

## CITY OF VAUGHAN

### EXTRACT FROM COUNCIL MEETING MINUTES OF MAY 14, 2019

Item 6, Report No. 7, of the Finance, Administration and Audit Committee, which was adopted without amendment by the Council of the City of Vaughan on May 14, 2019.

#### **6. THE LONG-TERM WATER FINANCIAL PLAN, 2020-2031 AS PART OF THE MUNICIPAL DRINKING WATER LICENCE RENEWAL**

**The Finance, Administration and Audit Committee recommends approval of the recommendation contained in the following report of the Deputy City Manager, Public Works, dated May 6, 2019:**

#### **Recommendations**

1. That the attached Long-term Water Financial Plan, 2020-2031, which demonstrates a viable and sustainable financial plan for the City's water distribution system, be approved; and
2. That a copy of the Council Resolution of the Long-term Water Financial Plan, 2020-2031 be submitted to the Ministry of the Environment, Conservation and Parks and that a copy of the resolution and plan be forwarded to the Ministry of Municipal Affairs and Housing.

## Finance, Administration and Audit Committee Report

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**DATE:** Monday, May 06, 2019

**WARD(S):** ALL

**TITLE: THE LONG-TERM WATER FINANCIAL PLAN, 2020-2031 AS  
PART OF THE MUNICIPAL DRINKING WATER LICENCE  
RENEWAL**

**FROM:**

Zoran Postic, Interim Deputy City Manager, Public Works  
Michael Coroneos, Chief Financial Officer and City Treasurer

**ACTION:** DECISION

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**Purpose**

Adoption of the City's Long-term Water Financial Plan, 2020-2031, that provides a financially viable and sustainable water distribution system as required by the Safe Drinking Water Act, 2002, Ontario Regulation 453/07 and as part of the City's Municipal Drinking Water Licence Renewal for 2020.

**Report Highlights**

- The City's Drinking Water Licence is being renewed in 2019 and Council approval of a twelve-year financial plan is required.
- The long-term water financial plan demonstrates the City's financial sustainability of the water distribution system to ensure the continuous delivery of safe drinking water.

**Recommendations**

1. That the attached Long-term Water Financial Plan, 2020-2031, which demonstrates a viable and sustainable financial plan for the City's water distribution system, be approved; and

2. That a copy of the Council Resolution of the Long-term Water Financial Plan, 2020-2031 be submitted to the Ministry of the Environment, Conservation and Parks and that a copy of the resolution and plan be forwarded to the Ministry of Municipal Affairs and Housing.

## **Background**

The Safe Drinking Water Act (SDWA), 2002, requires that the owner of a municipal drinking water system must apply for renewal of their Municipal Drinking Water Licence (MDWL) every five years. The City's current MDWL will expire in 2019 and, as part of the renewal requirements, a minimum of a six-year financial plan must be created and approved by Council. The City has decided to extend the financial planning horizon over a longer term to ensure full cost recovery for the water distribution system, and will be submitting a twelve-year plan from 2020 through to 2031. This longer-term plan will be reviewed on a regular basis to ensure it continues to align with the City's water program.

## **Previous Reports/Authority**

[https://www.vaughan.ca/council/minutes\\_agendas/AgendaItems/Finance1202\\_13\\_3.pdf](https://www.vaughan.ca/council/minutes_agendas/AgendaItems/Finance1202_13_3.pdf)

## **Analysis and Options**

The City currently holds a Drinking Water Works Permit along with a Municipal Drinking Water Licence, both of which are required to operate a drinking water system. The current Municipal Drinking Water Licence expires on June 15, 2019 and therefore the City is required to provide the Province with a Council Resolution indicating approval of a financial plan before that time.

The financial plan must include a:

- Statement of Operations
- Statement of Financial Position
- Statement of Net Financial Assets
- Statement of Cash Flow

The financial plan must be adopted by the Council of the municipality and the resolution must also indicate that the drinking water system is financially viable.

## **Financial Impact**

There is no financial impact as a result of this report, however, the Long-term Water Financial Plan, 2020-2031 will be reviewed during the preparation of the 2020 – 2031 water operating and capital budgets.

## **Broader Regional Impacts/Considerations**

No implications

## **Conclusion**

The financial sustainability of the City of Vaughan's drinking water system has been evaluated in the Long-term Water Financial Plan, 2020-2031. Financial projections have been made based on a series of assumptions, the most important of which includes system infrastructure growth, account growth, future water rates and future water purchase costs. Statements built on these assumptions conclude that the City of Vaughan has a financially sustainable drinking water system.

The Long-term Water Financial Plan, 2020-2031 is a living document and will be reviewed annually to ensure that the drinking water system continues to be financially sustainable and that any necessary adjustments are made as needed to achieve this objective.

**For more information**, please contact: Jack Graziosi, Interim Director of Environmental Services or Dean Ferraro, Director of Financial Services/Deputy Treasurer.

