



Hamilton

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2020 **RATE SUPPORTED CAPITAL AND OPERATING BUDGET**

2020 RATE SUPPORTED CAPITAL AND OPERATING BUDGET

The approved 2020 water, wastewater and stormwater budget represents an increase of \$10.7 M in rate revenues, or a combined rate increase of 4.11%. This includes a base budget increase of \$0.4M, or 0.11%, for operating and maintenance costs to keep our drinking water safe, as well as additional capital investment of \$10.3M, or 4.0%, in order to maintain infrastructure in a state-of-good-repair.

The 2020 Rate Budget balances the need to invest in environmental infrastructure upgrades, changing trends in demand for water and growth in users relative to “Places to Grow.” The financing strategy endeavours to achieve a balance between capital investment, rate of growth and rate stability. From 2020 to 2029, water, wastewater and stormwater capital investment is forecasted at \$2.49 B, which represents an increase of \$0.15 B from last year’s 10-year forecast. The 2020 budget continues to focus on growing our economy, environmental stewardship, financial sustainability and effective inter-governmental relations.

APPROVED 2020 WATER AND WASTEWATER / STORM RATE - TYPICAL RESIDENTIAL BILL




Based on annual water consumption of 200 m³

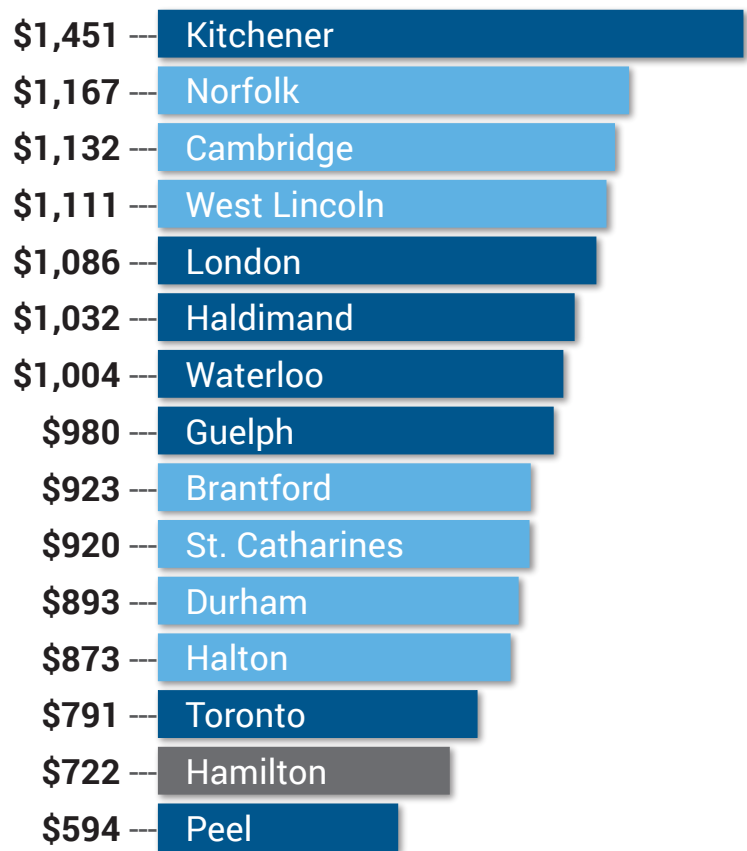
2019 Water Bill	2020 Water Bill	Change (\$)	Change (%)
\$722.90	\$752.60	\$29.70	4.11%

There are a variety of risks that may place financial pressures on ratepayers. Unique to Hamilton, the top 40 industrial, commercial, institutional and multi-residential customers account for nearly one quarter of total consumption. Reliance on a relatively small number of large water users poses a risk to revenue stability when these customers undertake water conservation projects or experience business failure. Expansion of the Wastewater Treatment Plant will be funded by development charge debt, which represents a significant risk if the future growth does not materialize as planned. Staff has pursued a variety of measures to control the impact of the above risks to maintain a safe and reliable service at a reasonable cost.

Hamilton’s residential annual water and wastewater/storm bill continues to be the second lowest within its local municipal comparator group. Though Hamilton largely funds its stormwater management program through its wastewater/storm fee, it still has been able to maintain competitive rates.

2019 WATER COST RESIDENTIAL (200 m³/yr)

-  Stormwater Funded By Water Rates
-  Stormwater Funded By Property Taxes
-  Hamilton (Stormwater Funded By Water Rates)



CITY OF HAMILTON
2020 RATE SUPPORTED CAPITAL AND OPERATING BUDGET BOOK
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**2020
Recommended
Water, Wastewater
and Stormwater
Budget Report**



CITY OF HAMILTON
CORPORATE SERVICES DEPARTMENT
Financial Planning, Administration and Policy Division

TO:	Chair and Members General Issues Committee
COMMITTEE DATE:	November 25, 2019
SUBJECT/REPORT NO:	2020 Recommended Water, Wastewater and Stormwater Budget (FCS19070) (City Wide)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	John Savoia (905) 546-2424 Ext. 7298
SUBMITTED BY:	Mike Zegarac General Manager, Finance and Corporate Services Corporate Services Department
SIGNATURE:	

RECOMMENDATION(S)

- (a) That the metered water consumption charges for residential properties in the City of Hamilton be imposed at the following rates, effective January 1, 2020:

Monthly Water Consumption (m3)	Rate (\$/m3)
0 – 10	0.82
10 +	1.63

- (b) That the metered water consumption charge for commercial, industrial, institutional and multi-residential (bulk meter) properties in the City of Hamilton be imposed at the rate of \$1.63 per cubic metre, effective January 1, 2020;
- (c) That daily water fixed charges for all properties in the City of Hamilton be imposed at the following rates, effective January 1, 2020:

Meter Size	Daily Water Rate
15 mm	\$0.37
16 mm	\$0.37
20 mm	\$0.37
21 mm	\$0.37
25 mm	\$0.93
38 mm	\$1.85
50 mm	\$2.96
75 mm	\$5.92
100 mm	\$9.25
150 mm	\$18.50
200 mm	\$29.60
250 mm	\$42.55
300 mm	\$62.90

- (d) That the wastewater / storm treatment charges for residential properties in the City of Hamilton be imposed at the following rates, effective January 1, 2020:

Monthly Water Consumption (m3)	Rate (\$/m3)
0 – 10	0.88
10 +	1.75

- (e) That the wastewater / storm treatment charge for all commercial, industrial, institutional and multi-residential (bulk meter) properties in the City of Hamilton be imposed at the rate of \$1.75 per cubic metre, effective January 1, 2020;
- (f) That daily wastewater /storm fixed charges for all properties in the City of Hamilton be imposed at the following rates, effective January 1, 2020:

Meter Size	Daily Wastewater / Storm Rate
15 mm	\$0.39
16 mm	\$0.39
20 mm	\$0.39
21 mm	\$0.39
25 mm	\$0.98
38 mm	\$1.95
50 mm	\$3.12
75 mm	\$6.24
100 mm	\$9.75
150 mm	\$19.50
200 mm	\$31.20
250 mm	\$44.85
300 mm	\$66.30

- (g) That the residential non-metered annual water rate be imposed at the flat rate of \$594.95 per annum, effective January 1, 2020;
- (h) That the residential non-metered annual wastewater / storm rate be imposed at the flat rate of \$638.75 per annum, effective January 1, 2020;
- (i) That the residential combined non-metered annual water and wastewater / storm rate be imposed at the flat rate of \$1,233.70 per annum, effective January 1, 2020;
- (j) That the Private Fire Line rates be imposed at the following rates, effective January 1, 2020:

Connection Size		Monthly Rate
mm	inches	
25	1.0	\$3.60
38	1.5	\$8.28
50	2.0	\$14.40
75	3.0	\$32.40
100	4.0	\$57.60
150	6.0	\$129.60
200	8.0	\$230.40
250	10.0	\$230.40
300	12.0	\$230.40

- (k) That the 2020 Water, Wastewater and Storm Proposed User Fees and Charges be imposed as per Appendix “G” to Report FCS19070, effective January 1, 2020;
- (l) That charges for raw water supplied to 690 Strathearne Avenue North by the City of Hamilton be imposed at the following rates, effective January 1, 2020:
 - (i) metered raw water at the rate of \$0.1223 per cubic metre;
 - (ii) daily raw water fixed charges at the following rates:

Meter Size	Daily Rate
200 mm	\$31.20

- (iii) 2020 annual fee of \$18,500 for the purpose of a private raw water pipeline owned by AMLPC to convey raw water supplied by the City to 690 Strathearne Avenue North;
- (m) That the 2020 Water, Wastewater and Stormwater Rate Supported Operating Budget in the amount of \$232,601,659 be approved as per Appendix “A” to Report FCS19070;
- (n) That the long-term financing plan for the Water, Wastewater and Stormwater programs and related rate increases required to meet sustainable financing as identified in the 2020-2029 Water, Wastewater and Stormwater Rate Supported Operating Budget forecast (Appendix “A” to Report FCS19070) be approved, in principle;
- (o) That the 2020 Water, Wastewater and Stormwater Rate Supported Capital Budget and Financing Plan in the amount of \$325,981,000 be approved as per Appendices “K”, “N”, “Q” and “S” to Report FCS19070;
- (p) That the 2020-2029 Water, Wastewater and Stormwater Rate Supported Capital Budget forecast and financing plan (Appendix “I” to Report FCS19070) be approved, in principle;
- (q) That the City Solicitor be authorized and directed to prepare, for Council approval, all necessary by-laws respecting the 2020 water and wastewater / storm user fees, charges and rates set out in recommendations (a) through (l) of Report FCS19070;
- (r) That the additional 7.0 Full Time Equivalent Rate Supported Staffing be approved as per Appendix “F” to Report FCS19070;

- (s) That the General Manager, Finance and Corporate Services, be authorized to negotiate and confirm the terms and placement of all debenture issue(s), and / or private placement debenture issue(s), in either a public or private market and / or bank loan agreements and debenture issue(s) and / or variable interest rate bank loan agreements and debenture issue(s), in an amount not to exceed \$83,678,000 as attached in Appendices “K”, “N” and “Q” to Report FCS19070, which includes \$16,900,000 in Rate Supported municipal debt and \$66,778,000 in Rate Supported Development Charges municipal debt;
- (t)
 - i) That the General Manager, Finance and Corporate Services, be authorized to engage the services of all required professionals to secure the terms and issuance of the debenture issue(s) described in subsection (s) including, but not limited to, external legal counsel, fiscal agents and Infrastructure Ontario’s Loan Program;
 - ii) That the General Manager, Finance and Corporate Services, Mayor and City Clerk are each authorized and directed to enter into and / or execute, on behalf of the City of Hamilton, all agreements and necessary ancillary documents requiring their respective signatures, to secure the terms and issuance of the debenture issue(s) described in subsections (s), and (t), in a form satisfactory to the City Solicitor;
 - iii) That the Mayor and City Clerk are authorized and directed to enter into and / or execute, on behalf of the City of Hamilton, all agreements and necessary ancillary documents not requiring any specific signing authority, to secure the terms and issuance of the debenture issue(s) described in subsections (s) and (t), in a form satisfactory to the City Solicitor and with content acceptable to the General Manager, Finance and Corporate Services;
- (u) That all necessary By-Law(s) be passed to authorize the debenture issue(s) negotiated, placed and secured in accordance with subsections (s) and (t).

EXECUTIVE SUMMARY

The 2020 Recommended Rate Budget is submitted for Council’s consideration. The 2020 Rate Budget balances the need to invest in environmental infrastructure upgrades and changing trends in demand for water and growth in users relative to “Places to Grow.” Over the period 2020 to 2029, water, wastewater and stormwater capital investment is forecast at \$2.49 B which represents an increase of \$0.15 B from last year’s 10-year forecast. This budget continues to focus on growing our economy, environmental stewardship, financial sustainability and effective inter-governmental relations.

The Rate Capital Budget forecasts in Report FCS19070 and its Appendices are based on the best available information from our asset management practices. The municipal asset management framework has been in the development stages for many years. The Ministry of Infrastructure filed Ontario Regulation 588/17 – Asset Management Planning for Municipal Infrastructure under Bill 6, *Infrastructure for Jobs and Prosperity Act* (“Act”) on December 27, 2017. Regulation 588/17 went into force on January 1, 2018 and applies to all infrastructure assets directly owned by a municipality or consolidated on the municipality’s financial statements. City staff will report to Council on the various stages in the implementation of the Regulation over the coming years.

The 2020 Operating expenditures in the 2020 Requested Budget of \$86.2 M reflect a decrease of \$9.5 M or 9.9% less than the 2019 budget.

Capital financing costs, including reserve transfers in the 2020 Requested Budget of \$146.4 M, reflect an increase of \$19.8 M over the 2019 Budget. With non-rate revenues of \$3 M, rate revenues of \$229.6 M are required to meet operating (program and capital financing) expenditures.

Table 1 summarizes the budget changes for the 2020 Requested Budget:

Table 1

Summary of the 2020 Operating Budget				
(\$ millions)	2019 Restated Budget	2020 Requested Budget	2020 Requested / 2019 Restated Change	
			\$	%
Expenditures				
Program Expenditures	\$ 95.7	\$ 86.2	(\$ 9.5)	(9.9%)
Capital/Debt / Reserve Financing	\$ 126.6	\$ 146.4	\$ 19.8	15.6%
Total Expenditures	\$ 222.3	\$ 232.6	\$ 10.3	4.7%
Revenues				
Rate Revenue	\$ 219.3	\$ 229.6	\$ 10.3	4.7%
Non-Rate Revenue	\$ 3.0	\$ 3.0	----	----
Total Revenue	\$ 222.3	\$ 232.6	\$ 10.3	4.7%
Average Residential Water / Wastewater / Storm Bill	\$ 722.90	\$ 751.80	\$ 28.90	4.00%

Note: Anomalies due to rounding.

Chart 1 highlights that the proposed combined 4.00% rate increase is driven entirely by increased capital financing expenditures in 2020.

Chart 1

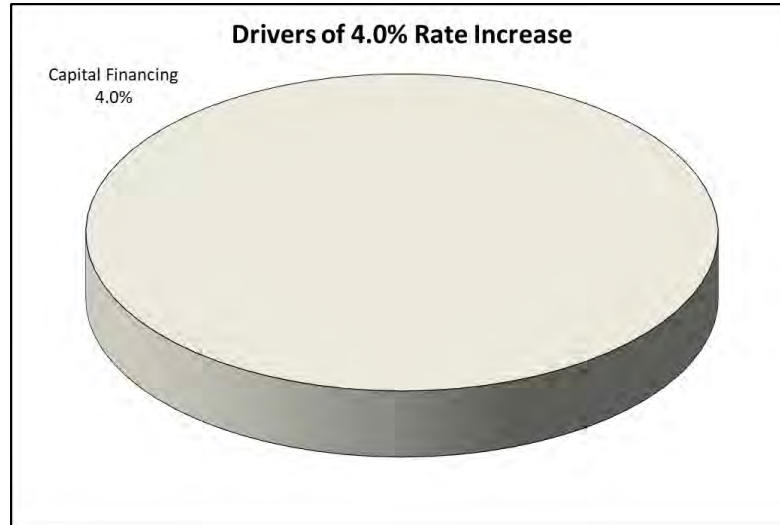


Table 2 identifies the proposed rate increase impact on the average residential customer:

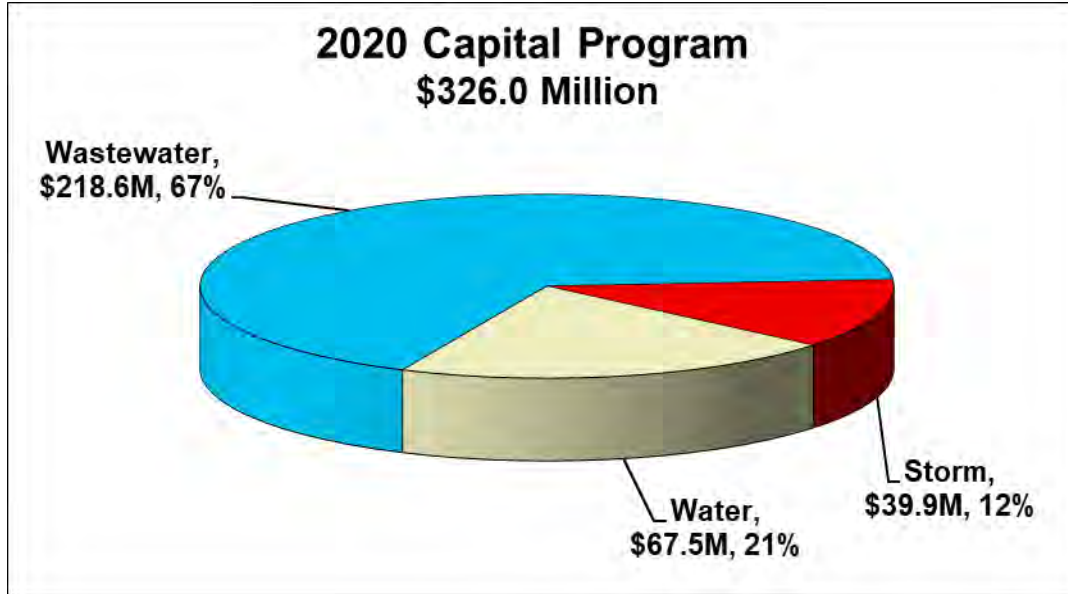
Table 2
Impact of Recommended 2020 Water and Wastewater / Storm Rate Increases on a Typical Residential Bill
 (Based on annual water consumption of 200 m³)

2019 Residential Bill	\$722.90
2020 Residential Bill	\$751.80
Recommended Change (\$)	\$28.90
Recommended Change (%)	4.00%

The recommended 2020 Rate Supported Financial Strategy endeavours to achieve a balance between capital investment, rate of growth and rate stability. The 2020 Rate Supported Strategy links the change in demand for water with a staged approach to necessary capital investments at the Woodward Wastewater Treatment Plant (WWTP). The current strategy calls for capital funding in 2020 of approximately \$326.0 M (2019\$) and \$2.49 B (2019\$) for the 2020 – 2029 timeframe. The 2020 Strategy includes financing from the federal and provincial governments with respect to the WWTP rehabilitation and upgrades, specifically in support of the Hamilton Harbour Remedial Action Plan.

Chart 2 provides a breakdown of the 2020 Rate Capital Program totalling \$326.0 M, by the three major program areas: Water, Wastewater and Storm.

Chart 2



Report FCS19070 identifies significant risks related to a variety of conditions which may impact ratepayers and, in combination, may place significant financial pressures on ratepayers. These risk factors detailed in later sections of Report FCS19070 include increased operating and capital investment requirements. Staff pursued a variety of measures to control the impact of the above risks to maintain a safe and reliable service at a reasonable cost.

Alternatives for Consideration – See page 30.

FINANCIAL – STAFFING – LEGAL IMPLICATIONS

Financial: As per Recommendation (m) of Report FCS19070, approval of the 2020 Water, Wastewater and Stormwater Supported Operating Budget will support operating and capital financing expenditures of \$232,601,659 for 2020.

Staffing: The 2020 Rate Supported staffing complement reflects a requested increase of 7.0 in total FTE headcount as reflected in Appendix “F” to Report FCS19070.

Legal: Recommendation “Q” of Report FCS19070 relates to By-laws requiring Council approval, respecting the implementation of 2020 water and wastewater user fees and charges set out in the recommendations (a) through (l) of Report FCS19070.

HISTORICAL BACKGROUND

The 2020 Rate Budget continues to support the priority of investing in infrastructure as evidenced by the 2020 to 2029 forecast investment of approximately \$2.49B in water, wastewater and stormwater capital infrastructure.

Report FCS19070 outlines the various aspects and components that the recommended 2020 Rate Supported strategy incorporates:

- Sustainable Rate Strategy
- Proposed 2020 Water and Wastewater / Storm Rates
- Operating Budget Highlights
- Capital Budget Highlights
- Water Consumption Review and Forecast

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

The recommended options support the principle of a user-pay water and wastewater / storm system. The Rate Reserve Policy has guided staff’s recommended use of rate reserves as a funding source in the 2020 - 2029 financing plan.

RELEVANT CONSULTATION

Public Works – Hamilton Water Division provided operating / capital expenditure and non-rate revenue forecasts as reflected in Report FCS19070.

ANALYSIS AND RATIONALE FOR RECOMMENDATIONS

Appendix “A” to Report FCS19070 summarizes the 2020 operating budget expenditures (program and capital financing) and revenues of \$232.6 M compared to the 2019 restated budget of \$222.3 M.

The 2020 Operating expenditures in the 2020 Requested Budget of \$86.2 M reflect a decrease of \$9.5 M or 9.9% over the 2019 budget. The operating expenditures have been reduced to align with historical actuals which has allowed for a corresponding increase in capital contributions to be spent on improving infrastructure while not increasing reliance on debt.

The majority of costs are fixed in nature at approximately 90% of total operating costs including employee related costs, property taxes, materials and operating supplies, corporate cost allocations. The remaining costs are variable related to production volumes (heating fuel – natural gas, hydro, fluid and chemicals, biosolids contract).

As outlined in the Executive Summary section of Report FCS19070, the proposed rate impact for the average residential water, wastewater and storm annual bill would be \$28.90 (4.00%).

