TO:

FINANCE AND CORPORATE SERVICES COMMITTEE

PREPARED BY AND KEY

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CHIEF ADMINISTRATIVE OFFICER APPROVAL:

CARLA LADD, CHIEF ADMINISTRATIVE OFFICER

DATE:

**OCTOBER 28th, 2015** 

SUBJECT:

WATER OPERATIONS BRANCH 2015 DRINKING WATER SYSTEM

**FINANCIAL PLAN** 

#### RECOMMENDED MOTION

That, in accordance with Provincial Regulation 453/07, the City of Barrie 2015 Drinking Water Financial Plan as provided in Appendix "A" be approved.

2. That, in accordance with Provincial Regulation 453/07 requiring Owners of municipal drinking water systems to submit a Drinking Water Financial Plan covering at least the six (6) year period of 2015-2021 to the Province, the submission of the same, as well as the Council Resolution approving this Plan to the Ministry of Municipal Affairs and Housing and Ministry of the Environment and Climate Change be approved.

3. That notification of the availability of the Financial Plan to the Public as prescribed by Provincial Regulation 453/07 be approved.

#### **PURPOSE & BACKGROUND**

- 4. The purpose of this Report to is to obtain the Finance and Corporate Services Committee's approval of Financial Plan #014-301A, dated October 7th, 2015 prepared in accordance with Provincial Regulation 453/07 under the Safe Drinking Water Act, 2002 to reflect current prevailing forecasts and asset plans.
- 5. Council expressed a desire to bring a revised plan from that approved in 2014 to the Finance and Corporate Services Committee.
- Financial Plan #014-301A is an update from Financial Plan #014-301 that was approved by 6. Council on April 28<sup>th</sup>, 2014. The plan has been updated to reflect recent 2015 forecast information including 2015 Council approved rates.

- 7. The Financial Plan for the City of Barrie's Drinking Water System has been prepared in accordance with Ontario Regulation 453/07 and must be approved by a resolution of Council for submission to the Ontario Ministry of Municipal Affairs and Housing and the Ontario Ministry of the Environment.
- 8. The purpose of Ontario Regulation 453/07 is to ensure the financial viability of drinking water systems in the long term by providing for adequate finances for day-today costs of operating and maintaining the Drinking Water System, as well as to fund all required growth and upgrade requirements.
- 9. Financial Plans must:
  - Be approved by a Council resolution;
  - Include a statement that financial impacts of the Drinking Water System have been considered and apply for a minimum six-year period;
  - Include details regarding proposed or projected financial operations using the Public Sector Accounting Board's "Statement of Operations" format for each year of the Financial Plan;
  - Be made available to the public who are served by the Drinking Water System upon request at no charge and online via publication to the Corporation's Website; and
  - Notice of the Financial Plan's availability must be provided to the public and a copy must be submitted to the Ministry of Municipal Affairs and Housing and Ministry of the Environment.
- 10. The Financial Plan, entitled 'City of Barrie, Water and Wastewater Ontario Regulation 453/07 Financial Plans', dated October 7<sup>th</sup>, 2015, presented as Appendix "A", was prepared by Watson and Associates Economists Ltd., in accordance with Ontario Regulation 453/07 and is the third Financial Plan for the City of Barrie Drinking Water System.
- 11. Although not required by legislation, Barrie choses to include in its Financial Plan a review of the issues that relate to its Wastewater System in order to have a similar level of financial confidence for that service.

#### **ANALYSIS**

- 12. The Financial Plan must cover a period of at least six (6) years and be reviewed and re-submitted every five (5) years as part of the renewal of the Municipal Drinking Water License. The City of Barrie received the renewal for its Municipal Drinking Water License in October, 2014. As previously noted, the City is updating its Financial Plan to reflect 2015 forecast information and actual approved rates for 2015.
- 13. The Financial Plan consists of:
  - Statement of Financial Position;
  - Statement of Operations;
  - Statement of Change in Net Financial Assets/Debt; and
  - Statement of Cash Flow.
- 14. Sustainability, as defined by the Public Sector Accounting Board (PSAB) and used by staff during the annual business planning process to assess the Corporation's financial condition, is the degree to which a [water owner] can maintain its current financial obligations and existing service commitments without increasing the debt or [rate] burden on the economy.
- 15. Overall, the Financial Plan provokes consideration of the long-term financial implications of current service levels and financing decisions and provides a model to show how the water system's operational requirements could be fully funded over the forecast period.

#### **ENVIRONMENTAL MATTERS**

16. There are no environmental matters related to the recommendation other than regulatory compliance.

#### **ALTERNATIVES**

17. Finance and Corporate Services Committee could chose not to approve the Plan, however, that would leave the previous Financial Plan in place which does not include the latest forecasts nor recognizes the impacts of the current Development Charges By-law (adopted since the existing plan was approved) which would result in unnecessarily high Water & Wastewater user rate increases in 2016 and beyond. This alternative is not recommended.

#### **FINANCIAL**

- 18. There are no direct financial implications associated with the recommended motions.
- 19. The Financial Plan suggests the following annual rate adjustments in order to maintain fiscal viability of the systems:

Service/Year	2016	2017	2018	2019	2020	2021	2022	2023	2024
Water	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	1.0%	1.0%	1.0%
Wastewater	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	2.75%	2.75%	2.25%

Regulation 453/07 requires that the Plan be adhered to for the next six (6) years - reapplication for Municipal Drinking Water License (MDWL) renewal will be required in 2019 (4 years from now) at which time the Plan can be re-evaluated and adjusted, if necessary, for the following six years.

- 20. The Financial Plan suggested annual rate adjustments are based on the following key assumptions:
  - Development Charge (DC) Revenue is based on detailed growth assumptions developed during the 2014 Fiscal Impact Analysis (F.I.A), in its current form.
  - Applicable existing debt charges for water and wastewater services are being funded from Development Charge Revenue.
  - Water and Wastewater Capital Reserve balances include a pay back from Development Charge revenues over the plans forecast period (related to previous debt charges not fully recovered from DC's).
- 21. As a result, any significant changes in the timing and quantum of actual growth and related Development Charge revenues along with any significant changes to capital needs, would negatively impact the City's Water & Wastewater capital reserves.

22. In order to limit the impact of any variations in the key assumptions used to develop the updated Financial Plan, staff are recommending the 2016 Budget include water rate increases of 2.5 per cent and 5 per cent for wastewater. In developing future business plans and budgets, staff will continue to assess the timing and development charge revenue collected against the Financial Plan, in assessing the appropriate annual rate increases.

#### **LINKAGE TO COUNCIL STRATEGIC PRIORITIES**

23. The recommendations included in this Staff Report are not specifically related to any of City Council's Strategic Priorities but is a requirement of ongoing service delivery.

Appendix "A"

City of Barrie

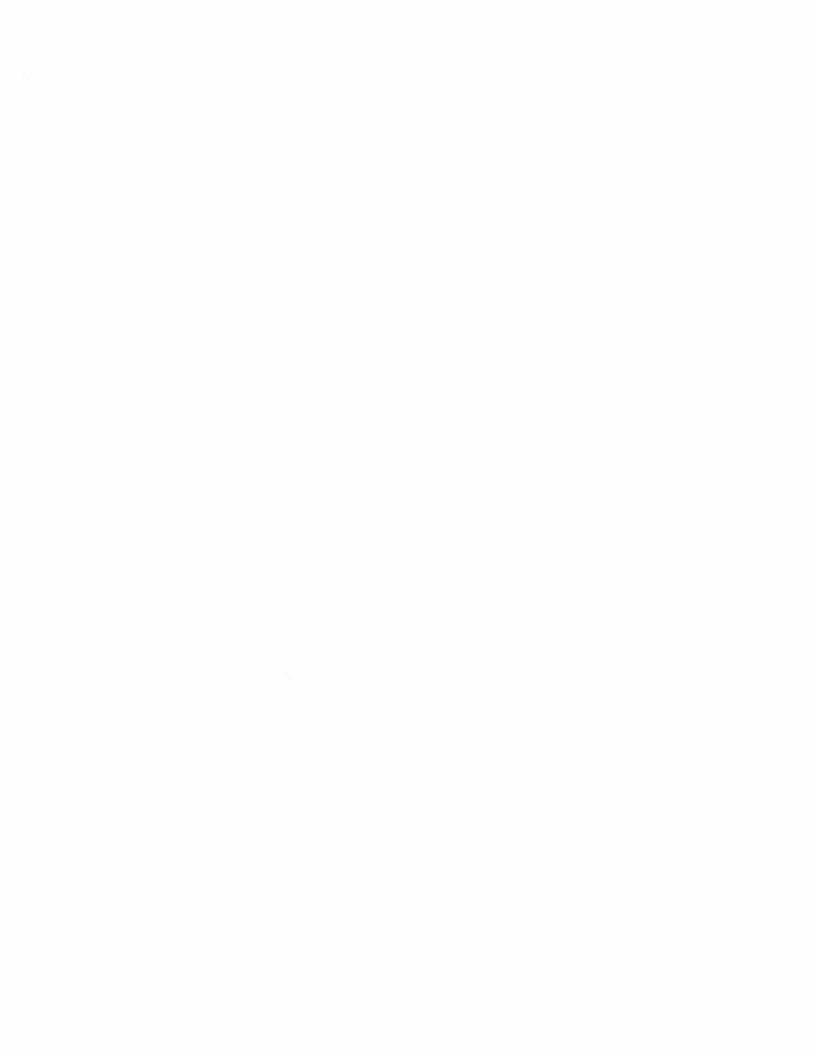
**Water and Wastewater** 

Regulation 453/07

**Financial Plans** 

Financial Plan #014-301A

Dated: October 7<sup>th</sup>, 2015



## City of Barrie

## Water and Wastewater Ontario Regulation 453/07 Financial Plans

Financial Plan # 014-301A

October 7, 2015





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Planning for growth

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## **List of Acronyms**

O.Reg. Ontario Regulation

P.S.A.B. Public Sector Accounting Board

S.D.W.A. Safe Drinking Water Act

S.W.S.S.A. Sustainable Water and Sewage Systems Act

### 1. Introduction

#### 1.1 Study Purpose

Watson & Associates Economists Ltd. (Watson) was retained by the City of Barrie (the City) to prepare water and wastewater financial plans as part of the five submission requirements for the purposes of obtaining a municipal drinking water license as per the Safe Drinking Water Act, 2002. In general, a financial plan requires an in-depth analysis of capital and operating needs, a review of current and future demand versus supply, and consideration of available funding sources. This detailed financial planning and forecasting in regards to the City's water and wastewater systems has already been completed and documented by Watson within the "City of Barrie Water and Wastewater Ontario Regulation 453/07 Financial Plans" issued May 5, 2014 and has been updated with revised 2015 forecasts from the City (2015 Forecast). The objective of the report provided herein is to convert the findings of the 2015 Forecast into the prescribed reporting requirements for a financial plan as defined by Ontario Regulation 453/07 (O.Reg. 453/07).

#### 1.2 Background

The Safe Drinking Water Act (S.D.W.A.) was passed in December, 2002 in order to address some of the recommendations made by the Walkerton Inquiry Part II report. One of the main requirements of the Act is the mandatory licensing of municipal water providers. Section 31 (1) specifically states,

"No person shall,

- establish a new municipal drinking water system or replace or carry out an alteration to a municipal drinking water system except under the authority of and in accordance with an approval under this Part or a drinking water works permit; or
- use or operate a municipal drinking water system that was established before or after this section comes into force except under the authority of and in accordance with an approval under this Part or municipal drinking water licence."

In order to become licensed, a municipality must satisfy five key requirements as per Section 44 (1):

1. Obtain a drinking water works permit;

- 2. Acceptance of the operational plan for the system based on the Drinking Water Quality Management Standard;
- 3. Accreditation of the Operating Authority;
- 4. Prepare and provide a financial plan; and
- 5. Obtain permit to take water.

The preparation of a financial plan is a key requirement for licensing and as such, must be undertaken by all water providers.

#### 1.2.1 Financial Plan Defined

Section 30 (1) of the S.D.W.A. provides the following definition of financial plans:

"'financial plans' means,

- a) financial plans that satisfy the requirements of subsection (2), but only if,
  - (i) Bill 175 (Sustainable Water and Sewage Systems Act, 2002, introduced on September 23, 2002) receives Royal Assent, and
  - (ii) sections 3 and 9 of Bill 175 (Sustainable Water and Sewage Systems Act, 2002) are in force, or
- b) financial plans that satisfy the requirements prescribed by the Minister, in any other case. 2002, c. 32, s. 30 (1)."

As of time of writing, the Sustainable Water and Sewage Systems Act, 2002 cited above has been repealed (see Section 2.2 of this report); however, the standards that it directs underpin the specific requirements of s.30 (1) part b as they are outlined in O.Reg. 453/07 and which will be examined in detail below.

