York Road)	$ 93,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Queenston Rd. (Airport to Coon)	$1,060,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Concession 6 Road - (RR55 to Line 2 Road)	$ 505,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Ball Street - (Ricardo to Delatre) Eng.	$ 16,500	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Niagara River Parkway - (Highlander to Dumfries)	$ 530,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Wellington Street - (Picton to Castlereagh)	$ 420,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Melville - (Ricardo to Byron) Eng.	$ 28,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
NSR (Line 3 to Line 4 Road) Eng.	$ 61,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Anne Street - King to Regent Watermain	$ 160,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
John Street - King to Regent	$ 200,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Line 4 Road - Niagara Stone Road to 75m west Eng Design	$ 10,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Queenston/NSR (Coon-NSR-Stewart)	$ -	$ 721,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Dorchester - (Mary to John West) Eng.	$ -	$ 20,600	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Line 6 Rd (Conc 1 to NRP) Eng	$ -	$ 61,800	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Ball Street - (Ricardo to Delatre)	$ -	$ -	$ 63,654	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Melville Street - (Ricardo to Byron)	$ -	$ -	$ 159,135	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Dorchester St. - (Mary to John West)	$ -	$ -	$ 137,917	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Line 6 Rd (Conc 1 to NRP)	$ -	$ -	$ 636,540	$ -	$ -	$ -	$ -	$ -	$ -	$ -
-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Butler Street - (William to Centre) Eng.	$ -	$ -	$ -	$ 43,709	$ -	$ -	$ -	$ -	$ -	$ -
Line 2 - (Conc. 4 to Four Mile Creek Road) Eng.	$ -	$ -	$ -	$ 49,173	$ -	$ -	$ -	$ -	$ -	$ -
Niagara Stone Road - (Line 3 to Line 4 Road)	$ -	$ -	$ -	$ 939,745	$ -	$ -	$ -	$ -	$ -	$ -
Townline (Queenston to South End) Eng.	$ -	$ -	$ -	$ 16,391	$ -	$ -	$ -	$ -	$ -	$ -
John St. West - (Gate to Regent) Eng.	$ -	$ -	$ -	$ 21,855	$ -	$ -	$ -	$ -	$ -	$ -
King St. (John St. West to South) Eng.	$ -	$ -	$ -	$ 16,391	$ -	$ -	$ -	$ -	$ -	$ -
-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Line 2 - (Conc. 4 to Four Mile Creek Road))	$ -	$ -	$ -	$ -	$ 675,305	$ -	$ -	$ -	$ -	$ -
Butler St. - (William to Centre Street)	$ -	$ -	$ -	$ -	$ 140,689	$ -	$ -	$ -	$ -	$ -
Townline Road - (Queenston to South End)	$ -	$ -	$ -	$ -	$ 90,041	$ -	$ -	$ -	$ -	$ -
John Street - (Gate to Regent)	$ -	$ -	$ -	$ -	$ 225,102	$ -	$ -	$ -	$ -	$ -
John St. West - (Regent to King) Eng.	$ -	$ -	$ -	$ -	$ 22,510	$ -	$ -	$ -	$ -	$ -
Cross St. (Stewart to East) Eng.	$ -	$ -	$ -	$ -	$ 16,883	$ -	$ -	$ -	$ -	$ -
Eastchester - (Stewart - NSR) Eng.	$ -	$ -	$ -	$ -	$ 28,138	$ -	$ -	$ -	$ -	$ -
King Street - (John Street West to South)	$ -	$ -	$ -	$ -	$ 78,786	$ -	$ -	$ -	$ -	$ -
Nasau St. (Johnson to William) Eng.	$ -	$ -	$ -	$ -	$ 33,765	$ -	$ -	$ -	$ -	$ -
Hampton Crt. - (Nassau to West) Eng.	$ -	$ -	$ -	$ -	$ 11,255	$ -	$ -	$ -	$ -	$ -
-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Queenston/NSR (Coon-NSR-Stewart) Eng.	$ -	$ -	$ -	$ -	$ -	$ 46,371	$ -	$ -	$ -	$ -
John Street West - (Regent to King Street)	$ -	$ -	$ -	$ -	$ -	$ 150,706	$ -	$ -	$ -	$ -
Cross Street - (Stewart Road to East)	$ -	$ -	$ -	$ -	$ -	$ 150,706	$ -	$ -	$ -	$ -
Eastchester Avenue - (Stewart to NSR)	$ -	$ -	$ -	$ -	$ -	$ 394,153	$ -	$ -	$ -	$ -
Niagara River Parkway - (Dumfries to Clarence) Eng.	$ -	$ -	$ -	$ -	$ -	$ 23,185	$ -	$ -	$ -	$ -
Niagara Stone Road - Line 4 to Southbrook Winery	$ -	$ -	$ -	$ -	$ -	$ 405,746	$ -	$ -	$ -	$ -
Hampton Court - Nassau Street to West Street	$ -	$ -	$ -	$ -	$ -	$ 92,742	$ -	$ -	$ -	$ -
NSR - Line 4 to Southbrook Winery Eng.	$ -	$ -	$ -	$ -	$ -	$ 57,964	$ -	$ -	$ -	$ -
-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Palatine Pl Loop (Lansdowne-Circle)	$ -	$ -	$ -	$ -	$ -	$ -	$ 142,665	$ -	$ -	$ -
NSR (Line 5R/A-Southbrook) Eng.	$ -	$ -	$ -	$ -	$ -	$ -	$ 49,195	$ -	$ -	$ -
FMC (East/West-Hunter) Eng.	$ -	$ -	$ -	$ -	$ -	$ -	$ 61,494	$ -	$ -	$ -
NSR (Line4-Line 5 R/A)	$ -	$ -	$ -	$ -	$ -	$ -	$ 983,899	$ -	$ -	$ -
Niagara River Parkway - Dumfries to Clarence	$ -	$ -	$ -	$ -	$ -	$ -	$ 184,481	$ -	$ -	$ -
-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
FMC (East-West - Hunter	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 886,739	$ -	$ -
FMC (Hunter-Wall) Eng.	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 63,339	$ -	$ -
Warner/Jockey Club (Conc.5-East) Eng.	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 63,339	$ -	$ -
NSR (Line 5 R/A-Southbrook)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 696,724	$ -	$ -
-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Four Mile Creek Road (Hunter to Wall)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 730,673	$ -
Warner or Jockey Club Main - Concession 5 - East	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 848,103	$ -
Glendale Looping through ONL 40	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 348,766	$ -
Glendale Looping from ONL 40 to York	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 137,393	$ -
Four Mile Creek Road (Wall to Lakeshore) Design	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 65,239	$ -
Lakeshore Rd (FMCR to Cemetery) Design	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 39,143	$ -
-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Four Mile Creek Rd (Wall to Lakeshore)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 537,567
Lakeshore Rd (FMCR to Cemetery)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 369,577
Wall Rd (FMCR to End) Eng	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 67,196
Niven & Village Rd (Bend to GVD) Eng	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 40,317
-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Capital Expenditures - Capital Program	**$3,083,500**	**$ 803,400**	**$ 997,246**	**$1,087,263**	**$1,322,473**	**$1,321,572**	**$1,421,734**	**$1,710,140**	**$2,169,316**	**$1,014,657**
Additional Asset Management Needs	$ -	$ 150,000	$ 300,000	$ 450,000	$ 600,000	$ 750,000	$ 900,000	$ 900,000	$ 900,000	$ 900,000
Total Capital Expenditures	**$3,083,500**	**$ 953,400**	**$1,297,246**	**$1,537,263**	**$1,922,473**	**$2,071,572**	**$2,321,734**	**$2,610,140**	**$3,069,316**	**$1,914,657**
Capital Financing										
Provincial/Federal Grants							$ 128,399		$ 68,696	$ -
Development Charges	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Non-Growth Related Debenture Requirements	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Growth Related Debenture Requirements	$ 931,500	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 123,653	$ -
Water Capital Reserve	$2,152,000	$ 953,400	$1,297,246	$1,537,263	$1,922,473	$2,071,572	$2,193,335	$2,610,140	$2,876,966	$1,914,657
Total Capital Financing	**$3,083,500**	**$ 953,400**	**$1,297,246**	**$1,537,263**	**$1,922,473**	**$2,071,572**	**$2,321,734**	**$2,610,140**	**$3,069,316**	**$1,914,657**

