



**Mike Mayes, Director
Financial Services/Treasurer**

TOWN OF NEWMARKET
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November 19, 2015

CORPORATE SERVICES REPORT - FINANCIAL SERVICES-2015-54

TO: Mayor Tony Van Bynen and Members of Council
Committee of the Whole

SUBJECT: 6 Year Financial Plan – Water and Wastewater

ORIGIN: Director, Financial Services/Treasurer

RECOMMENDATION

THAT Corporate Services Report - Financial Services – 2015-54 dated November 19, 2015 regarding 6 Year Financial Plan – Water and Wastewater be received and the following recommendation be adopted:

THAT Council adopt the proposed 6 Year Water Financial Plan and the 6 Year Wastewater Financial Plan.

COMMENTS

Purpose:

Staff was directed in Financial Services Report 2014-36 to update the 6-Year Water and Wastewater Financial Plan, this review includes an update to the rate structure and consumption projections.

Budget Impact:

This plan proposes to set rates where the annual residential bill will increase by an average of 6.7% and the annual bill for a non-residential customer with a 2" meter will increase by an average of 8.3% over the six years.

Summary:

This plan updates consumption projections. It also proposes adopting a tiered fixed rate structure where customers with larger meters pay a higher monthly rate. Finally, it proposes an increase in the asset replacement fund contribution in order to achieve long-term financial sustainability.

BACKGROUND

In the *Financial Services Report 2014-36*, staff was directed to conduct a further review of the water rate structure with an update to the *6 Year Water Financial Plan* and *6 Year Wastewater Financial Plan*.

This plan recommends updating the rate structure. This report provides a rationale for the update to the structure. This plan also updates consumption projections to better reflect current trends.

Analysis and Options

Consumption Projections

In Financial Services Report 2014-36, it was found that based on economic, social and technological factors, total consumption in Newmarket will continue to decrease. This report, for the purposes of the new 6-year water and wastewater financial plans, projects water consumption to 2021. See table 1 for the results.

This projection is based on historical population, consumption and York Region population projections outlined in *2041 York Region Draft Growth Scenarios and Land Budget*. As water consumption per capita is decreasing without sufficient population growth to offset this trend, it is projected that total billable consumption will decrease by 10% by 2021 compared to 2015.

The billable consumption is projected to decrease by less in 2017 to 2019 because the Town's meter replacement program will increase the accuracy of the meters and will record higher consumption levels.

Table 1: Water Consumption Projections in Newmarket

	2016	2017	2018	2019	2020	2021
Consumption in Cubic Meters per Person per Year	75.5	73.0	70.6	68.3	66.1	64.0
Population	87,519	88,421	89,331	90,251	91,181	92,100
Billable Consumption in Cubic Meters (000's) without New Meters	6,607	6,457	6,311	6,168	6,029	5,892
Billable Consumption in Cubic Meters (000's) with New Meters	6,607	6,536	6,465	6,394	6,250	6,110
Billable Consumption Growth Rate with New Meters	-2.3%	-1.1%	-1.1%	-1.1%	-2.3%	-2.3%

Wholesale Rates

York Region approved the new *Water and Wastewater Financial Sustainability Plan*, which sets the wholesale rate at which the Town pays to have potable water delivered to our municipality and to have it treated. See table 2 for the wholesale rate increases over the next six years.

Table 2: York Region Wholesale Rates from 2015 to 2021.

		2015	2016	2017	2018	2019	2020	2021
Blended Rate	Rate	\$2.18	\$2.37	\$2.59	\$2.82	\$3.07	\$3.35	\$3.45
Blended Rate	Increase	N/A	9.0%	9.0%	9.0%	9.0%	9.0%	2.9%

Rate Structure

It is recommended that the Town adopt a tiered fixed rate structure where customers with larger meters pay a higher fixed rate. The *American Water Works Association* has established a standard factor of what customers should be charged relative to the residential sized meter.

Table 3: Standardized Meter Equivalency Factor

Meter Size	5/8"	2"	3"	4"
Equivalency Factor	1	8	15	25

To illustrate how the equivalency factor works, if a resident with a 5/8" is charged \$14 per month for their fixed water rate, a business with a 2" meter would be charged 8 times the amount equating to \$112 per month.

According to the *2014 BMA Consulting Municipal Study*, low consumption customers in Newmarket pay among the most for water in York Region while high level water consumers pay among the least. See table 2 for a regional comparison of water and wastewater annual charges.

Table 4: Water and Wastewater Charge per customer based on consumption and meter size in York Region in 2014.

Consumption	200m ³	10,000m ³	30,000m ³	100,000m ³
Meter Size	5/8"	2"	3"	4"
Aurora	\$666	\$33,302	\$99,906	\$333,020
East Gwillimbury	1,098	52,556	159,156	532,256
Georgina	862	32,187	96,475	321,483
King	813	37,134	113,095	370,317
Markham	613	30,649	91,947	306,490
Newmarket	914	29,256	87,096	289,536
Richmond Hill	628	31,400	94,200	314,000
Vaughan	617	30,856	92,568	308,560
Whitchurch-Stouffville	630	31,475	94,425	314,750
Average	760	34,313	103,208	343,379
Median	666	31,475	94,425	314,750

To gauge the impact of changing to a tiered fixed rate in Newmarket, table 3 illustrates what the annual charge for customers would look like using the 2014 volumetric rate and the proposed tiered rate structure.