## **Attachments**

1. Long-term Water Financial Plan, 2020-2031

## **Prepared by**

Sean Skinkle, Finance Manager, Water/Wastewater/Stormwater, extension 8486  
Carol Warner, Supervisor of Compliance and Business Services, Environmental Services, extension 6197



**VAUGHAN**

**ATTACHMENT 1**

# 2020-2031 **Long-term Water Financial Plan**

**Financial Plan Number 011-301  
As Per Ontario Regulation 453/07  
Under the Safe Drinking Water Act, 2002**

Prepared by:  
Sean Skinkle, Finance Manager, Water/Wastewater/Stormwater  
Wynkie Ha Hau, Senior Financial Analyst  
Dean Ferraro, Director Financial Services/Deputy Treasurer

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## Executive Summary

As part of Justice O'Connor's Recommendation Report from the Walkerton Inquiry, the Province enacted the Safe Drinking Water Act (SDWA), 2002. In 2007, the Ministry of the Environment, Conservation and Parks (MOECP) released Ontario Regulation 453/07 (Financial Plans) under the SDWA. This regulation requires that a financial plan be prepared as part of the Municipal Drinking Water Licencing Program, for both new licences and licence renewals. Further, the Long-term Water Financial Plan utilizes guidelines of the Public Sector Accounting Board's (PSAB) accounting standards 3150 for tangible capital asset accounting. The Long-term Water Financial Plan is intended to ensure that the City of Vaughan, as the drinking water system owner, plans for the long-term financial sustainability of the drinking water system and to guarantee safe drinking water into the future.

The Long-term Water Financial Plan must include a statement that the financial impacts of the drinking water system have been considered, apply for a minimum of six (6) years and outline details of the proposed or projected revenues and expenses. The financial plan must also identify all assets and liabilities. The City of Vaughan has prepared a 12-year financial plan to encompass two Licencing periods to forecast the financial sustainability of the water system well in to the future. This financial plan will supplement the annual water program budgeting process and will be updated on a regular basis to reflect substantive changes.

Information on projected statements of financial position can be found in appendices 'B', 'C', 'D' and 'E'.



## Background

The City of Vaughan has been preparing and submitting water financial plans since 2010 in support of its Municipal Drinking Water Licence (MDWL). The first financial plan, covering the period 2010 through 2015, was approved by Council on June 15, 2010. A subsequent financial plan, covering the period 2014 through 2019, was approved by Council on December 10, 2013. This new Long-term Water Financial Plan (the Financial Plan) Number 011-301 will span the period from 2020 through 2031.

One of the conditions of receiving the MDWL requires that a financial plan that satisfies the conditions of Ontario Regulation 453/07 be approved by Council. This financial plan has been created to comply with the requirements of O. Reg. 453/07 and covers the City of Vaughan's public portion of the water system which includes all distribution systems, pipes, meters, valves, and hydrants. The financial statements included in this report project 12 years into the future.

Vaughan residents purchase their drinking water from the Regional Municipality of York (York), who in turn import their water from the City of Toronto and the Region of Peel. All treatment operations to ensure safe, potable water are performed by Toronto and Peel prior to transmission to York's water infrastructure, however both Vaughan and York further sample and test the water on a regular basis. This financial plan only considers Vaughan's water system.

## Methodology

Ontario Regulation 453/07, included as appendix 'A', requires that MDWL holders provide detailed information indicating the municipality is financially sustainable now and into the future. Determination of sustainability focuses on the following projections, including:



- Projected financial position including assets, liabilities, net debt and tangible capital assets;
- Projected financial operations including revenue and expenses; and
- Projected cash receipts and cash payments.

In order to meet the requirements of O. Reg. 453/07, the City of Vaughan has followed a formal five-step methodology in the development of the financial plan. The five steps include:

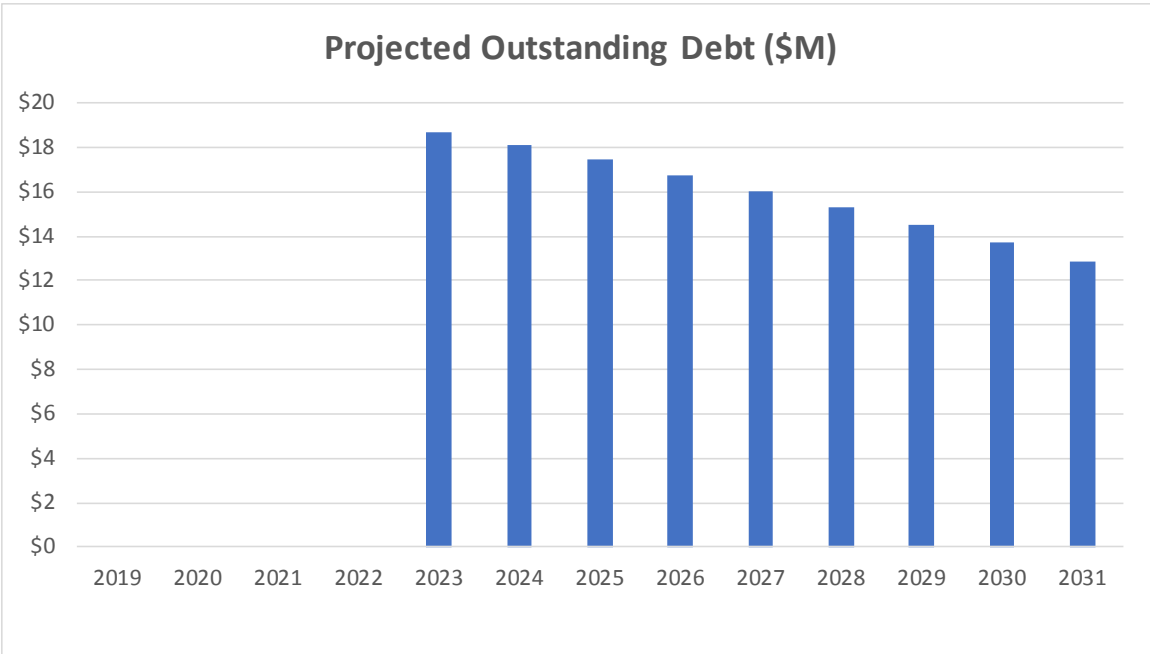
1. Establish the assumptions regarding growth, water rates and rate of inflation;
2. Determine current and future revenues under the assumptions;
3. Determine current and future expenditures under the assumptions;
4. Determine current and future capital expenditures under the assumptions; and
5. Assess whether the drinking water system is financially sustainable under these assumptions.