Appendix E

Capital Forecast
WASTEWATER

APPENDIX E: WASTEWATER CAPITAL FORECAST

Wastewater Service 2020 - 2029 Capital Forecast Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Old Town CSO I/I Study (Phase 4-Dorchester North & Wm. East Area	$ 150,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Engineering Simcoe St. (Centre to Gage)	$ 20,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Old Town (Phase 3) CSO Flow Monitoring (Post repair program)	$ 50,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Chautauqua Area - Froebel - (Circle to Dead End)	$ 60,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Engineering - Johnson Street - (Dorchester to Mississagua)	$ 40,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Engineering - Simcoe Street - (John to Anne Street)	$ 20,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
CSO Reduction Project - Old Town (Phase 4 - Dorchester N.-Wm. E.)	$ -	$ 154,500	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Simcoe Street (Centre-Gage)	$ -	$ 72,100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Old Town CSO I/I Study (Phase 5 - Mississauga Beach Area)	$ -	$ 154,500	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Engineering - Mississauga Street - (Johnson to Queen)	$ -	$ 25,750	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Johnson Street - (Dorchester to Mississagua)	$ -	$ 247,200	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Simcoe Street - (John to Anne Street)	$ -	$ 118,450	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Gate Street - (Mary to William Street)	$ -	$ 77,250	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Engineering - Green Street - (Flynn to Niagara)	$ -	$ 25,750	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Engineering - Wellington Street - (Picton to Queens Parade)	$ -	$ 5,150	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Engineering - Gate Street - (John to Mary)	$ -	$ 10,300	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
CSO Reduction Project-Old Town (Phase 5-Mississauga Beach Area	$ -	$ -	$ 159,135	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Old Town (Phase 4) CSO Flow Monitoring (Post repair program)	$ -	$ -	$ 53,045	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Green Street - Flynn to Niagara	$ -	$ -	$ 254,616	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Wellington Street - (at Picton-Queens Parade)	$ -	$ -	$ 26,523	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Gate Street - (John to Mary Street)	$ -	$ -	$ 74,263	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Engineering - Flynn Street - Rye to Charlotte	$ -	$ -	$ 26,523	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Mississauga Street - (Johnson to Queen)	$ -	$ -	$ 127,308	$ -	$ -	$ -	$ -	$ -	$ -	$ -
-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Engineering - Gate Street - (Mary to William Street)	$ -	$ -	$ -	$ 8,742	$ -	$ -	$ -	$ -	$ -	$ -
Flynn - Rye to Charlotte Street	$ -	$ -	$ -	$ 349,673	$ -	$ -	$ -	$ -	$ -	$ -
Engineering - Christopher Ct. - East of Charlotte	$ -	$ -	$ -	$ 21,855	$ -	$ -	$ -	$ -	$ -	$ -
Old Town (Phase 5) CSO Flow Monitoring (Post repair program)	$ -	$ -	$ -	$ 54,636	$ -	$ -	$ -	$ -	$ -	$ -
Engineering Mary Street - (Dorchester to Mississauga)	$ -	$ -	$ -	$ 43,709	$ -	$ -	$ -	$ -	$ -	$ -
-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Christopher Court - East of Charlotte Street	$ -	$ -	$ -	$ -	$ 73,158	$ -	$ -	$ -	$ -	$ -
Mary Street - (Dorchester to Mississauga)	$ -	$ -	$ -	$ -	$ 270,122	$ -	$ -	$ -	$ -	$ -
Engineering Mary Street - (Mississauga to Victoria)	$ -	$ -	$ -	$ -	$ 45,020	$ -	$ -	$ -	$ -	$ -
Engineering Gage Street - (Mississauga to Dorchester)	$ -	$ -	$ -	$ -	$ 22,510	$ -	$ -	$ -	$ -	$ -
-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Mary Street - (Mississauga to Victoria)	$ -	$ -	$ -	$ -	$ -	$ 417,339	$ -	$ -	$ -	$ -
Gage Street - (Mississauga to Dorchester)	$ -	$ -	$ -	$ -	$ -	$ 185,484	$ -	$ -	$ -	$ -
Engineering - Queen Street - (Mississauga to Simcoe)	$ -	$ -	$ -	$ -	$ -	$ 28,982	$ -	$ -	$ -	$ -
-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Construction - Queen Street (Mississaugua to Simcoe Street)	$ -	$ -	$ -	$ -	$ -	$ -	$ 147,585	$ -	$ -	$ -
King St (Prideaux to Front Street)	$ -	$ -	$ -	$ -	$ -	$ -	$ 24,597	$ -	$ -	$ -
Gate Street (Queen to Prideaux Street)	$ -	$ -	$ -	$ -	$ -	$ -	$ 24,597	$ -	$ -	$ -
King Street (Queen to Johnson Street)	$ -	$ -	$ -	$ -	$ -	$ -	$ 24,597	$ -	$ -	$ -
-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
King Street (Prideaux to Front Street)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 50,671	$ -	$ -
Gate Street (Queen to Prideaux Street)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 152,012	$ -	$ -
Gate Street (Queen to Johnson Street)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 152,012	$ -	$ -
Engineering - Gate Street (William to Johnson Street)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 63,339	$ -	$ -
-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Gate Street - Johnson to William	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 417,527	$ -
Engineering - Nassau - Johnson to Mary and Hampton Court	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 104,382	$ -
-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Nassau St (Johnson to Mary and Hampton Crt)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 645,080
Butler St (Mary to Johnson) Eng	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 40,317
John St (Butler to Mississagua) Eng	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 40,317
-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Capital Expenditures - Capital Program	$ 340,000	$ 890,950	$ 721,412	$ 478,614	$ 410,811	$ 631,804	$ 221,377	$ 418,034	$ 521,909	$ 725,715
Additional Asset Management Needs		$ 150,000	$ 300,000	$ 450,000	$ 600,000	$ 750,000	$ 900,000	$ 900,000	$ 900,000	$ 900,000
Total Capital Expenditures	**$ 340,000**	**$1,040,950**	**$1,021,412**	**$ 928,614**	**$1,010,811**	**$1,381,804**	**$1,121,377**	**$1,318,034**	**$1,421,909**	**$1,625,715**
Capital Financing										
Provincial/Federal Grants	$ 80,000	$ 108,150	$ 68,959	$ 21,855						$ -
Development Charges	$ -	$ 16,686	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Non-Growth Related Debenture Requirements	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Growth Related Debenture Requirements	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Wastewater Capital Reserve	$ 260,000	$ 916,114	$ 952,454	$ 906,760	$1,010,811	$1,381,804	$1,121,377	$1,318,034	$1,421,909	$1,625,715
Total Capital Financing	**$ 340,000**	**$1,040,950**	**$1,021,412**	**$ 928,614**	**$1,010,811**	**$1,381,804**	**$1,121,377**	**$1,318,034**	**$1,421,909**	**$1,625,715**