Table 5: Water and Wastewater Charge per customer based on consumption and meter size with proposed rate structure using the 2014 volumetric rate

Consumption	200m ³	10,000m ³	30,000m ³	100,000m ³
Meter Size	5/8"	2"	3"	4"
Newmarket with Tiers	\$914	\$31,618	\$91,830	\$297,702

There is economic reasoning as to why customers with large meters should bear a greater portion of the fixed cost. Larger meters are more expensive to maintain and replace and require a greater amount of standby capacity to accommodate consumption at peak times.

Moving to a tiered fixed rate increases total revenue by 4%, which reduces the pressure on volumetric rate increases and provides greater revenue stability.

This additional revenue will come from non-residential customers with larger meters that put greater strain on the water and wastewater infrastructure.

Approximately 66% percent of non-residential customers have meters smaller than 2". These customers will not see an increase to their fixed rate.

True costing the fixed charge for large meters enables lower increases to the volumetric rate. The effect of the new structure is that it will make water and wastewater more relatively affordable for residential and small business customers in subsequent years.

The inventory for the water meters is currently being collected. Since the meter inventory is in progress, the tiered rate could be implemented as early as June 2016.

Asset Replacement Fund Contribution

The *new 6 Year Water Financial Plan* and *6 Year Wastewater Financial Plan* recommend increasing the asset replacement fund contribution by 8.5 percent per year. The additional contribution is required in order to maintain capital reserves as a percent of accumulated amortization. According to the asset replacement schedule for the *Capital Financing Sustainability Strategy*, the Town must increase its contribution in order to remain financially sustainable in the long term.

Table 6: Capital Reserves as a percent of Accumulated Amortization

	2015	2016	2017	2018	2019	2020	2021
Capital Reserves as a % of Accumulated Amortization	55.9%	54.0%	49.4%	48.8%	50.0%	51.5%	53.1%

Volumetric Rate Impact

This plan proposes a combined volumetric increase of 10% in 2016, 7.22% from 2018 to 2020 and 4% in 2021. See table 7 below.

Table 7: Combined Volumetric Rate Increases from 2016 to 2021

	2016	2017	2018	2019	2020	2021
Combined volumetric rate per cubic metre	\$3.47	\$3.72	\$3.99	\$4.27	\$4.58	\$4.77
Percent Increase	9.98%	7.22%	7.22%	7.22%	7.22%	4.00%

Fixed Rate Impact

This plan proposes no increase in the base annual charge in 2016 and increases in subsequent years to ensure that the base fixed rate becomes 33% of the average residential customers' utility bill. See Table 8 for an illustration of the fixed rate over time. This table also illustrates the proposed phase in schedule for the tiered fixed rate structure. For more information on the phase in schedule please refer to *Financial Services Report 2015-53*.

Table 8: Fixed Rate Increases from 2016 to 2021

	2016	Mid 2016	2017	2018	2019	2020	2021
Base Annual Fixed Rate	\$28.00	\$28.00	\$30.75	\$32.70	\$35.06	\$37.59	\$39.09
2" Meter Monthly Rate	\$28.00	\$112.00	\$246.00	\$261.59	\$280.47	\$300.72	\$312.75
3" Meter Monthly Fixed Rate	\$28.00	\$210.00	\$461.25	\$490.49	\$525.89	\$563.84	\$586.40
4" Meter Monthly Fixed Rate	\$28.00	\$350.00	\$768.75	\$817.48	\$876.48	\$939.74	\$977.33
Percent Increase of Base Charge	0.00%	0.00%	9.82%	6.34%	7.22%	7.22%	4.00%

Total Rate Impact

The new rate structure will have different impacts on different types of customers. See table 9 for an illustration of those impacts.

Table 9: Combined volumetric and fixed annual rates and percent increases from 2016 to 2021.

	2016	2017	2018	2019	2020	2021
Average Residential Customer	1,030	1,113	1,190	1,275	1,368	1,422
	6.51%	8.1%	6.9%	7.2%	7.2%	4.0%
Average non-residential customer with 2" meter	35,600	40,131	43,001	46,104	49,432	51,409
	11.7%	12.7%	7.2%	7.2%	7.2%	4.0%

Table 9 may be over estimating the average bill increase due to the level of consumption going down over time. Because consumption is going down, the revenue from the volumetric portion of the utility bill will also decrease.

BUSINESS PLAN AND STRATEGIC PLAN LINKAGES

This report links to Newmarket's key strategic directions in being Well Managed through fiscal responsibility.

CONSULTATION

The Municipal Act stipulates public notice requirements for changes to water and wastewater rates. Advertisement on the Town's website has been provided for a three-week period in advance of the public meeting. Notice has also been given through advertisement on the Town Page of the local newspaper in advance of Council's consideration of the fee adjustments. The statutory public meeting is scheduled as part of the Committee of the Whole meeting on November 16, 2015.

HUMAN RESOURCE CONSIDERATIONS

Not applicable to this report.

BUDGET IMPACT

Operating Budget (Current and Future)

This plan proposes to set rates where the annual residential bill will increase 6.7% and the annual bill for a non-residential customer with a 2" meter will increase by an average of 8.3%.

Capital Budget

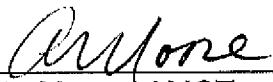
This plan proposes increasing the asset replacement fund contribution by 8.5% in order to keep up with inflation and contributing to the reserve for long term financial sustainability.