#### 1.2.2 Financial Plan Requirements - New System

O.Reg. 453/07 provides the following parameters with regard to s.30 (1) part b of the S.D.W.A. for new water systems:

- Financial plans must be approved by Council resolution (or governing body) indicating that the drinking water system is financially viable;
- Financial plans must include a statement that the financial impacts have been considered and apply for a minimum six-year period (commencing when the system first serves the public);
- Financial plans must include detail regarding proposed or projected financial operations itemized by total revenues, total expenses, annual surplus/deficit and accumulated surplus/deficit (i.e. the components of a "Statement of Operations"

- as per the Public Sector Accounting Board (P.S.A.B.) for each year in which the financial plans apply;
- Financial plans applicable to two or more solely-owned drinking water systems can be prepared as if they are for one drinking water system;
- Financial plans are to be made available to the public upon request and at no charge;
- If a website is maintained, financial plans are to be made available to the public through publication on the Internet at no charge;
- · Notice of the availability of the financial plans is to be given to the public; and
- Financial plans are to be submitted to the Ministry of Municipal Affairs and Housing.

#### 1.2.3 Financial Plan Requirements – Existing System

O.Reg. 453/07 also provides details with regard to s.30 (1) part b of the S.D.W.A. for <u>existing</u> water systems. The requirements for existing systems are summarized as follows:

- Financial plans must be approved by Council resolution (or governing body);
- Financial plans must include a statement that the financial impacts have been considered and apply for a minimum six-year period (commencing in the year of licence expiry);
- Financial plans must include detail regarding proposed or projected financial operations itemized by total revenues, total expenses, annual surplus/deficit and accumulated surplus/deficit (i.e. the components of a "Statement of Operations" as per the P.S.A.B.) for each year in which the financial plans apply;
- Financial plans must present financial position itemized by total financial assets, total liabilities, net debt, non-financial assets, and tangible capital assets (i.e. the components of a "Statement of Financial Position" as per the P.S.A.B.) for each year in which the financial plans apply;
- Gross cash receipts/payments itemized by operating transactions, capital transactions, investing transactions and financial transactions (i.e. the components of a "Statement of Cash Flow" as per the P.S.A.B.) for each year in which the financial plans apply;
- Financial plans applicable to two or more solely-owned drinking water systems can be prepared as if they are for one drinking water system;
- Financial plans are to be made available to the public upon request and at no charge;

- If a website is maintained, financial plans are to be made available to the public through publication on the Internet at no charge;
- Notice of the availability of the financial plans is to be given to the public; and
- Financial plans are to be submitted to the Ministry of Municipal Affairs and Housing.

#### 1.2.4 Financial Plan Requirements - General

Given that the legislation falls under the S.D.W.A., a financial plan is <u>mandatory</u> for water systems and <u>encouraged</u> for wastewater systems. The financial plans shall be for a forecast period of at least six years but longer planning horizons are encouraged. The financial plan is to be completed, approved and submitted at the time of licence renewal (i.e. six months prior to licence expiry). Financial plans may be amended and additional information beyond what is prescribed can be included if deemed necessary.

The financial plans must contain, on the front page, the appropriate financial plan number as set out in Schedule A of the Municipal Drinking Water Licence document.

#### 1.2.5 Public Sector Accounting Board (P.S.A.B.) Requirements

The components of the financial plans indicated by the regulation are consistent with the requirements for financial statement presentation as set out in section PS1200 of the Canadian Institute of Chartered Accountants Public Sector Accounting Handbook:

"Financial statements should include a Statement of Financial Position, a Statement of Operations, a Statement of Change in Net Debt, and a Statement of Cash Flow."

Both the Statement of Financial Position and the Statement of Operations were required for financial reporting purposes in pre-2009 reporting years; however, the format changed in 2009 to conform to the requirements of PS1200 and PS3150 (see Figures 1-1 and 1-2). Financial statements are now reported on a full accrual accounting basis, which will continue in future years. The accrual accounting method recognizes revenues and expenses in the same period as the activities that give rise to them regardless of when they are actually paid for. Since an exchange of cash is not necessary to report a financial transaction, the accrual method is meant to provide a more accurate picture of financial position. Before 2009, financial results were reported on a modified cash basis of accounting, whereby revenues and expenses are recognized when cash is paid or received and only certain accrual-type items such as payables and receivables are recognized at year-end. The difference between the methods is in the timing of when transactions are reported. This timing difference has

impacted the presentation of the statements in that various accounts have been added or deleted in order to properly report the transactions.

Moreover, since the 2009 fiscal year, additional information relating to the accounting treatment of tangible capital assets is included in annual reporting, as indicated by the requirements under section PS3150. Pre-2009, the costs to acquire, develop and/or construct capital assets were expensed in the year in which they occur. Going forward, tangible capital assets are capitalized so as to create an inventory of the assets owned and to account for their ability to provide future benefits. The reporting of tangible capital assets required further changes to the format of existing financial statements. From a financial planning perspective, this change is significant for water and wastewater assets as they can represent a significant portion of the City's total assets.

The Statement of Cash Flow and the Statement of Change in Net Financial Assets/Debt (which is a new statement as of 2009) are required statements going forward. The Statement of Change in Net Financial Assets/Debt reports on whether enough revenue was generated in a period to cover the expenses in the period and whether sufficient resources have been generated to support current and future activities (see Figure 1-3). The Statement of Cash Flow reports on how activities were financed for a given period providing a measure of the changes in cash for that period (see Figure 1-4).

It should be noted that the Statement of Reserves and Reserve Funds and the Statement of Capital, as used by the public sector pre-2009, have been eliminated by the new reporting format. The balances and transactions that make up these two statements have been transferred to either the Statement of Operations or the Statement of Financial Position depending on the nature of the account.

# Figure 1-1 Statement of Financial Position

#### OLD FORMAT (PRE-2009)

#### 2009 AND FUTURE

<u>Assets</u>	
Financial	Assets
Cash	

Accounts Receivable

Investments

Inventory for resale

Other Assets

Total Financial Assets

#### Non-Financial Assets

Inventory of Supplies Prepaid Expenses

Total Non-Financial Assets

#### Liabilities

Accounts Payable & Accrued Liabilities
Debt (Principal only)

Other (DC Reserves-Deferred Revenue)

Total Liabilities

#### **NET ASSETS**

#### **Municipal Position**

Fund Balances

Current Fund

Capital Fund

Reserves and Reserve Funds

Amounts to be Recovered

From Future Revenues

From Reserves & Reserve Funds

#### **TOTAL MUNICIPAL POSITION**

#### Financial Assets

Cash

Accounts Receivable

Investments

Inventory for resale

Other Assets

**Total Financial Assets** 

#### Liabilities

Accounts Payable & Accrued Liabilities

Debt (Principal only)

Other (DC Reserves-Deferred Revenue)

Total Liabilities

#### NET FINANCIAL ASSETS/(DEBT)

#### Non-Financial Assets

Tangible Capital Assets

Inventory of Supplies

Prepaid Expenses

Total Non-Financial Assets

ACCUMULATED SURPLUS/(DEFICIT)

# Figure 1-2 Statement of Operations

#### OLD FORMAT (PRE-2009)

#### 2009 AND FUTURE

	1 1
Revenues	Revenue
Base Charge Revenue	Base Charge Revenue
Rate Based Revenue	Rate Based Revenue
Transfers from Reserves	Earned DC Revenue
Other Revenue	Other Revenue
Total Revenues	Total Revenue
Expenditures	<u>Expenses</u>
	Operating Expenses
Operating Expenses	Interest on Debt
	Amortization
Capital	Other
Total Expenditures	Total Expenses
Net Revenues for the year	Annual Surplus/(Deficit)
Increase (decrease) in amounts to be recovered	Accum. Surplus/(Deficit), beg. of year
Change in fund balances	Accum. Surplus/(Deficit), end of year

# Figure 1-3 Statement of Change in Net Financial Assets/Debt

#### **2009 AND FUTURE**

Annual Surplus/(Deficit)

Less: Acquisition of tangible capital assets Add: Amortization of tangible capital assets

(Gain)/Loss on disposal of tangible capital assets Add: Proceeds on sale of tangible capital assets Add: Write-downs of tangible capital assets

Sub-total

Less: Acquisition of supplies inventory Less: Acquisition of prepaid expenses Add: Consumption of supplies inventory

Add: Use of prepaid expenses

Sub-total

(Increase)/Decrease in net financial assets/net debt

Net financial assets/(net debt), beginning of year

Net financial assets/(net debt), end of year

# Figure 1-4 Statement of Cash Flow<sup>1</sup>

#### **DIRECT METHOD**

#### INDIRECT METHOD

Operating Transactions
Cash received from:
Water Operations
Less: Cash paid for:
Operating expenses
Finance charges
Cash provided by operating transactions
Capital Transactions
Proceeds on sale of tangible capital assets
Less: Cash used to acquire tangible capital assets
Cash applied to capital transactions
Investing Transactions
Proceeds from investments
Less: Cash used to acquire investments
Cash provided by (applied to) investing transactions
Financing Transactions
Proceeds from debt issue
Less: Debt repayment (Principal only)
Cash applied to financing transactions
Increase in cash and cash equivalents
Cash and cash equivalents, beginning of year

Cash and cash equivalents, end of year

Operating Transactions

Annual Surplus/(Deficit)

Add: Amortization of Tangible Capital Assets Loss/(Gain) on sale of Tangible Capital Assets Decrease/(Increase) in Accounts Receivable Increase/(Decrease) in Accounts Payable Decrease/(Increase) in Inventories for sale

Other items

Cash provided by operating transactions

Capital Transactions

Proceeds on sale of tangible capital assets Less: Cash used to acquire tangible capital assets

Cash applied to capital transactions

Investing Transactions

Proceeds from investments

Less: Cash used to acquire investments

Cash provided by (applied to) investing transactions

Financing Transactions

Proceeds from debt issue

Less: Debt repayment (Principal only)

Cash applied to financing transactions

Increase in cash and cash equivalents

Cash and cash equivalents, beginning of year

Cash and cash equivalents, end of year

<sup>&</sup>lt;sup>1</sup> The statement of cash flow can be prepared using either the direct or indirect methods. The indirect method derives cash flow by making adjustments to the net surplus/deficit reported on the statement of operations. The direct method calculates cash flow identifying the direct sources and uses of cash.

## 2. Sustainable Financial Planning

#### 2.1 Introduction

In general, sustainability refers to the ability to maintain a certain position over time. While the S.D.W.A. requires a declaration of the financial plan's sustainability, it does not give a clear definition of what would be considered sustainable. Instead, the Ministry of the Environment released a guideline ("Towards Financially Sustainable Drinking-Water and Wastewater Systems") that provides possible approaches to achieving sustainability. The Province's Principles of Financially Sustainable Water and Wastewater Services are provided below:

- Principle #1: Ongoing public engagement and transparency can build support for, and confidence in, financial plans and the system(s) to which they relate.
- Principle #2: An integrated approach to planning among water, wastewater, and storm water systems is desirable given the inherent relationship among these services.
- Principle #3: Revenues collected for the provision of water and wastewater services should ultimately be used to meet the needs of those services.
- Principle #4: Lifecycle planning with mid-course corrections is preferable to planning over the short term, or not planning at all.
- Principle #5: An asset management plan is a key input to the development of a financial plan.
- Principle #6: A sustainable level of revenue allows for reliable service that meets or exceeds environmental protection standards, while providing sufficient resources for future rehabilitation and replacement needs.
- Principle #7: Ensuring users pay for the services they are provided leads to equitable outcomes and can improve conservation. In general, metering and the use of rates can help ensure users pay for services received.
- Principle #8: Financial plans are "living" documents that require continuous improvement. Comparing the accuracy of financial projections with actual results can lead to improved planning in the future.
- Principle #9: Financial plans benefit from the close collaboration of various groups, including engineers, accountants, auditors, utility staff and municipal Council.

#### 2.2 Sustainable Water and Sewage Systems Act

The Sustainable Water and Sewage Systems Act (S.W.S.S.A.) was passed on December 13, 2002. The intent of the Act was to introduce the requirement for municipalities to undertake an assessment of the "full cost" of providing their water and the wastewater services. In total, there were 40 areas within the Act to which the Minister could have made regulations. It is noted that, the regulations, which accompany the Act, were not issued and the Act was repealed on December 31, 2012.

#### 2.3 Water Opportunities Act, 2010 (Bill 72)

Since the passage of the Safe Drinking Water Act, changes and refinements to the legislation have been introduced, including Bill 72. Bill 72 was introduced into legislation on May 18, 2010 and received Royal Assent on November 29, 2010 as the Water Opportunities Act.

The purposes of the Water Opportunities Act are to foster innovative water, wastewater and storm water technologies, services and practices; to create opportunities for economic development and clean-technology jobs; and to conserve and sustain water resources. To achieve this, Bill 72 provides for the creation of performance targets (financial, operational and maintenance related) which will vary by service type and location, and the required submission of conservation and sustainability plans for water, wastewater and stormwater.

The sustainability plan in Bill 72 expands on interim legislation for financial plans included in O.Reg 453/07, to include the following:

- an asset management plan for the physical infrastructure;
- financial plan;
- water conservation plan (for water service only);
- a risk assessment;
- a strategy for maintaining and improving the services; and
- additional information considered advisable.