Appendix F

Debt Projections

APPENDIX F: DEBT CONTINUITY SCHEDULES

Table F-1

Water Service
Non Growth-Related Debt

Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Opening Balance	$ 322,968	$ 66,080	$ 33,600	$ -	$ -	$ -	$ -	$ -	$ -	$ -
New Debt	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Principal Repayment	$ 256,888	$ 32,480	$ 33,600	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Interest Payment	$ 8,134	$ 2,016	$ 1,042	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Closing Balance	66,080	33,600	-	-	-	-	-	-	-	-

Table F-2

Water Service
Growth-Related Debt

Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Opening Balance	$ -	$ -	$ 898,561	$ 864,469	$ 829,185	$ 792,665	$ 754,867	$ 715,746	$ 675,255	$ 633,348
New Debt	$ -	$ 931,500	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Principal Repayment	$ -	$ 32,939	$ 34,092	$ 35,285	$ 36,520	$ 37,798	$ 39,121	$ 40,490	$ 41,907	$ 47,747
Interest Payment	$ -	$ 32,603	$ 31,450	$ 30,256	$ 29,021	$ 27,743	$ 26,420	$ 25,051	$ 23,634	$ 26,495
Closing Balance	-	898,561	864,469	829,185	792,665	754,867	715,746	675,255	633,348	585,601

Table F-3

Wastewater Service
Non Growth-Related Debt

Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Opening Balance	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
New Debt	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Principal Repayment	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Interest Payment	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Closing Balance	-	-	-	-	-	-	-	-	-	-

Table F-4

Wastewater Service
Growth-Related Debt

Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Opening Balance	$ 405,485	$ 337,904	$ 270,323	$ 202,742	$ 135,161	$ 67,580	$ -	$ -	$ -	$ -
New Debt	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Principal Repayment	$ 67,581	$ 67,581	$ 67,581	$ 67,581	$ 67,581	$ 67,580	$ -	$ -	$ -	$ -
Interest Payment	$ 9,143	$ 7,573	$ 5,978	$ 4,383	$ 2,810	$ 1,191	$ -	$ -	$ -	$ -
Closing Balance	337,904	270,323	202,742	135,161	67,580	-	-	-	-	-

Appendix G

Reserve and Reserve Fund Projections

APPENDIX G: RESERVE AND RESERVE FUND PROJECTIONS

Table G-1

Water Service Water Capital Reserve Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Opening Balance	$4,276,020	$4,175,570	$5,338,072	$6,217,586	$6,915,702	$7,283,144	$7,554,842	$7,757,275	$7,590,849	$7,202,807
Transfer from Operating	$2,000,000	$2,050,000	$2,100,000	$2,150,000	$2,200,000	$2,250,000	$2,300,000	$2,350,000	$2,400,000	$2,450,000
Transfer to Capital	$2,152,000	$ 953,400	$1,297,246	$1,537,263	$1,922,473	$2,071,572	$2,193,335	$2,610,140	$2,876,966	$1,914,657
Closing Balance	$4,124,020	$5,272,170	$6,140,826	$6,830,323	$7,193,229	$7,461,572	$7,661,506	$7,497,135	$7,113,883	$7,738,150
Interest	51,550	65,902	76,760	85,379	89,915	93,270	95,769	93,714	88,924	96,727

Table G-2

Wastewater Service Wastewater Capital Reserve Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Opening Balance	$1,017,616	$1,526,461	$1,453,289	$1,418,345	$1,505,168	$1,563,662	$1,323,194	$1,419,339	$1,393,509	$1,338,120
Transfer from Operating	$ 750,000	$ 825,000	$ 900,000	$ 975,000	$1,050,000	$1,125,000	$1,200,000	$1,275,000	$1,350,000	$1,425,000
Transfer to Capital	$ 260,000	$ 916,114	$ 952,454	$ 906,760	$1,010,811	$1,381,804	$1,121,377	$1,318,034	$1,421,909	$1,625,715
Closing Balance	$1,507,616	$1,435,347	$1,400,835	$1,486,586	$1,544,358	$1,306,858	$1,401,816	$1,376,305	$1,321,600	$1,137,405
Interest	18,845	17,942	17,510	18,582	19,304	16,336	17,523	17,204	16,520	14,218

Table G-3

Water Service Water Development Charges Reserve Fund Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Opening Balance	$ (442,085)	$ (393,081)	$ (408,189)	$ (424,892)	$ (440,160)	$ (453,927)	$ (466,123)	$ (476,677)	$ (487,170)	$ (495,940)
Development Charge Proceeds	$ 53,857	$ 55,473	$ 54,085	$ 55,707	$ 57,379	$ 59,100	$ 60,873	$ 61,062	$ 62,894	$ 68,192
Transfer to Capital										
Transfer to Operating	$ -	$ 65,541	$ 65,541	$ 65,541	$ 65,541	$ 65,541	$ 65,541	$ 65,541	$ 65,541	$ 74,242
Closing Balance	$ (388,228)	$ (403,150)	$ (419,646)	$ (434,726)	$ (448,323)	$ (460,369)	$ (470,792)	$ (481,155)	$ (489,817)	$ (501,990)
Interest	$ (4,853)	$ (5,039)	$ (5,246)	$ (5,434)	$ (5,604)	$ (5,755)	$ (5,885)	$ (6,014)	$ (6,123)	$ (6,275)