CONTACT

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Mike Mayes, CPA, CGA
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Attachments:

- Water Financial Plan (2016-2021) – 9 pgs.
- Wastewater Financial Plan (2016-2021) – 9 pgs.

The Corporation of the Town of Newmarket

Water Financial Plan (2016 - 2021)

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THE CORPORATION OF THE TOWN OF NEWMARKET
WATER SYSTEM
Statement of Financial Position

As at December 31

	2014	2015	2016	2017	2018	2019	FORECAST	
							2020	2021
Financial Assets								
Cash and cash equivalents	\$22,578,000	\$24,274,000	\$24,588,330	\$22,300,330	\$22,705,700	\$24,547,791	\$26,812,935	\$29,079,443
Accounts receivable	2,135,000	2,187,000	2,178,000	2,308,000	2,417,000	2,579,000	2,729,000	2,795,000
Inventory for resale	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Total Financial Assets	24,813,000	26,561,000	26,886,330	24,708,330	25,222,700	27,226,791	29,641,935	31,974,443
Liabilities								
Accounts payable & accrued liabilities	2,598,000	2,314,000	2,319,000	2,532,000	2,693,000	2,953,000	3,025,000	3,093,000
Interest payable on debt	234,000	234,000	234,000	234,000	234,000	234,000	234,000	114,000
Deferred revenue	493,000	503,000	513,000	523,000	533,000	544,000	555,000	566,000
Long-term debt	6,046,000	5,756,000	5,473,000	5,181,000	4,886,000	4,570,000	4,251,000	3,923,000
Total Liabilities	9,371,000	8,807,000	8,559,000	8,470,000	8,340,000	8,301,000	8,065,000	7,696,000
Net Financial Assets	15,442,000	17,754,000	18,327,330	16,238,330	16,882,700	18,925,791	21,576,935	24,278,443
Non-Financial Assets								
Tangible Capital Assets	49,755,000	50,136,860	52,022,500	56,542,120	58,282,330	58,636,946	58,972,992	59,290,696
Total Non-Financial Assets	49,755,000	50,136,860	52,022,500	56,542,120	58,282,330	58,636,946	58,972,992	59,290,696
Total Net Assets	65,197,000	67,390,860	70,349,830	72,780,450	75,165,030	77,562,737	80,549,927	83,569,139
Accumulated Surplus	\$65,197,000	\$67,390,860	\$70,349,830	\$72,780,450	\$75,165,030	\$77,562,737	\$80,549,927	\$83,569,139

The accompanying notes are an integral part of these consolidated financial statements.

THE CORPORATION OF THE TOWN OF NEWMARKET
WATER SYSTEM
Statement of Operations

For the years ended December 31

	2014	2015	2016	2017	2018	2019	2020	2021
Revenues								
Rate based revenue	\$14,402,000	\$14,577,000	\$14,518,000	\$15,384,000	\$16,116,000	\$17,192,000	\$18,194,000	\$18,630,000
Contributed / Assumed assets	3,449,000	1,560,000	1,560,000	1,560,000	1,560,000	1,560,000	1,560,000	1,560,000
Gain/loss on sale of tangible capital assets	-173,000							
Investment income	426,000	435,000	444,000	453,000	462,000	471,000	480,000	490,000
Other revenue	72,000	72,000	72,000	72,000	72,000	72,000	72,000	72,000
Total Revenues	18,176,000	16,644,000	16,594,000	17,469,000	18,210,000	19,295,000	20,306,000	20,752,000
Expenditures								
Water purchases	7,028,000	7,714,000	7,729,000	8,439,000	8,975,000	9,844,000	10,084,000	10,311,000
Operating and maintenance	2,944,000	3,032,000	3,977,694	4,097,000	4,220,000	4,347,000	4,477,000	4,611,000
Allocated overhead	1,195,000	1,231,000	407,976	420,000	433,000	446,000	459,000	473,000
Interest expense	293,000	295,000	306,000	301,000	295,000	290,000	287,000	284,000
Amortization	1,599,000	1,678,140	1,714,360	1,781,380	1,902,420	1,970,293	2,011,811	2,053,788
Total Expenditures	13,059,000	13,950,140	14,135,030	15,038,380	15,825,420	16,897,293	17,318,811	17,732,788
Annual Surplus / (Deficit)	5,117,000	2,693,860	2,458,970	2,430,620	2,384,580	2,397,707	2,987,189	3,019,212
Accumulated Surplus, beginning of year	60,080,000	65,197,000	67,890,860	70,349,830	72,780,450	75,165,030	77,562,737	80,549,927
Accumulated Surplus, end of year	\$65,197,000	\$67,890,860	\$70,349,830	\$72,780,450	\$75,165,030	\$77,562,737	\$80,549,927	\$83,569,139

The accompanying notes are an integral part of these consolidated financial statements.