Water and wastewater service user fees have been reviewed in accordance with the User Service Fee and Charges Policy which requires identification of both the cost of the service and the fees / charges to recover such cost with the intent that full cost recovery is achieved. Many service fees are unchanged with full cost recovery currently being achieved with others undergoing varying fee increases to achieve full cost recovery.

The 2020 recommended water and wastewater / storm rate increases will result in an annual cost impact of approximately \$29 per typical household. The impact of the recommended rate increases on the water and wastewater / storm fixed charges as well as the water consumption and wastewater / storm treatment charges are identified in Table 3.

Table 3
Impact of Recommended Rate Increases on
Water and Wastewater / Storm Rates

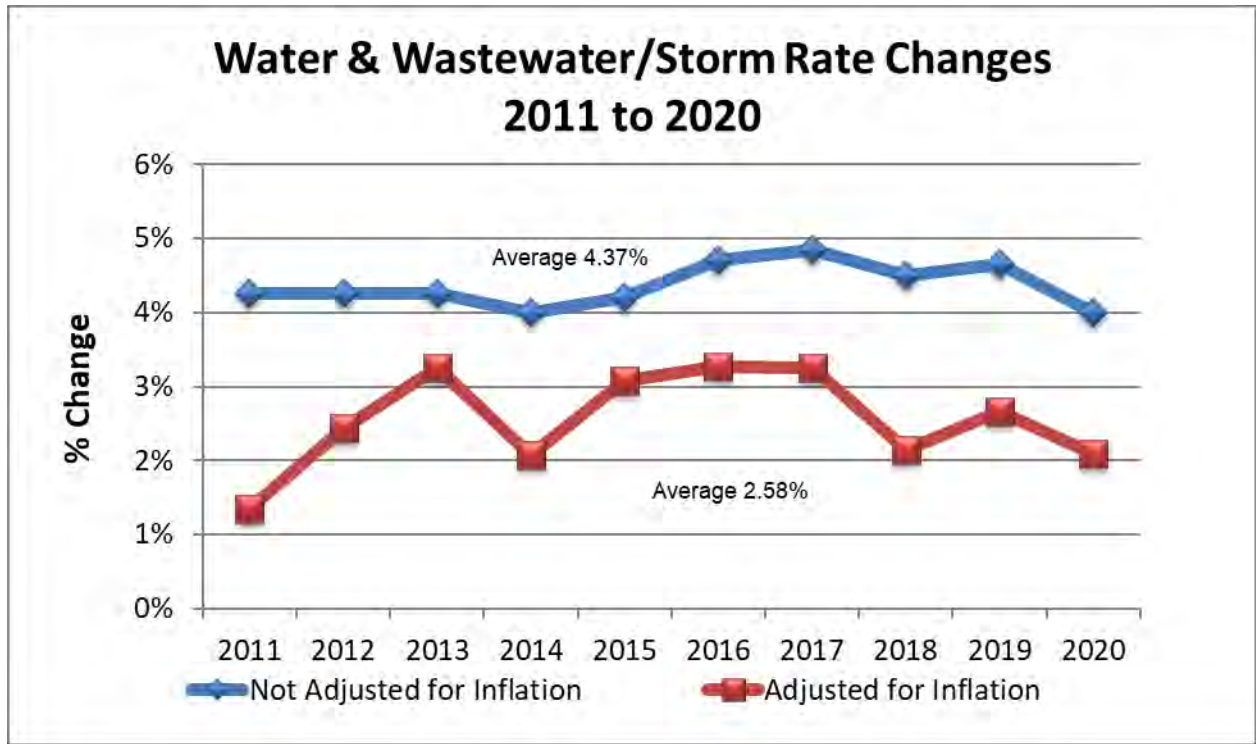
	2019	2020	Increase
Water Fixed Charge (daily) ¹	\$0.36	\$0.37	\$0.01
Consumption Charge Block 1 (0-10 cubic metres / month)	\$0.78	\$0.82	\$0.04
Consumption Charge Block 2 (>10 cubic metres / month)	\$1.55	\$1.63	\$0.08
Wastewater / Storm Fixed Charge (daily) ¹	\$0.38	\$0.39	\$0.01
Treatment Charge Block 1 (0-10 cubic metres / month)	\$0.84	\$0.88	\$0.04
Treatment Charge Block 2 (>10 cubic metres / month)	\$1.68	\$1.75	\$0.07

¹ Rate is for a 15-21 mm meter which most residential homes have installed.

Trends in Water Rate Charges 2011-2020

Hamilton's overall average annual combined water and wastewater / storm rate increase is 4.37% before adjusting for inflation during the 10-year period from 2011 to 2020. Accounting for inflation results in the overall average, the annual rate increase over the same period would be 2.58%. Chart 3 shows the trend in Hamilton's combined water and wastewater / storm rates for the period 2011 to 2020.

Chart 3



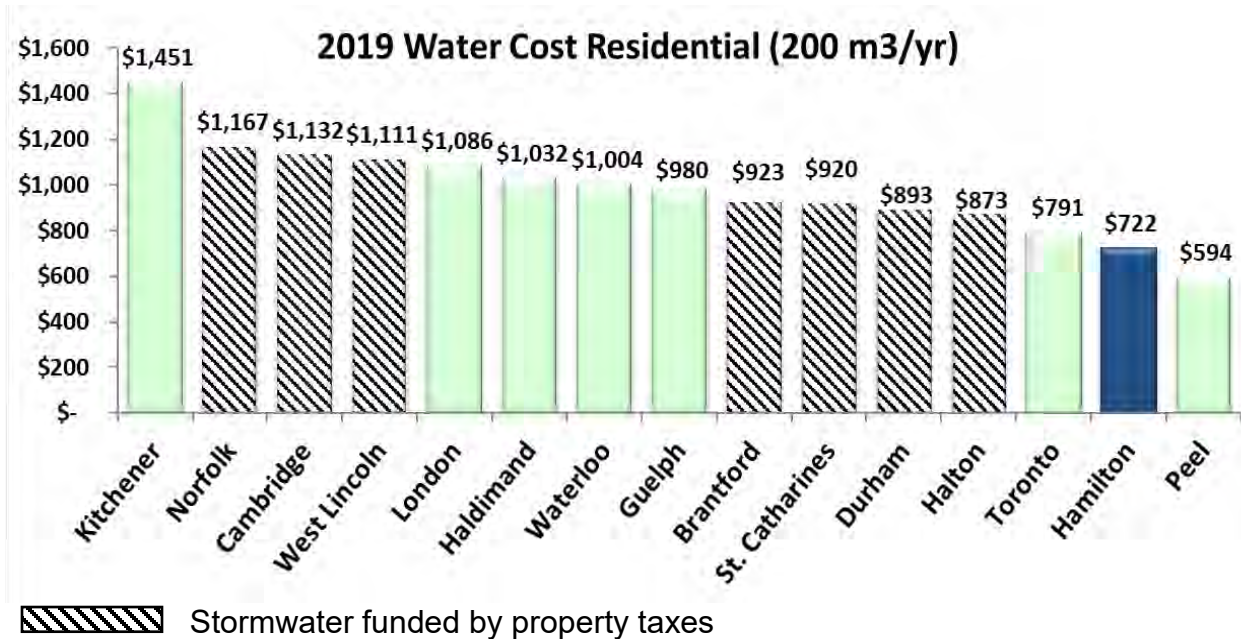
Comparative Rates

In recent years, staff reported that Hamilton's water and wastewater / storm rates have remained competitive, inclusive of the fact that annual rate increases over the past decade have averaged 4.37% before adjusting for inflation.

Over the past decade, Hamilton's ability to maintain competitive water and wastewater / storm rates, given the magnitude of the rate increases approved over this same period, reflects the fact that like Hamilton, other municipalities are addressing many of the same investment requirements as previously identified.

Hamilton’s residential annual water and wastewater / storm bill continues to be the second lowest within its local municipal comparator group. Though Hamilton largely funds its stormwater management program through its wastewater / storm fee, it still has been able to maintain competitive rates as reflected in Chart 4.

Chart 4



CONSUMPTION AND RATE-GENERATED REVENUES

Metered Water Consumption

Currently, the City of Hamilton has over 152,000 metered water accounts (see Chart 5). Residential users account for 93% of total metered accounts and approximately 48% of total water consumption. While industrial, commercial, institutional and multi-residential accounts only make up 7% of total metered accounts, Industrial Commercial Institutional (ICI) and multi-residential (multi-res) water consumption accounts for 52% of total consumption.

Revenues associated with consumption represents approximately 93% of the total budgeted Rate revenues of \$229.6 M for 2020 (see Chart 6).

Chart 5

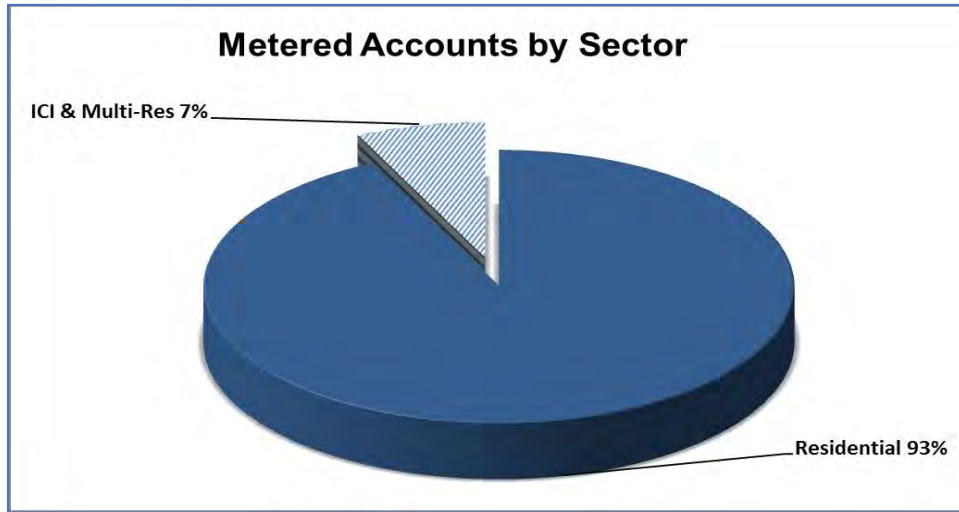
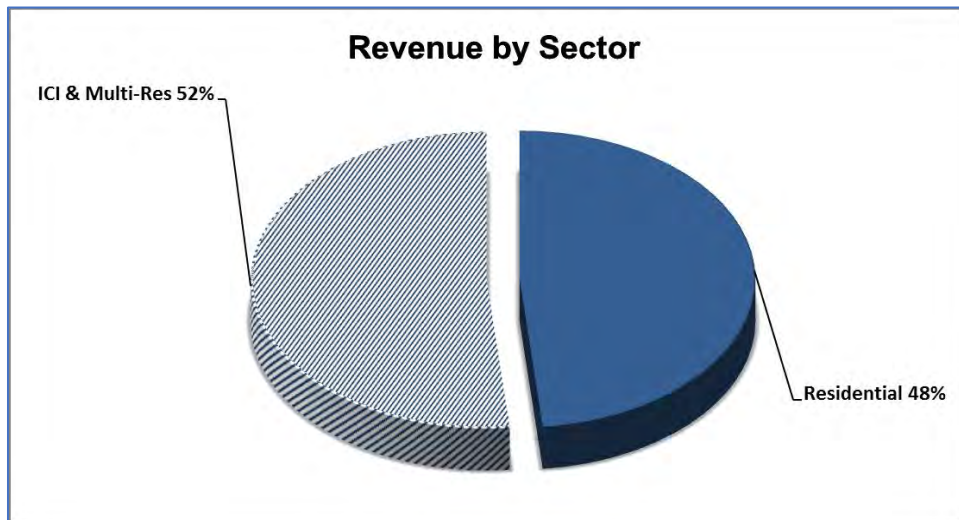


Chart 6



Total Consumption – 2020 Budget \$214.4 M

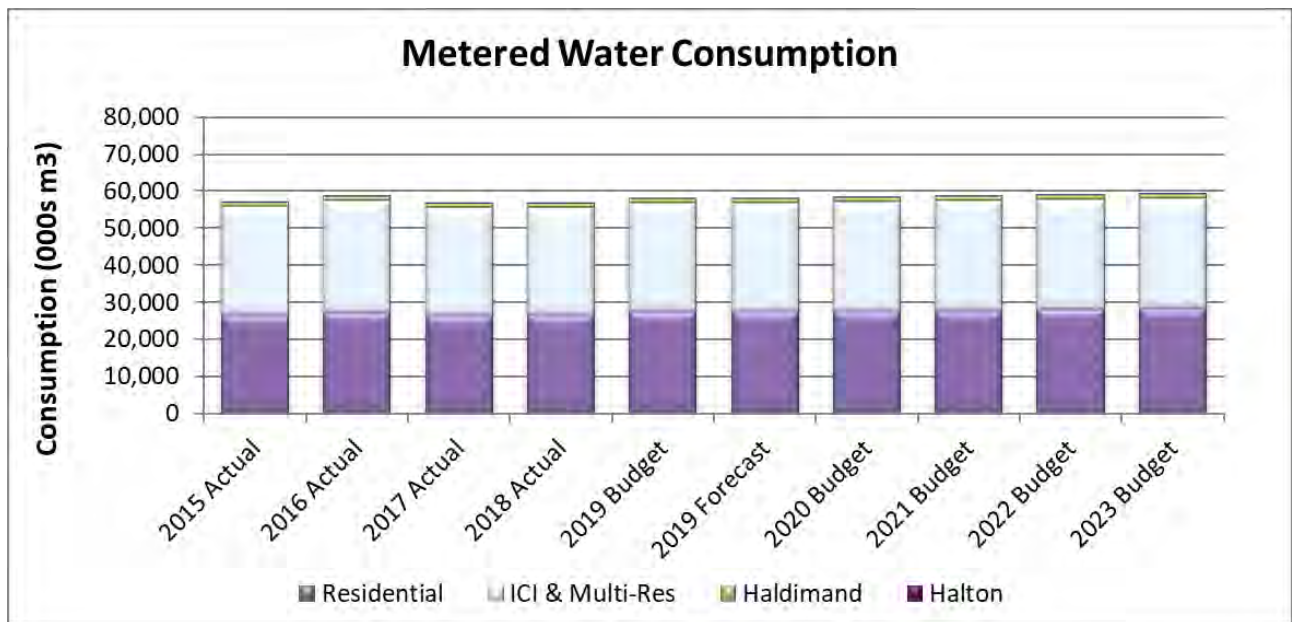
Since 2015, Hamilton's total metered annual water consumption (see Chart 7) has remained at approximately 56-59 million cubic metres. The 2019 forecast is for total consumption to be just under 58 million cubic metres. The 2020 Budget is approximately 0.3% above the consumption in the 2019 Budget and 2019 Forecast.

Total water consumption over the 10-year forecast period (2020 to 2029) projects relatively flat consumption demand. This relatively conservative forecast reflects the following:

- Sharp decline in consumption from 2009-10 Recession has proven to be structural in nature with no recovery in water demand
- Continued uncertainty surrounding growth / decline of consumption
- Conservation impacts:
 - residential toilet consumption = 30% of indoor consumption
 - newer high-efficiency toilets and washers

Staff will continue to monitor consumption across all sectors and take efforts to ensure that the City is maximizing its full potential with respect to metered water and wastewater / storm revenues. Similarly, staff will be monitoring changes in consumption on an ongoing basis identifying trends and related financial impacts through the Budget Variance Reports provided to Council.

Chart 7

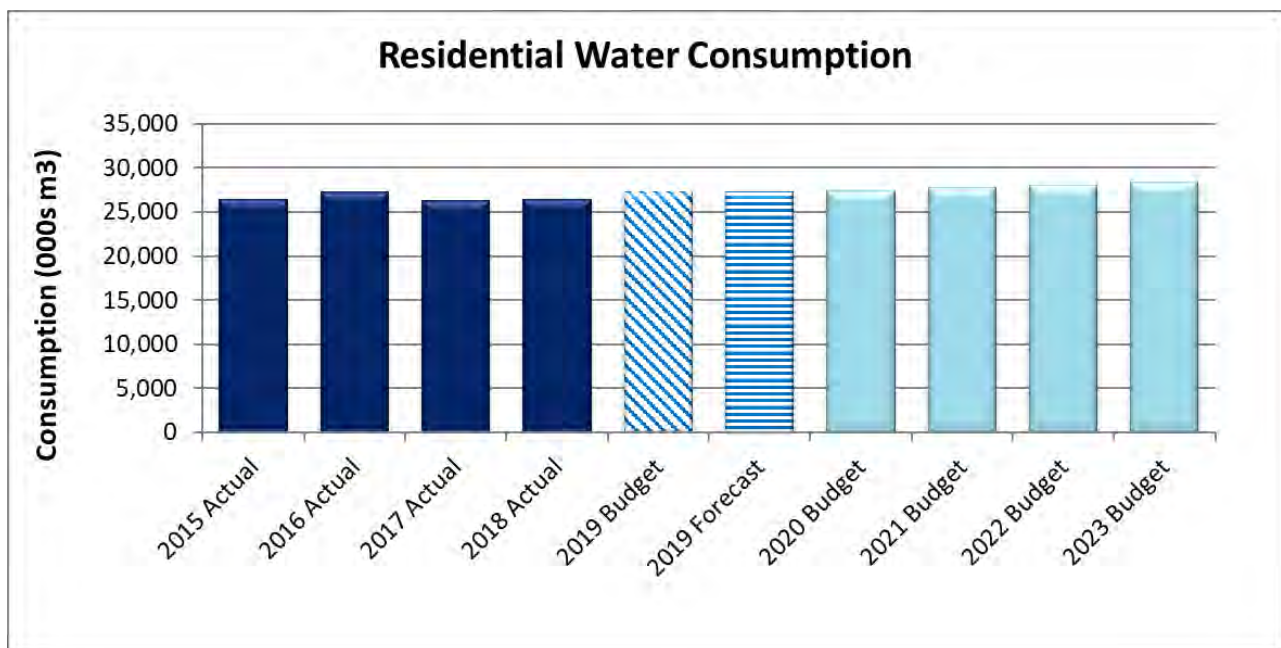


Residential Consumption - 2020 Budget \$101.8 M

Since 2015, residential consumption (see Chart 8) has remained relatively unchanged reflecting an observation that the growth of new customers' consumption has been offset by reduced consumption of existing customers' ongoing conservation efforts associated with fixture / appliance obsolescence such as the installation of water efficient toilets and washer machines. For 2020, staff is recommending that the forecast for average residential consumption remain at 200 m³ to reflect the past several years of consumption.

It is not clear how much further average residential consumption can decline, but there exists the potential for further declines, principally due to conservation efforts and associated regulations. For example, in 2012, the Ontario Building Code changed requirements related to the installation of high-efficiency toilets (4.8L) and expanding the end uses of rainwater and other non-potable water.

Chart 8



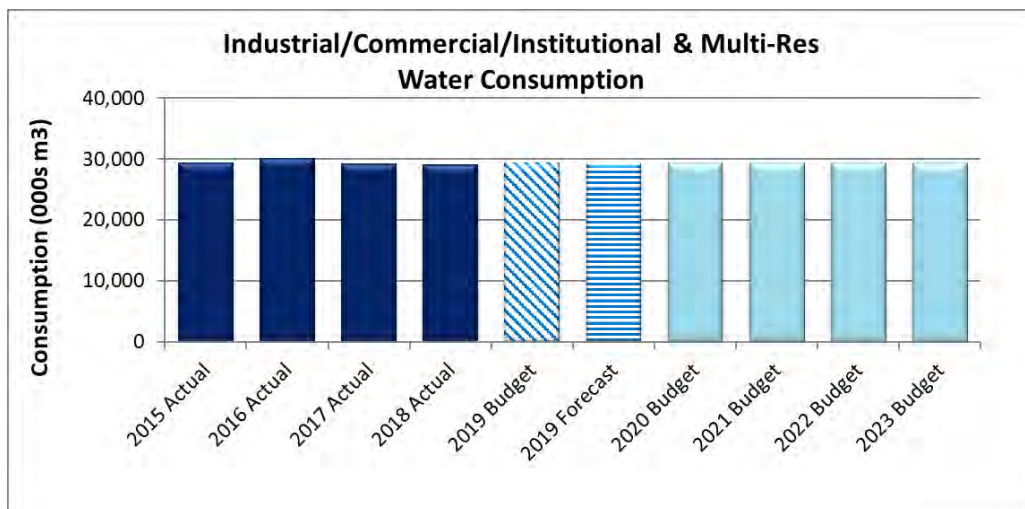
Industrial / Commercial / Institutional and Multi-Res Consumption – 2020 Budget \$112.6 M

The ICI and Multi-Res sector experienced a very significant consumption decline of nearly 10 million cubic metres since the last recession period, however, consumption levels have stabilized since 2013. Despite ongoing growth particularly in the multi-residential sector, there continues to be ongoing conservation efforts that offset any demand growth associated with new customers. Many larger multi-residential customers are implementing water conservation projects. For example, CityHousing Hamilton completed, this year, the installation of over 3,000 ultra-high efficiency 3.0 L toilets which will yield annual savings of over \$450 K.