Where a Board has jurisdiction over a service, the plan (and any plan amendments) must be approved by the municipality in which the municipal service is provided, before submission to the Minister. The Minister may also direct preparation of joint or partially joint plans.

Regulations (still forthcoming) will prescribe details with regard to any time periods or time limits, contents of the plans, identifying which portions of the plan will require certification, the public consultation process (if required), limitations updates and refinements.

#### 2.4 2015 Forecast

As noted above, Watson has worked with City staff to complete extensive financial planning as part of the 2015 Forecast process. The forecast process was designed to address "full cost" principles and reflect the guiding principles toward sustainable financial planning. Figure 2-1 below summarizes the process.

**Drivers:** Legislation **Financing Options:** Reserves/Reserve Funds Local Issues **Development Charges** Health & Safety Issues Municipal Act XII **Technical Innovations Debt Limit** Grants Draws from Capital Works **Growth Forecast** Capital Budget Forecast Reserves/ Requirements Reserve Funds Capital-Related Operating Reserves/Reserve **Expenditures** Contribution to **Funds** Capital Contributions to **Operating Budget** Reserves/ **Forecast** Reserve Funds User Count and Consumption Forecast Profile Rates Forecast

Figure 2-1
Water and Wastewater Rate Calculation Process

As a result of employing this process, the 2015 Forecast provides a sound financial plan for the City's water and wastewater system by providing:

- A detailed assessment of current and future capital needs including an analysis of potential funding sources;
- An analysis of fixed and variable operating costs in order to determine how they will be impacted by evolving infrastructure needs and system growth;
- A review and recommendation on rate structures that ensure revenues are equitable and sufficient to meet system needs; and
- A public process that involves ongoing consultation with the main stakeholders including the City staff, Council, the general public (specifically the users of the systems) and others, with the aim of gaining input and collaboration on the sustainability of the financial plan.

The financial plan has been formulated with recent budget and capital forecast estimates. The impact on an average annual water and wastewater bill per residential customer is displayed in Appendix A.

## 3. Approach

#### 3.1 Overview

The 2015 Forecast has been prepared on a modified cash basis; therefore, a conversion was required in order to present a full accrual financial plan for the purposes of this report. The conversion process used will help to establish the structure of the financial plan along with the opening balances that will underpin the forecast. This chapter outlines the conversion process utilized and summarizes the adjustments made to prepare the financial plan. It is noted that the financial plan has been prepared for both water and wastewater; however, the focus of the remaining chapters will be on water only. The complete financial plan for wastewater is provided in Appendix B.

#### 3.2 Conversion Process

The conversion from the existing modified cash basis financial plan to the full accrual reporting format required under O.Reg. 453/07 can be summarized in the following steps:

- 1. Calculate Tangible Capital Asset Balances;
- 2. Convert Statement of Operations;
- 3. Convert Statement of Financial Position;
- 4. Convert Statement of Cash Flow and Net Assets/Debt; and
- Verification and Note Preparation.

#### 3.2.1 Calculate Tangible Capital Asset Balances

In calculating tangible capital asset balances, existing and future purchased, developed, and/or contributed assets will need to be considered. For existing water assets, an inventory has already been compiled and summarized within the 2015 Forecast as well as part of the City's annual P.S.A.B. 3150 compliance processes. Given the prospective nature of the 2015 Forecast, replacement cost is provided for each asset; however, historical cost (which is the original cost to purchase, develop or construct each asset) is required for financial reporting purposes. Once historical cost is established, the following calculations are made to determine net book value:

- Accumulated amortization up to the year prior to the first forecast year;
- Amortization expense on existing assets for each year of the forecast period;
- Acquisition of new assets for each year of the forecast period; and
- Disposals and related gains or losses for each year of the forecast period.

Future water capital needs have also been determined and summarized within the 2015 Forecast. These estimates, however, only represent future assets that the City anticipates purchasing or constructing without consideration for assets that are contributed by developers and other parties (at no cost or partial cost to the City). These contributed assets could form a significant part of the infrastructure going forward in terms of the sustainability of the system as a whole and despite their non-monetary nature; the financial plan may need to be adjusted in order to properly account for these transactions. Once the sequence and total asset acquisition has been determined for the forecast period, annual amortization of these assets for each year is calculated in a similar manner as that used for existing assets.

Once the historical cost, accumulated amortization and amortization expenses are calculated as described above, the total net book value of the tangible capital assets can be determined and recorded on the Statement of Financial Position.

#### 3.2.2 Convert Statement of Operations

As per subsection 1.2.5 above, the new Statement of Operations eliminates and/or adds certain transactions that have been reported differently by municipalities since 2009 (see Figure 3-1). A wide range of adjustments will be considered and will depend on the size and complexity of the system. For example, the revenues and expenses associated with the now obsolete Statement of Capital and Statement of Reserves and Reserve Funds (see subsection 1.2.5) will need to be adjusted for and included within the Statement of Operations. This includes all non-tangible capital asset costs previously included in the capital statement (i.e. expenses related to various studies) while at the same time eliminating all expenditures incurred to acquire tangible capital assets which will now form part of the tangible capital asset balance discussed in subsection 3.2.1. Transfers to and from reserves are no longer explicitly reported on the Statement of Operations. Instead, these transactions are represented by changes in cash and accumulated surplus. Also, debt repayment costs relating to the principal payment portion only need to be removed, as they no longer qualify as an expense for reporting purposes. Principal payments will now be reported as a decrease in debt liability on the Statement of Financial Position. Finally, expenses relating to tangible capital assets, such as amortization, write-offs and (gain)/loss on disposal of assets, will be reported on the Statement of Operations in order to capture the allocation of the cost of these assets to operating activities over their useful lives.

Figure 3-1 Conversion Adjustments Statement of Operations (Water)

Modified Cash Basis	Budget	Adjustments	ments	Full Accrual Budget	Accrual Basis
	2015	DR	CR	2015	
Revenues					Revenues
Base Charge Revenue	8,233,087			8,233,087	Base Charge Revenue
Rate Based Revenue	16,662,517			16,662,517	Rate Based Revenue
Transfers from Reserves	8,112,164	8,112,164			
			9,818,165	9,818,165	Earned Development Charges and Gas Tax Revenue
Other Revenue	595,902			595,902	Other Revenue
Total Revenues	33,603,670			35,309,671	Total Revenues
Expenditures					Ехрепses
Operating	17,723,300			17,723,300	Operating Expenses
Capital					Additional services of
Transfers to Reserves	7,718,150		7,718,150		
Debt Repayment (Principal & Interest)	8,162,220		1,639,454	6,522,766	Interest on Debt
		8,749,885		8,749,885	Amortization
Total Expenditures	33,603,670			32,995,951	Total Expenses
Net Expenditures	1			2,313,720	Annual Surplus/(Deficit)
Increase (decrease) in amounts to be recovered	1			214,982,943	214,982,943 Accumulated Surplus/(Deficit), beginning of year
Change in Fund Balances	1	2,313,720		217,296,663	217,296,663 Accumulated Surplus/(Deficit), end of year

	19,175,769	
	19,175,769	
	AL ADJUSTMENTS	
1) (1) minutes	19,17	

Note: The combined adjustments above should be balanced and net to \$0 (i.e. Total DR = Total CR)

#### 3.2.3 Convert Statement of Financial Position

Once the Statement of Operations has been converted and the net book value of tangible capital assets has been recorded, balances for the remaining items on the Statement of Financial Position are determined and recorded (see Figure 3-2). As noted earlier, the applicable balances from the Statement of Capital and the Statement of Reserve and Reserve Funds will need to be transferred to this statement. The opening/actual balances for the remaining accounts, such as accounts receivable, inventory, accounts payable and outstanding debt (principal only), are recorded and classified according to the structure of the Statement of Financial Position as outlined in PS1200.

It is acknowledged that some of the balances required on the Statement of Financial Position will be consolidated across the City and, as such, will be difficult to isolate the information that is relevant to water. An example of this is accounts receivable which may be administered centrally by the Finance Department. Ontario Regulation 453/07 allows for the exclusion of these numbers if they are not known at the time of preparing the financial plan. Please refer to the Financial Plan Notes in Chapter 4 for more details.

#### 3.2.4 Convert Statement of Cash Flow and Net Financial Assets/Debt

The Statement of Cash Flow summarizes how the City financed its activities or, in other words, how the costs of providing services were recovered. The statement is derived using comparative Statement of Financial Position, the current Statement of Operations and other available transaction data.

The Statement of Change in Net Financial Assets/Debt is a new statement which reconciles the difference between the surplus or deficit from current operations and the change in net financial assets/debt for the year. This is significant, as net debt provides an indication of future revenue requirements. In order to complete the Statement of Net Financial Assets/Debt, additional information regarding any gains/losses on disposals of assets, asset write-downs, acquisition/use of supplies inventory and the acquisition use of prepaid expenses, is necessary (if applicable). Although the Statement of Change in Net Financial Assets/Debt is not required under O.Reg. 453/07, it has been included in this report as a further indicator of financial viability.

Figure 3-2
Conversion Adjustments
Statements of Financial Position (Water)

Modified Cash Basis	Budget	Adjustments	ments	Full Accrual Budget	Accrual Basis
	2015	DR	CR	2015	
ASSETS					ASSETS
Financial Assets					Financial Assets
Accounts Receivable	4,149,267			4,149,267	Accounts Receivable
Long-term Accounts Receivable	13,840,334			13,840,334	Long-term Accounts Receivable
Accounts Receivable - Other	9,939,176			9,939,176	Accounts Receivable - Other
Total Financial Assets	27,928,777			27,928,777	Total Financial Assets
LIABILITIES					Liabilities
Bank Indebtedness	533,378			533,378	Bank Indebtedness
Accounts Payable & Accrued Liabilities	3,487,384			3,487,384	Accounts Payable & Accrued Liabilities
Gross Long-term Liabilities	141,699,793			141,699,793	Debt (Principal only)
Total Liabilities	145, 720, 555		4	145, 720, 555	Total Liabilities
Net Assets/(Debt)	(117,791,778)			(117,791,778)	(117,791,778) Net Financial Assets/(Debt)
					Non-Financial Assets
		335,088,441		335,088,441	Tangible Capital Assets
				335,088,441	Total Non-Financial Assets
Municipal Position					
Water Reserves	10,067,680	10,067,680			
Development Charge Reserve Fund	(9,939,175)		9,939,175		
Amounts to be Recovered	(117,920,283)		117,920,283		
Total Municipal Position	(117,791,778)		217,296,663	217,296,663	217,296,663 Accumulated Surplus/(Deficit), end of year

345,156,121 345,156,121 TOTAL ADJUSTMENTS

Note: The combined adjustments above should be balanced and net to \$0 (i.e. Total DR = Total CR)

#### 3.2.5 Verification and Note Preparation

The final step in the conversion process is to ensure that all of the statements created by the previous steps are in balance. The Statement of Financial Position summarizes the resources and obligations of the City at a set point in time. The Statement of Operations summarizes how these resources and obligations changed over the reporting period. To this end, the accumulated surplus/deficit reported on the Statement of Financial Position should equal the accumulated surplus/deficit reported on the Statement of Operations.

The Statement of Change in Net Financial Assets/Debt and the Statement of Financial Position are also linked in terms of reporting on net financial assets/debt. On the Statement of Financial Position, net financial assets/debt is equal to the difference between financial assets and liabilities and should equal net financial assets/debt as calculated on the Statement of Net Financial Assets/Debt.

While not part of the financial plan, the accompanying notes are important to summarize the assumptions and estimates made in preparing the financial plan. Some of the significant assumptions that need to be addressed within the financial plan are as follows:

a) Opening cash balances – Opening cash balances are necessary to complete the Statement of Cash Flows and balance the Statement of Financial Position. Preferably, opening cash balances should be derived from actual information contained within the City's ledgers. It may not be possible, however, to extract this information from the ledgers for water alone; therefore, a reasonable proxy will be needed. One approach is to assume that opening cash balances equal ending reserve and reserve fund balances from the previous year adjusted for accrual-based transactions reflected by accounts receivable/payable balances. The following equation outlines this approach:

Ending Reserve/Reserve Fund Balance

Plus: Ending Accounts Payable Balance

Less: Ending Accounts Receivable Balance

Equals: Approximate Ending Cash Balance

b) <u>Amortization Expense</u> – The method and timing of amortization should be based on the City's amortization policy. Otherwise, an assumption will need to be made and applied consistently throughout the financial plan.

- c) <u>Accumulated Amortization</u> Will be based on the culmination of accumulated amortization expenses throughout the life of each asset however derived, along with information on construction/acquisition date and useful life obtained from the 2015 Forecast.
- d) <u>Contributed Assets</u> As noted earlier, contributed assets could represent a significant part of the City's infrastructure acquisitions. As such, a reasonable estimate of value and timing of acquisition/donation may be required in order to adequately capture these assets. In the case where contributed assets are deemed to be insignificant or unknown, an assumption of "no contributed assets within the forecast period" will be made.
- e) Accumulated Surplus The magnitude of the surplus in this area may precipitate the need for additional explanation especially in the first year of reporting. This Accumulated Surplus captures the historical infrastructure investment which has not been reported in the past but has accumulated to significant levels. It also includes all water reserve and reserve fund balances.
- f) Other Revenues Will represent the recognition of revenues previously deferred (i.e. development charge revenues) and/or accrued revenues (developer contributions) and/or other minor miscellaneous revenues.