THE CORPORATION OF THE TOWN OF NEWMARKET
WATER SYSTEM
Statement of Changes in Net Financial Assets

For the years ended December 31

	2014	2015	2016	2017	2018	2019	FORECAST	
							2020	2021
Annual surplus / (Deficit)	\$5,117,000	\$2,693,860	\$2,458,970	\$2,430,620	\$2,384,580	\$2,397,707	\$2,987,189	\$3,019,212
Less: Acquisition of tangible capital assets	-755,000	-500,000	-2,040,000	-4,741,000	-2,082,630	-764,909	-787,856	-811,492
Less: Contributed tangible capital assets	3,449,000	-1,560,000	-1,560,000	-1,560,000	-1,560,000	-1,560,000	-1,560,000	-1,560,000
Add: Amortization of tangible capital assets	1,599,000	1,678,140	1,714,360	1,781,380	1,902,420	1,970,293	2,011,811	2,053,788
Add: Proceeds from sale of TCA	-	-	-	-	-	-	-	-
Less: Gain on sale of tangible capital assets	173,000	-	-	-	-	-	-	-
Changes in Net Financial Assets	2,685,000	2,312,000	573,330	-2,089,000	644,370	2,043,091	2,651,144	2,701,508
Net Financial Assets, beginning of year	12,757,000	15,442,000	17,754,000	18,327,330	16,238,330	16,882,700	18,925,791	21,576,935
Net Financial Assets, end of year	\$ 15,442,000	\$ 17,754,000	\$ 18,327,330	\$ 16,238,330	\$ 16,882,700	\$ 18,925,791	\$ 21,576,935	\$ 24,278,443

The accompanying notes are an integral part of these consolidated financial statements.

THE CORPORATION OF THE TOWN OF NEWMARKET
WATER SYSTEM
Statement of Cashflow

For the years ended December 31

	2014	2015	2016	2017	2018	2019	2020	2021	FORECAST
Cash Provided By (Used in):									
Operating Activities									
Annual surplus/deficit	5,117,000	2,693,860	2,458,970	2,430,620	2,384,580	2,397,707	2,987,189	3,019,212	
Add: Amortization	1,599,000	1,678,140	1,714,360	1,781,380	1,902,420	1,970,293	2,011,811	2,053,788	
Less: Contributed/assumed assets	-3,449,000	-1,560,000	-1,560,000	-1,560,000	-1,560,000	-1,560,000	-1,560,000	-1,560,000	
Less: Gain on sale of tangible capital assets	173,000								
(Increase)/decrease in A/R	-120,000	-52,000	9,000	-130,000	-109,000	-162,000	-150,000	-66,000	
(Increase)/decrease in inventory for resale	4,000	0	0	0	0	0	0	0	
Increase/(decrease) in A/P	1,000	-284,000	5,000	213,000	161,000	260,000	72,000	-52,000	
Increase/(decrease) in deferred revenue	-95,000	10,000	10,000	10,000	10,000	11,000	11,000	11,000	
Net change in cash from operating activities	3,230,000	2,486,000	2,637,330	2,745,000	2,789,000	2,917,000	3,372,000	3,406,000	
Capital Activities									
Proceeds from sale of tangible capital assets									
Cash used to acquire tangible capital assets	-755,000	-500,000	-2,040,000	-4,741,000	-2,082,630	-764,909	-787,856	-811,492	
Net change in cash from capital activities	-755,000	-500,000	-2,040,000	-4,741,000	-2,082,630	-764,909	-787,856	-811,492	
Financing Activities									
Proceeds from debt issues	-								
Principal repayment on long-term debt	-383,000	-290,000	-283,000	-292,000	-301,000	-310,000	-319,000	-328,000	
Net change in cash from financing activities	-383,000	-290,000	-283,000	-292,000	-301,000	-310,000	-319,000	-328,000	
Net Change in Cash	2,092,000	1,696,000	314,330	-2,288,000	405,370	1,842,091	2,265,144	2,266,508	
Cash, beginning of year	20,486,000	22,578,000	24,274,000	24,588,330	22,300,330	22,705,700	24,547,791	26,812,935	
Cash, end of year	\$ 22,578,000	\$ 24,274,000	\$ 24,588,330	\$ 22,300,330	\$ 22,705,700	\$ 24,547,791	\$ 26,812,935	\$ 29,079,443	

THE CORPORATION OF THE TOWN OF NEWMARKET

Notes to the Consolidated Water Financial Plan

The Town of Newmarket with a population of approximately 86,000 is located in the Regional Municipality of York, Province of Ontario, Canada. The Town owns and operates its Drinking Water Distribution System that consists of 308 kilometers of distribution water mains and distributes drinking water to approximately 28,000 property owners. The Region of York is responsible for water supply, production, treatment, storage, and trunk distribution.

1. SAFE DRINKING WATER ACT

Under the *Safe Drinking Water Act*, 2002, S.O. 2002, c.32 , the Town was issued municipal drinking water licence for its drinking water distribution system on August 23, 2011. As per *Safe Drinking Water Act* regulation O. Reg. 453/07, the Town must provide to the Ministry of Municipal Affairs and Housing a minimum six year water financial plan within six months after the date the licence issued.

The six year financial plan must include: Statement of Financial Positions, Statement of Operations, Statement of Net Financial Assets, and Statement of Cash Flow. The financial plan must be approved by a resolution that indicates that the drinking water system is financially viable and that is passed by the Council of the Municipality.

2. FINANCIAL PLAN ASSUMPTIONS

The development of the projected six year consolidated financial statements incorporates the trend from 2010 to 2014, and assumptions for decrease of consumption volumes, inflationary factors, lifecycle capital replacement forecast, and water rate forecast.

3. FINANCIAL ASSETS

Financial assets consist of cash & cash equivalents, accounts receivables and inventory for resale. Inventory for resale is water meters to be sold to developers. Forecasted accounts receivable and inventory for resale are based on historical trends.