Table G-4

Wastewater Service Wastewater Development Charges Reserve Fund Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Opening Balance	$ 355,532	$ 581,275	$ 803,505	$1,039,637	$1,289,353	$1,553,070	$1,831,289	$2,192,470	$2,559,044	$2,940,376
Development Charge Proceeds	$ 295,291	$ 304,149	$ 296,856	$ 305,761	$ 314,934	$ 324,382	$ 334,114	$ 334,981	$ 345,030	$ 364,297
Transfer to Capital		$ 16,686								
Transfer to Operating	$ 76,724	$ 75,153	$ 73,558	$ 71,964	$ 70,391	$ 68,771	$ -	$ -	$ -	$ -
Closing Balance	$ 574,098	$ 793,585	$1,026,802	$1,273,435	$1,533,896	$1,808,681	$2,165,403	$2,527,451	$2,904,075	$3,304,672
Interest	$ 7,176	$ 9,920	$ 12,835	$ 15,918	$ 19,174	$ 22,609	$ 27,068	$ 31,593	$ 36,301	$ 41,308

Table G-5

Water Service Water Operating Reserve Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Stabilization Reserve Opening Balance	$ 195,486	$ 167,024	$ 278,712	$ 290,900	$ 292,604	$ 245,403	$ 212,031	$ 192,267	$ 184,389	$ 186,493
Contributions from Operating Budget	$ -	$ 111,688	$ 12,188	$ 1,704	$ -	$ -	$ -	$ -	$ 2,103	$ 17,126
(Contributions to) Operating Budget	$ 28,462				$ 47,201	$ 33,373	$ 19,764	$ 7,877		
Rate Stabilization Reserve Closing Balance	**$ 167,024**	**$ 278,712**	**$ 290,900**	**$ 292,604**	**$ 245,403**	**$ 212,031**	**$ 192,267**	**$ 184,389**	**$ 186,493**	**$ 203,619**

Table G-6

Wastewater Service Wastewater Operating Reserve Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Stabilization Reserve Opening Balance	$ 228,428	$ 276,282	$ 238,316	$ 201,090	$ 163,693	$ 129,126	$ 100,420	$ 80,631	$ 70,728	$ 139,411
(Contributions from) Operating Budget	$ 47,854	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 68,683	$ 167,849
(Contributions to) Operating Budget		$ 37,967	$ 37,226	$ 37,397	$ 34,567	$ 28,706	$ 19,789	$ 9,903		
Rate Stabilization Reserve Closing Balance	**$ 276,282**	**$ 238,316**	**$ 201,090**	**$ 163,693**	**$ 129,126**	**$ 100,420**	**$ 80,631**	**$ 70,728**	**$ 139,411**	**$ 307,260**