### 4. Financial Plan

#### 4.1 Introduction

The following tables provide the complete financial plan for the City's water system (please refer to Appendix B for the wastewater financial plan). A brief description and analysis of each table is provided below. It is important to note that the financial plan that follows is a forward look at the financial position of the City's water systems. It is not an audited document<sup>1</sup> and contains various estimates as detailed in the "Notes to the Financial Plan" section below.

#### 4.2 Water Financial Plan

#### 4.2.1 Statement of Financial Position (Table 4-1)

The Statement of Financial Position provides information that describes the assets, liabilities, and accumulated surplus of the City's water system. The first important indicator is net financial assets/(debt), which is defined as the difference between financial assets and liabilities. This indicator provides an estimation of the system's "future revenue requirement." A net financial asset position is where financial assets are greater than liabilities and implies that the system has the resources to finance future operations. Conversely, a net debt position implies that the future revenues generated by the system will be needed to finance past transactions as well as future operations. Table 4-1 indicates that at the end of 2015, due to existing water debt levels, the City's water system will be in a net financial debt position of approximately \$117.8 million. For the remainder of the forecast period the City's net financial asset/(debt) position will improve, reaching a net debt position of approximately \$55.8 million at the end of 2024.

Another important indicator on the Statement of Financial Position is the tangible capital asset balance. As noted earlier, providing this information is a requirement for municipalities as part of PS3150 compliance and is significant from a financial planning perspective for the following reasons:

 Tangible capital assets such as water mains are imperative to water service delivery;

<sup>&</sup>lt;sup>1</sup> O.Reg. 453/07 does not require an audited financial plan.

- These assets represent significant economic resources in terms of their historical and replacement costs; therefore, ongoing capital asset management is essential to managing significant replacements and repairs; and
- The annual maintenance required by these assets has an enduring impact on water operational budgets.

In general terms, an increase in the tangible capital asset balance indicates that assets may have been acquired either through purchase by the municipality or donation/ contribution by a third party. A decrease in the tangible capital asset balance can indicate a disposal, write down, or use of assets. A use of assets is usually represented by an increase in accumulated amortization due to annual amortization expenses arising as a result of allocating the cost of the asset to operations over the asset's useful life. Table 4-1 shows tangible capital asset balance is expected to increase by approximately \$86.0 million over the forecast period. This indicates that the City has plans to invest in tangible capital assets in excess of the anticipated use of existing assets over the forecast period.

#### 4.2.2 Statement of Operations (Table 4-2)

The Statement of Operations summarizes the revenues and expenses generated by the water system for a given period. The annual surplus/deficit measures whether the revenues generated were sufficient to cover the expenses incurred and, in turn, whether net financial assets have been maintained or depleted. Table 4-2 illustrates the ratio of expenses to revenues decreasing from 93% in 2015 to 86% by 2024 (with lower percentages during 2016 to 2023). As a result, annual surplus grows from approximately \$2.3 million in 2015 to just under \$6.2 million by 2024. It is important to note that an annual surplus is beneficial to ensure funding is available to non-expense costs such as tangible capital asset acquisitions, reserve/reserve fund transfers and debt principal payments.

Another important indicator on this statement is accumulated surplus/deficit. An accumulated surplus indicates that the available net resources are sufficient to provide future water services. An accumulated deficit indicates that resources are insufficient to provide future services and that borrowing or rate increases are required to finance annual deficits. From Table 4-2, the financial plan proposes to add approximately \$154.6 million to a 2014 accumulated surplus of approximately \$214.9 million over the forecast period. This accumulated surplus, as indicated in Table 4-2, is predominantly made up of reserve and reserve fund balances as well as historical investments in tangible capital assets.

#### 4.2.3 Statement of Change in Net Financial Assets/Debt (Table 4-3)

The Statement of Change in Net Financial Assets/Debt indicates whether revenue generated was sufficient to cover operating and non-financial asset costs (i.e. inventory supplies, prepaid expenses, tangible capital assets, etc.) and in so doing, explains the difference between the annual surplus/deficit and the change in net financial assets/ debt for the period. Table 4-3 indicates that from 2015 to 2024 forecasted annual surplus for each year exceeds forecasted tangible capital asset acquisitions (net of amortization), resulting in increases to net financial assets each year. This allows for a long-term plan of funding capital through accumulated surplus (i.e. reserves and reserve funds). This is evidenced by the ratio of cumulative annual surplus before amortization to cumulative tangible capital asset acquisitions ranging from 1.20 to 2.54 over the forecast period.<sup>1</sup>

#### 4.2.4 Statement of Cash Flow (Table 4-4)

The Statement of Cash Flow summarizes how the water system is expected to generate and use cash resources during the forecast period. The transactions that provide/use cash are classified as operating, capital, investing and financing activities as shown in Table 4-4. This statement focuses on the cash aspect of these transactions and thus is the link between cash and accrual based reporting. Table 4-4 indicates that cash from operations will be used to fund capital transactions (i.e. tangible capital asset acquisitions), make debt principal payments and build internal reserves and reserve funds over the forecast period. The financial plan projects the cash position of the City's water system to improve from a deficit balance of approximately \$7.1 million at the beginning of 2015 to a positive balance of approximately \$163.3 million by 2024. For further discussions on projected cash balances, please refer to the Notes to the Financial Plan.

<sup>&</sup>lt;sup>1</sup> A desirable ratio is 1:1 or better.

Table 4-1

Statement of Financial Position: Water Services

UNAUDITED: For Financial Planning Purposes Only

	Motor					Forecast					
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Financial Assets											
Cash	-		9,741,808	25,981,806	46,367,850	66,438,190	82,392,572	104,498,021	121,974,670	142 333, 173	163,333,855
Accounts Receivable	-	4,149,267	4,238,303	4,345,999	4,488,318	4,659,407	4.845,302	5,039,753	5,170,992	5.311,739	5,450,135
Long-term Accounts Receivable	2	13,840,334	13,840,334	13,840,334		ļ.	-	-		,	
Accounts Receivable - Other	2	9,939,176	4,085,346	•	1	1				-	
Total Financial Assets		27,928,777	31,905,791	44,168,139	50,856,168	71,097,597	87,237,874	109,537,774	127,145,682	147,644,912	168,783,990
Liablities		020 000									
Dank indepledness	,	025,578			0000	1001100	2 050 004	2 000 000	, 000 500	. 000 4	4 407 004
Accounts Payable & Accrued Liabilities	-	3,487,364	3,557,119	3,628,250	3,700,73	3,7/4,784	3,85U.284	3.927.739	4,000,500	4,U85,973	4, 10/,091
Debt (Principal only)	2	141,699,793	145,131,685	147,719,904	145,881,569	144,277,768	141,812,200	139,236,816	142,246,657	149.535,118	146,054,976
Deferred Revenue	8	•		6,833,840	6,829,717	21,344,117	33,597,583	46,482,653	53,520,523	62.957,545	74.379,151
Total Liabilities		145,720,555	148,688,804	158, 181, 994	156,412,065	169,396,669	179,260,067	189,646,768	199,773,048	216,578,636	224,601,818
Net Financial Assets/(Debt)		(117,791,778)	(116,783,013)	(114,013,855)	(105,555,897)	(98,299,072)	(92,022,193)	(80, 108, 994)	(72,627,386)	(68,933,724)	(55,817,828)
Non-Financial Assets Tangible Caziral Assets	4	335,088,441	350,568,616	365,382,407	374,049,338	384,854,328	394,844,016	400,501,981	416.172,321	432,394,842	425,442,294
Total Non-Financial Assets		335,088,441	350,568,616	365,382,407	374,049,338	384,854,328	394,844,016	400,501,981	416.172,321	432,394,842	425,442,294
Accumulated Surplus((Deficit)	s	217,296,663	233,785,603	251,368,552	268,493,441	286,555,256	302,821,823	320,392,987	343,544,935	363,461,118	369,624,466
Financial Indicators	Total Change	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1) Increase/(Decrease) in Net Financial Assets	68,681,555	6,707,605	1,008,765	2,769,158	8,457,958	7,256,825	6.276.879	11,913,199	7 481 608	3,693,662	13,115,896
2) Increase/(Decrease) in Tangible Capital Assets	85,959,968	(4,393,885)	15,480,175	14,813,791	8,666,931	10,804,990	889'686'6	5,657,965	15,670,340	16, 222, 521	(6.952,548)
23 Sections (Characters) in Acres and Archael Course in	454 644 500	2 242 720	16 400 040	17 582 040	47 124 990	18 OR1 815	18 286 567	17 571 164 1	23 151 948	19 916 183	6 163 34R

Table 4-2

Statement of Operations: Water Services

UNAUDITED: For Financial Planning Purposes Only

	-4-4					Forecast					
	Mores	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Water Revenue		780 222 A	8 571 276	A 909 624	9 279 587	9 633 973	9 925 678	10.233.827	10.572.593	10.820.024	11,135,001
Case Chalge November		18 689 517	16 B58 543	17 166 370	17 650 320	18 322 468	19 146 133	20 004 689	20 453 356	21 050 409	21.565.812
Kale based Kevenue		10,002,017	0,000,010	40,000,000	40,400,000	200000	40 654 674	40 COC 074	45 435 P74	11 412 207	10 219 443
Eamed Development Charges Revenue	n	9,818,165	13,958,519	13,340,189	12, 100, 9U8	12,290,915	10,024,07	/o'cne'n)	13, 130,07	11,412,207	0,210,440
Developer Contributions	4	•	10,173,097	11,346,057	11,984,373	12, 190, 468	11,449,910	11,793,406	12,147,210	070 115.21	
Other Revenue	9	295,902	607,900	620,000	632,500	645,100	628,099	621.299	684 800	834,090	994,641
Total Revenues		35,309,671	50, 169, 435	51,388,240	51,653,698	53,082,924	51,804,691	53,609,094	58,993,830	56,628,436	43,913,897
Water Expenses	Cab 44	17 703 300	18 340 700	18 439 200	18 R07 R00	19 183 900	19 567 600	19 959 000	20 358 300	20.765.400	21,180,700
Operating Expenses	3CII. 4-1	6 522 766	6 512 873	6 640 825	6 734 557	6.650.731	6.576.302	6.466.487	6,351,712	6,459,748	6,738,301
Amodization	4	8,749,885	8.817.922	8,725,266	8,986,442	9,186,478	9,394,222	9,612,443	9,131,870	9 487 105	9,831,548
Total Expenses		32,995,951	33,680,495	33,805,291	34,528,799	35,021,109	35,538,124	36,037,930	35,841,882	36.712,253	37,750,549
Annual Surplus (Deficit)		2,313,720	16,488,940	17,582,949	17,124,889	18,061,815	16,266,567	17,571,164	23,151,948	19,916,183	6, 163, 348
Accumulated Surplus/(Deficit), beginning of year	uș.	214,982,943	217,296,663	233,785,603	251,368,552	268,493,441	286,555,256	302,821,823	320,392,987	343,544,935	363.461,118
Accumulated Surplus/(Deficit), end of year		217,296,663	233,785,603	251,368,552	268,493,441	286,555,256	302,821,823	320,392,987	343,544,935	363,461,118	369,624,466
Note b:										0000	7000
Accumulated Surplus(Deficit) Reconciliation:		2015	2016	2017	2018	2019	2020	12021	2022	2023	2024
Reserve Balances		(90 000 476)	44 08E 34E	A 022 040	S 820 717	21 344 117	33 507 583	46 482 653	53 520 523	62 957 544	74.379.151
Reserves: Development Charges	Appendix A	10 087 681	14 FOR 338	19 865 715	40.325.672	45 978 696	49 790 007	59 127 822	69,619,271	80,601,394	90,237,148
Keserves: Capital/Cure	Whatehal w	428 606	40.422.042	26 699 665	47 155 389	67.322.843	83.387.690	105.610.475	123,139,794	143,558,938	164,616,299
Local Keserves Balance		1424 750 6400	(444 04E 330)	74EA 5E3 7AA)	1150 711 2861	(165 621 885)	(175, 409, 783)	(185 719 469)	(195 767 180)	(212 492 662)	(220.434.127)
Less. Dept Colganons and Deferred Revenue		13 840 334	13 840 334	13 840 334	1007	(200)		-	-		
Add. Long-telli Accounts Neverwand		335 DAR 441	350 568 616	365 382 407	374 049 338	384 854 328	394 844 016	400,501,981	416,172,321	432 394 842	425,442,294
Total Engine Balance		217,296,663	233,785,603	251,368,562	268,493,441	286,555,256	302,821,823	320,392,987	343,544,935	363,461,118	369,624,466
Financial Indicators	Total Change	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1) Expense to Revenue Ratio		%26	%/9	%99	%29	%99	%69	67%	61%	65%	%98
2) Increase/(Decrease) in Accumulated Surplus	154,641,523	2,313,720	16,488,940	17,582,949	17,124,889	18,061,815	16,266,567	17,571,164	23, 151, 948	19,916,183	6,163,348