4. LIABILITIES

Liabilities consist of accounts payable and accrued liabilities, interest payable on debt, deferred revenue and long-term debt.

(a) Accounts Payable and Accrued Liabilities

Accounts payable and accrued liabilities represent the costs of goods and services acquired in the period and recognized whether or not payments have been made or invoices received. Forecasted accounts payable and accruals are based on historical trend.

(b) Interest Payable on Debt

Interest payable on debt includes half of the balance of unamortized premium of debenture for New Operations Centre and accrued interest expense of debenture related to water.

THE CORPORATION OF THE TOWN OF NEWMARKET

Notes to the Consolidated Water Financial Plan

(c) Deferred Revenue

Deferred revenue represents the balance of the area specific development charges related to water. These funds, by their nature, are restricted in their use and, until applied to specific capital works, are recorded as deferred revenue. Amounts applied to qualifying capital projects are recorded as revenue in the fiscal period they are expended.

(d) Long-term Debt

Long-term debt consists of debenture and FCM loan for New Operations Centre which will mature at 2029 and 2031 respectively, and water portion of debt for Harry Walker Parkway extension which will mature at 2024 . No additional debentures are projected in this forecast period.

5. TANGIBLE CAPITAL ASSETS (TCA)

(a) Tangible Capital Assets

Tangible capital assets are physical assets with useful lives extending beyond the current year and are not intended for sale in the ordinary course of operations.

TCA are recorded at cost, which includes all amounts that are directly attributable to acquisition, construction, development or betterment of an asset. The cost, less residual value, of the tangible capital assets are amortized on a straight-line basis over their estimated useful lives as follows:

	<u>Useful Life - Years</u>
Buildings and building components	20 - 40
Vehicles	4 - 10
Machinery and equipment	3 - 10
Linear assets	
- Watermain	50

Annual amortization is charged in the year the asset is available for productive use and in the year of disposal. Assets under construction are not amortized until the asset is available for productive use.

Tangible capital assets are shown on a net basis in the financial statements. Residual value is assumed to be \$0 for all TCA contained within the forecast period. Gains/losses on disposal assumed to be \$0 as well.

(b) Additions and Disposals

Additions are based on the Asset Management Plan and disposals are based on the historical trend from 2010 to 2014. For 2016 to 2018, additions forecast includes \$6.7 million smart meter implementation costs. After the smart meter implementation, there will be potential increase in revenues due to more accurate meter readings. These revenues are incorporated in the forecast starting 2018.

THE CORPORATION OF THE TOWN OF NEWMARKET

Notes to the Consolidated Water Financial Plan

(c) Contributed / Assumed Assets

These are tangible capital assets contributed by developers or other parties. TCA received as contributions are recorded at their fair value at the date of receipt, and that fair value is also recorded as revenue. Forecasted amount of contributed /assumed assets is based on the historical trend.

(d) Summary of Water System Tangible Capital Assets

	As at December 31	FORECAST					
		2014	2015	2016	2017	2018	2019
Opening TCA Balance(Historical Cost)	\$74,358,000	\$78,315,000	\$80,126,000	\$83,477,000	\$89,529,000	\$92,922,630	\$94,988,539
Additions	4,204,000	2,060,000	3,600,000	6,301,000	3,642,630	2,324,909	2,347,856
Disposals	247,000	249,000	249,000	249,000	249,000	249,000	249,000
Closing TCA Balance(Historical Cost)	\$78,315,000	\$80,126,000	\$83,477,000	\$89,529,000	\$92,922,630	\$94,988,539	\$97,097,395
Opening Accumulated Amortization	27,036,000	28,561,000	29,980,140	31,455,500	32,987,880	34,641,300	36,352,593
Amortization Expense	1,599,000	1,678,140	1,714,360	1,781,380	1,902,420	1,970,293	2,011,811
Accumulated Amortization on Disposals	74,000	249,000	249,000	249,000	249,000	249,000	249,000
Ending Accumulated Amortization	\$28,561,000	\$29,990,140	\$31,455,500	\$32,987,880	\$34,641,300	\$36,362,593	\$38,125,403
Work - in - Progress	1,000	-	-	-	-	-	-
Net Book Value	\$49,755,000	\$50,135,860	\$52,021,500	\$56,541,120	\$58,281,330	\$58,635,946	\$59,289,696

7. NET FINANCIAL ASSETS

Net financial assets as defined is the difference between financial assets and liabilities and is a key indicator in determining the water system financial ability to replace its infrastructure. As reflected in the Statement of Changes in Net Financial Assets , the Town is in a net financial assets position which indicates the Town has sufficient resources to finance current and future activities. Forecasted net financial assets for the years 2015-2021 are \$17.8 million - \$24.3 million.