In sharp contrast to many neighbouring communities, Hamilton is unique in that significant portion of consumption and, in turn, revenues come from industrial and institutional customers. The top users of the ICI / Multi-res sector representing some 40 customers account for nearly a quarter of total consumption. This reliance on a relatively small number of large water users does pose a risk to revenue stability when these customers undertake water conservation projects or experience business failure. For example, in 2018, Hamilton Specialty Bar (HSB) ceased operations and its manufacturing site liquidated. As recently as 2016, HSB represented a customer with annual consumption of approximately 300,000 cubic metres and over \$1 M in combined water and wastewater / storm revenues.

As reflected in Chart 9, water consumption demand is forecast to remain relatively flat for the ICI / Multi-res sector:

Chart 9



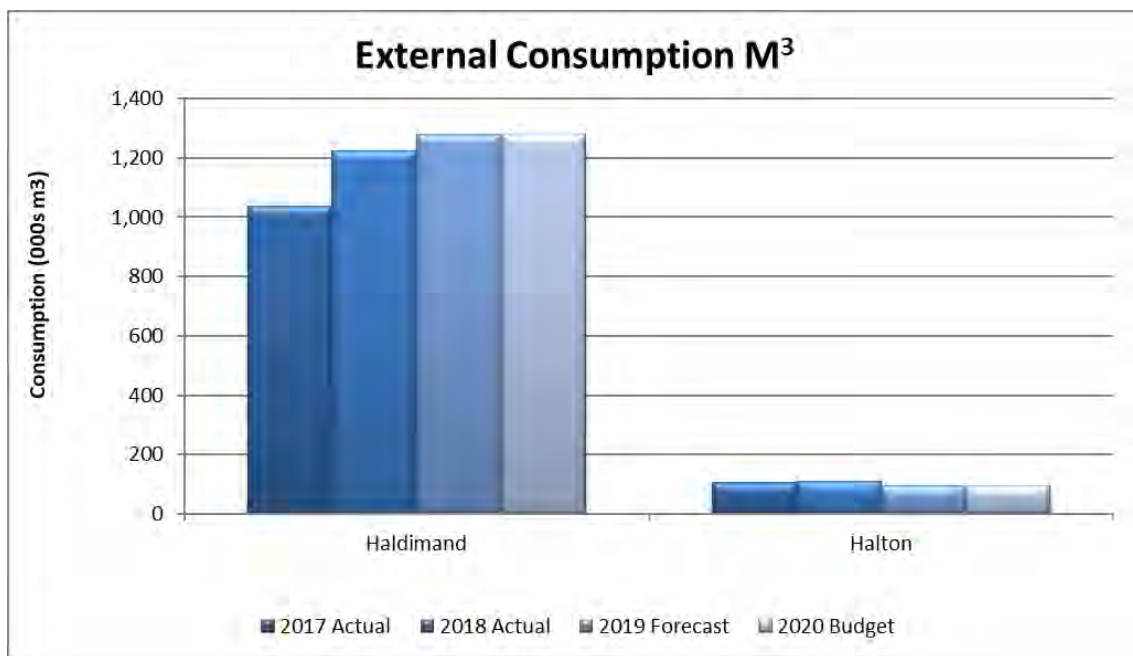
External Consumption – 2020 Budget \$2.7 M

Under long-term arrangements, Hamilton supplies Haldimand County and Halton Region potable water (see Chart 10) but does not provide wastewater / storm services to either community.

A renewed water supply agreement with Haldimand was executed in 2014 for an initial 20-year period with Hamilton supplying water to the communities of Caledonia and Cayuga. There has been some growth over the past few years with new housing developments in Caledonia.

The current water supply agreement for Halton was executed in 2011 for an initial ten-year period with Hamilton supplying water to the Aldershot and Snake Road communities. In September 2019, a renewal agreement has been executed that will conclude on November 16, 2031.

Chart 10



OTHER REVENUE HIGHLIGHTS

Sewer Discharge Permits – 2020 Budget \$8.7 M

Surcharge Discharge Permits allow the City of Hamilton a mechanism to recover costs associated with:

- the costs of conveyance, treatment, and monitoring of sewage that exceeds By-law limits for treatable parameters (Overstrength Discharge)
- the costs of conveyance, treatment, and monitoring of sewage that was not originally purchased by the customer from the City's potable water supply (Sewer Surcharge)

Permits, General Fees and other Recoveries – 2020 Budget \$2.6 M

Service fees that may be charged with the issuance of a permit or alternatively charged on the customer's water bill. Appendix "G" to Report FCS19070 provides details of the user fees charges that are applicable for various water / wastewater related services provided on an individual basis to customers such as new meter installations, water service turn on or off, laboratory services, etc.

Private Fire Lines – 2020 Budget \$1.85 M

The Private Fire Protection Charge applies to customers that have private fire protection systems which rely upon the public water system for their water supply via an unmetered fire water service line.

2020-2029 Rate Capital Budget

Table 4 summarizes the \$2.49 B capital program and the financing requirements for the 2020 – 2029 water, wastewater and storm capital budget. Of this amount, \$1.223 M or 49% is for wastewater, \$991 M or 40% is for water and \$279 M or 11% is for the storm program. A total of \$858 M or 34% of the 10-year capital program is required in the first three years (2020 – 2022). This is predominantly due to the Woodward Wastewater Treatment Plant (WWTP) Upgrade and Biosolids Plant construction.

The capital program also includes \$661 M for growth infrastructure related to Growth Related Integrated Development Strategy (GRIDS) which will be funded from Development Charges, except for \$80 M in Development Charge (DC) exemptions which the City is legislatively required to fund from rate revenues if Council chooses to discount its DC's or recover less than 100% of growth-related capital costs. Funding of DC exemptions reduces the amount of dollar for dollar funding the City can invest in infrastructure.

Table 4

**SOURCE OF CAPITAL FINANCING
2020 to 2029 RATE PROGRAM CAPITAL BUDGET
\$(000'S)**

	2020	2021	2022	2023	2024 to 2029	2020 to 2029
WATER						
Capital Program	67,495	123,358	100,025	67,841	632,483	991,202
Source of Funding						
Subsidy/Other Revenue	6,353	1,681	-	-	30	8,064
Development Charges	9,186	48,784	25,632	3,685	95,370	182,657
Reserves & Other Internal Sources	1,660	640	640	640	2,560	6,140
Contribution from Operating	50,296	52,953	56,553	63,516	512,023	735,341
External Debt	-	19,300	17,200	-	22,500	59,000
Total	67,495	123,358	100,025	67,841	632,483	991,202
WASTEWATER						
Capital Program	218,606	157,808	108,361	70,055	667,654	1,222,484
Source of Funding						
Subsidy/Other Revenue	80,036	22,092	-	-	-	102,128
Development Charges	44,227	39,739	26,612	14,681	290,818	416,077
Reserves & Other Internal Sources	24,770	12,220	-	-	-	36,990
Contribution from Operating	52,673	55,057	54,249	54,174	375,636	591,789
External Debt	16,900	28,700	27,500	1,200	1,200	75,500
Total	218,606	157,808	108,361	70,055	667,654	1,222,484
STORM SEWERS						
Capital Program	39,880	22,215	19,850	20,050	176,945	278,940
Source of Funding						
Subsidy/Other Revenue	370	473	75	75	450	1,443
Development Charges	23,195	7,360	4,000	4,000	24,060	62,615
Reserves & Other Internal Sources	630	-	-	-	-	630
Contribution from Operating	15,685	14,382	15,775	15,975	151,235	213,052
External Debt	-	-	-	-	1,200	1,200
Total	39,880	22,215	19,850	20,050	176,945	278,940
TOTAL RATE PROGRAM						
Capital Program	325,981	303,381	228,236	157,946	1,477,082	2,492,626
Source of Funding						
Subsidy/Other Revenue	86,759	24,246	75	75	480	111,635
Development Charges	76,608	95,883	56,244	22,366	410,248	661,349
Reserves & Other Internal Sources	27,060	12,860	640	640	2,560	43,760
Contribution from Operating	118,654	122,392	126,577	133,665	1,038,894	1,540,182
External Debt	16,900	48,000	44,700	1,200	24,900	135,700
Total	325,981	303,381	228,236	157,946	1,477,082	2,492,626

Chart 11 illustrates the \$2.49 B capital program for the 2020 – 2029 water, wastewater and storm capital budget.

Chart 11

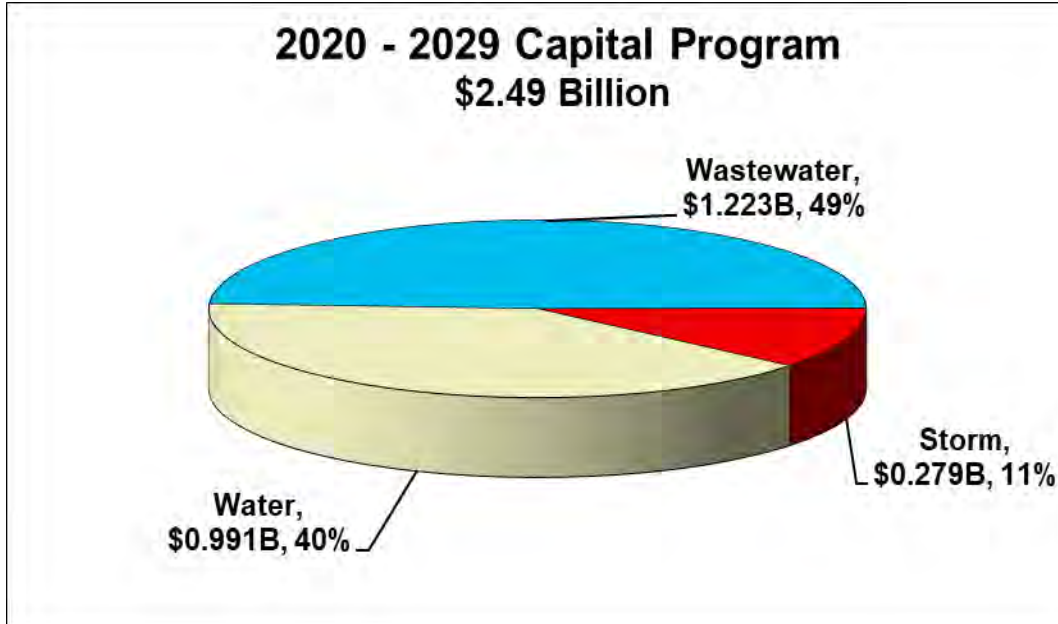
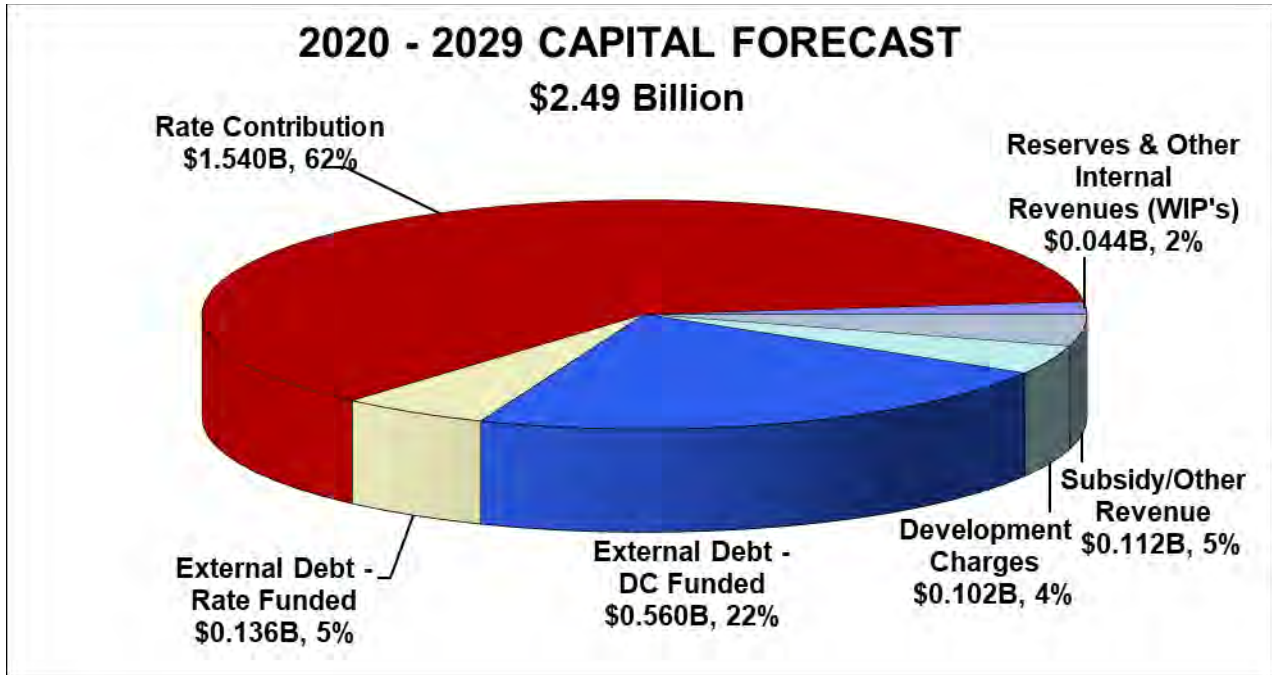


Chart 12 provides the sources of capital financing for the 2020 – 2029 forecast period. The growth-related infrastructure investment included in the 2020 – 2029 forecast to accommodate for growth is \$661 M, of which all but \$142 M will be funded from debt with the associated debt charges recovered from development charges over the next 20 years. It is assumed that DC collections of \$142 M held in reserve will be utilized to fund dollar for dollar growth capital, reducing the amount of debt required to fund growth capital.

The 2020–2029 Capital Forecast includes \$3.2 M in funding from capital work-in-progress (WIP's). Capital funding from reserves in years 2020 through 2029 totals \$40.4 M, which helps to mitigate rate supported debt financing.

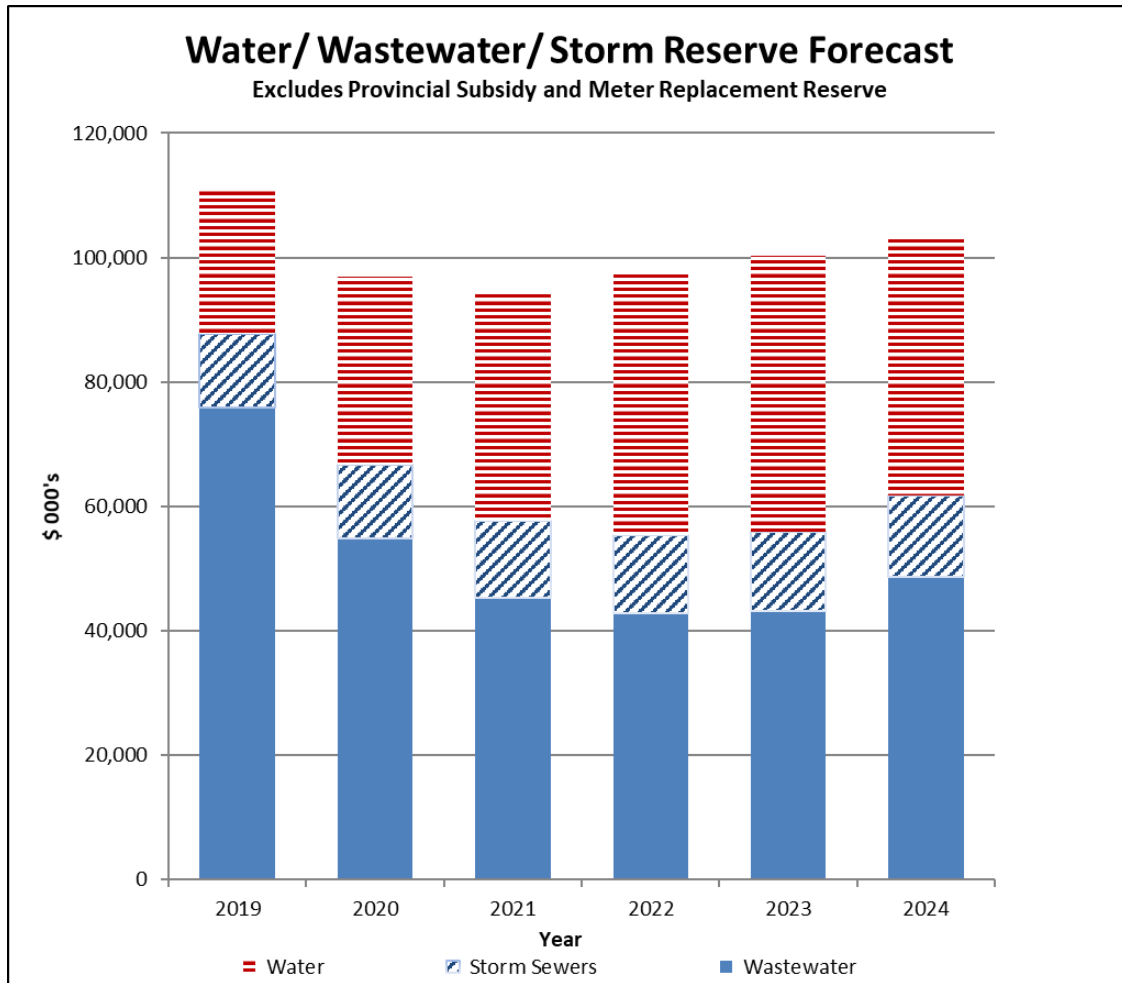
Chart 12



Rate Reserves

Chart 13 provides the projected reserve balances for the Water, Wastewater and Storm programs. The 2020 Budget Forecast reflects utilizing \$12.12 M in reserve funds to fund the WWTP project, \$11.14M to fund the Biosolids project and \$0.64 M for the Water Program. It should be noted, the reserve forecast below does not include the Provincial Wastewater Improvement Subsidy reserve (\$100 M Provincial subsidy which is dedicated funding for the WWTP Clean Harbour project) or the Meter Replacement Reserve.

Chart 13



Reserves are essential to assist the City in mitigating unanticipated events such as consumption fluctuations, unforeseen increase in capital costs and potentially to provide rate stability or to decrease future debt needs. The current reserve forecast indicates the combined reserve balance will decrease from \$111 M at the end of 2019, to \$94 M in 2021 and then increase over the years to \$119 M in 2029. The decrease in reserves coincides with construction of the Clean Harbour and Biosolids Projects at the WWTP plant of which the City is funding over \$60 M from the Wastewater Reserve from 2018 to 2021. All three system Reserves are within the target balances relative to the Rate Reserve Policy approved by Council in June 2016. A strategy has been identified to replenish the Reserves in anticipation of large projects in the 10-year forecast. Reserves will act as a mitigation strategy in the event of cost variances for these large projects.

Wastewater Treatment Upgrade and Expansion Project

The implementation plan for the Upgrade and Expansion of the WWTP is consistent with the 2019 Rate Budget, in that the plant improvements are forecast using a phased approach. Phase One is for effluent quality improvements and Phase Two is for expansion of the treatment plant to accommodate growth. The full \$296 M of the total growth component related to Phase Two is in the 2020-2029 Financing Plan. Construction for Phase Two related to expansion is proposed to start in 2026 and be completed in 2028.

The total budget for the Wastewater Treatment Plant upgrade and expansion has increased by \$5.5 M in the 2020 budget forecast compared to the 2019 budget forecast, as reflected in Table 5. The total project budget increase was made up by a \$5.5 M increase in the cost of the Clean Harbour Project. The budget increase is attributable to revised cost estimates for the plant expansion as part of the 2019 DC Background study. The previous cost estimate included in the 2019 budget was based on cost forecasts done in 2012. The new forecast has been adjusted for inflation. Table 5 provides a comparison of the budgeted costs in the 2019 and 2020 Rate Budgets for the Wastewater Treatment Plant upgrade and expansion.

The WWTP expansion project implementation plan has remained unchanged when compared to the 2019 forecast. It is scheduled to begin construction in 2026 with 100% of the cost funded by development charge debt. The levels of debt supported by development charges represent a significant risk if future growth does not materialize as planned. Staff will continue to monitor growth forecasts and DC Revenues over the next four years (2020 – 2023) and adjust the plant expansion project and associated financing plan to align with growth requirements. Staff in both Corporate Services (Finance) and Public Works will closely monitor the need for plant expansion, as well as, the forecasted DC Revenue streams needed to pay for such an expansion to mitigate the risk to the ratepayer.

Table 5

Woodward Wastewater Treatment Plant Project - Gross Capital Forecasts												
(\$ Millions)												
	Total	pre		2021	2022	2023	2024	2025	2026	2027	2028	2029
		2020	2020									
2020 Budget												
Phase 1 - Clean Harbour	412.0	216.8	100.6	69.4	25.2	-	-	-	-	-	-	-
Phase 2 - Expansion	296.4	1.5	1.8	1.8	2.5	2.5	3.1	3.1	94.3	92.9	92.9	-
Total WWTP	708.4	218.3	102.4	71.2	27.7	2.5	3.1	3.1	94.3	92.9	92.9	-
2019 Budget												
Phase 1 - Clean Harbour	406.5	216.8	89.2	97.1	3.4	-	-	-	-	-	-	-
Phase 2 - Expansion	296.4	1.5	1.8	1.8	2.5	2.5	3.1	3.1	94.3	92.9	92.9	-
Total WWTP	702.9	218.3	91.0	98.9	5.9	2.5	3.1	3.1	94.3	92.9	92.9	-
Increase (Decrease)												
Phase 1 - Clean Harbour	5.5	-	11.4	(27.7)	21.8	-	-	-	-	-	-	-
Phase 2 - Expansion	-	-	-	-	-	-	-	-	-	-	-	-
Total WWTP	5.5	-	11.4	(27.7)	21.8	-	-	-	-	-	-	-

Provincial / Federal Subsidy Programs

In 2010, the City received \$100 M of Provincial infrastructure funding related to the Wastewater Treatment Plant (WWTP) water quality improvement project and in 2013 a \$100 M commitment for Federal funding for the WWTP project from the Green Infrastructure Fund (GIF) with funding provided on a milestone completion basis.