Appendix H

Operating Budget Forecast
WATER

APPENDIX H: WATER OPERATING BUDGET FORECAST

Water Service 2020 - 2029 Operating Budget Forecast Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Operating Expenditures										
Program Administration	$ 1,251,509	$ 1,276,539	$ 1,302,070	$ 1,328,111	$ 1,354,674	$ 1,381,767	$ 1,409,402	$ 1,437,590	$ 1,466,342	$ 1,495,669
Training Division	$ 11,390	$ 11,618	$ 11,850	$ 12,087	$ 12,329	$ 12,575	$ 12,827	$ 13,084	$ 13,345	$ 13,612
Inventory Maintenance	$ 100	$ 102	$ 104	$ 106	$ 108	$ 110	$ 113	$ 115	$ 117	$ 120
Compliance	$ 3,710	$ 3,784	$ 3,860	$ 3,937	$ 4,016	$ 4,096	$ 4,178	$ 4,262	$ 4,347	$ 4,434
Bulk Water Stations	$ 13,310	$ 13,576	$ 13,848	$ 14,125	$ 14,407	$ 14,695	$ 14,989	$ 15,289	$ 15,595	$ 15,907
Hydrants	$ 20,080	$ 20,482	$ 20,891	$ 21,309	$ 21,735	$ 22,170	$ 22,613	$ 23,066	$ 23,527	$ 23,997
Irrigation from Hydrants	$ 7,500	$ 7,650	$ 7,803	$ 7,959	$ 8,118	$ 8,281	$ 8,446	$ 8,615	$ 8,787	$ 8,963
Meter Installations	$ 10,500	$ 10,710	$ 10,924	$ 11,143	$ 11,366	$ 11,593	$ 11,825	$ 12,061	$ 12,302	$ 12,548
Meter Repairs	$ 27,600	$ 28,152	$ 28,715	$ 29,289	$ 29,875	$ 30,473	$ 31,082	$ 31,704	$ 32,338	$ 32,985
Repair & Replace Mains	$ 12,670	$ 12,923	$ 13,182	$ 13,446	$ 13,714	$ 13,989	$ 14,268	$ 14,554	$ 14,845	$ 15,142
Repair & Replace Services	$ 55,960	$ 57,079	$ 58,221	$ 59,385	$ 60,573	$ 61,784	$ 63,020	$ 64,280	$ 65,566	$ 66,877
Service Installations (New)	$ 17,530	$ 17,881	$ 18,238	$ 18,603	$ 18,975	$ 19,355	$ 19,742	$ 20,136	$ 20,539	$ 20,950
Utility Locates	$ 74,810	$ 76,306	$ 77,832	$ 79,389	$ 80,977	$ 82,596	$ 84,248	$ 85,933	$ 87,652	$ 89,405
Valves	$ 2,120	$ 2,162	$ 2,206	$ 2,250	$ 2,295	$ 2,341	$ 2,387	$ 2,435	$ 2,484	$ 2,534
Water Sampling & Testing	$ 19,550	$ 19,941	$ 20,340	$ 20,747	$ 21,162	$ 21,585	$ 22,016	$ 22,457	$ 22,906	$ 23,364
Watermain Cleaning	$ 2,760	$ 2,815	$ 2,872	$ 2,929	$ 2,988	$ 3,047	$ 3,108	$ 3,170	$ 3,234	$ 3,298
Regional Water Charges - Fixed	$ 623,711	$ 647,065	$ 671,654	$ 697,177	$ 723,669	$ 751,169	$ 779,713	$ 809,342	$ 840,097	$ 872,021
Regional Water Charges - Variable	$ 1,992,501	$ 2,091,045	$ 2,193,533	$ 2,299,982	$ 2,411,353	$ 2,527,867	$ 2,649,755	$ 2,776,853	$ 2,909,367	$ 3,049,676
Sub Total Operating Expenditures	**$ 4,147,311**	**$ 4,411,519**	**$ 4,470,330**	**$ 4,623,677**	**$ 4,792,333**	**$ 4,969,493**	**$ 5,153,734**	**$ 5,344,947**	**$ 5,545,494**	**$ 5,768,628**
Capital-Related										
Existing Debt (Principal) - Non-Growth Related	$ 256,888	$ 32,480	$ 33,600	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Existing Debt (Interest) - Non-Growth Related	$ 8,153	$ 2,016	$ 1,042	$ -	$ -	$ -	$ -	$ -	$ -	$ -
New Growth Related Debt (Principal)	$ -	$ 32,939	$ 34,092	$ 35,285	$ 36,520	$ 37,798	$ 39,121	$ 40,490	$ 41,907	$ 47,747
New Growth Related Debt (Interest)	$ -	$ 32,603	$ 31,450	$ 30,256	$ 29,021	$ 27,743	$ 26,420	$ 25,051	$ 23,634	$ 26,495
Transfer to Capital Budget										
Transfer to Capital Reserves and Reserve Funds	$ 2,000,000	$ 2,050,000	$ 2,100,000	$ 2,150,000	$ 2,200,000	$ 2,250,000	$ 2,300,000	$ 2,350,000	$ 2,400,000	$ 2,450,000
Sub Total Capital Related Expenditures	**$ 2,265,041**	**$ 2,150,037**	**$ 2,200,183**	**$ 2,215,541**	**$ 2,265,541**	**$ 2,315,541**	**$ 2,365,541**	**$ 2,415,541**	**$ 2,465,541**	**$ 2,524,242**
Total Expenditures	**$ 6,412,352**	**$ 6,561,556**	**$ 6,670,513**	**$ 6,839,218**	**$ 7,057,874**	**$ 7,285,034**	**$ 7,519,276**	**$ 7,760,488**	**$ 8,011,035**	**$ 8,292,870**
Non-Rate Revenues										
Administrative Revenue	$ 3,500	$ 3,570	$ 3,641	$ 3,714	$ 3,789	$ 3,864	$ 3,942	$ 4,020	$ 4,101	$ 4,183
On & Off Fees	$ 430	$ 439	$ 447	$ 456	$ 465	$ 475	$ 484	$ 494	$ 504	$ 514
Water on Contruction	$ 105,850	$ 107,967	$ 110,126	$ 112,329	$ 114,575	$ 116,867	$ 119,204	$ 121,588	$ 124,020	$ 126,501
Recoveries	$ 5,140	$ 5,243	$ 5,348	$ 5,455	$ 5,564	$ 5,675	$ 5,788	$ 5,904	$ 6,022	$ 6,143
Water Sales	$ 68,030	$ 69,391	$ 70,778	$ 72,194	$ 73,638	$ 75,111	$ 76,613	$ 78,145	$ 79,708	$ 81,302
Recovery: Hydrant Rentals	$ 75,000	$ 76,500	$ 78,030	$ 79,591	$ 81,182	$ 82,806	$ 84,462	$ 86,151	$ 87,874	$ 89,632
Hydrants: Services Rendered	$ 10,560	$ 10,771	$ 10,987	$ 11,206	$ 11,430	$ 11,659	$ 11,892	$ 12,130	$ 12,373	$ 12,620
Irrigation from Hydrants; Services Rendered	$ 8,000	$ 8,160	$ 8,323	$ 8,490	$ 8,659	$ 8,833	$ 9,009	$ 9,189	$ 9,373	$ 9,561
Meter Installation; Services Rendered	$ 50,000	$ 51,000	$ 52,020	$ 53,060	$ 54,122	$ 55,204	$ 56,308	$ 57,434	$ 58,583	$ 59,755
Meter Repairs	$ 370	$ 377	$ 385	$ 393	$ 400	$ 409	$ 417	$ 425	$ 434	$ 442
Repair & Replace Services	$ 3,610	$ 3,682	$ 3,756	$ 3,831	$ 3,908	$ 3,986	$ 4,065	$ 4,147	$ 4,230	$ 4,314
Service Installations (New)	$ 12,000	$ 12,240	$ 12,485	$ 12,734	$ 12,989	$ 13,249	$ 13,514	$ 13,784	$ 14,060	$ 14,341
Total-Non Rate Revenues	**$ 342,490**	**$ 349,340**	**$ 356,327**	**$ 363,453**	**$ 370,722**	**$ 378,137**	**$ 385,699**	**$ 393,413**	**$ 401,282**	**$ 409,307**
Operating Subsidies										
Contributions from Development Charges Reserve Fund	$ -	$ 65,541	$ 65,541	$ 65,541	$ 65,541	$ 65,541	$ 65,541	$ 65,541	$ 65,541	$ 74,242
Contributions from Operating Reserve	$ 28,462	$ -	$ -	$ -	$ 47,201	$ 33,373	$ 19,764	$ 7,877	$ -	$ -
Total Operating Revenue	**$ 370,952**	**$ 414,881**	**$ 421,868**	**$ 428,994**	**$ 483,464**	**$ 477,051**	**$ 471,005**	**$ 466,832**	**$ 466,823**	**$ 483,549**
Net Water Costs To Be Recovered From Users	**$ 6,041,400**	**$ 6,146,675**	**$ 6,248,645**	**$ 6,410,224**	**$ 6,574,410**	**$ 6,807,984**	**$ 7,048,271**	**$ 7,293,656**	**$ 7,544,212**	**$ 7,809,321**