THE CORPORATION OF THE TOWN OF NEWMARKET
Notes to the Consolidated Water Financial Plan

8. ACCUMULATED SURPLUS

The Accumulated Surplus is comprised of the following:

As of December 31	2014	2015	2016	FORECAST				
				2017	2018	2019	2020	2021
Water Rate Stabilization Reserve	\$540,000	\$1,004,563	\$1,023,910	\$834,379	\$674,961	\$489,381	\$345,293	\$1,153,283
Asset Replacement Fund	20,948,000	22,506,437	22,777,420	20,565,951	21,088,739	23,007,410	24,983,642	27,019,160
Investment in tangible capital assets	49,755,000	50,135,860	52,021,500	56,541,120	58,281,350	58,635,946	58,971,982	59,289,696
Debentures	-6,346,000	-5,736,000	-5,473,000	-5,181,000	4,860,000	-4,570,000	4,251,000	3,923,000
Accumulated Surplus	\$65,197,000	\$67,890,860	\$70,349,830	\$72,780,450	\$75,165,030	\$77,562,737	\$80,549,927	\$83,569,139

The Corporation of the Town of Newmarket
Wastewater Financial Plan (2016 - 2021)

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THE CORPORATION OF THE TOWN OF NEWMARKET
WASTEWATER SYSTEM
Statement of Financial Position

As at December 31

	2014	2015	2016	2017	FORECAST			
					2018	2019	2020	2021
Financial Assets								
Cash and cash equivalents	\$16,007,000	\$17,699,400	\$18,348,319	\$19,335,319	\$20,658,609	\$22,403,428	\$24,137,961	\$26,157,340
Accounts receivable	2,135,000	2,141,000	2,407,000	2,563,000	2,734,000	2,913,000	3,075,000	3,175,000
Total Financial Assets	18,142,000	19,840,400	20,755,319	21,898,319	23,372,609	25,316,428	27,212,961	29,332,340
Liabilities								
Accounts payable & accrued liabilities	2,598,000	2,854,000	3,177,000	3,329,000	3,554,000	3,707,000	4,062,000	4,034,000
Interest payable on debt	234,000	338,000	304,000	269,000	233,000	196,000	155,000	114,000
Deferred revenue	147,000	150,000	153,000	156,000	159,000	162,000	165,000	168,000
Long-term debt	6,046,000	5,756,000	5,473,000	5,181,000	4,880,000	4,570,000	4,251,000	3,923,000
Total Liabilities	9,025,000	9,098,000	9,107,000	8,935,000	8,826,000	8,635,000	8,633,000	8,239,000
Net Financial Assets	9,117,000	10,742,400	11,648,319	12,963,319	14,546,609	16,681,428	18,579,961	21,093,340
Non-Financial Assets								
Tangible Capital Assets	65,080,000	65,935,560	68,020,832	70,079,276	72,111,428	74,117,839	76,099,079	78,055,732
Total Non-Financial Assets	65,080,000	65,935,560	68,020,832	70,079,276	72,111,428	74,117,839	76,099,079	78,055,732
Total Net Assets	74,197,000	76,677,960	79,669,151	83,042,595	86,658,037	90,799,267	94,679,040	99,149,072
Accumulated Surplus	\$74,197,000	\$76,677,960	\$79,669,151	\$83,042,595	\$86,658,037	\$90,799,267	\$94,679,040	\$99,149,072

THE CORPORATION OF THE TOWN OF NEWMARKET
WASTEWATER SYSTEM
Statement of Operations

For the years ended December 31

		2014	2015	2016	2017	2018	2019	2020	2021
Revenues									
Rate based revenue	\$14,345,000	\$14,271,000	\$16,045,000	\$17,084,000	\$18,227,000	\$19,418,000	\$20,502,000	\$21,165,000	
Contributed / Assumed assets	4,879,000	2,472,400	2,472,400	2,472,400	2,472,400	2,472,400	2,472,400	2,472,400	
Gain/(loss) on sale of TCA	-29,000	-100,000	-100,000	-100,000	-100,000	-100,000	-100,000	-100,000	
Investment income	326,000	333,000	340,000	347,000	354,000	361,000	368,000	375,000	
Other revenue	-	-	-	-	-	-	-	-	
Total Revenues	19,521,000	16,976,400	18,757,400	19,803,400	20,953,400	22,151,400	23,242,400	23,912,400	
Expenditures									
Rate based expenditure	8,718,000	9,513,000	10,591,000	11,098,000	11,847,000	12,356,000	13,539,000	13,446,000	
Operating and maintenance	563,000	1,131,000	1,818,995	1,874,000	1,930,000	1,988,000	2,048,000	2,109,000	
Allocated overhead	1,061,000	1,352,000	763,086	786,000	810,000	834,000	859,000	885,000	
Interest expense	293,000	295,000	306,000	301,000	295,000	290,000	287,000	284,000	
Amortization	2,148,000	2,204,440	2,287,128	2,370,956	2,455,958	2,542,170	2,629,627	2,718,368	
Total Expenditures	12,783,000	14,495,440	15,766,209	16,429,956	17,337,958	18,010,170	19,362,627	19,442,368	
Annual Surplus / (Deficit)	6,738,000	2,480,560	2,991,191	3,373,444	3,615,442	4,141,230	3,879,773	4,470,032	
Accumulated Surplus, beginning of year	67,459,000	74,197,000	76,677,960	79,669,151	83,042,595	86,658,037	90,799,267	94,679,040	
Accumulated Surplus, end of year	\$74,197,000	\$76,677,960	\$79,669,151	\$83,042,595	\$86,658,037	\$90,799,267	\$94,679,040	\$99,149,072	

The accompanying notes are an integral part of these consolidated financial statements.