The 2020–2029 Rate Capital Financing Plan incorporates both the Federal and Provincial Subsidies to fund the Clean Harbour project. Of the \$200 M of the Provincial and Federal funding, \$112.372 M has been committed as a funding source in previous years’ budgets, leaving \$87.628 M in funding for the Clean Harbour project to be applied in years 2020 and 2021.

In May 2017, the City received approval for 16 projects funded under the Clean Water and Wastewater Fund (CWWF). The CWWF provided communities with vital infrastructure funding to help accelerate short term investments to support the rehabilitation and modernization of drinking water, wastewater and stormwater infrastructure, and the planning and design of future facilities and upgrades to existing systems. The federal and provincial governments provided a maximum of 50% and 25% respectively toward the total eligible costs of projects totalling \$43,890,763. The City received a total CWWF government funding allocation of \$32,918,072 with the City share amounting to \$10,972,691. The CWWF Program project substantial completion timeline was extended to March 31, 2020 from an original deadline of March 2018.

On April 4, 2019, Infrastructure Canada announced the approval of the \$1.05 M Combined Sewer Overflow Backflow Prevention Project with 40% federal funding of \$420 K from the Disaster Mitigation and Adaptation Fund (DMAF) and the City to fund \$630 K (refer to Report FCS19038). This project to install back-flow devices at four Combined Sewer Overflow (CSO) outlets is to be completed between 2020 to 2025.

In March 2018, the federal government with the Ontario government announced the signing of a bilateral agreement that will provide more than \$11.8 B through the Investing in Canada Plan. The Investing in Canada Infrastructure Fund Program (ICIP) is a federal infrastructure program designed to create long-term economic growth, build inclusive, sustainable and resilient communities and support a low-carbon economy. There are a number of funding streams to be delivered nationally over the next decade (2018 to 2028) including \$2.3 B for Green Infrastructure for Ontario. Among the green infrastructure objectives is to ensure communities can provide safe drinking water for their citizens. The 2020–2029 Rate Capital Financing Plan makes no assumptions as to potential funding the City may receive under a future green infrastructure intake.

Addressing Climate Change

In March 2019, Council approved a declaration that “a climate emergency exists that threatens the city, region, province, nation, civilization, humanity and the natural world.”

In response, the 2020–2029 Rate Capital Financing Plan includes several projects that aim to address climate change with adaptation and mitigation measures. Over \$6 M has been identified for 2020 projects including:

- Inflow and Infiltration Studies and Flow Monitoring Program
- CSO Characterization Program
- Flooding and Drainage Master Plan Strategy
- South Street East and East Street South in Dundas Drainage Improvement
- Winona Area Drainage Improvements
- Stormwater Computer Model Enhancement
- Beach Strip Stormwater Pumping Stations
- Stoney Creek and Battlefield Creek Flood and Erosion Control
- Combined Sewer Overflow Backflow Prevention Project

Projected Water / Wastewater / Storm Debt

The 2020 Water, Wastewater and Storm Budget incorporates a significant reliance on both rate supported debt and growth-related debt supported from development charges over the 10-year forecast period. The forecasted rate supported debt financing for the 10-year period 2020–2029 has increased by \$18.6 M from the 2019 Rate Budget. The

increase in debt is resulting from an effort to maintain Council approved minimum reserve balances, while staying within Council approved debt levels. The forecasted DC supported debt financing has decreased by approximately \$43.8 M over the same period, resulting in an overall net decrease in forecasted debt financing of \$25.2 M from the forecast in the 2019 Rate Budget. The decrease in reliance on DC supported debt is attributable to funding dollar for dollar DC growth projects from Reserve, where possible, as well as, staging of growth infrastructure. The Growth Capital is partially offset with a \$20 M contribution from DC reserves in the 2020 Rate Budget.

The 10-year capital program relies on a significant amount of debt financing with the associated debt charges funded from both rates and development charges. The rate supported debt is projected to peak at \$297 M in 2023, compared with the 2019 budget forecasted debt peak of \$307 M in 2022. The debt funded from DC's is projected to peak at \$564 M in 2028, whereas the 2019 forecast was \$708 M in 2028. The decrease in DC supported debt is due to deferral of major capital growth projects such as the Water Treatment Plant, as well as, funding dollar for dollar growth projects from DC Reserves.

Table 6 provides the ten-year debt forecast compared to the 2019 Budget forecast.

Table 6

Projected Rate & DC Supported Outstanding Debt											
(\$ Millions)											
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2019 Rate Budget											
Funded from Rates	187	222	274	307	284	267	254	226	198	173	146
Funded from DC's	102	221	298	377	391	400	416	511	612	708	673
Total	289	443	572	684	675	667	670	737	810	881	819
2020 Rate Budget											
Funded from Rates	145	177	237	291	297	280	266	240	216	191	165
Funded from DC's	4	85	176	235	259	261	286	396	494	564	539
Total	149	262	413	526	557	541	553	636	710	755	704
Increase (Decrease)	(140)	(181)	(159)	(158)	(118)	(126)	(117)	(101)	(100)	(126)	(115)

Consistent with the 2019 Rate Budget and to more accurately forecast debt levels and the associated debt charges, the major multi-year Wastewater Treatment Plant projects are budgeted based on the projected cash flow of expenditures for the 2020 Rate Capital Budget, versus full commitment-based budgeting.

Chart 14 compares the total outstanding debt (Rate and DC Funded) from the 2019 Budget forecast to the 2020 Budget forecast. The graph illustrates the lower debt

requirements when compared to the prior year budget forecast. The decrease in debt is due to deferral of major capital growth projects such as the Water Treatment Plant, as well as, funding dollar for dollar growth projects from DC Reserves. The higher debt levels in the later years can be attributed to the accelerated timeline of the Wastewater Treatment Plant expansion project which is to be 100% DC debt funded.

Chart 14

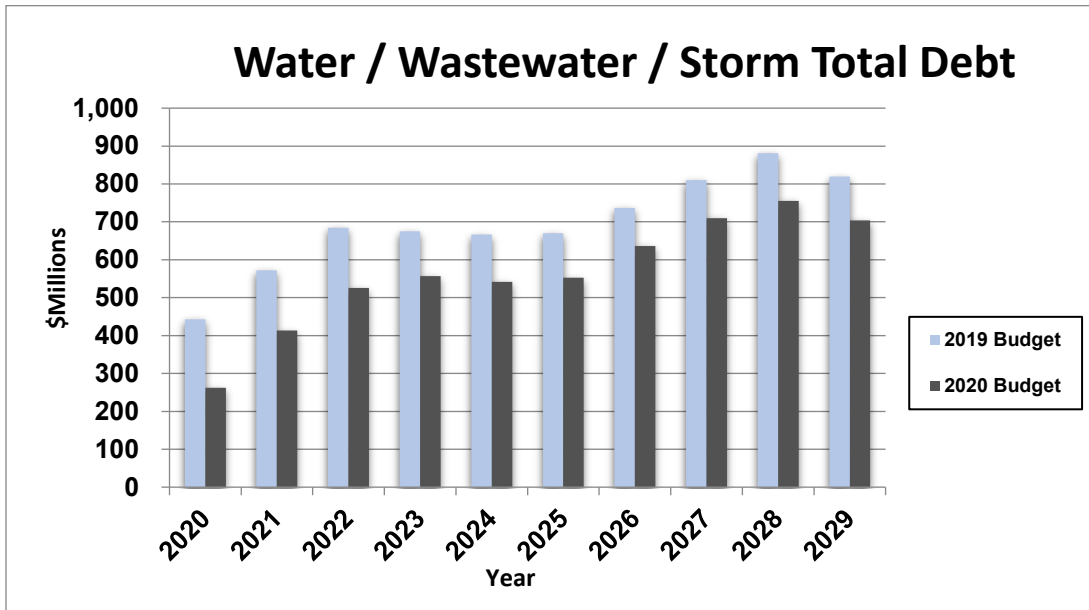


Chart 15 illustrates the projected outstanding debt for the 10-year period (2020–2029) and the funding source of the associated debt charges.

Chart 15

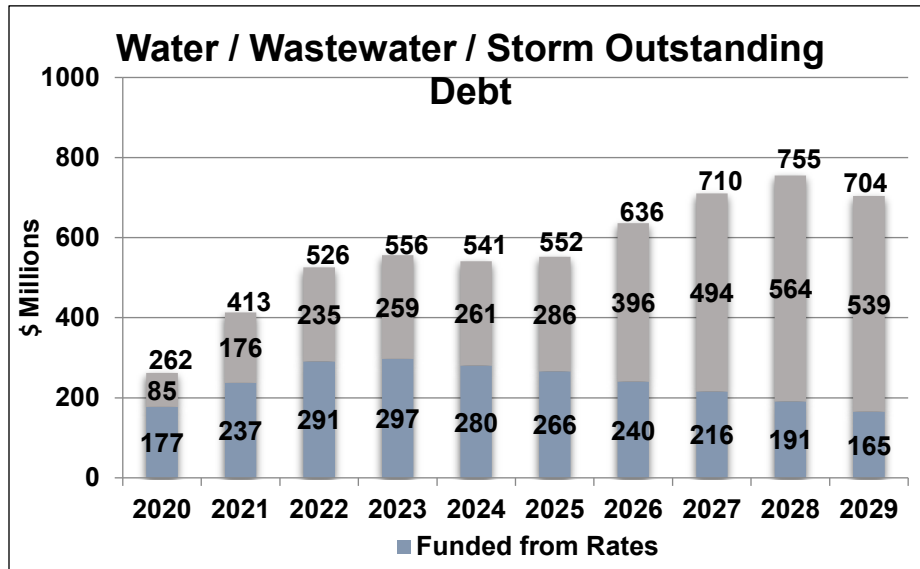
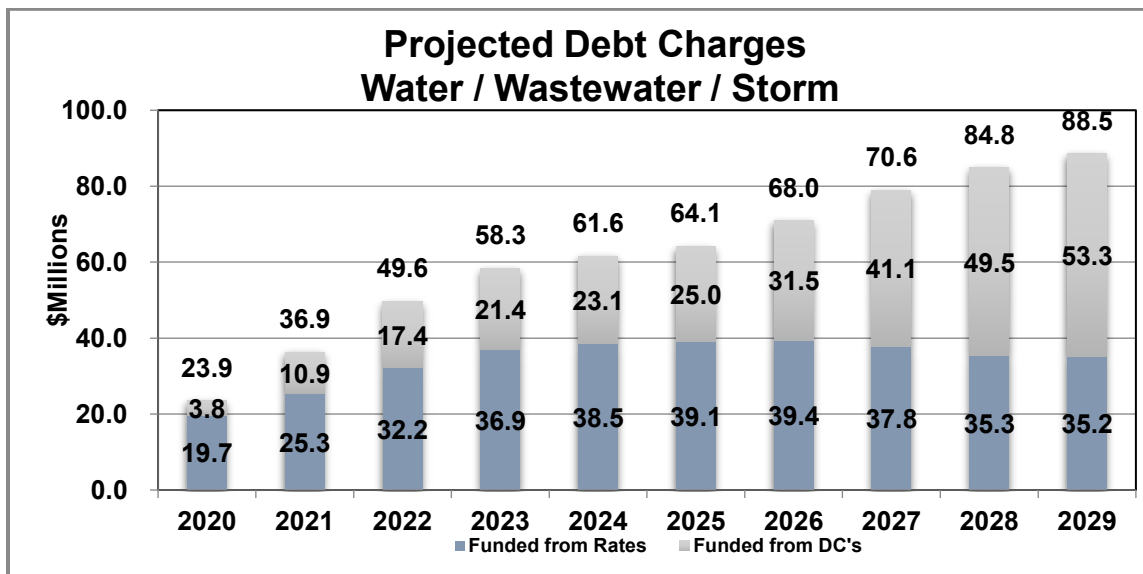


Chart 16 shows the forecasted debt charges funded by water / sewer rates and by Development Charges. In the upcoming years, staff in Corporate Services and in conjunction with staff in Public Works will monitor the forecasted DC Debt charges in comparison to DC Revenue, to mitigate potential risks to the rate payer. Much of this risk lies with the implementation plan of the WWTP expansion project, currently forecasted for construction in years 2026-2028.

Chart 16



Impact of Capital Budget on Operating Budget

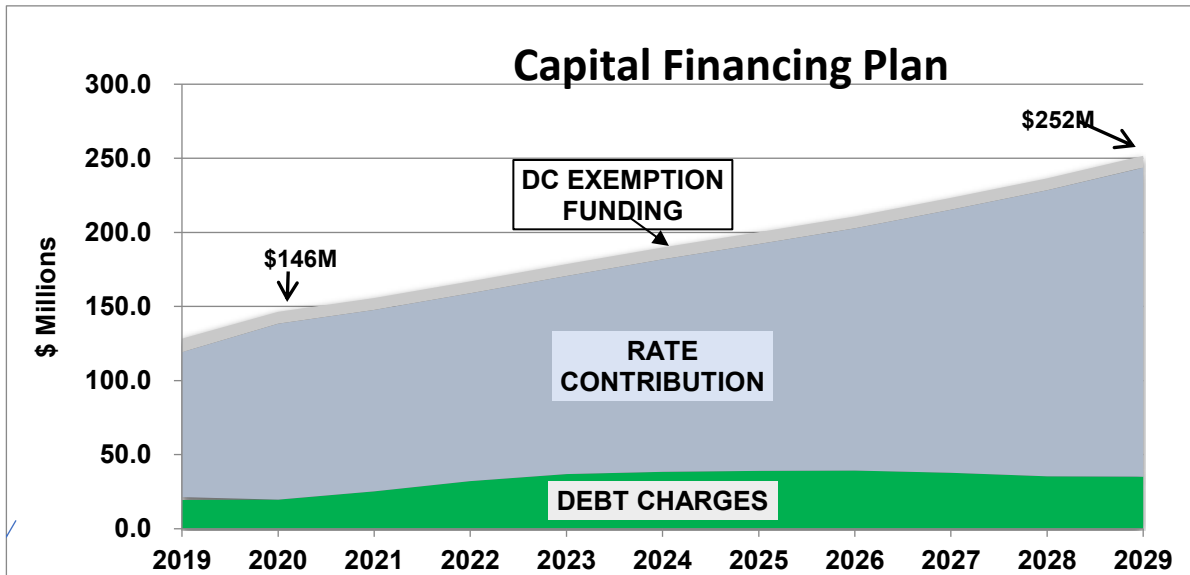
As summarized in Table 7, the 2020 Rate Budget incorporates \$146.3 M capital financing costs which is an increase of \$20.2 M from the 2019 Rate budget. The 2020 budgeted debt charges increase by \$0.3 M, while contribution to capital increased by \$20.1 M when compared to the 2019 budget. DC exemption funding decreased by \$1.0 M. The increase in contribution to capital is a result of directing the majority of rate increases to capital investment, as well as adjustments to the operating budget, freeing up capital investment capacity.

Table 7

WATER, WASTEWATER & STORM					
IMPACT OF CAPITAL ON OPERATING BUDGET					
(000's)					
	2019	2020	CHANGE		2020 - 2029
	APPROVED	PROPOSED	\$	%	FORECAST
Debt to be Issued	14,341	16,900	2,559	17.8%	135,700
Debt Charges (Net of DCs)	19,366	19,682	316	1.6%	339,367
Contribution to Capital	97,804	118,654	20,850	21.3%	1,540,182
DC Exemption Funding	9,000	8,000	(1,000)	-11.1%	80,000
Impact on Operating Budget	126,170	146,336	20,166	16.0%	1,959,549

Chart 17 highlights the impact on the operating budget from the Rate Supported Capital program. These impacts are projected to increase from \$146 M in 2020 to \$252 M in 2029. Rate supported debt charges are expected to increase from 8.5% of total revenues in 2020 to 13.7% in 2023, and then decline to 9.9% in 2029.

Chart 17



Debt Management

According to Ontario Regulation 403/02, Council shall, before giving authorization for capital work that would require a long-term debt or financial obligation, have the City Treasurer calculate an updated Annual Repayment Limit (ARL) using the most recent Annual Repayment Limit determined by the Ministry. The most recent ARL, determined and sent in writing by the Ministry to the City Treasurer, is the 2019 ARL in the amount of \$266,191,448 and is based on 2017 Financial Information Returns.

Using this 2019 ARL, the City Treasurer has calculated an updated ARL of \$218,886,384, shown in Appendix “T” to Report FCS19070. The 2019 ARL was adjusted for possible debt service charges of \$45,130,619 corresponding to approximately \$468.4 M of debt which has been approved by Council in 2019 and prior years but not yet issued. Further adjustments were made for CityHousing Hamilton service charges, as well as 2019 debenture issue charges. The 2019 ARL was then further adjusted for debt service charges assumed or discharged on debt in 2017 and 2018. According to this calculation, the updated ARL of \$218,886,384 represents a maximum amount which the City has available to commit to payments related to debt and financial obligations before the statutory limit is breached and corresponds to approximately \$2.2 B of additional borrowing which the City could undertake (assuming a 15-year term and 5% interest rate). The related tax and rate impacts would be considered before approving debt within these limits.

ALTERNATIVES FOR CONSIDERATION

Beyond the recommended rate increase, staff can direct changes to this budget submission that would require a review of the 2020 Capital Budget submissions.

ALIGNMENT TO THE 2016 – 2025 STRATEGIC PLAN

Economic Prosperity and Growth

Hamilton has a prosperous and diverse local economy where people have opportunities to grow and develop.

Healthy and Safe Communities

Hamilton is a safe and supportive city where people are active, healthy, and have a high quality of life.

Clean and Green

Hamilton is environmentally sustainable with a healthy balance of natural and urban spaces.

Built Environment and Infrastructure

Hamilton is supported by state of the art infrastructure, transportation options, buildings and public spaces that create a dynamic City.

Our People and Performance

Hamiltonians have a high level of trust and confidence in their City government.