The following table includes the high-level assumptions that were used in the development of the financial plan. These factors were derived from multiple sources including the City's Capital Asset Management Plan, the City's Planning Department, Alectra Energy Services (City's meter reading and billing agent), York Region and The Conference Board of Canada.

<b>Item</b>	<b>Assumption(s)</b>	<b>Details</b>
System infrastructure	2.0% - 3.0%	Year-over-year inflation increase to the water system infrastructure
Account growth	1.01% R 1.13% ICI	Year-over-year growth to the account base for residential(R) and Industrial/Commercial/Institutional (ICI) accounts based on population growth projections
Current consumption per unit	267 m <sup>3</sup>	Average amount of water used by account, trending down by 1% per year after 2022
City Water rates	9.9% - 5.0%	9.9% in 2020 and 5.0% for 2021 through 2031
York Region wholesale water rates	4.8% - 4.6%	Water purchase rates charged by York Region, 4.8% in 2020 and 4.6% for 2021 through 2031
Operating Expenses	4%	Average of 4% annual increase in maintenance and installation costs, and general administration costs that includes both volume and price increase

## Debt Expenses

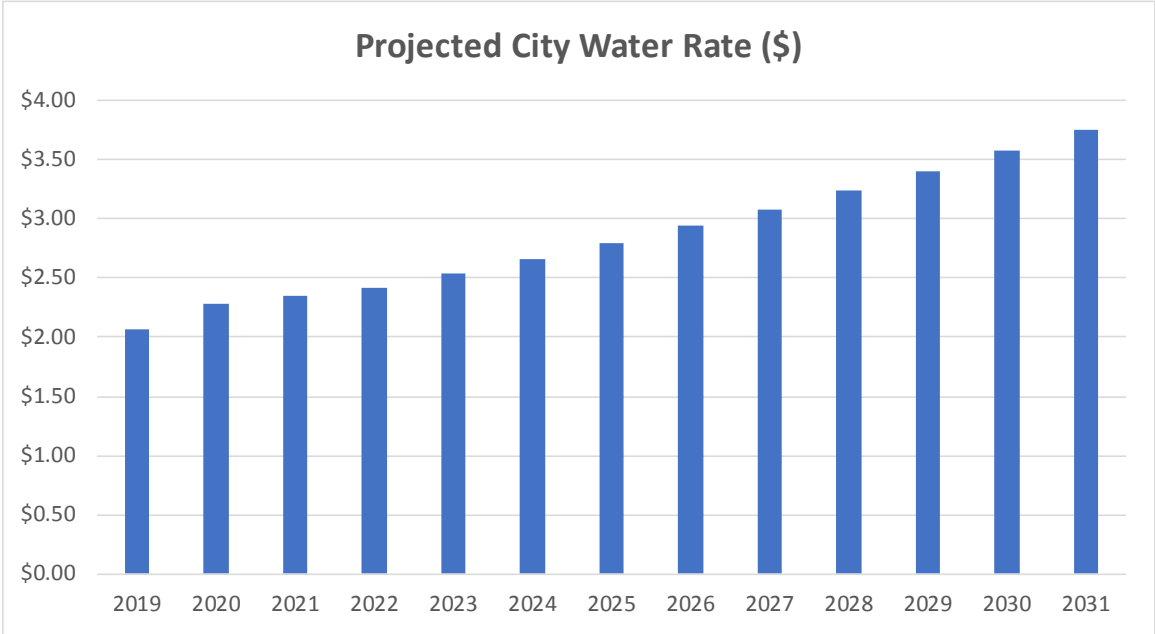
Currently the City of Vaughan has no debt associated with the water program. During the 2018 budget process, City Council approved a Smart Meter and Advanced Metering Infrastructure (AMI) project in the amount of \$38,500,000, 50% (i.e. \$19,250,000) of which is charged against the wastewater program with the other 50% being charged to the water program. The project is expected to be completed in 2023, following which the total amount of the project will be debentured. Principal repayment and interest charges will extend through 2042 until the full amount of the debt is repaid. The City is not expected to incur any other debt through 2031.