THE CORPORATION OF THE TOWN OF NEWMARKET
WASTEWATER SYSTEM

Statement of Changes in Net Financial Assets

For the years ended December 31

							FORECAST		
							2018	2019	2020
							2014	2015	2016
Annual surplus / (Deficit)									
Less: Acquisition of tangible capital assets	\$6,738,000	\$2,480,960	\$2,991,191		\$3,373,444	\$3,615,442	\$4,141,230	\$3,879,773	\$4,470,032
Less: Contributed tangible capital assets	-833,000	-587,600	-1,900,000		-1,957,000	-2,015,710	-2,076,181	-2,138,467	-2,202,621
Less: Amortization of tangible capital assets	-4,879,000	-2,472,400	-2,472,400		-2,472,400	-2,472,400	-2,472,400	-2,472,400	-2,472,400
Add: Amortization of financial assets	2,148,000	2,204,440	2,287,128		2,370,956	2,455,958	2,542,170	2,629,627	2,718,368
Add: Loss on sale of tangible capital assets	29,000								
Changes in Net Financial Assets	3,203,000	1,625,400	905,919	1,315,000	1,583,290	2,134,819	1,898,533	2,513,379	
Net Financial Assets, beginning of year	5,914,000	9,117,000	10,742,400	11,648,319	12,963,319	14,546,609	16,681,428	18,579,961	
Net Financial Assets, end of year	\$ 9,117,000	\$10,742,400	\$11,648,319	\$12,963,319	\$14,546,609	\$16,681,428	\$18,579,961	\$21,093,340	

THE CORPORATION OF THE TOWN OF NEWMARKET
WASTEWATER SYSTEM
Statement of Cashflow

For the years ended December 31

	2014	2015	2016	2017	2018	2019	2020	2021	FORECAST	
									2014	2015
Cash Provided By (Used in):										
Operating Activities										
Annual surplus/deficit	6,738,000	2,480,960	2,991,191	3,373,444	3,615,442	4,141,230	3,879,773	4,470,032		
Add: Amortization	2,148,000	2,204,440	2,287,128	2,370,956	2,455,958	2,542,170	2,629,627	2,718,368		
Less: Contributed/assumed assets	-4,879,000	-2,472,400	-2,472,400	-2,472,400	-2,472,400	-2,472,400	-2,472,400	-2,472,400		
Add: Loss on sale of tangible capital assets	29,000									
(Increase)/decrease in A/R	-120,000	-6,000	-266,000	-156,000	-171,000	-179,000	-162,000	-100,000		
Increase/(decrease) in A/P	1,000	360,000	289,000	117,000	189,000	116,000	314,000	-69,000		
Increase/(decrease) in deferred revenue	-29,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000		
Net change in cash from operating activities	3,888,000	2,570,000	2,831,919	3,236,000	3,620,000	4,151,000	4,192,000	4,550,000		
Capital Activities										
Cash used to acquire tangible capital assets	-833,000	-587,600	-1,900,000	-1,957,000	-2,015,710	-2,076,181	-2,138,467	-2,202,621		
Net change in cash from capital activities	-833,000	-587,600	-1,900,000	-1,957,000	-2,015,710	-2,076,181	-2,138,467	-2,202,621		
Financing Activities										
Proceeds from debt issues	-									
Principal repayment on long-term debt	-383,000	-290,000	-283,000	-292,000	-301,000	-310,000	-319,000	-328,000		
Net change in cash from financing activities	-383,000	-290,000	-283,000	-292,000	-301,000	-310,000	-319,000	-328,000		
Net Change in Cash	2,672,000	1,692,400	648,919	987,000	1,303,290	1,764,819	1,734,533	2,019,379		
Cash, beginning of year	13,335,000	16,007,000	17,699,400	18,348,319	19,335,319	20,638,609	22,403,428	24,137,961		
Cash, end of year	\$ 16,007,000	\$ 17,699,400	\$ 18,348,319	\$ 19,335,319	\$ 20,638,609	\$ 22,403,428	\$ 24,137,961	\$ 26,157,340		

THE CORPORATION OF THE TOWN OF NEWMARKET

Notes to the Consolidated Wastewater Financial Plan

The Town of Newmarket, with a population of approximately 85,000 is located in the Regional Municipality of York, Province of Ontario, Canada. The Town owns and operates its Wastewater Collection System servicing approximately 28,000 property owners. The Region of York is responsible for treatment of wastewater.

1. SIX YEAR WASTEWATER FINANCIAL PLAN

The six year financial plan includes: Statement of Financial Positions, Statement of Operations, Statement of Net Financial Assets, and Statement of Cash Flow.

The financial plan must be approved by a resolution that indicates that the wastewater system is financially viable and that is passed by the Council of the Municipality.

2. FINANCIAL PLAN ASSUMPTIONS

The development of the projected six year consolidated financial statements incorporates the trend from 2010 to 2014, and assumptions for decrease of consumption volumes, inflationary factors, lifecycle capital replacement forecast, and water rate forecast.

3. FINANCIAL ASSETS

Financial assets consist of cash & cash equivalents and accounts receivables. Forecasted accounts receivable is based on historical trends.

4. LIABILITIES

Liabilities consist of accounts payable and accrued liabilities, interest payable on debt, deferred revenue and long-term debt.

(a) Accounts Payable and Accrued Liabilities

Accounts payable and accrued liabilities represent the costs of goods and services acquired in the period and recognized whether or not payments have been made or invoices received. Forecasted accounts payable and accruals are based on historical trend.