Appendix I

Operating Budget Forecast
WASTEWATER

APPENDIX I: WASTEWATER OPERATING BUDGET FORECAST

Wastewater Service 2020 - 2029 Operating Budget Forecast Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Operating Expenditures										
Program Adminstration	$ 410,399	$ 418,607	$ 426,979	$ 435,519	$ 444,229	$ 453,114	$ 462,176	$ 471,419	$ 480,848	$ 490,465
Training Division	$ 2,140	$ 2,183	$ 2,226	$ 2,271	$ 2,316	$ 2,363	$ 2,410	$ 2,458	$ 2,507	$ 2,557
Lateral Cleaning & Maintenance	$ 25,440	$ 25,949	$ 26,468	$ 26,997	$ 27,537	$ 28,088	$ 28,650	$ 29,223	$ 29,807	$ 30,403
Manhole Maintenance	$ 50	$ 51	$ 52	$ 53	$ 54	$ 55	$ 56	$ 57	$ 59	$ 60
Sewer CCTV Inspections	$ 48,790	$ 49,766	$ 50,761	$ 51,776	$ 52,812	$ 53,868	$ 54,945	$ 56,044	$ 57,165	$ 58,309
Sewer Lateral Installations	$ 36,800	$ 37,536	$ 38,287	$ 39,052	$ 39,834	$ 40,630	$ 41,443	$ 42,272	$ 43,117	$ 43,979
Sewer Main Cleaning	$ 59,620	$ 60,812	$ 62,029	$ 63,269	$ 64,535	$ 65,825	$ 67,142	$ 68,485	$ 69,854	$ 71,251
Sewer Main Repairs	$ 1,060	$ 1,081	$ 1,103	$ 1,125	$ 1,147	$ 1,170	$ 1,194	$ 1,218	$ 1,242	$ 1,267
Reimburse/Disconnect Program	$ 5,260	$ 5,365	$ 5,473	$ 5,582	$ 5,694	$ 5,807	$ 5,924	$ 6,042	$ 6,163	$ 6,286
Trenchless Repair Program	$ 50,380	$ 51,388	$ 52,415	$ 53,464	$ 54,533	$ 55,624	$ 56,736	$ 57,871	$ 59,028	$ 60,209
Grinder Pumps	$ 7,000	$ 7,140	$ 7,283	$ 7,428	$ 7,577	$ 7,729	$ 7,883	$ 8,041	$ 8,202	$ 8,366
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Regional Wastewater Charges - Fixed	$ 3,300,220	$ 3,497,243	$ 3,706,029	$ 3,927,278	$ 4,161,737	$ 4,410,193	$ 4,673,481	$ 4,952,488	$ 5,248,152	$ 5,561,466
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Transfer to Operating Reserve	$ 47,854								$ 68,683	$ 167,849
Sub Total Operating Expenditures	**$ 3,995,013**	**$ 4,157,121**	**$ 4,379,104**	**$ 4,613,815**	**$ 4,862,005**	**$ 5,124,466**	**$ 5,402,040**	**$ 5,695,618**	**$ 6,074,827**	**$ 6,502,467**
Capital-Related										
Existing Debt (Principal) - Growth Related	$ 67,581	$ 67,581	$ 67,581	$ 67,581	$ 67,581	$ 67,581	$ -	$ -	$ -	$ -
Existing Debt (Interest) - Growth Related	$ 9,143	$ 7,573	$ 5,978	$ 4,383	$ 2,810	$ 1,191	$ -	$ -	$ -	$ -
Transfer to Capital Reserves and Reserve Funds	$ 750,000	$ 825,000	$ 900,000	$ 975,000	$ 1,050,000	$ 1,125,000	$ 1,200,000	$ 1,275,000	$ 1,350,000	$ 1,425,000
Sub Total Capital Related Expenditures	**$ 826,724**	**$ 900,153**	**$ 973,558**	**$ 1,046,964**	**$ 1,120,391**	**$ 1,193,771**	**$ 1,200,000**	**$ 1,275,000**	**$ 1,350,000**	**$ 1,425,000**
Total Expenditures	**$ 4,821,737**	**$ 5,057,274**	**$ 5,352,662**	**$ 5,660,779**	**$ 5,982,395**	**$ 6,318,237**	**$ 6,602,040**	**$ 6,970,618**	**$ 7,424,827**	**$ 7,927,467**
Non-Rate Revenues										
Administrative Revenue	$ 1,480	$ 1,510	$ 1,540	$ 1,571	$ 1,602	$ 1,634	$ 1,667	$ 1,700	$ 1,734	$ 1,769
Miscellanous Revenue	$ 10,000	$ 10,200	$ 10,404	$ 10,612	$ 10,824	$ 11,041	$ 11,262	$ 11,487	$ 11,717	$ 11,951
Adminstrative Services Rendered	$ 210,000	$ 214,200	$ 218,484	$ 222,854	$ 227,311	$ 231,857	$ 236,494	$ 241,224	$ 246,048	$ 250,969
Lateral Cleaning & Maintenance - Services Rendered	$ 80	$ 82	$ 83	$ 85	$ 87	$ 88	$ 90	$ 92	$ 94	$ 96
Sewer Lateral Installations - Services Rendered	$ 21,570	$ 22,001	$ 22,441	$ 22,890	$ 23,348	$ 23,815	$ 24,291	$ 24,777	$ 25,273	$ 25,778
Sewer Main Cleaning - Services Rendered	$ 110	$ 112	$ 114	$ 117	$ 119	$ 121	$ 124	$ 126	$ 129	$ 131
Transfer from DC Wastewater	$ 1,841	$ 1,878	$ 1,915	$ 1,954	$ 1,993	$ 2,033	$ 2,073	$ 2,115	$ 2,157	$ 2,200
Total-Non Rate Revenues	**$ 245,081**	**$ 249,983**	**$ 254,982**	**$ 260,082**	**$ 265,284**	**$ 270,589**	**$ 276,001**	**$ 281,521**	**$ 287,151**	**$ 292,894**
Operating Subsidies										
Contributions from Development Charges Reserve Fund	$ 76,724	$ 75,153	$ 73,558	$ 71,964	$ 70,391	$ 68,771	$ -	$ -	$ -	$ -
Total Operating Revenue	**$ 321,805**	**$ 363,103**	**$ 365,767**	**$ 369,442**	**$ 370,241**	**$ 368,066**	**$ 295,790**	**$ 291,424**	**$ 287,151**	**$ 292,894**
Net Wastewater Costs To Be Recovered From Users	**$ 4,499,932**	**$ 4,694,172**	**$ 4,986,896**	**$ 5,291,337**	**$ 5,612,154**	**$ 5,950,171**	**$ 6,306,249**	**$ 6,679,193**	**$ 7,137,676**	**$ 7,634,572**

Appendix J

Sustainable Water Rates and Charges

APPENDIX J: SUSTAINABLE WATER RATES AND REVENUES

BASE RATE CALCULATION

Projected Number of Accounts

Customer Type	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
up to 3/4"	7,195	7,367	7,533	7,692	7,851	8,010	8,169	8,325	8,478	8,643
1"	185	185	185	185	185	185	185	185	185	185
1 1/2"	78	78	78	78	78	78	78	78	78	78
2"	74	74	74	74	74	74	74	74	74	74
3"	24	24	24	24	24	24	24	24	24	24
4"	16	16	16	16	16	16	16	16	16	16
6"	2	2	2	2	2	2	2	2	2	2
8"	-	-	-	-	-	-	-	-	-	-
10"	-	-	-	-	-	-	-	-	-	-
Total	**7,574**	**7,746**	**7,912**	**8,071**	**8,230**	**8,389**	**8,548**	**8,704**	**8,857**	**9,022**