### Current Revenues

Revenues are primarily driven by consumption charges, that is metered consumption multiplied by the water rate. The City also charges for water related services, including, for example, water turn-offs and water line thawing. Changes to revenue is based on two things, one being population growth and the other being the per-unit use of water. Vaughan is assumed to grow at a rate of 1.01% for Residential and 1.13% for Industrial/Commercial/Institutional accounts, adding 9,774 and 429 accounts respectively by 2031. In contrast to account growth, the City has seen a steady decrease in per unit consumption driven by ongoing conservation initiatives and lower demand caused by increases in the cost of water. These assumptions are critical in modeling revenue projections. Deviations in projected population growth or per-unit demand can lead to large changes in projected revenue. The Financial Plan will be reviewed on a regular basis and updated as required when significant revenue changes occur.

In respect of water charges, it has been assumed that York Region’s wholesale purchase costs will increase at 4.6% per year and the City’s water rate will increase at 9.9% for 2020 (\$2.2777/m<sup>3</sup>), 3.0% for 2021 and 2022 and 5.0% per year from 2023 through 2031 (\$3.7486/m<sup>3</sup>). Revenue projections have assumed that the current customer base will increase over the 12-year period of the financial plan. The growth in customer base has been projected based on planning forecasts.

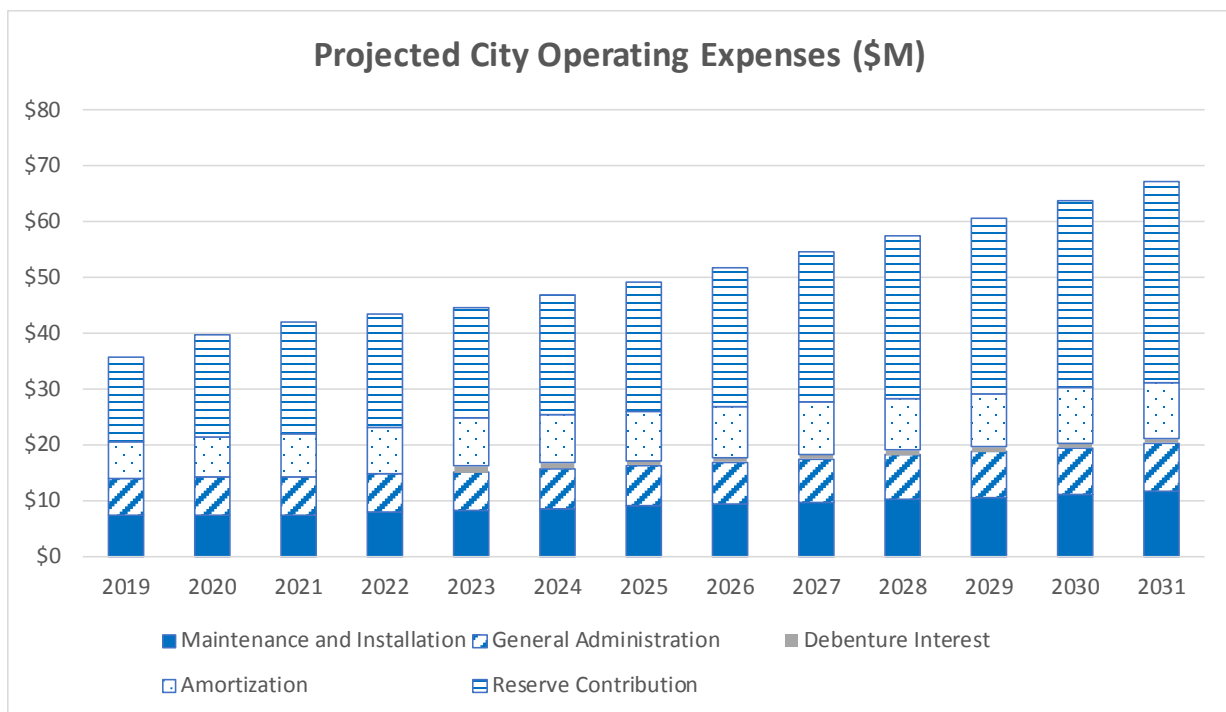


### Current Expenses

As a starting point for the financial plan, current year operating expenditures were taken from the City’s approved 2019 Budget and 2020-2022 Financial Plan. These expenses are assumed to increase linearly at an average of 4.0% from 2020 through 2031, due to both volume and price increases. There are two main expense types, one being the purchase of bulk water from York Region and the other City specific expenses. The Financial Plan will be reviewed on a regular basis and updated as required when significant expense changes occur.

York Region water purchases represent the single largest expense, currently representing approximately 70 cents of every dollar collected. York Region has posted their wholesale water rates for 2020 and 2021 at 4.8% and 4.6% respectively. Based on discussions with York Region, it is assumed the wholesale water rate will remain at 4.6% through 2031.