Schedule 4-1

Statement of Operating Expenses: Water Services UNAUDITED: For Financial Planning Purposes Only

					į	Forecast					
	Notes	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Operating Expenses Ground Waler Supply (18-2610):									!		
Salaries/Benefits		1,411,700	1,439,900	1,468,700	1,498,100	1,528,100	1,558,700	1,589,900	1,621,700	1,654,100	1,687,200
Utilities		924,400	942,900	961,800	981,000	1,000,600	1,020,600	1,041,000	1,061,800	1,083,000	1,104,700
Other		1,403,000	1,431,100	1,459,700	1,488,900	1,518,700	1,549,100	1,580,100	1,611,700	1,643,900	1,676,800
Surface Water Supply (18-2615):											
Salaries/Benefits		1,733,900	1,768,600	1,804,000	1,840,100	1,876,900	1.914,400	1,952,700	1,991,800	2,031,600	2,072,200
Ctilities		849,800	966,800	884,100	901,800	919,800	938.200	000'256	976.100	995,600	1,015,500
Other		602,800	614,900	627,200	639,700	652,500	665.600	006'829	692,500	706,400	720,500
Water Maintenance - Administration (18-2620):											
Salaries/Benefits		99,100	580,500	592,100	603,900	616,000	628,300	640,900	653 700	9999	680,100
Other		418,500	426,900	435,400	444,100	453,000	462,100	471,300	480,700	490,300	500,100
Water Meters/Customer Service (18-2630):											
Salaries/Benefits		1,572,000	1,603,400	1,635,500	1,668,200	1,701,600	1,735,600	1,770,300	1,805,700	1,841,800	1,878,600
Other		336,200	342,900	349,800	356,800	363,900	371,200	378,600	386.200	393,900	401.800
Water Distribution (18-2840):											
Salaries/Benefits		1,452,800	1.481.900	1,511,500	1,541,700	1,572,500	1,604,000	1,636,100	1,668,800	1,702.200	1,736,200
Other		1,141,800	1,164,600	1.187.900	1,211,700	1,235,900	1,260,600	1,285,800	1,311,500	1.337,700	1,364,500
Hydrant Painting (18-2641):		61,200	62,400	63,600	64,900	66,200	67.500	006'89	70,300	71,700	73,100
Hydrant Maintenance (18-2642):		122,400	124,800	127,300	129,800	132,400	135,000	137,700	140.500	143,300	146,200
Hydrant Snow Removal (18-2643):		122,400	124,800	127,300	129,800	132,400	135,000	137,700	140.500	143,300	146,200
Main Tapping (18-2644):		20,400	20,800	21,200	21,600	22,000	22,400	22,800	23,300	23.800	24,300
Water-Corporate Support (18-2695):		4,964,600	5,063,900	5,165,200	5,268,500	5,373,900	5,481,400	5,591,000	5,702,800	5.816.900	5,933,200
Water Rate (18-2645):											
Salaries/Benefits		16,300	16,600	16,900	17,200	17,500	17,900	18,300	18,700	19,100	19,500
Non TCA - Expenses from Capital Budget	2	,	272,000	1	•			,		,	
TOTAL OPERATING EXPENSES		17,723,300	18,349,700	18,439,200	18,807,800	19,183,900	19,567,600	19,959,000	20,358,300	20,765,400	21,180,700

Table 4-3

Statement of Changes in Net Financial Assets/Debt: Water Services

UNAUDITED: For Financial Planning Purposes Only

						Forecast					
	Notes	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Annual Surplus/(Deficit)		2,313,720	16,488,940	17,582,949	17,124,889	18,061,815	16,266,567	17,571,164	23,151,948	19.916,183	6,163,348
Less: Acquisition of Tangible Capital Assets	4	(4,356,000)	(24,298,097)	(23,539,057)	(17,653,373)	(19,991,468)	(19,383,910)	(15,270,408)	(24.802.210)	(25, 709, 626)	(2,879,000)
Add: Amortization of Tangible Capital Assets	4	8,749,885	8,817,922	8,725,266	8,986,442	9,186,478	9,394,222	9,612,443	9,131,870	9 487 105	9,831,548
(Gain)/Loss on disposal of Tangible Capital Assets		1	•	-	•	-	•	•			•
Add: Proceeds on Sale of Tangible Capital Assets		•	•	•	,	•	•	•	,	,	•
Add: Write-downs of Tangible Capital Assets			-			•			•		1
		4,393,885	(15,480,175)	(14.813.791)	(8,666,931)	(10,804,990)	(9,989,688)	(5,657,965)	(15,670,340)	(16.222.521)	6,952,548
Increase/(Decrease) in Net Financial Assets/(Net Debt)		6,707,605	1,008,765	2,769,158	8,457,958	7,256,825	6,276,879	11,913,199	7,481,608	3,693,662	13,115,896
Net Financial Assets/(Net Debt), beginning of year		(124,499,383)	(117,791,778)	(116,783,013)	(114,013,855)	(105, 555, 897)	(98, 299, 072)	(92,022,193)	(80, 108, 994)	(72.627,386)	(68.933,724)
Net Financial Assets (Net Debt), end of year		(117,791,778)	(116,783,013)	(114,013,855)	(105,555,897)	(98,299,072)	(92,022,193)	(80,108,994)	(72,627,386)	(68,933,724)	(55,817,828)
Financial indicators		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1) Acquisition of Tangible Capital Assets (Cumulative)		4,356,000	28,654,097	52, 193, 154	69,846,527	89,837,995	109,221,905	124,492,313	149,294,523	175 004 149	177,883,149
2) Annual Surplus/Delicit before Amortization (Cumulative)		11,063,605	36,370,467	62,678,682	88,790,013	116,038,306	141,699,095	168,882,702	201,166.520	230,569,808	246,564,704
3) Ratio of Annual Surplus before Amortization to Acquisition of TCA's (Cumulative)	mulalive)	2.54	1.27	1.20	1.27	1.29	1.30	1.36	1.35	1.32	1.39

Table 4-4
Statement of Cash Flow – Indirect Method: Water Services

UNAUDITED: For Financial Planning Purposes Only

						Forecast					
	Notes	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Operating Transactions Americal Survivor Pagest		2 313 720	16 488 940	17 582 949	17 124 889	18 061 815	16 266 567	17.571.164	23 151 948	19 916 183	6.163.348
Add: Amortization of TCA's	4	8,749,885	8,817,922	8,725,266	8,986,442	9,186,478	9,394,222	9,612,443	9.131.870	9 487 105	9,831,548
Less; Eamed Deferred Revenue	60	(9,818,165)	(13,958,619)	(13,346,189)	(12, 106, 908)	(12,290,915)	(10,624,871)	(10,905,871)	(15,135,871)	(11.412.287)	(10,218,443)
Less: Developer Contributions			(10,173,097)	(11,346,057)	(11,984,373)	(12,190,468)	(11,449,910)	(11,793,408)	(12,147,210)	(12 511 626)	1
Add: Deferred Revenue Proceeds		11,414,351	19,812,449	24,265,375	25,943,119	26,805,315	22, 878, 337	23,790,941	22,173,741	20.849.309	21,640,050
Change in A/R (Increase)/Decrease		(137,029)	(89,036)	(107,695)	(142,319)	(171,089)	(185,894)	(194,452)	(131,239)	(140,747)	(138,397)
Change in A/P Increase/(Decrease)		68,369	69,735	71,131	72,529	74,005	75,500	77,015	78,569	80, 105	81,718
Cash Provided by Operating Transactions		12,591,131	20,968,294	25,844,780	27,893,379	29,475,141	26,353,951	28, 157, 832	27,121,808	26 132 452	27,077,583
Capital Transactions											5
Proceeds on sale of Tangible Capital Assets		٠	,	•	•	•	-	•			3
Less Cash Used to acquire Tangible Capital Assets	4	(4,356,000)	(14,125,000)	(12, 193,000)	(2,669,000)	(7,801,000)	(7,934,000)	(3,477,000)	(12.655 000)	13 198,000)	(2,879,000)
Cash Applied to Capital Transactions		(4,356,000)	(14,125,000)	(12, 193, 000)	(5.669,000)	(7.801,000)	(7,934,000)	(3,477,000)	(12.655,000)	(13 198 000)	(2,879,000)
Investing Transactions					-						;
Proceeds from Investments		-	•	•	,		٠	•	,	135,590	282,241
Less: Cash Used to Acquire Investments		-			-	•	•		,		1
Cash Provided by (applied to) Investing Transactions		,		1	•	•	-	•	,	135,590	282,241
Financing Transactions											
Proceeds from Debt Issue	8	1	5,200,000	4,611,000	430,000	780,000	•	•	5,700,000	10,290,000	•
Less: Debt Repayment (Principal only)	2	(1,639,454)	(1,768,108)	(2.022.782)	(2,268,335)	(2,383,801)	(2,465,569)	(2,575,383)	(2,690,159)	(3.001.539)	(3,480,142)
Cash Applied to Financing Transactions		(1,639,454)	3,431,892	2,588,218	(1,838,335)	(1,603,801)	(2,465,569)	(2,575,383)	3,009,841	7,288,461	(3,480,142)
Increase in Cash and Cash Equivalents		6.595,677	10,275,186	16,239,998	20,386,044	20,070,340	15,954,382	22, 105, 449	17,476,649	20,358,503	21,000,682
Cash and Cash Equivalents, beginning of year	-	(7,129,055)	(533,378)	9,741,808	25,981,806	46,367,850	66,438,190	82,392,572	104,498,021	121,974,670	142,333,173
Cash and Cash Equivalents, end of year	-	(533,378)	9,741,808	25,981,806	46,367,850	66,438,190	82,392,572	104,498,021	121,974,670	142,333,173	163,333,855

### Water Notes to Financial Plan

The financial plan format, as outlined in Chapter 4, closely approximates the full accrual format used by municipalities (2009 onward) on their audited financial statements. The financial plan, however, is not an audited document and contains various estimates. In this regard, Section 3 (2) of O.Reg. 453/07 states the following:

"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:

- 1. Sub-subparagraphs 4 i A, B and C of subsection (1)
- 2. Sub-subparagraphs 4 iii A, C, E and F of subsection (1)."

The information referred to in sub-subparagraphs 4 i A, B and C of subsection (1) includes:

- A. Total financial assets (i.e. cash and receivables);
- B. Total liabilities (i.e. payables, debt and deferred revenue); and
- C. Net debt (i.e. the difference between A and B above).

The information referred to in sub-subparagraphs 4 iii A, C, E and F of subsection (1) includes:

- A. Operating transactions that are cash received from revenues, cash paid for operating expenses and finance charges;
- B. Investing transactions that are acquisitions and disposal of investments;
- C. Change in cash and cash equivalents during the year; and
- D. Cash and cash equivalents at the beginning and end of the year.

In order to show a balanced financial plan in a full accrual format for the City of Barrie, some of the items listed above have been estimated given that the City does not maintain all financial asset and liability data separately for water. Usually, this type of data is combined with the financial assets and liabilities of other departments and services given that there is not a current obligation to disclose this data separately (as there is with revenue and expenses). The assumptions used have been documented below:

### 1. Cash, Receivables and Payables

It is assumed that the opening cash balances required to complete the financial plan are equal to:

Ending Reserve/Reserve Fund Balance

Plus: Ending Accounts Payable Balance

Less: Ending Accounts Receivable Balance

Equals: Approximate Ending Cash Balance

Receivable and payable balances were estimated for each year of the forecast based on the following factors:

- Receivables: Based on historical levels of receivables and accrued receivables as a percentage of annual revenues, applied to projected water revenues; and
- b) Payables: Based on historical levels of payables as a percentage of annual expenses incurred, applied to projected water expenses.

### 2. Debt

Outstanding water related debt at the end of 2014 was \$143,339,248 with additional debt proceeds anticipated throughout the forecast period. *Principal* repayments over the forecast period are scheduled as follows:

Year	Principal Payments
2015	1,639,454
2016	1,768,108
2017	2,022,782
2018	2,268,335
2019	2,383,801
2020	2,465,569
2021	2,575,383
2022	2,690,159
2023	3,001,539
2024	3,480,142
Total	\$ 24,295,272

For financial reporting purposes, debt principal payments represent a decrease in debt liability and the interest payments represent a current year operating expense.

### 3. Deferred Revenue/Accounts Receivable-Other

Deferred revenue is made up of water development charge reserve fund balances which are considered to be a liability for financial reporting purposes until the funds are used to emplace the works for which they have been collected. In years when the water development charge reserve fund balance is negative, it is shown as an asset (accounts receivable – other) for financial reporting purposes, representing future amounts to be collected from developers.