APPENDICES AND SCHEDULES ATTACHED

Appendix “A” to Report FCS19070 – 2020 Hamilton Water Operating Budget – Combined Water, Wastewater and Storm

Appendix “B” to Report FCS19070 – 2020 Hamilton Water Operating Budget – Water

Appendix “C” to Report FCS19070 – 2020 Hamilton Water Operating Budget – Combined Wastewater and Storm

Appendix “D” to Report FCS19070 – 2020 Hamilton Water Operating Budget – Wastewater

Appendix “E” to Report FCS19070 – 2020 Hamilton Water Operating Budget – Storm

Appendix “F” to Report FCS19070 – 2020 Rate Supported Staffing Summary and 2020 Rate Budget – Business Case Summary

Appendix “G” to Report FCS19070 – 2020 Water and Wastewater / Storm Fees and Charges Effective January 1, 2020 – 2020 Private Fire Line Rates – 2020 Proposed User Fees and Charges)

Appendix “H” to Report FCS19070 – Source of Capital Financing – 2020 to 2029 Rate Program Capital Budget

Appendix “I” to Report FCS19070 – 2020 – 2029 Water / Wastewater / Storm Capital Financing Plan (2020 – 2029 Capital Financing Charges – Rate Programs)

Appendix “J” to Report FCS19070 – Source of Capital Financing – 2020 to 2029 Rate Program Capital Budget

Appendix “K” to Report FCS19070 – Water System – 2020 Capital Budget Project List

Appendix “L” to Report FCS19070 – Water System – 2020 – 2029 Capital Budget List

Appendix “M” to Report FCS19070 – Source of Capital Financing – 2020 to 2029 Rate Program Capital Budget

Appendix “N” to Report FCS19070 – Wastewater System – 2020 Capital Budget Project List

Appendix “O” to Report FCS19070 – Wastewater System – 2020 – 2029 Capital Budget List

Appendix “P” to Report FCS19070 – Source of Capital Financing – 2020 to 2029 Rate Program Capital Budget

Appendix “Q” to Report FCS19070 – Storm Water Management – 2020 Capital Budget Project List

Appendix “R” to Report FCS19070 – Storm Water Management – 2020 – 2029 Capital Budget List

Appendix “S” to Report FCS19070 – 2020 Rate Program Capital Budget Summary

Appendix “T” to Report FCS19070 – City of Hamilton Treasurer’s Updated 2019 Annual Repayment Limit

JS/dt

CITY OF HAMILTON
2020 HAMILTON WATER OPERATING BUDGET
COMBINED WATER, WASTEWATER AND STORM

	2019	2019	2020	CHANGE		CHANGE	
	RESTATED BUDGET	PROJECTED ACTUAL	REQUESTED BUDGET	2019 PROJECTED ACTUAL / 2019 RESTATED BUDGET	%	2020 REQUESTED / 2019 RESTATED BUDGET	%
<u>OPERATING EXPENDITURES:</u>	\$	\$	\$	\$	%	\$	%
Divisional Administration & Support	2,242,620	2,242,620	1,408,041	(0)	(0.0%)	(834,579)	(37.2%)
Woodward Upgrades	1,524,540	1,524,540	1,108,390	-	0.0%	(416,150)	(27.3%)
Customer Service	421,610	421,610	254,823	-	0.0%	(166,787)	(39.6%)
Outreach & Education	1,350,860	1,300,860	1,239,577	50,000	3.7%	(111,283)	(8.2%)
Service Co-ordination	4,251,610	3,785,610	3,745,588	466,000	11.0%	(506,022)	(11.9%)
Engineering Systems & Data Collection	1,286,870	1,286,870	1,351,831	-	0.0%	64,961	5.0%
Compliance & Regulations	871,210	871,210	976,984	-	0.0%	105,774	12.1%
Laboratory Services	3,527,640	3,527,640	3,660,204	-	0.0%	132,564	3.8%
Environmental Monitoring & Enforcement	1,818,020	1,818,020	1,778,256	-	0.0%	(39,764)	(2.2%)
Water Distribution & Wastewater Collection	21,369,840	21,369,840	22,014,201	-	0.0%	644,361	3.0%
Plant Operations & Maintenance	41,383,390	39,383,390	33,449,649	2,000,000	4.8%	(7,933,741)	(19.2%)
Capital Delivery	1,859,660	1,859,660	1,595,011	-	0.0%	(264,649)	(14.2%)
Sustainable Initiatives	1,497,370	1,497,370	1,431,094	-	0.0%	(66,276)	(4.4%)
Infrastructure Planning & System Design	2,314,770	2,314,770	1,877,476	-	0.0%	(437,294)	(18.9%)
Wastewater Abatement Program	1,150,000	1,150,000	1,150,040	-	0.0%	40	0.0%
Alectra Utilities Service Contract	5,700,000	5,400,000	5,600,000	300,000	5.3%	(100,000)	(1.8%)
Corporate & Departmental Support Services	6,432,040	6,432,040	6,977,580	-	0.0%	545,540	8.5%
Utilities Arrears Program	500,000	500,000	500,080	-	0.0%	80	0
Sewer Lateral Management Program	500,000	500,000	414,738	-	0.0%	(85,262)	(0)
Hamilton Harbour Remedial Action Plan	395,000	395,000	382,550	-	0.0%	(12,450)	(3.2%)
Protective Plumbing Program (3P)	1,250,000	885,034	1,250,000	364,966	29.2%	-	0.0%
Financial Charges	177,000	177,000	86,019	-	0.0%	(90,981)	(51.4%)
	101,824,050	98,643,084	92,252,132	3,180,966	3.1%	(9,571,918)	(9.4%)
Capital and Reserve Recoveries	(6,099,580)	(6,099,580)	(6,029,550)	0	(0.0%)	70,030	(1.1%)
Sub-Total	95,724,470	92,543,504	86,222,582	3,180,966	3.3%	(9,501,888)	(9.9%)
<u>Capital and Reserve Impacts on Operating</u>							
<u>Contributions to Capital</u>							
Water Quality Initiatives	51,762,000	51,762,000	50,296,000	-	-	(1,466,000)	(2.8%)
Wastewater	42,837,000	42,837,000	52,673,000	-	-	9,836,000	23.0%
Stormwater	3,205,000	3,205,000	15,685,000	-	-	12,480,000	389.4%
Sub-Total Contributions to Capital	97,804,000	97,804,000	118,654,000	-	-	20,850,000	21.3%
<u>Contributions for DC Exemptions</u>							
Water Quality Initiatives	2,547,000	2,547,000	2,240,000	-	-	(307,000)	(12.1%)
Wastewater	4,590,000	4,590,000	4,080,000	-	-	(510,000)	(11.1%)
Stormwater	1,863,000	1,863,000	1,680,000	-	-	(183,000)	(9.8%)
Sub-Total Contributions for DC Exemptions	9,000,000	9,000,000	8,000,000	-	-	(1,000,000)	(11.1%)

CITY OF HAMILTON
2020 HAMILTON WATER OPERATING BUDGET
COMBINED WATER, WASTEWATER AND STORM

OPERATING EXPENDITURES:	2019	2019	2020	CHANGE		CHANGE	
	RESTATED BUDGET	PROJECTED ACTUAL	REQUESTED BUDGET	2019 PROJECTED / 2019 RESTATED BUDGET	ACTUAL	2020 REQUESTED / 2019 RESTATED BUDGET	
	\$	\$	\$	\$	%	\$	%
Capital Debt Charges							
Water Quality Initiatives	9,762,487	7,537,276	8,593,943	2,225,211	22.8%	(1,168,544)	(12.0%)
Wastewater	10,120,380	8,460,849	11,514,374	1,659,531	16.4%	1,393,994	13.8%
Stormwater	3,950,054	2,371,561	3,399,997	1,578,493	40.0%	(550,057)	(13.9%)
DC Debt Charges Recoveries	(4,467,237)	(904,431)	(3,826,205)	(3,562,806)	79.8%	641,032	(14.3%)
Sub-Total Debt Charges	19,365,685	17,465,255	19,682,108	1,900,430	9.8%	316,424	1.6%
Sub-Total Capital Financing	126,169,685	124,269,256	146,336,108	1,900,430	1.5%	20,166,424	16.0%
Reserve Transfers	365,324	365,324	42,969	0	0.0%	(322,355)	(88.2%)
Sub-Total Capital and Reserve Impacts on Operating	126,535,009	124,634,580	146,379,077	1,900,430	1.5%	19,844,068	15.7%
TOTAL EXPENDITURES	222,259,479	217,178,084	232,601,659	5,081,395	2.3%	10,342,180	4.7%
REVENUES:							
Rate Revenue							
Residential	97,938,766	98,938,766	101,816,099	1,000,000	1.0%	3,877,333	4.0%
Industrial/Commercial/Institutional/Multi-res	107,752,759	108,752,759	112,557,622	1,000,000	0.9%	4,804,863	4.5%
Haldimand	2,353,282	2,353,282	2,476,307	-	0.0%	123,025	5.2%
Halton	247,782	247,782	259,593	-	0.0%	11,811	4.8%
Raw Water	150,000	120,000	125,000	(30,000)	(20.0%)	(25,000)	(16.7%)
Non-Metered	580,000	1,700,000	580,000	1,120,000	193.1%	-	0.0%
Private Fire Lines	1,550,000	1,750,000	1,850,000	200,000	12.9%	300,000	19.4%
Hauler / 3rd Party Sales	1,225,000	1,225,000	1,225,000	-	0.0%	-	0.0%
Overstrength Agreements	2,249,480	3,098,294	2,892,902	848,814	37.7%	643,422	28.6%
Sewer Surcharge Agreements	5,200,000	5,200,000	5,806,726	-	0.0%	606,726	11.7%
Sub-Total Utility Rates	219,247,069	223,385,883	229,589,249	4,138,814	1.9%	10,342,180	4.7%
Non-Rate Revenue							
Local Improvement Recoveries	275,850	275,850	275,850	-	-	-	-
Permits / Leases / Agreements	1,365,050	1,365,050	1,365,050	-	-	-	0.0%
Investment Income	450,000	450,000	450,000	-	0.0%	-	-
General Fees and Recoveries	921,510	921,510	921,510	-	0.0%	-	0.0%
Sub-Total Non-Rate Revenue	3,012,410	3,012,410	3,012,410	-	0.0%	-	0.0%
TOTAL REVENUES	222,259,479	226,398,293	232,601,659	4,138,814	1.9%	10,342,180	4.7%
NET EXPENDITURES	-	(9,220,209)	-	9,220,209	-	-	-

CITY OF HAMILTON
2020 - 2023 WATER, WASTEWATER AND STORM OPERATING BUDGET
COMBINED WATER, WASTEWATER AND STORM

	2019	2020	2021	2022	2023	CHANGE		CHANGE		CHANGE	
	RESTATED BUDGET	REQUESTED BUDGET	PROJECTED BUDGET	PROJECTED BUDGET	PROJECTED BUDGET	2020 REQUESTED / 2019 RESTATED BUDGET	%	2021 PROJECTED / 2020 REQUESTED BUDGET	%	2022 PROJECTED / 2021 PROJECTED BUDGET	%
	\$	\$	\$	\$	\$	\$	%	\$	%	\$	%
OPERATING EXPENDITURES:											
Divisional Administration & Support	2,242,620	1,408,041	1,436,202	1,464,926	1,494,224	(834,579)	(37.2%)	28,161	2.0%	28,724	2.0%
Woodward Upgrades	1,524,540	1,108,390	1,130,558	1,153,169	1,176,232	(416,150)	(27.3%)	22,168	2.0%	22,611	2.0%
Customer Service	421,610	254,823	259,919	265,118	270,420	(166,787)	(39.6%)	5,096	2.0%	5,198	2.0%
Outreach & Education	1,350,860	1,239,577	1,264,369	1,289,656	1,315,449	(111,283)	(8.2%)	24,792	2.0%	25,287	2.0%
Service Co-ordination	4,251,610	3,745,588	3,820,500	3,896,910	3,974,848	(506,022)	(11.9%)	74,912	2.0%	76,410	2.0%
Engineering Systems & Data Collection	1,286,870	1,351,831	1,378,868	1,406,445	1,434,574	64,961	5.0%	27,037	2.0%	27,577	2.0%
Compliance & Regulations	871,210	976,984	996,524	1,016,454	1,036,783	105,774	12.1%	19,540	2.0%	19,930	2.0%
Laboratory Services	3,527,640	3,660,204	3,733,408	3,808,076	3,884,238	132,564	3.8%	73,204	2.0%	74,668	2.0%
Environmental Monitoring & Enforcement	1,818,020	1,778,256	1,813,821	1,850,098	1,887,099	(39,764)	(2.2%)	35,565	2.0%	36,276	2.0%
Water Distribution & Wastewater Collection	21,369,840	22,014,201	22,454,485	22,903,575	23,361,646	644,361	3.0%	440,284	2.0%	449,090	2.0%
Plant Operations & Maintenance	41,383,390	33,449,649	34,118,642	34,801,015	35,497,035	(7,933,741)	(19.2%)	668,993	2.0%	682,373	2.0%
Capital Delivery	1,859,660	1,595,011	1,626,911	1,659,449	1,692,638	(264,649)	(14.2%)	31,900	2.0%	32,538	2.0%
Sustainable Initiatives	1,497,370	1,431,094	1,459,716	1,488,910	1,518,688	(66,276)	(4.4%)	28,622	2.0%	29,194	2.0%
Infrastructure Planning & System Design	2,314,770	1,877,476	1,915,026	1,953,326	1,992,393	(437,294)	(18.9%)	37,550	2.0%	38,301	2.0%
Wastewater Abatement Program	1,150,000	1,150,040	1,173,041	1,196,502	1,220,432	40	0.0%	23,001	2.0%	23,461	2.0%
Alectra Utilities Service Contract	5,700,000	5,600,000	5,712,000	5,826,240	5,942,765	(100,000)	(1.8%)	112,000	2.0%	114,240	2.0%
Corporate & Departmental Support Services	6,432,040	6,977,580	7,117,132	7,259,474	7,404,664	545,540	8.5%	139,552	2.0%	142,343	2.0%
Utilities Arrears Program	500,000	500,080	510,082	520,283	530,689	80	0.0%	10,002	2.0%	10,202	2.0%
Sewer Lateral Management Program	500,000	414,738	423,033	431,493	440,123	(85,262)	(17.1%)	8,295	2.0%	8,461	2.0%
Hamilton Harbour Remedial Action Plan	395,000	382,550	390,201	398,005	405,965	(12,450)	(3.2%)	7,651	2.0%	7,804	2.0%
Protective Plumbing Program (3P)	1,250,000	1,250,000	1,275,000	1,300,500	1,326,510	-	0.0%	25,000	2.0%	25,500	2.0%
Financial Charges	177,000	86,019	87,739	89,494	91,284	(90,981)	(51.4%)	1,720	2.0%	1,755	2.0%
	101,824,050	92,252,132	94,097,175	95,979,118	97,898,700	(9,571,918)	(9.4%)	1,845,043	2.0%	1,881,943	2.0%
Capital and Reserve Recoveries	(6,099,580)	(6,029,550)	(6,150,141)	(6,273,144)	(6,398,607)	70,030	(1.1%)	(120,591)	2.0%	(123,003)	2.0%
Sub-Total	95,724,470	86,222,582	87,947,034	89,705,974	91,500,094	(9,501,888)	(9.9%)	1,724,452	2.0%	1,758,941	2.0%
Capital and Reserve Impacts on Operating											
Contributions to Capital											
Water Quality Initiatives	51,762,000	50,296,000	52,953,000	56,553,000	63,516,000	(1,466,000)	(2.8%)	2,657,000	5.3%	3,600,000	6.8%
Wastewater	42,837,000	52,673,000	55,057,000	54,249,000	54,174,000	9,836,000	23.0%	2,384,000	4.5%	(808,000)	(1.5%)
Stormwater	3,205,000	15,685,000	14,382,000	15,775,000	15,975,000	12,480,000	389.4%	(1,303,000)	(8.3%)	1,393,000	9.7%
Sub-Total Contributions to Capital	97,804,000	118,654,000	122,392,000	126,577,000	133,665,000	20,850,000	21.3%	3,738,000	3.2%	4,185,000	3.4%
Contributions for DC Exemptions											
Water Quality Initiatives	2,547,000	2,240,000	2,240,000	2,240,000	2,240,000	(307,000)	(12.1%)	-	0.0%	-	0.0%
Wastewater	4,590,000	4,080,000	4,080,000	4,080,000	4,080,000	(510,000)	(11.1%)	-	0.0%	-	0.0%
Stormwater	1,863,000	1,680,000	1,680,000	1,680,000	1,680,000	(183,000)	(9.8%)	-	0.0%	-	0.0%
Sub-Total Contributions for DC Exemptions	9,000,000	8,000,000	8,000,000	8,000,000	8,000,000	(1,000,000)	(11.1%)	-	0.0%	-	0.0%
Debt Charges											
Water Quality Initiatives	9,762,487	8,593,943	13,081,230	19,120,697	22,771,434	(1,168,544)	(12.0%)	4,487,287	52.2%	6,039,467	46.2%
Wastewater	10,120,380	11,514,374	18,224,240	24,836,447	29,106,256	1,393,994	13.8%	6,709,866	58.3%	6,612,207	36.3%
Stormwater	3,950,054	3,399,997	4,917,875	5,719,347	6,438,841	(550,057)	(13.9%)	1,517,878	44.6%	801,472	16.3%
DC Debt Charges Recoveries	(4,467,237)	(3,826,205)	(10,928,162)	(17,429,536)	(21,372,836)	641,032	(14.3%)	(7,101,957)	185.6%	(6,501,374)	59.5%
Sub-Total Debt Charges	19,365,685	19,682,108	25,295,182	32,246,955	36,943,695	316,424	1.6%	5,613,074	28.5%	6,951,772	27.5%
Sub-Total Capital Financing	126,169,685	146,336,108	155,687,182	166,823,955	178,608,695	20,166,424	16.0%	9,351,074	6.4%	11,136,772	7.2%
Reserve Transfers	365,324	42,969	104,448	146,480	270,888	(322,355)	(88.2%)	61,479	143.1%	42,032	40.2%
Sub-Total Capital and Reserve Impacts on Operating	126,535,009	146,379,077	155,791,630	166,970,435	178,879,583	19,844,068	15.7%	9,412,553	6.4%	11,178,805	7.2%
TOTAL EXPENDITURES	222,259,479	232,601,659	243,738,664	256,676,409	270,379,677	10,342,180	4.7%	11,137,005	4.8%	12,937,745	5.3%

CITY OF HAMILTON
2020 - 2023 WATER, WASTEWATER AND STORM OPERATING BUDGET
COMBINED WATER, WASTEWATER AND STORM

	2019 RESTATE D BUDGET	2020 REQUEST ED BUDGET	2021 PROJECT ED BUDGET	2022 PROJECT ED BUDGET	2023 PROJECT ED BUDGET	CHANGE 2020 REQUESTED / 2019 RESTATED BUDGET		CHANGE 2021 PROJECTED / 2020 REQUESTED BUDGET		CHANGE 2022 PROJECTED / 2021 PROJECTED BUDGET	
	\$	\$	\$	\$	\$	\$	%	\$	%	\$	%
REVENUES:											
Rate Revenue											
Residential	97,938,766	101,816,099	107,533,183	113,624,568	120,099,836	3,877,333	4.0%	5,717,083	5.6%	6,091,385	5.7%
Industrial/Commercial/Institutional/Multi-res	107,752,759	112,557,622	117,408,155	123,603,330	130,095,258	4,804,863	4.5%	4,850,533	4.3%	6,195,175	5.3%
Haldimand	2,353,282	2,476,307	2,591,366	2,739,374	2,931,659	123,025	5.2%	115,058	4.6%	148,008	5.7%
Halton	247,782	259,593	269,837	284,866	303,990	11,811	4.8%	10,245	3.9%	15,029	5.6%
Raw Water	150,000	125,000	128,750	132,613	136,591	(25,000)	(16.7%)	3,750	3.0%	3,863	3.0%
Non-Metered	580,000	580,000	580,000	610,000	640,000	-	0.0%	-	0.0%	30,000	5.2%
Private Fire Lines	1,550,000	1,850,000	1,924,000	2,000,960	2,080,998	300,000	19.4%	74,000	4.0%	76,960	4.0%
Hauler / 3rd Party Sales	1,225,000	1,225,000	1,261,750	1,299,603	1,338,591	-	0.0%	36,750	3.0%	37,853	3.0%
Overstrength Agreements	2,249,480	2,892,902	2,979,689	3,069,080	3,161,152	643,422	28.6%	86,787	3.0%	89,391	3.0%
Sewer Surcharge Agreements	5,200,000	5,806,726	5,980,928	6,160,356	6,345,166	606,726	11.7%	174,202	3.0%	179,428	3.0%
Sub-Total Utility Rates	219,247,069	229,589,249	240,657,657	253,524,748	267,133,241	10,342,180	4.7%	11,068,408	4.8%	12,867,091	5.3%
Non-Rate Revenue											
Local Improvement Recoveries	275,850	275,850	275,850	275,850	275,850	-	0.0%	-	0.0%	-	0.0%
Permits/Leases/Agreements	1,365,050	1,365,050	1,406,002	1,448,182	1,491,627	-	0.0%	40,952	3.0%	42,180	3.0%
Investment Income	450,000	450,000	450,000	450,000	450,000	-	0.0%	-	0.0%	-	0.0%
General Fees and Recoveries	921,510	921,510	949,155	977,630	1,028,959	-	0.0%	27,645	3.0%	28,475	3.0%
Sub-Total Non-Rate Revenue	3,012,410	3,012,410	3,081,007	3,151,662	3,246,436	-	0.0%	68,597	2.3%	70,655	2.3%
TOTAL REVENUES	222,259,479	232,601,659	243,738,664	256,676,409	270,379,677	10,342,180	4.7%	11,137,005	4.8%	12,937,745	5.3%
NET EXPENDITURES	-	-	-	-	-	(0)	-	(0)	-	0	-

CITY OF HAMILTON
2020-2029 WATER, WASTEWATER & STORM OPERATING BUDGET
COMBINED WATER, WASTEWATER AND STORM
(\$ 000'S)