City operating expenses are the sum of the operating, interest and amortization expenses incurred to run the City’s day-to-day potable water program. Operating expenses include maintenance and installation costs, general administration (e.g. office supplies, wages, benefits), amortization and debt repayment costs and contributions to the water reserve.



## Capital Expenditures

The water program reviews and updates short term (one (1) year) and longer-term (four (4) year) capital expenditures in the annual budget development process. Capital planning for the water program considers both existing and future requirements

associated with the distribution system (e.g. linear infrastructure, valves, meters) and supporting systems (e.g. control systems, modelling tools). Planning for the repair and replacement of the distribution system uses state of good repair analysis which considers projected asset useful life and history of asset performance. Supporting system capital planning focuses on the tools and processes to manage an increasingly complex water system, including hydraulic modelling, leak detection and non-revenue water mitigation.

Capital plan development also considers the funding sources and the sustainability of the water reserve. The water reserve and development charges are the primary funding sources for capital projects. The City also actively pursues grant opportunities which help reduce draws on the water reserve.

Capital expenditure planning is gradually becoming better informed based on outputs from the City's Asset Management Plan. The Asset Management Plan, which includes water infrastructure assets, is reviewed and updated annually to capture additions, write downs and disposals of those assets. Asset management allows for longer range modelling to assess complicated long-term challenges and to help mitigate against sudden and significant rate increases and/or the need for major debt financing.

## **Amortization Expenses**

Amortization is a non-cash expense, which represents the usage of tangible capital assets (TCAs). The annual expense is based on the asset's historic cost and apportioned over the useful life of the asset using the amortization method adopted for the purposes of PSAB 3150. The City of Vaughan uses the straight-line method to calculate annual amortization expense.

## Accumulated Amortization

Using annual depreciation as a basis for reserve funding is a best practice according to the Government of Canada's *National Guide to Sustainable Municipal Infrastructure*.

## Annual Surplus or Deficit

The City of Vaughan uses a zero-based budget approach for the water program, transferring prior year surpluses into the water reserve at year end. In the event of a deficit the amount of the deficit will be financed from the water reserve.

## Conclusions

The financial sustainability of the City of Vaughan's drinking water system has been evaluated in this Financial Plan. As outlined above, the financial projections have been made based on a series of assumptions, the most important of which includes system infrastructure growth, account growth, future water rates, future water purchase costs and increases in expenses. The Financial Plan built on these assumptions conclude that the City of Vaughan has a financially sustainable drinking water system.

This Financial Plan is a working document and will be reviewed annually to ensure that the system continues to be financially sustainable and that adjustments are made as necessary to achieve this objective.

## Process for Approval and Submission

The following steps are required in accordance with the requirements of O.Reg 453/07.

1. The Financial Plan must be approved by resolution of Council.
2. A Notice of the availability of the Financial Plan must be advertised.
3. The Financial Plan must be made available, upon request, without charge, to the members of the public that are served by the water system.
4. The Financial Plan must be made available on the City of Vaughan's website.



5. A copy of the Financial Plan, along with Council's resolution must be submitted to the Ministry of Municipal Affairs and Housing and to the Ministry of the Environment, Conservation and Parks to comply with the City of Vaughan's Drinking Water System Licence requirements.

# APPENDIX A

## Ontario Regulation 453/07

Requirements for the City of Vaughan Pursuant to Ontario Regulation 453/07

Requirement to prepare financial plans

1. (2) A person who makes an application under subsection 32 (4) of the Act for the renewal of a municipal drinking water licence shall, before making the application, prepare and approve financial plans for the system that satisfy the requirements prescribed under section 3. O. Reg. 453/07, s. 1 (2).

Financial plan requirement; licence renewals

3. (1) For the purposes of clause (b) of the definition of “financial plans” in subsection 30 (1) of the Act, the following requirements are prescribed for financial plans that are required by subsection 1 (2) or a condition that is included in a municipal drinking water licence under subsection 1 (3) to satisfy the requirements of this section:
  1. The financial plans must be approved by a resolution that is passed by,
    - i. the council of the municipality, if the owner of the drinking water system is a municipality.
  2. The financial plans must apply to a period of at least six years.
  3. The first year to which the financial plans must apply must be the year determined in accordance with the following rules:
    - i. If the financial plans are required by subsection 1 (2), the first year to which the financial plans must apply must be the year in which the drinking water system’s existing municipal drinking water licence would otherwise expire.