### 4. Tangible Capital Assets

- Opening net book value of tangible capital assets includes water-related assets in the following categories:
  - i. Watermain Infrastructure;
  - ii. Vehicles and Equipment;
  - iii. Land; and
  - iv. Facilities.
- For the purposes of amortization, 2014 work in progress was assumed to be brought into service based on assumptions provided by City staff.
- Amortization is calculated based on the straight-line approach.
- Given the planned asset replacement forecast in the 2015 Forecast, useful life on acquisitions is assumed to be equal to typical values assigned by the City for each asset category.
- Write-offs are assumed to equal \$0 for each year in the forecast period.
- Tangible capital assets are shown on a net basis. It is assumed that
  disposals occur when the asset is being replaced, unless the asset is
  documented as a new asset. The value of each asset disposal is
  calculated by estimating the original purchase/construction date and
  deflating current replacement cost values to those estimated dates in
  order to calculate original historical cost.
- Gains/losses on disposals are assumed to be \$0 (it is assumed that historical cost is equal to accumulated amortization for all disposals).
- Residual value is assumed to be \$0 for all assets contained within the forecast period.

- Contributed Assets, as described in subsection 3.2.1, are shown on the Statement of Operations as revenue earned in the year of contribution.
- The City is unaware of any specific lead service piping in the City water system. However when older portions of the water main system are replaced as part of the ongoing replacement program, any lead service pipes will be replaced if and when found.

The balance of tangible capital assets is summarized as follows:

Asset Historical Cost	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Opening Tangible Capital Asset Balance	396,345,541	400,179,590	424,028,158	447,073,140	464,429,334	484,232,750	502,703,022	517,431,469	541,817,517	567,309,372
Acquisitions	4,356,000	24,298,097	23,539,067	17,653,373	19,991,468	19,383,910	15,270,408	24,802,210	25,709,626	2,879,000
Disposals	521,951	449,529	494,075	297, 179	188,052	913,638	541,961	416,162	217,771	634,632
Closing Tangible Capital Asset Balance	400,179,590	424,028,158	447,073,140	464,429,334	484,232,750	502,703,022	517,431,469	541,817,517	567,309,372	569,553,740
Opening Accumulated Amortization	56,863,215	65,091,149	73,459,542	81,690,733	90,379,996	99,378,422	107,859,006	116,929,488	125,645,196	134,914,530
Amortization Expense	8,749,885	8,817,922	8,725,266	8,986,442	9,186,478	9,394,222	9,612,443	9,131,870	9,487,105	9,831,548
Amortization on Disposal	521,951	449,529	494,075	297,179	188,052	913,638	541,961	416,162	217,771	634,632
Ending Accumulated Amortization	65,091,149	73,459,542	81,690,733	90,379,996	99,378,422	107,859,006	116,929,488	125,645,196	134,914,530	144,111,446
Net Book Value	335,088,441	350,568,616	365,382,407	374,049,338	384,854,328	394,844,016	400,501,981	416,172,321	432,394,842	425,442,294

### 5. Accumulated Surplus

Opening accumulated surplus for the forecast period is reconciled as follows:

Water	2015 Opening Accumulated Surplus
Reserve Balances	
Reserves: Development Charges	(11,535,362)
Reserves: Capital/Other	4,999,531
Total Reserves Balance	(6,535,831)
Less: Debt Obligations and Deferred Revenue	(131,803,886)
Add: Long-term Accounts Receivable	13,840,334
Add: Tangible Capital Assets	339,482,326
Total Opening Balance	214,982,943

The accumulated surplus reconciliation for all years within the forecast period is contained in Table 4-2.

### 6. Other Revenue

Other revenue includes water meter revenue, penalties and interest, as well as other non-operating general revenues.

### 7. Operating Expenses

Capital expenditures for items not meeting the definition of tangible capital assets have been reclassified as operating expenses and have been expensed in the year in which they occur.

### 5. Process for Financial Plan Approval and Submission to the Province

As mentioned in Section 1.2, the requirement to prepare the financial plan is provided in Section 32 (5) 2 ii of the S.D.W.A. Proof of the preparation of a financial plan is one of the submission requirements for municipal drinking water licensing and, upon completion, must be submitted to the Ministry of the Environment. As part of O.Reg. 453/07, the process established for plan approval, public circulation and filing is set out as follows:

- The financial plan must be approved by resolution of the municipality who owns the drinking water system or the governing body of the owner. (O.Reg. 453/07, Section 3 (1) 1)
- 2. The owner of the drinking water system must provide notice advertising the availability of the financial plan. The plans will be made available to the public upon request and without charge. The plans must also be made available to the public on the municipality's website. (O.Reg. 453/07, Section 3 (1) 5)
- 3. The owner of the drinking water system must provide a copy of the financial plan to the Director of Policy Branch, Ministry of Municipal Affairs and Housing. (O.Reg. 453/07, Section 3 (1) 6)
- 4. The owner of the drinking water system must provide proof satisfactory to the Ministry of the Environment that the financial plans for the system satisfy the requirements under the Safe Drinking Water Act. (S.D.W.A. Section 32 (5) 2 ii)

### 6. Recommendations

This report presents the water and wastewater financial plan for the City of Barrie in accordance with the mandatory reporting formats for water systems as detailed in O.Reg. 453/07. It is important to note that, while mandatory, the financial plan is provided for Council's interest and approval; however, for decision making purposes, it may be more informative to rely on the information contained within the 2015 Forecast. Nevertheless, Council is required to pass certain resolutions with regard to this plan and regulations and it is recommended that:

- 1. The City of Barrie Water and Wastewater Financial Plan prepared by Watson & Associates Economists Ltd. dated October 7, 2015 be approved.
- 2. Notice of availability of the Financial Plan be advertised.
- 3. The Financial Plan and the Council Resolution approving the Financial Plan be submitted to the Ministry of Municipal Affairs and Housing. (O.Reg. 453/07, Section 3 (1) 6)
- 4. The Financial Plan and the Council Resolution approving the Financial Plan be submitted to the Ministry of the Environment, satisfying the requirements under the Safe Drinking Water Act. (S.D.W.A. Section 32 (5) 2 ii))

### Appendix A – Supplementary Tables (Reserve/Reserve Fund Assumptions & Average Water and Wastewater Bill per Residential Customer)

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	Appendix "A"	Re
	Development Charges Reserve Funds	Reserve/Reserve Fund
The annual balances in the Capital/Other reserves is based on a number of assumptions including:  1) Capital and Lifecycle Reserve balances are based on the assumptions developed during the F.I.A. The capital forecast in F.I.A. extended to 2031 and ensured that all asset replacement needs, including the current backlog, were to be funded over the forecast. Much of the replacement capital expenditures are included in the latter portion of the forecast to 2031 and therefore the reserves are building to 2023 to ensure the funding is available for the capital needs to 2031.  2) Capital Reserve balances include a payback from the D.C. Reserve funds over the forecast in relation to cash flowing of growth related treatment debt over the past years. These funds are then used to assist in funding replacement capital over the forecast. In the first few years, the capital reserve balances are also ensuring that the City is able to continue to cash flow the annual growth related treatment debt payments until such time as the growth in the annexed lands commences.	(F.I.A.) recently undertaken.  Although there are large Development Charge (D.C.) reserve fund balances at the end of the 2023 forecast period, the majority of D.C. reserve funds are at approximately zero by the end of the 2031 forecast period. The exception to this is the D.C. reserve funds for water & wastewater debt as portion of the debt were issued over longer periods extending out to 2031 for wastewater and 2051 for water. The capital expenditures relating to treatment facilities in which this longer item debt was issued for is to service the growth to 2031 and therefore all D.C. revenue associated with the debt charges extending beyond the forecast period must be collected by 2031.  The D.C. reserve fund balances for both water and wastewater services are also based on a number of other assumptions developed in the F.I.A. including:  1) D.C. Revenue - based on detailed growth assumptions developed during the Fiscal Impact Analysis (F.I.A.) which includes build out of greenfield growth and intensification growth in the Existing Barrie Boundary and growth in the annexed lands (Salern & Hewitt's Secondary Plans). The revenue from D.C.s will fluctuate over the forecast based on actual growth that occurs.  2) Funding of DC credits/discounts from water and wastewater rates is based on estimated timing of the growth eligible for the credits/discounts as developed during the F.I.A. and the City's current D.C. By-law.  2) Funding of DC credits/discounts from developers for EA's & Design of capital works have been included in 2015 with majority of the payback taking place outside the 2023 forecast period. This is based on the estimated timing of growth and the terms of the Memorandum of Understanding (M.O.U.) between the City and Annexed Landowners Groups.	Assumptions

### Appendix "A"

	Water	Water and Wastewater Annual Bill as a percentage of Average Hou	vater Annua	l Bill as a p	ercentage o	f Average H	ousehold Income	come			
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Average Household income	\$85,500	\$87,200	\$88,900	\$90,700	\$92,500	\$94,400	\$96,300	\$98,200	\$100,200	\$102,200	\$104,200
Average Annual Water Consumption (m³)	180	180	180	180	180	180	180	180	180	180	180
		2014 Bas	e - Average	Water & Wa	asteater Bill	2014 Base - Average Water & Wasteater Bill per Residenti	ntial Use	I			
Water Rate/m³ (Residential Block 1)	\$0.8982	\$0.9346	\$0.9414	\$0.9499	\$0.9582	\$0.9709	\$0.9903	\$1.0101	\$1.0108	\$1.0209	\$1.0263
Annual Volume Charge	\$161.68	\$168.22	\$169.45	\$170.98	\$172.48	\$174.76	\$178.25	\$181.82	\$181.94	\$183.76	\$184.74
Annual Base Charge	\$142.38	\$143,44	\$148.46	\$153.29	\$158.27	\$162.62	\$165.87	\$169.19	\$172.57	\$174.30	\$176.91
Total Annual Water Bill	\$304.06	\$311.66	\$317.91	\$324.26	\$330.75	\$337.38	\$344.12	\$351.01	\$354.52	\$358.06	\$361.65
Increase in Annual Water Bill		2.50%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	1.00%	1.00%	1.00%
Wastewater Rate/m³ (Residential Block											
<del>3</del>	\$1.2472	\$1.3093	\$1.3460	\$1.3837	\$1,4224	\$1.4622	\$1.5032	\$1.5453	\$1.5813	\$1.6181	\$1.6579
Annual Volume Charge	\$224.50	\$235.68	\$242.27	\$249.06	\$256.03	\$263.20	\$270.57	\$278.15	\$284.63	\$291.26	\$298.42
Annual Base Charge	\$180.46	\$189.53	\$195.69	\$202.05	\$208.62	\$215.40	\$222,40	\$229.62	\$237.09	\$244.79	\$249.69
Total Annual Wastewater Bill	\$404.96	\$425.21	\$437.96	\$451.11	\$464.65	\$478.60	\$492.97	\$507.77	\$521.71	\$536.05	\$548.11
Increase in Annual Wastewater Bill		5.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	2.75%	2.75%	2.25%
					:						
Total Annual Combined Water &		200	******	*****	*105 30	*04E 07	*027 AB	£0E9 79	\$ 07£ 22	6004	* 000 7E
Annual Increase in Combined Water											
& Wastewater Bill \$		\$27.86	\$19.01	\$19.49	\$20.03	\$20.58	\$21.12	\$21.69	\$17.45	\$17.88	\$15.65
Annual Bill as % of Household				}	·					9	) }
Income	0.8%	0.8%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%

### **Appendix B – Wastewater Financial Plan**

Figure B-1
Conversion Adjustments
Statement of Operations (Wastewater)

				,	
Modified Cash Basis	Budget	Adjustments	ments	Full Accrual Budget	Accrual Basis
	2015	DR	CR	2015	
Revenues					Revenues
Base Charge Revenue	10,698,494			10,698,494	Base Charge Revenue
Rate Based Revenue	21,163,997			21,163,997	Rate Based Revenue
Transfers from Reserves	9,937,906	906'256'6			
			13,292,416	13,292,416	Earned Development Charges and Gas Tax Revenue
Other Revenue	425,900			425,900	Other Revenue
Total Revenues	42,226,297			45,580,807	Total Revenues
Expenditures					Expenses
Operating	17,626,400	11,000		17,637,400	Operating Expenses
Capital					
Transfers to Reserves	14,193,972		14,193,972		
Debt Repayment (Principal & Interest)	10,405,925		5,591,669	4,814,256	Interest on Debt
		10,986,446		10,986,446	Amortization
Total Expenditures	42,226,297			33,438,102	Total Expenses
Net Expenditures	1			12,142,705	Annual Surplus/(Deficit)
Increase (decrease) in amounts to be recovered	9			243,281,230	243,281,230 Accumulated Surplus/(Deficit), beginning of year
Change in Fund Balances	•	12,142,705		255,423,935	255,423,935 Accumulated Surplus/(Deficit), end of year

33,078,057 33,078,057 TOTAL ADJUSTMENTS

Note: The combined adjustments above should be balanced and net to \$0 (i.e. Total DR = Total CR)

Figure B-2
Conversion Adjustments
Statement of Financial Position (Wastewater)