Projected Annual Base Charges

Customer Type	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Annual Increase %Increases	**0.00%**	**0.00%**	**0.00%**	**1.00%**	**1.00%**	**2.00%**	**2.00%**	**2.00%**	**2.00%**	**2.00%**
up to 3/4"	$ 294.12	$ 294.12	$ 294.12	$ 297.06	$ 300.03	$ 306.03	$ 312.15	$ 318.40	$ 324.76	$ 331.26
1"	$ 412.08	$ 412.08	$ 412.08	$ 416.20	$ 420.36	$ 428.77	$ 437.35	$ 446.09	$ 455.01	$ 464.11
1 1/2"	$ 529.80	$ 529.80	$ 529.80	$ 535.10	$ 540.45	$ 551.26	$ 562.28	$ 573.53	$ 585.00	$ 596.70
2"	$ 853.44	$ 853.44	$ 853.44	$ 861.97	$ 870.59	$ 888.01	$ 905.77	$ 923.88	$ 942.36	$ 961.21
3"	$ 3,237.36	$ 3,237.36	$ 3,237.36	$ 3,269.73	$ 3,302.43	$ 3,368.48	$ 3,435.85	$ 3,504.57	$ 3,574.66	$ 3,646.15
4"	$ 4,120.20	$ 4,120.20	$ 4,120.20	$ 4,161.40	$ 4,203.02	$ 4,287.08	$ 4,372.82	$ 4,460.27	$ 4,549.48	$ 4,640.47
6"	$ 6,180.24	$ 6,180.24	$ 6,180.24	$ 6,242.04	$ 6,304.46	$ 6,430.55	$ 6,559.16	$ 6,690.35	$ 6,824.15	$ 6,960.64
8"	$ 8,534.76	$ 8,534.76	$ 8,534.76	$ 8,620.11	$ 8,706.31	$ 8,880.43	$ 9,058.04	$ 9,239.20	$ 9,423.99	$ 9,612.47
10"	$11,771.88	$11,771.88	$11,771.88	$11,889.60	$12,008.49	$12,248.66	$12,493.64	$12,743.51	$12,998.38	$13,258.35

Projected Annual Revenue Generated from Base Charges

Customer Type	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
up to 3/4"	$2,116,193	$2,166,782	$2,215,606	$2,284,995	$2,355,550	$2,451,320	$2,549,979	$2,650,648	$2,753,350	$2,863,075
1"	$ 76,235	$ 76,235	$ 76,235	$ 76,997	$ 77,767	$ 79,322	$ 80,909	$ 82,527	$ 84,178	$ 85,861
1 1/2"	$ 41,324	$ 41,324	$ 41,324	$ 41,738	$ 42,155	$ 42,998	$ 43,858	$ 44,735	$ 45,630	$ 46,543
2"	$ 63,155	$ 63,155	$ 63,155	$ 63,786	$ 64,424	$ 65,712	$ 67,027	$ 68,367	$ 69,735	$ 71,129
3"	$ 77,697	$ 77,697	$ 77,697	$ 78,474	$ 79,258	$ 80,844	$ 82,460	$ 84,110	$ 85,792	$ 87,508
4"	$ 65,923	$ 65,923	$ 65,923	$ 66,582	$ 67,248	$ 68,593	$ 69,965	$ 71,364	$ 72,792	$ 74,248
6"	$ 12,360	$ 12,360	$ 12,360	$ 12,484	$ 12,609	$ 12,861	$ 13,118	$ 13,381	$ 13,648	$ 13,921
8"	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
10"	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$2,452,887**	**$2,503,476**	**$2,552,300**	**$2,625,056**	**$2,699,011**	**$2,801,651**	**$2,907,316**	**$3,015,132**	**$3,125,124**	**$3,242,284**

UNIFORM RATE CALCULATION

Projected Annual Uniform Rates & Revenues

Customer Type	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Annual Increase %Increases	**0.00%**	**0.00%**	**0.00%**	**1.00%**	**1.00%**	**2.00%**	**2.00%**	**2.00%**	**2.00%**	**2.00%**
Uniform Rate per Metre 3	$ 1.4969	$ 1.4969	$ 1.4969	$ 1.5119	$ 1.5270	$ 1.5575	$ 1.5887	$ 1.6205	$ 1.6529	$ 1.6859
Projected Water Consumption	2,397,296	2,433,829	2,469,333	2,503,635	2,537,937	2,572,239	2,606,541	2,640,328	2,673,600	2,708,932
Projected Annual Uniform Water Rate Revenues	**3,588,512**	**3,643,199**	**3,696,345**	**3,785,168**	**3,875,399**	**4,006,333**	**4,140,955**	**4,278,524**	**4,419,089**	**4,567,037**

Projected Annual Revenue Generated from Base Charges	**$2,452,887**	**$2,503,476**	**$2,552,300**	**$2,625,056**	**$2,699,011**	**$2,801,651**	**$2,907,316**	**$3,015,132**	**$3,125,124**	**$3,242,284**
Projected Annual Revenue Generated from Uniform Rates	**$3,588,512**	**$3,643,199**	**$3,696,345**	**$3,785,168**	**$3,875,399**	**$4,006,333**	**$4,140,955**	**$4,278,524**	**$4,419,089**	**$4,567,037**
Total Water User Revenue	**$6,041,400**	**$6,146,675**	**$6,248,645**	**$6,410,224**	**$6,574,410**	**$6,807,984**	**$7,048,271**	**$7,293,656**	**$7,544,212**	**$7,809,321**

Net Water Costs To Be Recovered From Users	**$6,041,400**	**$6,146,675**	**$6,248,645**	**$6,410,224**	**$6,574,410**	**$6,807,984**	**$7,048,271**	**$7,293,656**	**$7,544,212**	**$7,809,321**

Projected Base (Fixed) Revenues vs. Uniform (Variable) Revenues

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Base Rate Revenue Percentage	41%	41%	41%	41%	41%	41%	41%	41%	41%	42%
Uniform Rate Revenue Percentage	59%	59%	59%	59%	59%	59%	59%	59%	59%	58%

Appendix K

Sustainable Wastewater Rates and Charges

APPENDIX K: SUSTAINABLE WASTEWATER RATES AND REVENUES

BASE RATE CALCULATION

Projected Number of Accounts

Customer Type	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
up to 3/4"	5,800	5,972	6,138	6,297	6,456	6,615	6,774	6,930	7,083	7,248
1"	139	139	139	139	139	139	139	139	139	139
1 1/2"	66	66	66	66	66	66	66	66	66	66
2"	62	62	62	62	62	62	62	62	62	62
3"	18	18	18	18	18	18	18	18	18	18
4"	14	14	14	14	14	14	14	14	14	14
6"	2	2	2	2	2	2	2	2	2	2
8"	-	-	-	-	-	-	-	-	-	-
10"	-	-	-	-	-	-	-	-	-	-
Total	**6,101**	**6,273**	**6,439**	**6,598**	**6,757**	**6,916**	**7,075**	**7,231**	**7,384**	**7,549**