4. Subject to subsection (2), for each year to which financial plans apply, the financial plans must include the following:
  - i. Details of the proposed or projected financial position of the drinking water system itemized by,
    - A. total financial assets,
    - B. total liabilities,
    - C. net debt,
    - D. non-financial assets that are tangible capital assets, tangible capital assets under construction, inventories of supplies and prepaid expenses, and
    - E. changes in tangible capital assets that are additions, donations, write downs and disposals.
  - ii. Details of the proposed or projected financial operations of the drinking water system itemized by,
    - A. total revenues, further itemized by water rates, user charges and other revenues,
    - B. total expenses, further itemized by amortization expenses, interest expenses and other expenses,
    - C. annual surplus or deficit, and
    - D. accumulated surplus or deficit.
  - iii. Details of the drinking water system's proposed or projected gross cash receipts and gross cash payments itemized by,
    - A. operating transactions that are cash received from revenues, cash paid for operating expenses and finance charges,

- B. capital transactions that are proceeds on the sale of tangible capital assets and cash used to acquire capital assets,
  - C. investing transactions that are acquisitions and disposal of investments,
  - D. financing transactions that are proceeds from the issuance of debt and debt repayments,
  - E. changes in cash and cash equivalents during the year, and
  - F. cash and cash equivalents at the beginning and end of the year.
- iv. Details of the extent to which the information described in subparagraphs i, ii and iii relates directly to the replacement of lead service pipes as defined in section 15.1 – 3 of Schedule 15.1 to Ontario Regulation 170/03 (Drinking Water Systems), made under the Act.
5. The owner of the drinking water system must,
- i. make the financial plans available, on request, to members of the public who are served by the drinking water system without charge,
  - ii. make the financial plans available to members of the public without charge through publication on the Internet, if the owner maintains a website on the Internet, and
  - iii. provide notice advising the public of the availability of the financial plans under subparagraphs i and ii, if applicable, in a manner that, in the opinion of the owner, will bring notice to the attention of members of the public who are served by the drinking water system.
6. The owner of the drinking water system must give a copy of the financial plans to the Ministry of Municipal Affairs and Housing. O. Reg. 453/07, s. 3 (1).

# APPENDIX B

## STATEMENT OF FINANCIAL POSITION

As of December 31	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
<b>Financial Assets:</b>													
Cash and cash equivalents	72,320,479	63,542,749	56,775,908	57,909,217	91,355,653	106,522,229	122,053,090	140,020,636	156,589,375	174,347,713	196,860,226	211,852,425	234,739,313
Water billings receivable	12,363,731	13,672,424	14,462,084	14,989,508	15,806,087	16,603,902	17,441,995	18,322,397	19,247,245	20,218,784	21,239,372	22,314,683	23,437,121
Accounts receivable	229,573	233,655	237,762	238,017	243,273	249,720	258,451	268,679	279,694	290,899	302,509	314,542	327,001
Total Financial Assets	94,913,783	77,448,827	71,465,754	73,136,741	107,405,212	123,375,852	139,753,536	158,611,912	176,116,315	194,867,396	218,392,107	234,478,451	258,504,035
<b>Financial Liabilities:</b>													
Accounts payable	813,674	828,745	827,985	870,588	888,541	922,149	953,613	985,330	1,020,539	1,056,097	1,092,060	1,131,801	1,172,007
Accrued liabilities	17,311,596	18,641,323	19,501,802	20,196,471	21,705,318	22,714,039	23,769,646	24,874,322	26,030,345	27,240,105	28,506,098	29,830,941	31,217,267
Employee future benefits	2,942,563	3,153,474	3,374,931	3,607,461	3,851,617	4,107,982	4,377,164	4,659,805	4,956,579	5,268,191	5,595,394	5,938,636	6,299,666
Deferred revenue - obligatory reserve funds	2,926,576	2,926,576	2,926,576	2,926,576	2,926,576	2,926,576	2,926,576	2,926,576	2,926,576	2,926,576	2,926,576	2,926,576	2,926,576
Debt and other debt					18,671,665	18,064,052	17,425,678	16,754,987	16,050,342	15,310,025	14,532,229	13,715,056	12,865,515
Total Liabilities	23,994,808	25,550,117	26,631,295	27,601,066	48,043,718	48,734,797	49,452,678	50,201,020	50,984,381	51,800,933	52,652,347	53,543,310	54,472,131
<b>Net Financial Assets</b>	<b>60,919,174</b>	<b>51,898,710</b>	<b>44,834,460</b>	<b>45,535,645</b>	<b>59,361,494</b>	<b>74,641,055</b>	<b>90,300,858</b>	<b>108,410,892</b>	<b>125,131,933</b>	<b>143,066,403</b>	<b>165,739,761</b>	<b>180,935,141</b>	<b>204,031,904</b>
<b>Non-Financial Assets:</b>													
Tangible Capital Assets	338,473,794	365,847,555	392,930,591	412,423,898	418,537,194	424,671,828	432,127,746	439,023,366	449,267,126	460,390,006	468,979,622	487,323,263	500,236,059
<b>Accumulated surplus</b>	<b>399,392,998</b>	<b>417,746,265</b>	<b>437,765,051</b>	<b>457,959,544</b>	<b>477,898,888</b>	<b>499,312,883</b>	<b>522,428,604</b>	<b>547,434,260</b>	<b>574,399,059</b>	<b>603,446,409</b>	<b>634,719,583</b>	<b>668,258,404</b>	<b>704,267,992</b>