Modified Cash Basis	Budget	Adjustments	nents	Full Accrual Budget	Accrual Basis
	2015	DR	CR	2015	
ASSETS					ASSETS
Financial Assets					Financial Assets
Cash	3,660,144			3,660,144	Cash
Accounts Receivable	5,310,415			5,310,415	Accounts Receivable
Long-term Accounts Receivable	12,707,666			12,707,666	Long-term Accounts Receivable
Total Financial Assets	21,678,225			21,678,225	Total Financial Assets
LIABILITIES					Liabilities
Accounts Payable & Accrued Liabilities	3,468,317			3,468,317	Accounts Payable & Accrued Liabilities
Gross Long-term Liabilities	108, 139, 464			108,139,464	Debt (Principal only)
Deferred Revenue	3,221,683			3,221,683	Deferred Revenue
Total Liabilities	114, 829, 464		in it is a second of the	114,829,464	Total Liabilities
Net Assets/(Debt)	(93,151,239)			(93,151,239)	(93,151,239) Net Financial Assets/(Debt)
					Non-Financial Assets
		348,586,174	11,000	348,575,174	Tangible Capital Assets
				348,575,174	Total Non-Financial Assets
Municipal Position	(	( ( ( (			
Wastewater Reserves	2,280,559	SCC,U82,2			
Development Charge Reserve Fund	3,221,683	3,221,683			
Amounts to be Recovered	(98,653,481)		98,653,481		
Total Municipal Position	(93,151,239)		255,423,935	255,423,935	255,423,935 Accumulated Surplus/(Deficit), end of year
				0	

354,088,416 354,088,416 TOTAL ADJUSTMENTS

Note: The combined adjustments above should be balanced and net to \$0 (i.e. Total DR = Total CR)

Table B-1

Statement of Financial Position: Wastewater Services

UNAUDITED: For Financial Planning Purposes Only 2015-2024

					:	Forecast					
	MOIGS	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Financial Assets											
Cash	-	3,660,144	14,336,532	20,596,893	15,362,686	16,943,336	36,422,098	57,502,689	76,771,188	96,571,173	101,650,125
Accounts Receivable	_	5,310,415	5,506,840	5,733,579	6,020,576	6,352,405	6,699,913	7,068,612	7,430,095	7 796,575	8,156,574
Long-term Accounts Receivable	7	12,707,666	12,707,666	12,707,666	12,707,666	12 707 666	12,707,666	12,707,666	12,707,666	12 707,666	12,707,666
Accounts Receivable - Other	6				3,359,331	553, 393	•		-	•	•
Total Financial Assets		21,678,225	32,551,038	39,038,138	37,450,259	36,556,800	55,829,677	77,278,967	96,908,949	117,075,414	122,514,365
Liabilities											
Accounts Payable & Accrued Liabilities	-	3,468,317	3,537,639	3,608,396	3,680,492	3,754,084	3,829,151	3,905,733	3,983,850	4,063,561	4,144,885
Debt (Principal only)	~	108, 139, 464	103,961,354	102,598,643	114,108,008	134, 262, 301	125,389,353	116, 153, 626	106,539,316	96,594,307	86,250,692
Deferred Revenue	6	3,221,683	3,773,470	4,363,180		,	3,243,836	5,689,681	7,779,630	10.240,037	14,458,629
Total Liabilities		114,829,464	111,272,463	110,570,219	117,788,500	138,016,385	132,462,340	125,749,040	118,302,796	110.897,905	104,854,206
Net Financial Assets'(Debt)		(93, 151, 239)	(78,721,425)	(71,532,081)	(80,338,241)	(101,459,685)	(76,632,663)	(48,470,073)	(21,393,847)	6,177,509	17,660,159
Non-Financial Assets											
Tangible Capital Assets	4	348,575,174	361,426,133	384,906,748	434,906,005	490,534,986	495,075,610	498, 902, 565	506, 142, 491	515.095.415	529,257,407
Total Non-Financial Assets		348,575,174	361,426,133	384,908,748	434,906,005	490, 534, 986	495,075,610	498,902,565	506,142,491	515,095,415	529,257,407
Accumulated Surplus/(Deficit)	ş	255,423,935	282,704,708	313,376,667	354,567,764	389,075,401	418,442,947	450,432,492	484,748,644	521,272,924	546,917,586
Financial Indicators	Total Change	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024

Financial Indicators	Total Change	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1) Increase/(Decrease) in Net Financial Assets	287,617,459	13,930,151	14,429,814	7,189,344	(8,806,160)	(21, 121, 344)	24,826,922		80,065,738	82.810.172	66,130,232
2) Increase/(Decrease) in Tangible Capital Assets	178,894,787	(1,787,446)	12	23,482,615	49,997,257	55,628,981	4,540,624	3,826,955	7,239,926	8.952,924	14, 161, 992
3) Increase/(Decrease) in Accumulated Surplus	303,636,336	12,142,705	27,280,773	30,671,959	41,191,097	34,507,637	29,367,546	31,989,545	34,316,152	36 524 280	25.644.642

Table B-2

Statement of Operations: Wastewater Services

UNAUDITED: For Financial Planning Purposes Only

	Plates					Forecast					
	NOIGS	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Wastewater Revenue				4	100 000	000 000	40 000 045	44 200 005	46 348 613	16 100 194	16 965 278
Base Charge Revenue		10.698,494	11,178,089	11,598,975	12,291,145	12,933,390	13,639,910	14,360,605	10.012.013	10,109,104	10,002,320
Rate Based Revenue		21,163,997	21,862,948	22,702,501	23,832,313	25,161,042	26,559,565	28,030,865	29,363,959	30.5/0.269	32,077,113
Earned Development Charges Revenue	9	13,292,416	17,499,389	19,354,105	28,592,420	19,014,045	14,391,642	14,612,142	14,112,692	13,975,132	13,961,375
Developer Contributions	4		10,441,990	10,755,250	11,077,907	13,251,831	11,752,552	12, 105, 128	12,468,282	12,842,331	
Other Revenue	9	425,900	434,399	443,000	451,801	460,800	470,100	479 498	489,100	498,900	508,901
Total Revenues		45,580,807	61,416,815	64,953,831	76,245,586	70,841,108	66,813,774	69,608,438	71,650,646	74.095.816	63,409,717
Wastewater Expenses	1	47.697.400	10 367 700	40 230 300	00Z VUZ 84	10 166 700	10 400 200	19 849 400	20 246 400	20 651 500	21.064.800
Operating Expenses	scn. 4-1	004, V60, V	4 678 311	4 516 937	4 467 139	4 930 921	5 738 100	5 375 320	4 996 738	4 601 629	4.189.267
Friends on Dear		10 0RS 446	11 000 031	11 426 635	11 882 650	12 235 850	12 208 928	12 394 173	12.091.356	12.318.407	12,511,008
Total Evanters		33 438 102	34 136 042	34 281 872	35 054 489	36 333 471	37,446,228	37,618,893	37,334 494	37,571,536	37,765,075
LOCAL CAPPERS		40 440 700	200 200	000 000	44 404 007	14 607 617	20 3C7 E46	14 989 EAK	34 346 152	36 524 280	25.644.642
Annual Surplus(Deficit)		12,142,705	51,26U,113	30,6/1,303	41,131,037	34,001,003	DAG' (00'57	21,000,040	701,107	20120	
Accumulated Surplus/(Deficit), beginning of year	٠	243,281,230	255,423,935	282,704,708	313,376,667	354,567,764	389,075,401	418,442,947	450,432,492	484 748 644	521,272,924
Accumulated Surplus/(Deficit), end of year		255,423,935	282,704,708	313,376,667	354,567,764	389,075,401	418,442,947	450,432,492	484,748,644	521.272,924	546,917,566
Note 5:											
Accumulated Surplus(Deficit) Reconcillation:		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Reserve Balances					000	1000	200 000	6 690 694	7 770 630	10 240 037	14 458 670
Reserves: Development Charges	Appendix A	3,221,683	3,773,470	4,363,179	(3,308,332)	(223, 383)	3,243,033	0,009,00	000 407 000	20,000	200,000,000
Reserves: Capital/Other	Appendix A	2,280,559	12,532,263	18,358,896	21,062,101	20,095,050	36,049,024	24.973,887	12,437,003	90,004,130	91,203,103
Total Reserves Balance		5,502,242	16,305,733	22,722,075	17,702,769	19,541,657	39,292,859	60,665,568	80,217,433	100,304,187	105,661,814
Less: Debt Obligations and Deferred Revenue		(111,361,147)	(107,734,824)	(106,961,822)	(110,748,676)	(133, 708, 908)	(128,633,188)	(121,843,307)	(114.318.946)	(106 834 344)	(100,709,321)
Add: Long-term Accounts Receivable		12,707,666	12,707,666	12,707,666	12,707,666	12,707,666	12,707,666	12,707,666	12,707,666	12 707 666	12,707,666
Add: Tangible Capital Assets	4	348,575,174	361,426,133	384,908,748	434,906,005	490,534,986	495,075,610	498,902,565	506 142 491	515 095 415	529,257,407
Total Ending Balance		255,423,935	282,704,708	313,376,667	354,567,764	389,075,401	418,442,947	450,432,492	484,748,644	521,272,924	546,917,566
					: !						
Financial Indicators	Total Change	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1) Expense to Revenue Ratio		73%	%95	23%	46%	51%	999	54%	25%	21%	%0%
2) Increase/(Decrease) in Accumulated Surplus	303,636,336	12,142,705	27.280.773	30,671,959	41,191,097	34,507,637	29,367,546	31,989,545	34,316,152	36,524,280	25,644,642

Schedule B-1

Schedule of Operating Expenses: Wastewater Services UNAUDITED: For Financial Planning Purposes Only

						Forecast				į	
	Notes	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Operating Expenses Was tauslar Charactering A Admin (18-2750)			Ī			ψ.					
Salaries/Benefits		3,515,000	3,585,300	3,657,000	3,730,100	3,804,700	3,880,800	3,958,400	4,037,600	4,118,400	4,200,800
Other		755,500	770,600	786,000	801,700	817,700	834,100	850,800	867,800	885,200	902,900
Pump Station Operations (18-2761):											
Utilities		93,200	95,100	97,000	98,900	100,900	102,900	105,000	107,100	109.200	111,400
Other		25,300	56,400	57,500	58,700	29,900	61,100	62,300	63.500	64.800	66,100
Plant Operations (18-2762):											
Utilities		1,539,800	1,570,600	1,602,000	1,634,000	1,666,700	1,700,000	1,734,000	1,768,700	1.804.100	1,840,200
Technical Support (18-2763):		77,000	78,500	80,100	81,700	83,300	85,000	86,700	88 400	90.200	92,000
Scada Support (18-2764);		96,300	67,600	9000'69	70,400	71,800	73,200	74.700	76.200	77, 700	79,300
North Barrier Wall (18-2765):											
Utilities		9009	009	9009	909	009	009	009	009	009	900
Other		19,800	20,200	20,600	21,000	21,400	21.800	22,200	22,600	23,100	23,600
Sludge Storage Facility (18-2775):											
Utilities		164,600	167,900	171,300	174,700	178,200	181,800	185,400	189, 100	192,900	196.800
Other		309,800	316,000	322,300	328,700	335,300	342,000	348,800	355,800	362,900	370,200
Pump Station Maintenance (18-2781):		271,000	276,400	281,900	287,500	293,300	299.200	305,200	311,300	317,500	323,900
Plant Maintenance (18-2782):		2,331,700	2,378,300	2,425,900	2,474,400	2,523,900	2.574,400	2,625,900	2.678.400	2.732,000	2,786,600
Electrical Maintenance (18-2783):		226,200	230,700	235,300	240,000	244,800	249,700	254,700	259,800	265.000	270,300
Mechanical Maintenance (18-2784):		136,200	138,900	141,700	144,500	147,400	150,300	153,300	156.400	159,500	162,700
Wastewater Rate and Conservation (18-2790):		10,200	10,400	10,600	10,800	11,000	11,200	11,400	11,600	11,800	12,000
Overheads & Direct Support - Sewer (18-2795):		3,514,900	3,585,200	3,656,900	3,730,000	3,804,600	3,880,700	3,958,300	4,037,500	4,118,300	4,200,700
Sanitary Systems Maintenance (18-4530):											
Salaries/Benefits		407.100	415,200	423,500	432,000	440,600	449,400	458,400	467.600	477,000	486,500
Other		628,400	641,000	653,800	666,900	680,200	693,800	707,700	721,900	736,300	751,000
Contracted Sewer Repairs (01-18-4535):		20,800	21.200	21,600	22,000	22,400	22,800	23,300	23.800	24 300	24.800
Non TCA - Expenses from Capital Budget	7	11,000	389,000		•	98.000	39,000	٠			
											00000000
TOTAL OPERATING EXPENSES		17,637,400	18,367,700	18,338,300	18,704,700	19, 166, 700	19,499,200	19,849,400	20,246,400	20,651,500	21,064,800