	2019 Restated	2020 Requested	2021 Forecast	2022 Forecast	2023 Forecast	2024 Forecast	2025 Forecast	2026 Forecast	2027 Forecast	2028 Forecast	2029 Forecast
OPERATING EXPENDITURES											
OPERATING COSTS	91,224	82,223	83,717	83,977	85,653	87,363	89,107	90,885	92,698	94,546	96,530
BIO-SOLIDS	4,500	4,000	4,230	4,129	4,215	4,302	4,392	4,484	4,578	4,676	4,676
TERTIARY TREATMENT	-	-	-	1,600	1,632	1,665	1,698	1,732	1,767	1,802	1,838
TOTAL OPERATING COSTS	95,724	86,223	87,947	89,706	91,500	93,330	95,197	97,101	99,043	101,023	103,044
CAPITAL & RESERVE IMPACTS ON OPERATING											
Contributions to Capital											
Water	51,762	50,296	52,953	56,553	63,516	73,300	84,611	83,417	72,832	90,002	107,861
Wastewater	42,837	52,673	55,057	54,249	54,174	52,379	58,704	63,479	67,164	68,470	65,440
Stormwater	3,205	15,685	14,382	15,775	15,975	17,595	9,875	16,385	37,430	34,735	35,215
Sub-total Contributions to Capital	97,804	118,654	122,392	126,577	133,665	143,274	153,190	163,281	177,426	193,207	208,516
Contributions for DC Exemptions											
Water	2,547	2,240	2,240	2,240	2,240	2,240	2,240	2,240	2,240	2,240	2,240
Wastewater	4,590	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080
Stormwater	1,863	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680
Sub-total Contributions to Capital	9,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000
Debt Charges											
Water	9,762	8,594	13,081	19,121	22,771	24,378	26,861	29,864	30,861	30,665	30,561
Wastewater	10,120	11,514	18,224	24,836	29,106	30,401	30,518	34,295	41,345	47,498	51,136
Stormwater	3,950	3,400	4,918	5,719	6,439	6,775	6,728	6,681	6,690	6,705	6,778
DC Debt Charges Recoveries	(4,467)	(3,826)	(10,928)	(17,430)	(21,373)	(23,098)	(25,025)	(31,460)	(41,112)	(49,540)	(53,306)
Sub-total Debt Charges	19,366	19,682	25,295	32,247	36,944	38,456	39,082	39,380	37,784	35,328	35,169
Reserve Transfers	365	43	104	146	134	185	245	278	258	264	741
Sub-Total Capital & Reserve Impacts on Operating	126,535	146,379	155,792	166,970	178,743	189,915	200,517	210,938	223,468	236,799	252,426
TOTAL EXPENDITURES	222,259	232,602	243,739	256,676	270,243	283,245	295,714	308,039	322,511	337,823	355,470
REVENUES											
Residential	97,939	101,816	107,533	113,625	120,100	126,815	134,051	141,659	149,749	157,939	166,460
Industrial/Commercial/Institutional/Multi-res	107,753	112,558	117,408	123,603	130,095	135,830	140,539	144,771	150,606	157,123	165,607
Haldimand	2,353	2,476	2,591	2,739	2,932	3,074	3,179	3,241	3,351	3,507	3,687
Halton	248	260	270	285	304	318	331	340	351	367	385
Raw Water	150	125	129	133	137	141	145	149	154	158	163
Non-Metered	580	580	580	610	640	670	700	730	760	790	820
Private Fire Lines	1,550	1,850	1,924	2,001	2,081	2,164	2,251	2,341	2,434	2,532	2,633
Hauler / 3rd Party Sales	1,225	1,225	1,262	1,300	1,326	1,352	1,379	1,407	1,435	1,464	1,493
Overstrength Agreements	2,249	2,893	2,980	3,069	3,130	3,193	3,257	3,322	3,389	3,456	3,525
Sewer Surcharge Agreements	5,200	5,807	5,981	6,160	6,284	6,409	6,537	6,668	6,802	6,938	7,076
Non-Rate Revenue	3,012	3,012	3,081	3,152	3,215	3,279	3,345	3,411	3,480	3,549	3,620
TOTAL REVENUES	222,259	232,602	243,739	256,676	270,243	283,245	295,714	308,039	322,511	337,823	355,470
NET EXPENDITURES											
Rate Increase	4.66%	4.00%	4.39%	4.50%	4.55%	4.41%	4.46%	4.41%	4.54%	4.34%	4.37%
RESIDENTIAL BILL (200m³ p.a.)	\$ 722.90	\$ 751.80	\$ 784.80	\$ 820.10	\$ 857.40	\$ 895.20	\$ 935.10	\$ 976.30	\$ 1,020.60	\$ 1,064.85	\$ 1,111.35

CITY OF HAMILTON
2020 HAMILTON WATER OPERATING BUDGET
WATER

	2019	2019	2020	CHANGE		CHANGE	
	RESTATED BUDGET	PROJECTED ACTUAL	REQUESTED BUDGET	2019 PROJECTED / 2019 RESTATED BUDGET	ACTUAL	2020 REQUESTED / 2019 RESTATED BUDGET	
	\$	\$	\$	\$	%	\$	%
<u>OPERATING EXPENDITURES:</u>							
Divisional Administration & Support	1,012,984	1,012,984	636,007	(0)	(0.0%)	(376,977)	(37.2%)
Woodward Upgrades	-	-	-	-	0.0%	-	0.0%
Customer Service	211,240	211,240	127,674	-	0.0%	(83,566)	(39.6%)
Outreach & Education	690,420	664,865	633,544	25,555	3.7%	(56,876)	(8.2%)
Service Co-ordination	2,091,780	1,862,509	1,842,819	229,271	11.0%	(248,961)	(11.9%)
Engineering Systems & Data Collection	643,430	643,430	675,910	-	0.0%	32,480	5.0%
Compliance & Regulations	435,600	435,600	488,486	-	0.0%	52,886	12.1%
Laboratory Services	1,132,777	1,132,777	1,175,345	-	0.0%	42,568	3.8%
Environmental Monitoring & Enforcement	-	-	-	-	0.0%	-	0.0%
Water Distribution & Wastewater Collection	15,793,060	15,793,060	16,269,265	-	0.0%	476,205	3.0%
Plant Operations & Maintenance	20,354,155	19,370,468	16,451,995	983,687	4.8%	(3,902,160)	(19.2%)
Capital Delivery	836,847	836,847	717,755	-	0.0%	(119,092)	(14.2%)
Sustainable Initiatives	673,816	673,816	643,991	-	0.0%	(29,824)	(4.4%)
Infrastructure Planning & System Design	959,142	959,142	777,946	-	0.0%	(181,196)	(18.9%)
Wastewater Abatement Program	-	-	-	-	0.0%	-	0.0%
Alectra Utilities Service Contract	2,850,000	2,700,000	2,800,000	150,000	5.3%	(50,000)	(1.8%)
Corporate & Departmental Support Services	2,872,450	2,872,450	3,116,080	-	0.0%	243,630	8.5%
Utilities Arrears Program	250,000	250,000	250,040	-	0.0%	40	0.0%
	50,807,699	49,419,187	46,606,858	1,388,513	2.7%	(4,200,842)	(8.3%)
Capital and Reserve Recoveries	(1,881,768)	(1,881,768)	(1,860,163)	-	0.0%	21,605	(1.1%)
Sub-Total	\$ 48,925,932	\$ 47,537,419	\$ 44,746,695	\$ 1,388,513	2.8%	\$ (4,179,237)	(8.5%)
<u>Capital and Reserve Impacts on Operating</u>							
<u>Contributions to Capital</u>							
Water Quality Initiatives	51,762,000	51,762,000	50,296,000	-	-	(1,466,000)	(2.8%)
Sub-Total Contributions to Capital	51,762,000	51,762,000	50,296,000	-	-	(1,466,000)	(2.8%)
<u>Contributions for DC Exemptions</u>							
Water Quality Initiatives	2,547,000	2,547,000	2,240,000	-	-	(307,000)	(12.1%)
Sub-Total Contributions for DC Exemptions	2,547,000	2,547,000	2,240,000	-	-	(307,000)	(12.1%)

CITY OF HAMILTON
2020 HAMILTON WATER OPERATING BUDGET
WATER

	2019	2019	2020	CHANGE		CHANGE	
	RESTATED BUDGET	PROJECTED ACTUAL	REQUESTED BUDGET	2019 PROJECTED / 2019 RESTATED BUDGET	ACTUAL	2020 REQUESTED / 2019 RESTATED BUDGET	
	\$	\$	\$	\$	%	\$	%
<u>Debt Charges</u>							
Water Quality Initiatives	9,762,487	6,582,511	8,593,943	3,179,976	32.6%	(1,168,544)	(12.0%)
DC Debt Charges Recoveries	(976,370)	(24,584)	(418,112)	(951,786)	97.5%	558,257	(57.2%)
Sub-Total Debt Charges	8,786,118	6,557,927	8,175,831	2,228,191	25.4%	(610,287)	(6.9%)
Sub-Total Capital Financing	63,095,118	60,866,927	60,711,831	2,228,191	3.5%	(2,383,287)	(3.8%)
Reserve Transfers	(4,745,039)	(53,336)	6,830,465	(4,691,703)	98.9%	11,575,504	(243.9%)
Sub-Total Cap/Reserve Impacts on Operating	58,350,079	60,813,591	67,542,295	(2,463,513)	(4.2%)	9,192,217	15.8%
TOTAL EXPENDITURES	107,276,010	108,351,010	112,288,990	(1,075,000)	(1.0%)	5,012,980	4.7%
<u>REVENUES:</u>							
<u>Rate Revenue</u>							
Residential	47,795,256	48,295,256	49,778,979	500,000	1.0%	1,983,724	4.2%
Industrial/Commercial/Institutional/Multi-res	52,541,131	53,041,131	55,160,551	500,000	1.0%	2,619,420	5.0%
Haldimand	2,353,282	2,353,282	2,476,307	-	0.0%	123,025	5.2%
Halton	247,782	247,782	259,593	-	0.0%	11,811	4.8%
Raw Water	150,000	25,000	125,000	(125,000)	(83.3%)	(25,000)	(16.7%)
Non-Metered	290,000	290,000	290,000	-	0.0%	-	0.0%
Private Fire Lines	1,550,000	1,750,000	1,850,000	200,000	12.9%	300,000	19.4%
Hauler / 3rd Party Sales	435,000	435,000	435,000	-	0.0%	-	0.0%
Sub-Total Utility Rates	105,362,450	106,437,450	110,375,430	1,075,000	1.0%	5,012,980	4.8%
<u>Non-Rate Revenue</u>							
Local Improvement Recoveries	10,000	10,000	10,000	-	0.0%	-	0.0%
Permits / Leases / Agreements	850,050	850,050	850,050	-	0.0%	-	0.0%
Investment Income	450,000	450,000	450,000	-	0.0%	-	0.0%
General Fees and Recoveries	603,510	603,510	603,510	-	0.0%	-	0.0%
Sub-Total Non-Rate Revenue	1,913,560	1,913,560	1,913,560	-	0.0%	-	0.0%
TOTAL REVENUES	107,276,010	108,351,010	112,288,990	1,075,000	1.0%	5,012,980	4.7%
NET EXPENDITURES	-	-	-	-	-	-	-

CITY OF HAMILTON
2020 - 2023 WATER, WASTEWATER AND STORM OPERATING BUDGET
WATER

	2019	2020	2021	2022	2023	CHANGE		CHANGE		CHANGE	
	RESTATED BUDGET	REQUESTED BUDGET	PROJECTED BUDGET	PROJECTED BUDGET	PROJECTED BUDGET	2020 REQUESTED / 2019 RESTATED BUDGET	%	2021 PROJECTED / 2020 REQUESTED BUDGET	%	2022 PROJECTED / 2021 PROJECTED BUDGET	%
	\$	\$	\$	\$	\$	\$	%	\$	%	\$	%
OPERATING EXPENDITURES:											
Divisional Administration & Support	1,012,984	636,007	648,728	661,702	674,936	(376,977)	(37.2%)	12,720	2.0%	12,975	2.0%
Woodward Upgrades	-	-	-	-	-	-	0.0%	-	0.0%	-	0.0%
Customer Service	211,240	127,674	130,228	132,832	135,489	(83,566)	(39.6%)	2,553	2.0%	2,605	2.0%
Outreach & Education	690,420	633,544	646,215	659,139	672,322	(56,876)	(8.2%)	12,671	2.0%	12,924	2.0%
Service Co-ordination	2,091,780	1,842,819	1,879,675	1,917,268	1,955,614	(248,961)	(11.9%)	36,856	2.0%	37,593	2.0%
Engineering Systems & Data Collection	643,430	675,910	689,428	703,217	717,281	32,480	5.0%	13,518	2.0%	13,789	2.0%
Compliance & Regulations	435,600	488,486	498,256	508,221	518,386	52,886	12.1%	9,770	2.0%	9,965	2.0%
Laboratory Services	1,132,777	1,175,345	1,198,852	1,222,829	1,247,285	42,568	3.8%	23,507	2.0%	23,977	2.0%
Environmental Monitoring & Enforcement	-	-	-	-	-	-	0.0%	-	0.0%	-	0.0%
Water Distribution & Wastewater Collection	15,793,060	16,269,265	16,594,651	16,926,544	17,265,075	476,205	3.0%	325,385	2.0%	331,893	2.0%
Plant Operations & Maintenance	20,354,155	16,451,995	16,781,035	17,116,656	17,458,989	(3,902,160)	(19.2%)	329,040	2.0%	335,621	2.0%
Capital Delivery	836,847	717,755	732,110	746,752	761,687	(119,092)	(14.2%)	14,355	2.0%	14,642	2.0%
Sustainable Initiatives	673,816	643,991	656,871	670,009	683,409	(29,824)	(4.4%)	12,880	2.0%	13,137	2.0%
Infrastructure Planning & System Design	959,142	777,946	793,505	809,375	825,562	(181,196)	(18.9%)	15,559	2.0%	15,870	2.0%
Wastewater Abatement Program	-	-	-	-	-	-	0.0%	-	0.0%	-	0.0%
Alectra Utilities Service Contract	2,850,000	2,800,000	2,856,000	2,913,120	2,971,382	(50,000)	(1.8%)	56,000	2.0%	57,120	2.0%
Corporate & Departmental Support Services	2,872,450	3,116,080	3,178,401	3,241,969	3,306,809	243,630	8.5%	62,322	2.0%	63,568	2.0%
Utilities Arrears Program	250,000	250,040	255,041	260,142	265,344	40	0.0%	5,001	2.0%	5,101	2.0%
	50,807,699	46,606,858	47,538,995	48,489,775	49,459,570	(4,200,842)	(8.3%)	932,137	2.0%	950,780	2.0%
Capital and Reserve Recoveries	(1,881,768)	(1,860,163)	(1,897,366)	(1,935,314)	(1,974,020)	21,605	(1.1%)	(37,203)	2.0%	(37,947)	2.0%
Sub-Total	48,925,932	44,746,695	45,641,629	46,554,461	47,485,550	(4,179,237)	(8.5%)	894,934	2.0%	912,833	2.0%
Capital and Reserve Impacts on Operating											
Contributions to Capital											
Water Quality Initiatives	51,762,000	50,296,000	52,953,000	56,553,000	63,516,000	(1,466,000)	(2.8%)	2,657,000	5.3%	3,600,000	6.8%
Sub-Total Contributions to Capital	51,762,000	50,296,000	52,953,000	56,553,000	63,516,000	(1,466,000)	(2.8%)	2,657,000	5.3%	3,600,000	6.8%
Contributions for DC Exemptions											
Water Quality Initiatives	2,547,000	2,240,000	2,240,000	2,240,000	2,240,000	(307,000)	(12.1%)	-	0.0%	-	0.0%
Wastewater	-	-	-	-	-	-	0.0%	-	0.0%	-	0.0%
Stormwater	-	-	-	-	-	-	0.0%	-	0.0%	-	0.0%
Sub-Total Contributions for DC Exemptions	2,547,000	2,240,000	2,240,000	2,240,000	2,240,000	(307,000)	(12.1%)	-	0.0%	-	0.0%
Debt Charges											
Water Quality Initiatives	9,762,487	8,593,943	13,081,230	19,120,697	22,771,434	(1,168,544)	(12.0%)	4,487,287	52.2%	6,039,467	46.2%
DC Debt Charges Recoveries	(976,370)	(418,112)	(2,419,501)	(5,145,642)	(6,411,633)	558,257	(57.2%)	(2,001,389)	478.7%	(2,726,140)	112.7%
Sub-Total Debt Charges	8,786,118	8,175,831	10,661,728	13,975,055	16,359,801	(610,287)	(6.9%)	2,485,898	30.4%	3,313,326	31.1%
Sub-Total Capital Financing	63,095,118	60,711,831	65,854,728	72,768,055	82,115,801	(2,383,287)	(3.8%)	5,142,898	8.5%	6,913,326	10.5%
Reserve Transfers	(4,745,039)	6,830,465	5,650,089	4,328,570	1,481,014	11,575,504	(243.9%)	(1,180,375)	(17.3%)	(1,321,519)	(23.4%)
Sub-Total Capital and Reserve Impacts on Operating	58,350,079	67,542,295	71,504,818	77,096,625	83,596,814	9,192,217	15.8%	3,962,522	5.9%	5,591,808	7.8%
TOTAL EXPENDITURES	107,276,010	112,288,990	117,146,446	123,651,086	131,082,365	5,012,980	4.7%	4,857,456	4.3%	6,504,640	5.6%

**CITY OF HAMILTON
2020 - 2023 WATER, WASTEWATER AND STORM OPERATING BUDGET
WATER**

	2019 RESTATED BUDGET	2020 REQUESTED BUDGET	2021 PROJECTED BUDGET	2022 PROJECTED BUDGET	2023 PROJECTED BUDGET	CHANGE 2020 REQUESTED / 2019 RESTATED BUDGET	CHANGE 2021 PROJECTED / 2020 REQUESTED BUDGET	CHANGE 2022 PROJECTED / 2021 PROJECTED BUDGET			
	\$	\$	\$	\$	\$	\$	%	\$	%	\$	%
REVENUES:											
Rate Revenue											
Residential	47,795,256	49,778,979	52,120,402	55,165,514	58,393,435	1,983,724	4.2%	2,341,422	4.7%	3,045,112	5.8%
Industrial/Commercial/Institutional/Multi-res	52,541,131	55,160,551	57,416,875	60,559,186	64,370,011	2,619,420	5.0%	2,256,324	4.1%	3,142,311	5.5%
Haldimand	2,353,282	2,476,307	2,591,366	2,739,374	2,931,659	123,025	5.2%	115,058	4.6%	148,008	5.7%
Halton	247,782	259,593	269,837	284,866	303,990	11,811	4.8%	10,245	3.9%	15,029	5.6%
Raw Water	150,000	125,000	128,750	132,613	136,591	(25,000)	(16.7%)	3,750	3.0%	3,863	3.0%
Non-Metered	290,000	290,000	290,000	305,000	320,000	-	0.0%	-	0.0%	15,000	5.2%
Private Fire Lines	1,550,000	1,850,000	1,924,000	2,000,960	2,080,998	300,000	19.4%	74,000	4.0%	76,960	4.0%
Hauler / 3rd Party Sales	435,000	435,000	448,050	461,492	475,336	-	0.0%	13,050	3.0%	13,442	3.0%
Sub-Total Utility Rates	105,362,450	110,375,430	115,189,279	121,649,005	129,012,020	5,012,980	4.8%	4,813,849	4.4%	6,459,725	5.6%
Non-Rate Revenue											
Local Improvement Recoveries	10,000	10,000	10,000	10,000	10,000	-	0.0%	-	0.0%	-	0.0%
Permits/Leases/Agreements	850,050	850,050	875,552	901,818	928,873	-	0.0%	25,502	3.0%	26,267	3.0%
Investment Income	450,000	450,000	450,000	450,000	450,000	-	0.0%	-	0.0%	-	0.0%
General Fees and Recoveries	603,510	603,510	621,615	640,264	681,472	-	0.0%	18,105	3.0%	18,648	3.0%
Sub-Total Non-Rate Revenue	1,913,560	1,913,560	1,957,167	2,002,082	2,070,344	-	0.0%	43,607	2.3%	44,915	2.3%
TOTAL REVENUES	107,276,010	112,288,990	117,146,446	123,651,086	131,082,365	5,012,980	4.7%	4,857,456	4.3%	6,504,640	5.6%
NET EXPENDITURES	-	-	-	-	-	-	-	-	-	-	-

**CITY OF HAMILTON
2020-2029 WATER, WASTEWATER & STORM OPERATING BUDGET
WATER**

	2019 Restated	2020 Requested	2021 Forecast	2022 Forecast	2023 Forecast	2024 Forecast	2025 Forecast	2026 Forecast	2027 Forecast	2028 Forecast	2029 Forecast
OPERATING EXPENDITURES											
OPERATING COSTS	48,926	44,747	45,642	46,554	47,486	48,435	49,404	50,392	51,400	52,428	53,476
TOTAL OPERATING COSTS	48,926	44,747	45,642	46,554	47,486	48,435	49,404	50,392	51,400	52,428	53,476
CAPITAL & RESERVE IMPACTS ON OPERATING											
Contributions to Capital											
Water	51,762	50,296	52,953	56,553	63,516	73,300	84,611	83,417	72,832	90,002	107,861
Sub-total Contributions to Capital	51,762	50,296	52,953	56,553	63,516	73,300	84,611	83,417	72,832	90,002	107,861
Contributions for DC Exemptions											
Water	2,547	2,240	2,240	2,240	2,240	2,240	2,240	2,240	2,240	2,240	2,240
Sub-total Contributions to Capital	2,547	2,240	2,240	2,240	2,240	2,240	2,240	2,240	2,240	2,240	2,240
Debt Charges											
Water	9,762	8,594	13,081	19,121	22,771	24,378	26,861	29,864	30,861	30,665	30,561
DC Debt Charges Recoveries	(976)	(418)	(2,420)	(5,146)	(6,412)	(6,919)	(8,559)	(11,047)	(13,153)	(14,089)	(14,089)
Sub-total Debt Charges	8,786	8,176	10,662	13,975	16,360	17,459	18,303	18,817	17,708	16,576	16,472
Reserve Transfers	(4,745)	6,830	5,650	4,329	1,448	(3,612)	(9,212)	(2,761)	13,889	4,480	(6,359)
Sub-Total Capital & Reserve Impacts on Operating	58,350	67,542	71,505	77,097	83,564	89,387	95,942	101,713	106,669	113,298	120,214
TOTAL EXPENDITURES	107,276	112,289	117,146	123,651	131,050	137,822	145,346	152,105	158,069	165,726	173,691
REVENUES											
Residential	47,795	49,779	52,120	55,166	58,393	61,803	66,169	70,489	73,698	77,665	81,527
Industrial/Commercial/Institutional/Multi-res	52,541	55,161	57,417	60,559	64,370	67,424	70,306	72,513	74,981	78,327	82,056
Haldimand	2,353	2,476	2,591	2,739	2,932	3,074	3,179	3,241	3,351	3,507	3,687
Halton	248	260	270	285	304	318	331	340	351	367	385
Raw Water	150	125	129	133	137	141	145	149	154	158	163
Non-Metered	290	290	290	305	320	335	350	365	380	395	410
Private Fire Lines	1,550	1,850	1,924	2,001	2,081	2,164	2,251	2,341	2,434	2,532	2,633
Hauler / 3rd Party Sales	435	435	448	461	471	480	490	500	510	520	530
Non-Rate Revenue	1,914	1,914	1,957	2,002	2,042	2,083	2,125	2,167	2,210	2,255	2,300
TOTAL REVENUES	107,276	112,289	117,146	123,651	131,050	137,822	145,346	152,105	158,069	165,726	173,691
NET EXPENDITURES											
	-	-	-	-	-	-	-	-	-	-	-
Rate Increase	4.7%	4.3%	3.5%	4.7%	4.8%	4.7%	5.8%	5.2%	3.4%	4.3%	3.9%
RESIDENTIAL BILL (200m³ p.a.)	\$ 349.00	\$ 363.85	\$ 376.70	\$ 394.35	\$ 413.15	\$ 432.45	\$ 457.45	\$ 481.30	\$ 497.80	\$ 519.10	\$ 539.55