# APPENDIX C

## STATEMENT OF OPERATIONS

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
<b>Revenues</b>													
Rate Based	75,034,549	82,976,907	87,708,608	90,970,189	95,925,945	100,767,829	105,854,148	111,197,242	116,810,078	122,706,276	128,900,142	135,406,707	142,241,761
Other	1,294,128	1,312,702	1,327,853	1,079,452	1,101,041	1,123,062	1,145,523	1,168,434	1,191,802	1,215,638	1,239,951	1,264,750	1,290,045
Contributions from Developers	3,953,265	4,032,330	4,112,977	4,195,236	4,279,141	4,364,724	4,452,018	4,541,059	4,631,880	4,724,518	4,819,008	4,915,388	5,013,696
Contributed/Assumed Assets	8,804,775	8,980,871	9,160,488	9,343,698	9,530,572	9,721,183	9,915,607	10,113,919	10,316,198	10,522,522	10,732,972	10,947,631	11,166,584
Interest Income	1,341,600	1,341,600	1,341,600	1,341,600	1,401,657	1,535,753	1,817,043	2,206,013	2,614,725	3,043,254	3,492,550	3,963,578	4,456,425
<b>Total Revenues</b>	<b>90,428,317</b>	<b>98,644,410</b>	<b>103,651,526</b>	<b>106,930,176</b>	<b>112,238,357</b>	<b>117,512,552</b>	<b>123,184,339</b>	<b>129,226,667</b>	<b>135,564,683</b>	<b>142,212,207</b>	<b>149,184,622</b>	<b>156,498,055</b>	<b>164,168,511</b>
<b>Expenses</b>													
Water Purchases	53,641,334	57,761,598	60,427,861	62,580,347	67,255,628	70,381,227	73,652,110	77,075,033	80,657,063	84,405,597	88,328,377	92,433,505	96,729,457
Maintenance and Installation Cost	7,325,683	7,560,555	7,509,914	8,004,524	8,242,928	8,653,937	9,035,209	9,419,335	9,850,448	10,285,722	10,725,929	11,216,978	11,713,750
General Administration	4,420,347	4,382,263	4,429,679	4,483,243	4,537,455	4,592,322	4,647,853	4,704,055	4,760,937	4,818,506	4,876,772	4,935,742	4,995,426
Allocated Overhead	2,147,403	2,252,740	2,272,478	2,259,311	2,375,882	2,499,951	2,632,065	2,772,811	2,922,820	3,082,773	3,253,403	3,435,501	3,629,916
Debtenture Interest	0	0	0	0	1,016,708	987,430	956,669	924,352	890,398	854,725	817,247	777,871	736,501
Future Employee Benefits	200,868	210,911	221,457	232,530	244,156	256,364	269,182	282,641	296,774	311,612	327,193	343,552	360,730
Loss of Disposal of TCA	953,252	840,540	863,584	719,844	0	0	0	0	0	0	0	0	0
Amortization	6,657,144	7,282,506	7,907,767	8,415,884	8,626,456	8,727,126	8,875,528	9,042,784	9,221,446	9,405,922	9,582,528	9,816,085	9,993,173
<b>Total Expenses</b>	<b>75,346,031</b>	<b>80,291,113</b>	<b>83,632,740</b>	<b>86,735,683</b>	<b>92,299,212</b>	<b>96,098,357</b>	<b>100,068,618</b>	<b>104,221,011</b>	<b>108,599,884</b>	<b>113,164,857</b>	<b>117,911,449</b>	<b>122,959,234</b>	<b>128,158,952</b>
<b>Annual Surplus</b>	<b>15,082,286</b>	<b>18,353,297</b>	<b>20,018,786</b>	<b>20,194,493</b>	<b>19,939,144</b>	<b>21,414,195</b>	<b>23,115,721</b>	<b>25,005,656</b>	<b>26,964,799</b>	<b>29,047,350</b>	<b>31,273,174</b>	<b>33,538,821</b>	<b>36,009,559</b>
<b>Accumulated Surplus, beginning of year</b>	<b>384,310,682</b>	<b>399,392,968</b>	<b>417,746,265</b>	<b>437,765,051</b>	<b>457,959,544</b>	<b>477,898,688</b>	<b>499,312,883</b>	<b>522,428,604</b>	<b>547,434,260</b>	<b>574,399,059</b>	<b>603,446,409</b>	<b>634,719,583</b>	<b>668,258,404</b>
<b>Accumulated Surplus, end of year</b>	<b>399,392,968</b>	<b>417,746,265</b>	<b>437,765,051</b>	<b>457,959,544</b>	<b>477,898,688</b>	<b>499,312,883</b>	<b>522,428,604</b>	<b>547,434,260</b>	<b>574,399,059</b>	<b>603,446,409</b>	<b>634,719,583</b>	<b>668,258,404</b>	<b>704,267,962</b>