Table B-3

# Statement of Changes in Net Financial Assets/Debt: Wastewater Services

### UNAUDITED: For Financial Planning Purposes Only

	Mades					Forecast					
	Motes	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Annual Surplus/(Deficit)		12,142,705	27,280,773	30,671,959	41,191,097	34,507,637	29,367,546	31,989,545	34.316.152	36.524,280	25,644,642
Less: Acquisition of Tangible Capital Assets	4	(9, 199,000)	(23,940,990)	(34,909,250)	(61.879.907)	(67,864,831)	(16,749,552)	(16,221,128)	(19 331 282	(21 271 331)	(26,673,000)
Add: Amortization of Tangible Capital Assets	4	10,986,446	11,090,031	11,426,635	11,882,650	12,235,850	12,208,928	12,394,173	12.091.356	12:318:407	12,511,008
(Gain)/Loss on disposal of Tangible Capital Assets		,	,		•	]	•	•	1		•
Add: Proceeds on Sale of Tangible Capital Assets			ı	•	•	1		,	٠		1
Add: Write-downs of Tangible Capital Assets		r					•				,
		1,787,446	(12,850,959)	(23,482,615)	(49,997,257)	(55,628,981)	(4.540,624)	(3,826,955)	(7,239,926)	(8.952,924)	(14, 161, 992)
Increase/(Decrease) in Net Financial Assets/(Net Debt)		13,930,151	14,429,814	7,189,344	(8,806,160)	(21, 121, 344)	24.826,922	28,162,590	27,076.226	27.571,356	11,482,650
Net Financial Assets/(Net Debt), beginning of year		(107,081,390)	(93,151,239)	(78,721,425)	(71,532,081)	(80,338,241)	(101,459,585)	(76,632,663)	(48.470.073)	(21,393,847)	6,177,509
Net Financial Assets/(Net Debt), and of year		(93,161,239)	(78,721,425)	(71,532,081)	(80,338,241)	(101,459,585)	(76,632,663)	(48,470,073)	(21,393,847)	6,177,509	17,660,159
Financial Indicators		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1) Acquisition of Tangible Capital Assets (Cumulative)		9,199,000	33,139,990	68,049,240	129,929,147	197, 793, 978	214,543,530	230,764,658	250,095,940	271,367,271	298,040,271
2) Annual Surplus/Deficit before Amortization (Cumulative)		23, 129, 151	61,499,955	103,598,549	156,672,296	203,415,783	244,992,257	289,375,975	335,783,483	384.626.170	422,781,820
3) Ratio of Annual Sumlus before Amortization to Acquisition of TCA's (Cumulative)	Cumulative)	2.51	1.86	1.52	1.21	1.03	1.14	1.25	138	1.42	1.42

Table B-4

Statement of Cash Flow - Indirect Method: Wastewater Services

UNAUDITED: For Financial Planning Purposes Only

	Motor					Forecast					
	COLON	2016	2016	2017	2018	2019	2020	2021	2022	2023	2024
Operating Transactions											
Annual Surplus/Deficit		12,142,705	27,280,773	30,671,959	41,191,097	34,507,637	29,367,546	31,989,545	34,316,152	36.524.280	25,644,642
Add: Amortization of TCA's	4	10,986,446	11,090,031	11,426,635	11,882,650	12,235,850	12,208,928	12,394 173	12,091,356	12 318 407	12,511,008
Less: Earned Deferred Revenue	65	(13,292,416)	(17,499,389)	(19,354,105)	(28,592,420)	(19,014,045)	(14,391,642)	(14.612,142)	(14,112,692)	(13.975.132)	(13,961,375)
Less: Developer Contributions		,	(10,441,990)	(10,755,250)	(11,077,907)	(13,251,831)	(11,752,552)	(12, 105, 128)	(12,468,282)	(12.842,331)	٠
Add: Deferred Revenue Proceeds		12,129,902	18,051,176	19,943,815	20,869,910	21,819,984	18,188,871	17,057,988	16,202.641	16,435,539	18,179,967
Change in A/R (Increase)/Decrease	Ī	(428,817)	(196,425)	(226,739)	(286,998)	(331,830)	(347,508)	(368,699)	(361,483)	(366.480)	(359,999)
Change in A/P Increase/(Decrease)		68,024	69,322	70,757	72,096	73,592	75,067	76,582	78.117	79 711	81,324
Cash Provided by Operating Transactions		21,605,844	28,353,498	31,777,072	34,058,428	36,039,357	33,348,710	34,432,319	35,745,809	38,173,994	42,095,567
Capital Transactions											
Proceeds on sale of Tangible Capital Assets		•	•	•	•	•		,	•		•
Less: Cash Used to acquire Tangible Capital Assets	4	(9, 199, 000)	(13,499,000)	(24, 154,000)	(50,802,000)	(54,613,000)	(4,997,000)	(4, 116,000)	(6,863,000)	8 429 000)	(26,673,000)
Cash Applied to Capital Transactions		(9, 199, 000)	(13,499,000)	(24, 154,000)	(50,802,000)	(54,613,000)	(4,997.000)	(4,116,000)	(6,863,000)	8 429 000)	(26,673,000)
Investing Transactions											
Proceeds from Investments		•	•	1	•	•	•	1			•
Less: Cash Used to Acquire Investments		•		1	1	•		1	o		
Cash Provided by (applied to) Investing Transactions				•	•	,			0	2	,
Financing Transactions											
Proceeds from Debt Issue	7	2,370,650	2,070,850	5,200,000	18,500,000	28,000,000	•	•	•	•	•
Less: Debt Repayment (Principal only)	2	(5,591,669)	(6,248,960)	(6.562,711)	(6.990,635)	(7.845,707)	(8,872,948)	(9.235,728)	(9.614.310)	(9.945,009)	(10,343,615)
Cash Applied to Financing Transactions		(3,221,019)	(4, 178, 110)	(1,362,711)	11,509,365	20,154,293	(8,872,948)	(9,235,728)	(9.614.310)	(9.945,009)	(10,343,615)
Increase in Cash and Cash Equivalents		9,185,825	10,676,388	6,260,361	(5,234,207)	1,580,650	19,478,762	21,080,591	19,268,499	19,799,985	5,078,952
Cash and Cash Equivalents, beginning of year	-	(5,525,681)	3,660,144	14,336,532	20,596,893	15,362,686	16,943,336	36,422,098	57,502,689	76.771,188	96,571,173
Cash and Cash Equivalents, end of year	-	3,660,144	14,336,632	20,596,893	15,362,686	16,943,336	36,422,098	57,502,689	76,771,188	96,571,173	101,650,125

### Wastewater Notes to Financial Plan

The financial plan format, as outlined in Chapter 4, closely approximates the full accrual format used by municipalities (2009 onward) on their audited financial statements. The financial plan, however, is not an audited document and contains various estimates. In this regard, Section 3 (2) of O.Reg. 453/07 states the following:

"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:

- 1. Sub-subparagraphs 4 i A, B and C of subsection (1)
- 2. Sub-subparagraphs 4 iii A, C, E and F of subsection (1)."

The information referred to in sub-subparagraphs 4 i A, B and C of subsection (1) includes:

- A. Total financial assets (i.e. cash and receivables);
- B. Total liabilities (i.e. payables, debt and deferred revenue); and
- C. Net debt (i.e. the difference between A and B above).

The information referred to in sub-subparagraphs 4 iii A, C, E and F of subsection (1) includes:

- A. Operating transactions that are cash received from revenues, cash paid for operating expenses and finance charges;
- C. Investing transactions that are acquisitions and disposal of investments;
- E. Change in cash and cash equivalents during the year; and
- F. Cash and cash equivalents at the beginning and end of the year.

In order to show a balanced financial plan in a full accrual format for City of Barrie, some of the items listed above have been estimated given that the City does not maintain all financial asset and liability data separately for wastewater. Usually, this type of data is combined with the financial assets and liabilities of other departments and services given that there is not a current obligation to disclose this data separately (as there is with revenue and expenses). The assumptions used have been documented below:

### 1. Cash, Receivables and Payables

It is assumed that the opening cash balances required to complete the financial plan are equal to:

Ending Reserve/Reserve Fund Balance

Plus: Ending Accounts Payable Balance

Less: Ending Accounts Receivable Balance

Equals: Approximate Ending Cash Balance

Receivable and payable balances were estimated for each year of the forecast based on the following factors:

- a) Receivables: Based on historical levels of receivables and accrued receivables as a percentage of annual revenues, applied to projected wastewater revenues; and
- b) Payables: Based on historical levels of payables as a percentage of annual expenses incurred, applied to projected wastewater expenses.

### 2. Debt

The City has wastewater-related outstanding debt at the end of 2014 totalling \$111,360,483 with additional debt proceeds anticipated throughout the forecast period. *Principal* repayments over the forecast period are scheduled as follows:

Year	Principal Payments
2015	5,591,669
2016	6,248,960
2017	6,562,711
2018	6,990,635
2019	7,845,707
2020	8,872,948
2021	9,235,728
2022	9,614,310
2023	9,945,009
2024	10,343,615
Total	\$ 81,251,292

For financial reporting purposes, debt principal payments represent a decrease in debt liability and the interest payments represent a current year operating expense.

### 3. Deferred Revenue/Accounts Receivable-Other

Deferred revenue is made up of wastewater development charge reserve fund balances which are considered to be a liability for financial reporting purposes until the funds are used to emplace the works for which they have been collected. In years when the wastewater development charge reserve fund balance is negative, it is shown as an asset (accounts receivable – other) for financial reporting purposes, representing future amounts to be collected from developers.

### 4. Tangible Capital Assets

- Opening net book value of tangible capital assets includes wastewaterrelated assets in the following categories:
  - i. Sanitary Sewer and Forcemain Infrastructure;
  - ii. Land:
  - iii. Equipment and Vehicles; and
  - iv. Facilities.
- For the purposes of amortization, 2014 work in progress was assumed to be brought into service based on assumptions provided by City staff.
- Amortization is calculated based on the straight-line approach.
- Given the planned asset replacement forecast in the 2015 Forecast, useful life on acquisitions is assumed to be equal to typical values assigned by the City for each asset category.
- Write-offs are assumed to equal \$0 for each year in the forecast period.
- Tangible capital assets are shown on a net basis. It is assumed that
  disposals occur when the asset is being replaced, unless the asset is
  documented as a new asset. The value of each asset disposal is
  calculated by estimating the original purchase/construction date and
  deflating current replacement cost values to those estimated dates in
  order to calculate original historical cost.
- Gains/losses on disposals are assumed to be \$0 (it is assumed that historical cost is equal to accumulated amortization for all disposals).
- Residual value is assumed to be \$0 for all assets contained within the forecast period.

• Contributed Assets, as described in subsection 3.2.1, are shown on the Statement of Operations as revenue earned in the year of contribution.

The balance of tangible capital assets is summarized as follows:

Asset Historical Cost	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Opening Tangible Capital Asset Balance	526,932,D44	536, 123, 086	559,781,138	594,342,687	655,963,383	722,978,618	739, 152, 715	754,920,922	773,470,507	794,222,765
Acquisitions	9,199,000	23,940,990	34,909,250	61,879,907	67,864,831	16,749,552	16,221,128	19,331,282	21,271,331	26,673,000
Disposals	7,968	282,938	347,701	259,211	849,596	575,455	452,921	781,697	519,073	10,550,159
Closing Tangible Capital Asset Balance	536,123,086	559,781,138	594,342,687	655,963,383	722,976,618	739,152,715	754,920,922	773,470,507	794,222,765	810,345,606
Opening Accumulated Amortization	176,569,424	187,547,912	198,355,005	209,433,939	221,057,378	232,443,632	244,077,105	256,018,357	267,328,016	279,127,350
Amortization Expense	10,986,446	11,090,031	11,426,635	11,882,650	12,235,850	12,208,928	12,394,173	12,091,356	12,318,407	12.511,008
Amortization on Disposal	7,958	282.938	347,701	259,211	849,596	575,455	452,921	781,697	519,073	10,550,159
Ending Accumulated Amortization	187,547,912	198,355,005	209,433,939	221,057,378	232,443,632	244,077,105	256,018,357	267,328,01 <u>6</u>	279,127,350	281,088,199
Net Book Value	348,575,174	361,426,133	384,908,748	434,906,005	490,534,986	495,075,610	498,902,565	506,142,491	515,095,415	529,257,407

### 5. Accumulated Surplus

Opening accumulated surplus for the forecast period is reconciled as follows:

Wastewater	2015 Opening Accumulated Surplus
Reserve Balances	
Reserves: Development Charges	4,384,197
Reserves: Capital/Other	(8,428,573)
Total Reserves Balance	(4,044,376)
Less: Debt Obligations and Deferred Revenue	(115,744,680)
Add: Long-term Accounts Receivable	12,707,666
Add: Tangible Capital Assets	350,362,620
Total Opening Balance	243,281,230

The accumulated surplus reconciliation for all years within the forecast period is contained in Table B-2.

### 6. Other Revenue

Other revenue includes penalty and interest revenues.

### 7. Operating Expenses

Capital expenditures for items not meeting the definition of tangible capital assets have been reclassified as operating expenses and have been expensed in the year in which they occur.