Projected Annual Base Charges

Customer Type	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Annual Increase %Increases	**0.00%**	**2.00%**	**4.00%**	**4.00%**	**4.00%**	**4.00%**	**4.00%**	**4.00%**	**5.00%**	**5.00%**
up to 3/4"	$ 325.20	$ 331.70	$ 344.97	$ 358.77	$ 373.12	$ 388.05	$ 403.57	$ 419.71	$ 440.70	$ 462.73
1"	$ 455.28	$ 464.39	$ 482.96	$ 502.28	$ 522.37	$ 543.27	$ 565.00	$ 587.60	$ 616.98	$ 647.82
1 1/2"	$ 585.36	$ 597.07	$ 620.95	$ 645.79	$ 671.62	$ 698.48	$ 726.42	$ 755.48	$ 793.25	$ 832.92
2"	$ 929.64	$ 948.23	$ 986.16	$ 1,025.61	$ 1,066.63	$ 1,109.30	$ 1,153.67	$ 1,199.82	$ 1,259.81	$ 1,322.80
3"	$ 3,577.20	$ 3,648.74	$ 3,794.69	$ 3,946.48	$ 4,104.34	$ 4,268.51	$ 4,439.25	$ 4,616.83	$ 4,847.67	$ 5,090.05
4"	$ 4,552.92	$ 4,643.98	$ 4,829.74	$ 5,022.93	$ 5,223.84	$ 5,432.80	$ 5,650.11	$ 5,876.11	$ 6,169.92	$ 6,478.42
6"	$ 6,829.32	$ 6,965.91	$ 7,244.54	$ 7,534.32	$ 7,835.70	$ 8,149.13	$ 8,475.09	$ 8,814.09	$ 9,254.80	$ 9,717.54
8"	$ 9,430.92	$ 9,619.54	$10,004.32	$10,404.49	$10,820.67	$11,253.50	$11,703.64	$12,171.78	$12,780.37	$13,419.39
10"	$13,008.24	$13,268.40	$13,799.14	$14,351.11	$14,925.15	$15,522.16	$16,143.04	$16,788.76	$17,628.20	$18,509.61

Projected Annual Revenue Generated from Base Charges

Customer Type	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
up to 3/4"	$1,886,160	$1,980,936	$2,117,439	$2,259,181	$2,408,875	$2,566,929	$2,733,774	$2,908,600	$3,121,456	$3,353,880
1"	$ 63,284	$ 64,550	$ 67,132	$ 69,817	$ 72,610	$ 75,514	$ 78,534	$ 81,676	$ 85,760	$ 90,048
1 1/2"	$ 38,634	$ 39,406	$ 40,983	$ 42,622	$ 44,327	$ 46,100	$ 47,944	$ 49,862	$ 52,355	$ 54,973
2"	$ 57,638	$ 58,790	$ 61,142	$ 63,588	$ 66,131	$ 68,776	$ 71,528	$ 74,389	$ 78,108	$ 82,013
3"	$ 64,390	$ 65,677	$ 68,304	$ 71,037	$ 73,878	$ 76,833	$ 79,907	$ 83,103	$ 87,258	$ 91,621
4"	$ 63,741	$ 65,016	$ 67,616	$ 70,321	$ 73,134	$ 76,059	$ 79,102	$ 82,266	$ 86,379	$ 90,698
6"	$ 13,659	$ 13,932	$ 14,489	$ 15,069	$ 15,671	$ 16,298	$ 16,950	$ 17,628	$ 18,510	$ 19,435
8"	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
10"	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total	**$2,187,504**	**$2,288,308**	**$2,437,105**	**$2,591,634**	**$2,754,626**	**$2,926,510**	**$3,107,738**	**$3,297,523**	**$3,529,825**	**$3,782,667**

UNIFORM RATE CALCULATION

Projected Annual Uniform Rates & Revenues

Customer Type	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Annual Increase %Increases	**0.00%**	**2.00%**	**4.00%**	**4.00%**	**4.00%**	**4.00%**	**4.00%**	**4.00%**	**5.00%**	**5.00%**
Uniform Rate per Metre 3	$ 1.2663	$ 1.2916	$ 1.3433	$ 1.3970	$ 1.4529	$ 1.5110	$ 1.5715	$ 1.6343	$ 1.7160	$ 1.8018
Projected Wastewater Flows	1,826,129	1,862,663	1,898,167	1,932,469	1,966,771	2,001,073	2,035,375	2,069,162	2,102,434	2,137,766
Projected Annual Uniform Wastewater Rate Revenues	**$2,312,428**	**$2,405,864**	**$2,549,790**	**$2,699,703**	**$2,857,528**	**$3,023,660**	**$3,198,511**	**$3,381,670**	**$3,607,850**	**$3,851,905**

Projected Annual Revenue Generated from Base Charges	**$2,187,504**	**$2,288,308**	**$2,437,105**	**$2,591,634**	**$2,754,626**	**$2,926,510**	**$3,107,738**	**$3,297,523**	**$3,529,825**	**$3,782,667**
Projected Annual Revenue Generated from Uniform Rates	**$2,312,428**	**$2,405,864**	**$2,549,790**	**$2,699,703**	**$2,857,528**	**$3,023,660**	**$3,198,511**	**$3,381,670**	**$3,607,850**	**$3,851,905**
Total Wastewater User Revenue	**$4,499,932**	**$4,694,172**	**$4,986,896**	**$5,291,337**	**$5,612,154**	**$5,950,171**	**$6,306,249**	**$6,679,193**	**$7,137,676**	**$7,634,572**

Net Wastewater Costs To Be Recovered From Users	**$4,499,932**	**$4,694,172**	**$4,986,896**	**$5,291,337**	**$5,612,154**	**$5,950,171**	**$6,306,249**	**$6,679,193**	**$7,137,676**	**$7,634,572**

Projected Base (Fixed) Revenues vs. Uniform (Variable) Revenues

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Base Rate Revenue Percentage	49%	49%	49%	49%	49%	49%	49%	49%	49%	50%
Uniform Rate Revenue Percentage	51%	51%	51%	51%	51%	51%	51%	51%	51%	50%

Appendix L

Requirement 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.	• It is expected the Council will approve the Updated Financial Plan prior to April 29th 2016.
	ii.	The governing body of the owner, if the owner of the drinking water system has a governing body and is not a municipality.	• N/A
2.	The financial plans must apply to a period of at least six years.		• Applies for 6 years from 2016 to 2021 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.	• The licence expires in 2016 for the water systems (No. 077-301). 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.	• 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:	• See Statement of Financial Position for all water systems combined in Financial Plan.
		a. Total financial assets	• See Statement of Financial Position for all water systems combined in Financial Plan.
		b. Total liabilities	• See Statement of Financial Position for all water systems combined in Financial Plan.
		c. Net financial assets (debt)	• 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.	• 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.	• 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,	• 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.	• 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	• See Statement of Operations for all water systems combined in Financial Plan.
		c. Annual surplus or deficit, and	• See Statement of Operations for all water systems combined in Financial Plan.
		d. Accumulated surplus or deficit	• 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,	• 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	• 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,	• See Statement of Cash Flow for all water systems combined in Financial Plan.
		c. Investing transactions that are acquisitions and disposal of investments,	• 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.	• See Statement of Cash Flow for all water systems combined in Financial Plan.
		e. Changes in cash and cash equivalents during the year,	• 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.	• 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.	• 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,	• 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,	• 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.	• 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).		• 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.	• 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).	• 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).	• 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.