CITY OF HAMILTON
2020 HAMILTON WATER OPERATING BUDGET
COMBINED WASTEWATER AND STORM

	2019	2019	2020	CHANGE		CHANGE	
	RESTATED BUDGET	PROJECTED ACTUAL	REQUESTED BUDGET	2019 PROJECTED / 2019 RESTATED BUDGET	ACTUAL	2020 REQUESTED / 2019 RESTATED BUDGET	
	\$	\$	\$	\$	%	\$	%
<u>OPERATING EXPENDITURES:</u>							
Divisional Administration & Support	1,229,636	1,229,636	772,034	(0)	(0.0%)	(457,602)	(37.2%)
Woodward Upgrades	1,524,540	1,524,540	1,108,390	-	0.0%	(416,150)	(27.3%)
Customer Service	210,370	210,370	127,149	-	0.0%	(83,221)	(39.6%)
Outreach & Education	660,440	635,995	606,033	24,445	3.7%	(54,407)	(8.2%)
Service Co-ordination	2,159,830	1,923,101	1,902,769	236,729	11.0%	(257,061)	(11.9%)
Engineering Systems & Data Collection	643,440	643,440	675,921	-	0.0%	32,481	5.0%
Compliance & Regulations	435,610	435,610	488,498	-	0.0%	52,888	12.1%
Laboratory Services	2,394,864	2,394,864	2,484,859	-	0.0%	89,996	3.8%
Environmental Monitoring & Enforcement	1,818,020	1,818,020	1,778,256	-	0.0%	(39,764)	(2.2%)
Water Distribution & Wastewater Collection	5,576,780	5,576,780	5,744,936	-	0.0%	168,156	3.0%
Plant Operations & Maintenance	21,029,235	20,012,922	16,997,654	1,016,313	4.8%	(4,031,581)	(19.2%)
Capital Delivery	1,022,813	1,022,813	877,256	-	0.0%	(145,557)	(14.2%)
Sustainable Initiatives	823,555	823,555	787,103	-	0.0%	(36,452)	(4.4%)
Infrastructure Planning & System Design	1,355,629	1,355,629	1,099,530	-	0.0%	(256,098)	(18.9%)
Wastewater Abatement Program	1,150,000	1,150,000	1,150,040	-	0.0%	40	0.0%
Alectra Utilities Service Contract	2,850,000	2,700,000	2,800,000	150,000	5.3%	(50,000)	(1.8%)
Corporate & Departmental Support Services	3,559,590	3,559,590	3,861,500	-	0.0%	301,910	8.5%
Utilities Arrears Program	250,000	250,000	250,040	-	0.0%	40	0.0%
Sewer Lateral Management Program	500,000	500,000	414,738	-	0.0%	(85,262)	(17.1%)
Hamilton Harbour Remedial Action Plan	395,000	395,000	382,550	-	0.0%	(12,450)	(3.2%)
Protective Plumbing Program (3P)	1,250,000	885,034	1,250,000	364,966	29.2%	-	0.0%
Financial Charges	177,000	177,000	86,019	-	0.0%	(90,981)	(51.4%)
	51,016,350	49,223,897	45,645,274	1,792,453	3.5%	(5,371,076)	(10.5%)
Capital and Reserve Recoveries	(4,217,812)	(4,217,812)	(4,169,387)	0	(0.0%)	48,425	(1.1%)
Sub-Total	46,798,539	45,006,085	41,475,887	1,792,453	3.8%	(5,322,651)	(11.4%)
<u>Capital and Reserve Impacts on Operating</u>							
<u>Contributions to Capital</u>							
Wastewater	42,837,000	42,837,000	52,673,000	-	0.0%	9,836,000	23.0%
Stormwater	3,205,000	3,205,000	15,685,000	-	0.0%	12,480,000	389.4%
Sub-Total Contributions to Capital	46,042,000	46,042,000	68,358,000	-	0.0%	22,316,000	48.5%
<u>Contributions for DC Exemptions</u>							
Wastewater	4,590,000	4,590,000	4,080,000	-	0.0%	(510,000)	(11.1%)
Stormwater	1,863,000	1,863,000	1,680,000	-	0.0%	(183,000)	(9.8%)
Sub-Total Contributions for DC Exemptions	6,453,000	6,453,000	5,760,000	-	0.0%	(693,000)	(0)

CITY OF HAMILTON
2020 HAMILTON WATER OPERATING BUDGET
COMBINED WASTEWATER AND STORM

	2019	2019	2020	CHANGE		CHANGE	
	RESTATED BUDGET	PROJECTED ACTUAL	REQUESTED BUDGET	2019 PROJECTED / 2019 RESTATED BUDGET	ACTUAL	2020 REQUESTED / 2019 RESTATED BUDGET	
	\$	\$	\$	\$	%	\$	%
<u>Debt Charges</u>							
Wastewater	10,120,380	7,012,631	11,514,374	3,107,749	30.7%	1,393,994	13.8%
Stormwater	3,950,054	651,022	3,399,997	3,299,032	83.5%	(550,057)	(13.9%)
DC Debt Charges Recoveries	(3,490,867)	(138,256)	(3,408,093)	(3,352,611)	96.0%	82,774	(2.4%)
Sub-Total Debt Charges	10,579,567	7,525,397	11,506,278	3,054,170	28.9%	926,710	8.8%
Sub-Total Capital Financing	63,074,567	60,020,397	85,624,278	3,054,170	4.8%	22,549,710	35.8%
Reserve Transfers	5,110,363	9,378,487	(6,787,496)	(4,268,124)	(83.5%)	(11,897,859)	(232.8%)
Sub-Total Capital and Reserve Impacts on Operating	68,184,930	69,398,884	78,836,782	(1,213,953)	(1.8%)	10,651,852	15.6%
TOTAL EXPENDITURES	114,983,469	114,404,969	120,312,669	578,500	0.5%	5,329,200	4.6%
<u>REVENUES:</u>							
<u>Rate Revenue</u>							
Residential	50,143,510	50,643,510	52,037,120	500,000	1.0%	1,893,610	3.8%
Industrial/Commercial/Institutional/Multi-res	55,211,628	55,711,628	57,397,071	500,000	0.9%	2,185,443	4.0%
Non-Metered	290,000	290,000	290,000	-	0.0%	-	0.0%
Hauler / 3rd Party Sales	790,000	790,000	790,000	-	0.0%	-	0.0%
Overstrength Agreements	2,249,480	2,148,500	2,892,902	(100,980)	(4.5%)	643,422	28.6%
Sewer Surcharge Agreements	5,200,000	3,914,380	5,806,726	(1,285,620)	(24.7%)	606,726	11.7%
Sub-Total Utility Rates	113,884,619	113,498,019	119,213,819	(386,600)	(.3%)	5,329,200	4.7%
<u>Non-Rate Revenue</u>							
Local Improvement Recoveries	265,850	265,850	265,850	-	0.0%	-	0.0%
Permits / Leases / Agreements	515,000	323,100	515,000	(191,900)	(37.3%)	-	0.0%
General Fees and Recoveries	318,000	318,000	318,000	-	0.0%	-	0.0%
Sub-Total Non-Rate Revenue	1,098,850	906,950	1,098,850	(191,900)	(17.5%)	-	0.0%
TOTAL REVENUES	114,983,469	114,404,969	120,312,669	(578,500)	(0.5%)	5,329,200	4.6%
NET EXPENDITURES	-	-	-	-	-	-	-

CITY OF HAMILTON
2020 - 2023 WATER, WASTEWATER AND STORM OPERATING BUDGET
COMBINED WASTEWATER AND STORM

	2019 RESTATE D BUDGET	2020 REQUESTED BUDGET	2021 PROJECTED BUDGET	2022 PROJECTED BUDGET	2023 PROJECTED BUDGET	CHANGE 2020 REQUESTED / 2019 RESTATED BUDGET	CHANGE 2021 PROJECTED / 2020 REQUESTED BUDGET	CHANGE 2022 PROJECTED / 2021 PROJECTED BUDGET			
	\$	\$	\$	\$	\$	\$	%	\$	%	\$	%
OPERATING EXPENDITURES:											
Divisional Administration & Support	1,229,636	772,034	787,474	803,224	819,288	(457,602)	(37.2%)	15,441	2.0%	15,749	2.0%
Woodward Upgrades	1,524,540	1,108,390	1,130,558	1,153,169	1,176,232	(416,150)	(27.3%)	22,168	2.0%	22,611	2.0%
Customer Service	210,370	127,149	129,692	132,285	134,931	(83,221)	(39.6%)	2,543	2.0%	2,594	2.0%
Outreach & Education	660,440	606,033	618,154	630,517	643,127	(54,407)	(8.2%)	12,121	2.0%	12,363	2.0%
Service Co-ordination	2,159,830	1,902,769	1,940,825	1,979,641	2,019,234	(257,061)	(11.9%)	38,055	2.0%	38,816	2.0%
Engineering Systems & Data Collection	643,440	675,921	689,439	703,228	717,293	32,481	5.0%	13,518	2.0%	13,789	2.0%
Compliance & Regulations	435,610	488,498	498,268	508,233	518,398	52,888	12.1%	9,770	2.0%	9,965	2.0%
Laboratory Services	2,394,864	2,484,859	2,534,556	2,585,248	2,636,953	89,996	3.8%	49,697	2.0%	50,691	2.0%
Environmental Monitoring & Enforcement	1,818,020	1,778,256	1,813,821	1,850,098	1,887,099	(39,764)	(2.2%)	35,565	2.0%	36,276	2.0%
Water Distribution & Wastewater Collection	5,576,780	5,744,936	5,859,834	5,977,031	6,096,572	168,156	3.0%	114,899	2.0%	117,197	2.0%
Plant Operations & Maintenance	21,029,235	16,997,654	17,337,607	17,684,359	18,038,046	(4,031,581)	(19.2%)	339,953	2.0%	346,752	2.0%
Capital Delivery	1,022,813	877,256	894,801	912,697	930,951	(145,557)	(14.2%)	17,545	2.0%	17,896	2.0%
Sustainable Initiatives	823,555	787,103	802,845	818,902	835,280	(36,452)	(4.4%)	15,742	2.0%	16,057	2.0%
Infrastructure Planning & System Design	1,355,629	1,099,530	1,121,521	1,143,951	1,166,830	(256,098)	(18.9%)	21,991	2.0%	22,430	2.0%
Wastewater Abatement Program	1,150,000	1,150,040	1,173,041	1,196,502	1,220,432	40	0.0%	23,001	2.0%	23,461	2.0%
Alectra Utilities Service Contract	2,850,000	2,800,000	2,856,000	2,913,120	2,971,382	(50,000)	(1.8%)	56,000	2.0%	57,120	2.0%
Corporate & Departmental Support Services	3,559,590	3,861,500	3,938,730	4,017,505	4,097,855	301,910	8.5%	77,230	2.0%	78,775	2.0%
Utilities Arrears Program	250,000	250,040	255,041	260,142	265,344	40	0.0%	5,001	2.0%	5,101	2.0%
Sewer Lateral Management Program	500,000	414,738	423,033	431,493	440,123	(85,262)	(17.1%)	8,295	2.0%	8,461	2.0%
Hamilton Harbour Remedial Action Plan	395,000	382,550	390,201	398,005	405,965	(12,450)	(3.2%)	7,651	2.0%	7,804	2.0%
Protective Plumbing Program (3P)	1,250,000	1,250,000	1,275,000	1,300,500	1,326,510	-	0.0%	25,000	2.0%	25,500	2.0%
Financial Charges	177,000	86,019	87,739	89,494	91,284	(90,981)	(51.4%)	1,720	2.0%	1,755	2.0%
	51,016,350	45,645,274	46,558,180	47,489,343	48,439,130	(5,371,076)	(10.5%)	912,905	2.0%	931,164	2.0%
Capital and Reserve Recoveries	(4,217,812)	(4,169,387)	(4,252,775)	(4,337,830)	(4,424,587)	48,425	(1.1%)	(83,388)	2.0%	(85,055)	2.0%
Sub-Total	46,798,539	41,475,887	42,305,405	43,151,513	44,014,543	(5,322,651)	(11.4%)	829,518	2.0%	846,108	2.0%
Capital and Reserve Impacts on Operating											
Contributions to Capital											
Wastewater	42,837,000	52,673,000	55,057,000	54,249,000	54,174,000	9,836,000	23.0%	2,384,000	4.5%	(808,000)	(1.5%)
Stormwater	3,205,000	15,685,000	14,382,000	15,775,000	15,975,000	12,480,000	389.4%	(1,303,000)	(8.3%)	1,393,000	9.7%
Sub-Total Contributions to Capital	46,042,000	68,358,000	69,439,000	70,024,000	70,149,000	22,316,000	48.5%	1,081,000	1.6%	585,000	0.8%
Contributions for DC Exemptions											
Wastewater	4,590,000	4,080,000	4,080,000	4,080,000	4,080,000	(510,000)	(11.1%)	-	0.0%	-	0.0%
Stormwater	1,863,000	1,680,000	1,680,000	1,680,000	1,680,000	(183,000)	(9.8%)	-	0.0%	-	0.0%
Sub-Total Contributions for DC Exemptions	6,453,000	5,760,000	5,760,000	5,760,000	5,760,000	(693,000)	(10.7%)	-	0.0%	-	0.0%
Debt Charges											
Wastewater	10,120,380	11,514,374	18,224,240	24,836,447	29,106,256	1,393,994	13.8%	6,709,866	58.3%	6,612,207	36.3%
Stormwater	3,950,054	3,399,997	4,917,875	5,719,347	6,438,841	(550,057)	(13.9%)	1,517,878	44.6%	801,472	16.3%
DC Debt Charges Recoveries	(3,490,867)	(3,408,093)	(8,508,661)	(12,283,894)	(14,961,202)	82,774	(2.4%)	(5,100,568)	149.7%	(3,775,233)	44.4%
Sub-Total Debt Charges	10,579,567	11,506,278	14,633,454	18,271,900	20,583,895	926,710	8.8%	3,127,176	27.2%	3,638,446	24.9%
Sub-Total Capital Financing	63,074,567	85,624,278	89,832,454	94,055,900	96,492,895	22,549,710	35.8%	4,208,176	4.9%	4,223,446	4.7%
Reserve Transfers	5,110,363	(6,787,496)	(5,545,641)	(4,182,090)	(1,210,126)	(11,897,859)	(232.8%)	1,241,855	(18.3%)	1,363,551	(24.6%)
Sub-Total Capital and Reserve Impacts on Operating	68,184,930	78,836,782	84,286,813	89,873,810	95,282,769	10,651,852	15.6%	5,450,031	6.9%	5,586,997	6.6%
TOTAL EXPENDITURES	114,983,469	120,312,669	126,592,218	133,025,323	139,297,313	5,329,200	4.6%	6,279,549	5.2%	6,433,105	5.1%

CITY OF HAMILTON
2020 - 2023 WATER, WASTEWATER AND STORM OPERATING BUDGET
COMBINED WASTEWATER AND STORM

	2019	2020	2021	2022	2023	CHANGE		CHANGE		CHANGE	
	RESTATED BUDGET	REQUESTED BUDGET	PROJECTED BUDGET	PROJECTED BUDGET	PROJECTED BUDGET	2020 REQUESTED / 2019 RESTATED BUDGET	%	2021 PROJECTED / 2020 REQUESTED BUDGET	%	2022 PROJECTED / 2021 PROJECTED BUDGET	%
	\$	\$	\$	\$	\$	\$	%	\$	%	\$	%
REVENUES:											
Rate Revenue											
Residential	50,143,510	52,037,120	55,412,781	58,459,054	61,706,401	1,893,610	3.8%	3,375,661	6.5%	3,046,273	5.5%
Industrial/Commercial/Institutional/Multi-res	55,211,628	57,397,071	59,991,280	63,044,143	65,725,247	2,185,443	4.0%	2,594,209	4.5%	3,052,863	5.1%
Haldimand	-	-	-	-	-	-	0.0%	-	0.0%	-	0.0%
Halton	-	-	-	-	-	-	0.0%	-	0.0%	-	0.0%
Non-Metered	290,000	290,000	290,000	305,000	320,000	-	0.0%	-	0.0%	15,000	5.2%
Private Fire Lines	-	-	-	-	-	-	0.0%	-	0.0%	-	0.0%
Hauler / 3rd Party Sales	790,000	790,000	813,700	838,111	863,254	-	0.0%	23,700	3.0%	24,411	3.0%
Overstrength Agreements	2,249,480	2,892,902	2,979,689	3,069,080	3,161,152	643,422	28.6%	86,787	3.0%	89,391	3.0%
Sewer Surcharge Agreements	5,200,000	5,806,726	5,980,928	6,160,356	6,345,166	606,726	11.7%	174,202	3.0%	179,428	3.0%
Sub-Total Utility Rates	113,884,619	119,213,819	125,468,378	131,875,743	138,121,221	5,329,200	4.7%	6,254,559	5.2%	6,407,365	5.1%
Non-Rate Revenue											
Local Improvement Recoveries	265,850	265,850	265,850	265,850	265,850	-	0.0%	-	0.0%	-	0.0%
Permits/Leases/Agreements	515,000	515,000	530,450	546,364	562,754	-	0.0%	15,450	3.0%	15,914	3.0%
General Fees and Recoveries	318,000	318,000	327,540	337,366	347,487	-	0.0%	9,540	3.0%	9,826	3.0%
Sub-Total Non-Rate Revenue	1,098,850	1,098,850	1,123,840	1,149,580	1,176,092	-	0.0%	24,990	2.3%	25,740	2.3%
TOTAL REVENUES	114,983,469	120,312,669	126,592,218	133,025,323	139,297,313	5,329,200	4.6%	6,279,549	5.2%	6,433,105	5.1%
NET EXPENDITURES	-	-	-	-	-	0	-	(0)	-	0	-

CITY OF HAMILTON
2020-2029 WATER, WASTEWATER & STORM OPERATING BUDGET
COMBINED WASTEWATER AND STORM
(\$ 000'S)

	2019 Restated	2020 Requested	2021 Forecast	2022 Forecast	2023 Forecast	2024 Forecast	2025 Forecast	2026 Forecast	2027 Forecast	2028 Forecast	2029 Forecast
OPERATING EXPENDITURES											
OPERATING COSTS	42,299	37,476	38,075	37,423	38,168	38,928	39,703	40,493	41,298	42,118	43,054
BIO-SOLIDS	4,500	4,000	4,230	4,129	4,215	4,302	4,392	4,484	4,578	4,676	4,676
TERTIARY TREATMENT	-	-	-	1,600	1,632	1,665	1,698	1,732	1,767	1,802	1,838
TOTAL OPERATING COSTS	46,799	41,476	42,305	43,152	44,015	44,895	45,793	46,709	47,643	48,596	49,568
CAPITAL & RESERVE IMPACTS ON OPERATING											
Contributions to Capital											
Wastewater	42,837	52,673	55,057	54,249	54,174	52,379	58,704	63,479	67,164	68,470	65,440
Stormwater	3,205	15,685	14,382	15,775	15,975	17,595	9,875	16,385	37,430	34,735	35,215
Sub-total Contributions to Capital	46,042	68,358	69,439	70,024	70,149	69,974	68,579	79,864	104,594	103,205	100,655
Contributions for DC Exemptions											
Wastewater	4,590	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080
Stormwater	1,863	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680
Sub-total Contributions to Capital	6,453	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760
Debt Charges											
Wastewater	10,120	11,514	18,224	24,836	29,106	30,401	30,518	34,295	41,345	47,498	51,136
Stormwater	3,950	3,400	4,918	5,719	6,439	6,775	6,728	6,681	6,690	6,705	6,778
DC Debt Charges Recoveries	(3,491)	(3,408)	(8,509)	(12,284)	(14,961)	(16,179)	(16,467)	(20,413)	(27,959)	(35,451)	(39,217)
Sub-total Debt Charges	10,580	11,506	14,633	18,272	20,584	20,998	20,779	20,562	20,076	18,752	18,697
Reserve Transfers											
	5,110	(6,787)	(5,546)	(4,182)	(1,314)	3,797	9,457	3,039	(13,631)	(4,216)	7,100
Sub-Total Capital & Reserve Impacts on Operating	68,185	78,837	84,287	89,874	95,179	100,529	104,575	109,225	116,799	123,501	132,211
TOTAL EXPENDITURES	114,983	120,313	126,592	133,025	139,193	145,423	150,368	155,934	164,442	172,097	181,779
REVENUES											
Residential	50,144	52,037	55,413	58,459	61,706	65,012	67,881	71,170	76,052	80,274	84,933
Industrial/Commercial/Institutional/Multi-res	55,212	57,397	59,991	63,044	65,725	68,406	70,233	72,257	75,626	78,796	83,551
Non-Metered	290	290	290	305	320	335	350	365	380	395	410
Hauler / 3rd Party Sales	790	790	814	838	855	872	889	907	925	944	963
Overstrength Agreements	2,249	2,893	2,980	3,069	3,130	3,193	3,257	3,322	3,389	3,456	3,525
Sewer Surcharge Agreements	5,200	5,807	5,981	6,160	6,284	6,409	6,537	6,668	6,802	6,938	7,076
Non-Rate Revenue	1,099	1,099	1,124	1,150	1,173	1,196	1,220	1,244	1,269	1,295	1,321
TOTAL REVENUES	114,983	120,313	126,592	133,025	139,193	145,423	150,368	155,934	164,442	172,097	181,779
NET EXPENDITURES	-	-	-	-	-	-	-	-	-	-	-
Rate Increase	4.6%	3.8%	5.2%	4.3%	4.3%	4.2%	3.2%	3.6%	5.6%	4.4%	4.8%
RESIDENTIAL BILL (200m³ p.a.)	\$ 373.90	\$ 387.95	\$ 408.10	\$ 425.75	\$ 444.25	\$ 462.75	\$ 477.65	\$ 495.00	\$ 522.80	\$ 545.75	\$ 571.80