(b) Interest Payable on Debt

Interest payable on debt includes half of the balance of unamortized premium of debenture for New Operations Centre and accrued interest expense of debenture related to wastewater.

THE CORPORATION OF THE TOWN OF NEWMARKET

Notes to the Consolidated Wastewater Financial Plan

(c) Deferred Revenue

Deferred revenue represents the balance of the area specific development charges related to wastewater. These funds, by their nature, are restricted in their use and, until applied to specific capital works, are recorded as deferred revenue. Amounts applied to qualifying capital projects are recorded as revenue in the fiscal period they are expended.

(d) Long-term Debt

Long-term debt consists of debenture and FCM loan for New Operations Centre which will mature at 2029 and 2031 respectively, and wastewater portion of debt for Harry Walker Parkway extension which will mature at 2024. No additional debentures are projected in this forecast period.

5. TANGIBLE CAPITAL ASSETS (TCA)

(a) Tangible Capital Assets

Tangible capital assets are physical assets with useful lives extending beyond the current year and are not intended for sale in the ordinary course of operations.

TCA are recorded at cost, which includes all amounts that are directly attributable to acquisition, construction, development or betterment of an asset. The cost, less residual value, of the tangible capital assets are amortized on a straight-line basis over their estimated useful lives as follows:

	<u>Useful Life - Years</u>
Buildings and building components	20 - 40
Vehicles	4 - 10
Machinery and equipment	3 - 10
Linear assets	
- Wastewater	50

Annual amortization is charged in the year the asset is available for productive use and in the year of disposal. Assets under construction are not amortized until the asset is available for productive use.

Tangible capital assets are shown on a net basis in the financial statements. Residual value is assumed to be \$0 for all TCA contained within the forecast period. Gains/losses on disposal assumed to be \$0 as well.

(b) Additions and Disposals

Additions are based on the Asset Management Plan and disposals are based on the historical trend from 2010 to 2014.

THE CORPORATION OF THE TOWN OF NEWMARKET

Notes to the Consolidated Wastewater Financial Plan

(c) Contributed / Assumed Assets

These are tangible capital assets contributed by developers or other parties. TCA received as contributions are recorded at their fair value at the date of receipt, and that fair value is also recorded as revenue. Forecasted amount of contributed /assumed assets is based on the historical trend.

(d) Summary of Wastewater System Tangible Capital Assets

	As of December 31	FORECAST						
		2014	2015	2016	2017	2018	2019	2020
Opening TCA Balance(Historical Cost)	\$96,868,000	\$102,365,000	\$105,187,000	\$109,321,400	\$113,512,800	\$117,762,910	\$122,073,491	\$126,446,358
Additions	5,660,000	3,060,000	4,372,400	4,429,400	4,488,110	4,548,581	4,610,867	4,675,021
Disposals	63,000	238,000	238,000	238,000	238,000	238,000	238,000	238,000
Closing TCA Balance(Historical Cost)	\$102,365,000	\$105,187,000	\$109,321,400	\$113,512,800	\$117,762,910	\$122,073,491	\$126,446,358	\$130,883,379
Opening Accumulated Amortization	35,513,000	37,627,000	39,593,440	41,642,568	43,775,524	45,993,482	48,297,652	50,689,279
Amortization Expense	2,148,000	2,204,440	2,287,128	2,370,956	2,455,958	2,542,170	2,629,627	2,718,368
Accumulated Amortization on Disposals	34,000	238,000	238,000	238,000	238,000	238,000	238,000	238,000
Ending Accumulated Amortization	\$37,627,000	\$39,593,440	\$41,642,568	\$43,775,524	\$45,993,482	\$48,297,652	\$50,689,279	\$53,169,647
Work - in - Progress	342,000	-	-	-	-	-	-	-
Net Book Value	\$65,080,000	\$65,593,560	\$67,678,832	\$69,737,276	\$71,769,428	\$73,775,839	\$75,757,079	\$77,713,732

7. NET FINANCIAL ASSETS

Net financial assets as defined is the difference between financial assets and liabilities and is a key indicator in determining the wastewater system financial ability to replace its infrastructure. As reflected in the Statement of Changes in Net Financial Assets, the Town is in a net financial assets position which indicates the Town has sufficient resources to finance current and future activities. Forecasted net financial assets for the years 2015-2021 are \$10.7 million - \$21.1 million.

THE CORPORATION OF THE TOWN OF NEWMARKET
Notes to the Consolidated Wastewater Financial Plan

8. ACCUMULATED SURPLUS

The Accumulated Surplus is comprised of the following:

As at December 31	2014	2015	2016	2017	FORECAST		
					2018	2019	2020
Wastewater Rate Stabilization Reserve	\$850,000	\$427,400	\$791,614	\$1,150,673	\$1,547,022	\$2,240,062	\$2,415,967
Asset Replacement Fund	14,613,000	16,413,000	16,571,705	17,335,646	18,221,537	19,353,366	20,756,994
Investment in tangible capital assets	85,080,000	65,593,560	67,578,832	69,737,276	71,769,428	73,775,839	75,757,079
Debentures	-6,046,000	-5,755,000	-5,747,300	-5,181,000	-4,380,000	-4,570,000	-4,251,000
Accumulated Surplus	\$74,197,000	\$76,677,960	\$79,669,151	\$83,042,595	\$86,658,037	\$90,799,287	\$94,679,040
							\$98,149,072