# APPENDIX D

## STATEMENT OF CASH FLOW

As at December 31	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
<b>Cash provided by (used in):</b>													
Annual surplus	15,082,286	18,353,297	20,018,786	20,194,493	19,939,144	21,414,195	23,115,721	25,005,696	26,964,799	29,047,350	31,273,174	33,538,821	36,009,559
<b>Operating activities:</b>													
Items not involving cash:													
Amortization	6,657,144	7,282,506	7,907,767	8,415,884	8,626,456	8,727,126	8,875,528	9,042,794	9,221,446	9,405,922	9,582,528	9,816,085	9,993,173
Loss on disposal of tangible capital assets	953,252	840,540	863,584	719,844	-	-	-	-	-	-	-	-	-
Contributed tangible capital assets	(8,804,775)	(8,980,871)	(9,160,488)	(9,343,698)	(9,530,572)	(9,721,183)	(9,915,607)	(10,113,919)	(10,316,198)	(10,522,522)	(10,732,972)	(10,947,631)	(11,166,594)
Change in non-cash assets and liabilities													
Decrease (increase) in water billings receivable	(1,857,148)	(1,308,693)	(779,661)	(537,423)	(816,579)	(797,816)	(838,092)	(880,402)	(924,849)	(971,539)	(1,020,587)	(1,072,112)	(1,126,238)
Decrease (increase) in accounts receivable	(197,960)	(4,082)	(4,107)	(255)	(5,256)	(6,447)	(8,731)	(10,428)	(10,815)	(11,205)	(11,611)	(12,033)	(12,459)
Increase (decrease) in accounts payable	266,390	14,871	(739)	42,602	17,954	33,607	31,465	31,716	35,209	35,558	35,953	39,741	40,206
Increase (decrease) in accrued liabilities	4,631,705	1,329,727	880,479	694,669	1,508,847	1,008,720	1,055,608	1,104,675	1,156,024	1,209,760	1,265,994	1,324,842	1,386,427
Increase in employee future benefits	174,489	210,911	221,457	232,530	244,156	256,364	269,182	282,641	296,774	311,612	327,193	343,552	360,730
	16,905,383	17,738,206	19,927,058	20,418,646	19,984,150	20,914,566	22,585,074	24,462,724	26,422,391	28,504,936	30,719,681	33,031,285	35,484,813
<b>Capital activities:</b>													
Cash used to acquire tangible capital assets	(30,219,904)	(28,515,937)	(26,693,899)	(19,285,337)	(5,209,180)	(5,140,576)	(6,415,840)	(5,824,487)	(9,149,006)	(10,006,281)	(7,439,372)	(17,211,894)	(11,739,384)
<b>Financing activities:</b>													
Debiture and other debt incurred/(repaid)	-	-	-	-	18,671,665	(607,613)	(638,374)	(670,691)	(704,645)	(740,318)	(777,796)	(817,172)	(858,541)
<b>Increase (decrease) in Cash and Cash Equivalents</b>	(13,314,521)	(8,777,730)	(6,766,841)	1,133,309	33,446,636	15,166,377	15,530,861	17,967,546	16,568,739	17,758,337	22,502,513	15,002,199	22,886,888
Cash and Cash Equivalents, beginning of year	85,635,000	72,320,479	63,542,749	56,775,908	57,909,217	91,355,853	106,522,229	122,053,090	140,020,636	156,589,375	174,347,713	196,850,226	211,852,425
<b>Cash and Cash Equivalents, end of year</b>	<b>72,320,479</b>	<b>63,542,749</b>	<b>56,775,908</b>	<b>57,909,217</b>	<b>91,355,853</b>	<b>106,522,229</b>	<b>122,053,090</b>	<b>140,020,636</b>	<b>156,589,375</b>	<b>174,347,713</b>	<b>196,850,226</b>	<b>211,852,425</b>	<b>234,739,313</b>



# APPENDIX E

## STATEMENT OF CHANGE IN NET FINANCIAL ASSETS

As at December 31	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
<b>Annual Surplus/(Deficit)</b>	15,082,286	18,353,297	20,018,786	20,194,493	19,939,144	21,414,195	23,115,721	25,005,656	26,964,799	29,047,350	31,273,174	33,538,821	36,009,559
Amortization of tangible capital assets	6,657,144	7,292,506	7,907,767	8,415,884	8,626,456	8,727,126	8,875,528	9,042,784	9,221,446	9,405,922	9,582,528	9,816,085	9,993,173
Loss on disposal of tangible capital assets	953,252	840,540	863,584	719,844	0	0	0	0	0	0	0	0	0
Acquisition of tangible capital assets	(39,024,679)	(35,486,808)	(35,854,388)	(28,629,035)	(14,729,752)	(14,861,759)	(16,331,447)	(15,938,406)	(19,465,204)	(20,528,802)	(18,172,344)	(28,159,526)	(22,905,988)
Increase (decrease) in net financial assets	(16,331,997)	(9,020,465)	(7,064,250)	701,186	13,825,849	15,279,561	15,659,803	18,110,034	16,721,041	17,924,469	22,683,358	15,195,380	23,096,763
<b>Net financial assets, beginning of the year</b>	77,251,171	60,919,174	51,898,710	44,834,460	45,535,645	59,361,494	74,641,055	90,300,888	108,410,892	125,131,933	143,056,403	165,739,761	180,935,141
<b>Net Financial Assets, end of the year</b>	60,919,174	51,898,710	44,834,460	45,535,645	59,361,494	74,641,055	90,300,888	108,410,892	125,131,933	143,056,403	165,739,761	180,935,141	204,031,904

**City of Vaughan**  
Office of the Chief Financial Officer  
and City Treasurer

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