CITY OF HAMILTON
2020 HAMILTON WATER OPERATING BUDGET
WASTEWATER

	2019	2019	2020	CHANGE		CHANGE	
	RESTATED BUDGET	PROJECTED ACTUAL	REQUESTED BUDGET	2019 PROJECTED / 2019 RESTATED BUDGET	ACTUAL %	2020 REQUESTED / 2019 RESTATED BUDGET	%
	\$	\$	\$	\$	%	\$	%
OPERATING EXPENDITURES:							
<u>Environmental Services</u>							
Divisional Administration & Support	1,006,104	1,006,104	631,688	(0)	(0.0%)	(374,416)	(37.2%)
Woodward Upgrades	1,524,540	1,524,540	1,108,390	-	0.0%	(416,150)	(27.3%)
Customer Service	168,630	168,630	101,921	-	0.0%	(66,709)	(39.6%)
Outreach & Education	528,350	508,794	484,825	19,556	3.7%	(43,525)	(8.2%)
Service Co-ordination	1,301,020	1,158,421	1,146,174	142,599	11.0%	(154,846)	(11.9%)
Engineering Systems & Data Collection	514,750	514,750	540,735	-	0.0%	25,985	5.0%
Compliance & Regulations	414,730	414,730	465,083	-	0.0%	50,353	12.1%
Laboratory Services	2,258,943	2,258,943	2,343,831	-	0.0%	84,888	3.8%
Environmental Monitoring & Enforcement	1,752,210	1,752,210	1,713,885	-	0.0%	(38,325)	(2.2%)
Water Distribution & Wastewater Collection	5,042,270	5,042,270	5,194,309	-	0.0%	152,039	3.0%
Plant Operations & Maintenance	20,209,645	19,232,942	16,335,190	976,703	4.8%	(3,874,455)	(19.2%)
Capital Delivery	836,847	836,847	717,755	-	0.0%	(119,092)	(14.2%)
Sustainable Initiatives	673,816	673,816	643,991	-	0.0%	(29,824)	(4.4%)
Infrastructure Planning & System Design	1,109,142	1,109,142	899,608	-	0.0%	(209,533)	(18.9%)
Wastewater Abatement Program	1,150,000	1,150,000	1,150,040	-	0.0%	40	0.0%
Alectra Utilities Service Contract	2,850,000	2,700,000	2,800,000	150,000	5.3%	(50,000)	(1.8%)
Corporate & Departmental Support Services	3,129,340	3,129,340	3,394,758	-	0.0%	265,418	8.5%
Utilities Arrears Program	250,000	250,000	250,040	-	0.0%	40	0.0%
Sewer Lateral Management Program	500,000	500,000	414,738	-	0.0%	(85,262)	(17.1%)
Financial Charges	177,000	177,000	86,019	-	0.0%	(90,981)	(51.4%)
	45,397,336	44,108,478	40,422,979	1,288,858	2.8%	(4,974,357)	(11.0%)
Capital and Reserve Recoveries	(3,397,058)	(3,397,058)	(3,358,056)	0	(0.0%)	39,002	(1.1%)
Sub-Total Environmental Services	42,000,278	40,711,420	37,064,923	1,288,858	3.1%	(4,935,355)	(11.8%)
<u>Capital and Reserve Impacts on Operating</u>							
<u>Contributions to Capital</u>							
Wastewater	42,837,000	42,837,000	52,673,000	-	-	9,836,000	23.0%
Sub-Total Contributions to Capital	42,837,000	42,837,000	52,673,000	-	-	9,836,000	23.0%
<u>Contributions for DC Exemptions</u>							
Wastewater	4,590,000	4,590,000	4,080,000	-	-	(510,000)	(11.1%)
Sub-Total Contributions for DC Exemptions	4,590,000	4,590,000	4,080,000	-	-	(510,000)	(11.1%)

CITY OF HAMILTON
2019 HAMILTON WATER OPERATING BUDGET
WASTEWATER

	2019	2019	2020	CHANGE		CHANGE	
	RESTATED BUDGET	PROJECTED ACTUAL	REQUESTED BUDGET	2019 PROJECTED ACTUAL / 2019 RESTATED BUDGET	2020 REQUESTED / 2019 RESTATED BUDGET		
	\$	\$	\$	\$	%	\$	%
<u>Debt Charges</u>							
Wastewater	10,120,380	7,012,631	11,514,374	3,107,749	30.7%	1,393,994	13.8%
DC Debt Charges Recoveries	(1,669,722)	(113,893)	(2,260,170)	(1,555,829)	93.2%	(590,448)	35.4%
Sub-Total Debt Charges	8,450,658	6,898,738	9,254,204	1,551,920	18.4%	803,546	9.5%
Sub-Total Capital Financing	55,877,658	54,325,738	66,007,204	1,551,920	2.8%	10,129,546	18.1%
Reserve Transfers	16,937,533	19,199,811	17,072,542	(2,262,278)	(13.4%)	135,009	0.8%
Sub-Total Cap\Reserve Impacts on Operating	72,815,191	73,525,549	83,079,746	(710,358)	(1.0%)	10,264,555	14.1%
TOTAL EXPENDITURES	114,815,469	114,236,969	120,144,669	578,500	0.5%	5,329,200	4.6%
<u>REVENUES:</u>							
<u>Rate Revenue</u>							
Residential	50,143,510	50,643,510	52,037,120	500,000	1.0%	1,893,610	3.8%
ICI	55,211,628	55,711,628	57,397,071	500,000	0.9%	2,185,443	4.0%
Non-Metered	290,000	290,000	290,000	-	0.0%	-	0.0%
Hauler / 3rd Party Sales	790,000	790,000	790,000	-	0.0%	-	0.0%
Overstrength Agreements	2,249,480	2,148,500	2,892,902	(100,980)	(4.5%)	643,422	28.6%
Sewer Surcharge Agreements	5,200,000	3,914,380	5,806,726	(1,285,620)	(24.7%)	606,726	11.7%
Sub-Total Utility Rates	113,884,619	113,498,019	119,213,819	(386,600)	(.3%)	5,329,200	4.7%
<u>Non-Rate Revenue</u>							
Local Improvement Recoveries	265,850	265,850	265,850	-	-	-	-
Permits / Leases / Agreements	515,000	323,100	515,000	(191,900)	(37.3%)	-	0.0%
Investment Income	-	-	-	-	0.0%	-	0.0%
General Fees and Recoveries	150,000	150,000	150,000	-	0.0%	-	0.0%
Sub-Total Non-Rate Revenue	930,850	738,950	930,850	(191,900)	(20.6%)	-	0.0%
TOTAL REVENUES	114,815,469	114,236,969	120,144,669	(578,500)	(.5%)	5,329,200	4.6%
NET EXPENDITURES	-	-	-	-	-	-	-

**CITY OF HAMILTON
2020 - 2023 WATER, WASTEWATER AND STORM OPERATING BUDGET
WASTEWATER**

	2019 RESTATED BUDGET	2020 REQUESTED BUDGET	2021 PROJECTED BUDGET	2022 PROJECTED BUDGET	2023 PROJECTED BUDGET	CHANGE 2020 REQUESTED / 2019 RESTATED BUDGET	CHANGE 2021 PROJECTED / 2020 REQUESTED BUDGET	CHANGE 2022 PROJECTED / 2021 PROJECTED BUDGET			
	\$	\$	\$	\$	\$	\$	%	\$	%	\$	%
OPERATING EXPENDITURES:											
Divisional Administration & Support	1,006,104	631,688	644,322	657,208	670,352	(374,416)	(37.2%)	12,634	2.0%	12,886	2.0%
Woodward Upgrades	1,524,540	1,108,390	1,130,558	1,153,169	1,176,232	(416,150)	(27.3%)	22,168	2.0%	22,611	2.0%
Customer Service	168,630	101,921	103,959	106,038	108,159	(66,709)	(39.6%)	2,038	2.0%	2,079	2.0%
Outreach & Education	528,350	484,825	494,521	504,412	514,500	(43,525)	(8.2%)	9,696	2.0%	9,890	2.0%
Service Co-ordination	1,301,020	1,146,174	1,169,097	1,192,479	1,216,329	(154,846)	(11.9%)	22,923	2.0%	23,382	2.0%
Engineering Systems & Data Collection	514,750	540,735	551,549	562,580	573,832	25,985	5.0%	10,815	2.0%	11,031	2.0%
Compliance & Regulations	414,730	465,083	474,384	483,872	493,549	50,353	12.1%	9,302	2.0%	9,488	2.0%
Laboratory Services	2,258,943	2,343,831	2,390,708	2,438,522	2,487,292	84,888	3.8%	46,877	2.0%	47,814	2.0%
Environmental Monitoring & Enforcement	1,752,210	1,713,885	1,748,163	1,783,126	1,818,789	(38,325)	(2.2%)	34,278	2.0%	34,963	2.0%
Water Distribution & Wastewater Collection	5,042,270	5,194,309	5,298,195	5,404,159	5,512,242	152,039	3.0%	103,886	2.0%	105,964	2.0%
Plant Operations & Maintenance	20,209,645	16,335,190	16,661,894	16,995,132	17,335,034	(3,874,455)	(19.2%)	326,704	2.0%	333,238	2.0%
Capital Delivery	836,847	717,755	732,110	746,752	761,687	(119,092)	(14.2%)	14,355	2.0%	14,642	2.0%
Sustainable Initiatives	673,816	643,991	656,871	670,009	683,409	(29,824)	(4.4%)	12,880	2.0%	13,137	2.0%
Infrastructure Planning & System Design	1,109,142	899,608	917,601	935,953	954,672	(209,533)	(18.9%)	17,992	2.0%	18,352	2.0%
Wastewater Abatement Program	1,150,000	1,150,040	1,173,041	1,196,502	1,220,432	40	0.0%	23,001	2.0%	23,461	2.0%
Alectra Utilities Service Contract	2,850,000	2,800,000	2,856,000	2,913,120	2,971,382	(50,000)	(1.8%)	56,000	2.0%	57,120	2.0%
Corporate & Departmental Support Services	3,129,340	3,394,758	3,462,653	3,531,906	3,602,545	265,418	0	67,895	2.0%	69,253	2.0%
Utilities Arrears Program	250,000	250,040	255,041	260,142	265,344	40	0	5,001	2.0%	5,101	2.0%
Sewer Lateral Management Program	500,000	414,738	423,033	431,493	440,123	(85,262)	(17.1%)	8,295	2.0%	8,461	2.0%
Financial Charges	177,000	86,019	87,739	89,494	91,284	(90,981)	(51.4%)	1,720	2.0%	1,755	2.0%
	45,397,336	40,422,979	41,231,439	42,056,068	42,897,189	(4,974,357)	(11.0%)	808,460	2.0%	824,629	2.0%
Capital and Reserve Recoveries	(3,397,058)	(3,358,056)	(3,425,217)	(3,493,721)	(3,563,596)	39,002	(1.1%)	(67,161)	2.0%	(68,504)	2.0%
Sub-Total	42,000,278	37,064,923	37,806,222	38,562,346	39,333,593	(4,935,355)	(11.8%)	741,298	2.0%	756,124	2.0%
Capital and Reserve Impacts on Operating											
Contributions to Capital											
Water Quality Initiatives	-	-	-	-	-	-	-	-	-	-	-
Wastewater	42,837,000	52,673,000	55,057,000	54,249,000	54,174,000	9,836,000	23.0%	2,384,000	4.5%	(808,000)	(1.5%)
Sub-Total Contributions to Capital	42,837,000	52,673,000	55,057,000	54,249,000	54,174,000	9,836,000	23.0%	2,384,000	4.5%	(808,000)	(1.5%)
Contributions for DC Exemptions											
Wastewater	4,590,000	4,080,000	4,080,000	4,080,000	4,080,000	(510,000)	(11.1%)	-	0.0%	-	0.0%
Sub-Total Contributions for DC Exemptions	4,590,000	4,080,000	4,080,000	4,080,000	4,080,000	(510,000)	(11.1%)	-	0.0%	-	0.0%
Debt Charges											
Wastewater	10,120,380	11,514,374	18,224,240	24,836,447	29,106,256	1,393,994	13.8%	6,709,866	58.3%	6,612,207	36.3%
DC Debt Charges Recoveries	(1,669,722)	(2,260,170)	(6,113,270)	(9,356,174)	(11,581,584)	(590,448)	35.4%	(3,853,100)	170.5%	(3,242,903)	53.0%
Sub-Total Debt Charges	8,450,658	9,254,204	12,110,970	15,480,274	17,524,672	803,546	9.5%	2,856,766	30.9%	3,369,304	27.8%
Sub-Total Capital Financing	55,877,658	66,007,204	71,247,970	73,809,274	75,778,672	10,129,546	18.1%	5,240,766	7.9%	2,561,304	3.6%
Reserve Transfers	16,937,533	17,072,542	17,364,987	20,475,472	24,001,469	135,009	0.8%	292,445	1.7%	3,110,485	17.9%
Sub-Total Capital and Reserve Impacts on Operating	72,815,191	83,079,746	88,612,956	94,284,746	99,780,141	10,264,555	14.1%	5,533,210	6.7%	5,671,789	6.4%
TOTAL EXPENDITURES	114,815,469	120,144,669	126,419,178	132,847,092	139,113,734	5,329,200	4.6%	6,274,509	5.2%	6,427,914	5.1%

**CITY OF HAMILTON
2019 - 2022 WATER, WASTEWATER AND STORM OPERATING BUDGET
WASTEWATER**

	2019 RESTATED BUDGET	2020 REQUESTED BUDGET	2021 PROJECTED BUDGET	2022 PROJECTED BUDGET	2023 PROJECTED BUDGET	CHANGE 2020 REQUESTED / 2019 RESTATED BUDGET		CHANGE 2021 PROJECTED / 2020 REQUESTED BUDGET		CHANGE 2022 PROJECTED / 2021 PROJECTED BUDGET	
	\$	\$	\$	\$	\$	\$	%	\$	%	\$	%
REVENUES:											
Rate Revenue											
Residential	50,143,510	52,037,120	55,412,781	58,459,054	61,706,401	1,893,610	3.8%	3,375,661	6.5%	3,046,273	5.5%
ICI	55,211,628	57,397,071	59,991,280	63,044,143	65,725,247	2,185,443	4.0%	2,594,209	4.5%	3,052,863	5.1%
Non-Metered	290,000	290,000	290,000	305,000	320,000	-	0.0%	-	0.0%	15,000	5.2%
Hauler / 3rd Party Sales	790,000	790,000	813,700	838,111	863,254	-	0.0%	23,700	3.0%	24,411	3.0%
Overstrength Agreements	2,249,480	2,892,902	2,979,689	3,069,080	3,161,152	643,422	28.6%	86,787	3.0%	89,391	3.0%
Sewer Surcharge Agreements	5,200,000	5,806,726	5,980,928	6,160,356	6,345,166	606,726	11.7%	174,202	3.0%	179,428	3.0%
Sub-Total Utility Rates	113,884,619	119,213,819	125,468,378	131,875,743	138,121,221	5,329,200	4.7%	6,254,559	5.2%	6,407,365	5.1%
Non-Rate Revenue											
Local Improvement Recoveries	265,850	265,850	265,850	265,850	265,850	-	-	-	-	-	-
Permits/Leases/Agreements	515,000	515,000	530,450	546,364	562,754	-	0.0%	15,450	3.0%	15,914	3.0%
General Fees and Recoveries	150,000	150,000	154,500	159,135	163,909	-	0.0%	4,500	3.0%	4,635	3.0%
Sub-Total Non-Rate Revenue	930,850	930,850	950,800	971,349	992,513	-	0.0%	19,950	2.1%	20,549	2.2%
TOTAL REVENUES	114,815,469	120,144,669	126,419,178	132,847,092	139,113,734	5,329,200	4.6%	6,274,509	5.2%	6,427,914	5.1%
NET EXPENDITURES	-	-	-	-	-	-	-	-	-	0	-

CITY OF HAMILTON
2020-2029 WATER, WASTEWATER & STORM OPERATING BUDGET
WASTEWATER
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	2019 Restated	2020 Requested	2021 Forecast	2022 Forecast	2023 Forecast	2024 Forecast	2025 Forecast	2026 Forecast	2027 Forecast	2028 Forecast	2029 Forecast
OPERATING EXPENDITURES											
OPERATING COSTS	37,500	33,065	33,576	32,833	33,487	34,154	34,833	35,525	36,231	36,950	37,782
BIO-SOLIDS	4,500	4,000	4,230	4,129	4,215	4,302	4,392	4,484	4,578	4,676	4,676
TERTIARY TREATMENT	-	-	-	1,600	1,632	1,665	1,698	1,732	1,767	1,802	1,838
TOTAL OPERATING COSTS	42,000	37,065	37,806	38,562	39,334	40,120	40,923	41,741	42,576	43,427	44,296
CAPITAL & RESERVE IMPACTS ON OPERATING											
Contributions to Capital											
Wastewater	42,837	52,673	55,057	54,249	54,174	52,379	58,704	63,479	67,164	68,470	65,440
Sub-total Contributions to Capital	42,837	52,673	55,057	54,249	54,174	52,379	58,704	63,479	67,164	68,470	65,440
Contributions for DC Exemptions											
Wastewater	4,590	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080
Sub-total Contributions to Capital	4,590	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080
Debt Charges											
Wastewater	10,120	11,514	18,224	24,836	29,106	30,401	30,518	34,295	41,345	47,498	51,136
DC Debt Charges Recoveries	(1,670)	(2,260)	(6,113)	(9,356)	(11,582)	(12,576)	(12,867)	(16,818)	(24,368)	(31,858)	(35,622)
Sub-total Debt Charges	8,451	9,254	12,111	15,480	17,525	17,826	17,650	17,477	16,977	15,640	15,514
Reserve Transfers	16,938	17,073	17,365	20,475	23,899	30,833	28,822	28,964	33,448	40,279	52,244
Sub-Total Capital & Reserve Impacts on Operating	72,815	83,080	88,613	94,285	99,678	105,118	109,256	114,000	121,669	128,469	137,278
TOTAL EXPENDITURES	114,815	120,145	126,419	132,847	139,011	145,238	150,179	155,741	164,245	171,896	181,574
REVENUES											
Residential	50,144	52,037	55,413	58,459	61,706	65,012	67,881	71,170	76,052	80,274	84,933
ICI	55,212	57,397	59,991	63,044	65,725	68,406	70,233	72,257	75,626	78,796	83,551
Non-Metered	290	290	290	305	320	335	350	365	380	395	410
Hauler / 3rd Party Sales	790	790	814	838	855	872	889	907	925	944	963
Overstrength Agreements	2,249	2,893	2,980	3,069	3,130	3,193	3,257	3,322	3,389	3,456	3,525
Sewer Surcharge Agreements	5,200	5,807	5,981	6,160	6,284	6,409	6,537	6,668	6,802	6,938	7,076
Non-Rate Revenue	931	931	951	971	991	1,011	1,031	1,051	1,072	1,094	1,116
TOTAL REVENUES	114,815	120,145	126,419	132,847	139,011	145,238	150,179	155,741	164,245	171,896	181,574
NET EXPENDITURES	-	-	-	-	-	-	-	-	-	-	-

CITY OF HAMILTON
2020 HAMILTON WATER OPERATING BUDGET
STORM

	2019	2019	2020	CHANGE		CHANGE	
	RESTATED BUDGET	PROJECTED ACTUAL	REQUESTED BUDGET	2019 PROJECTED / 2019 RESTATED BUDGET	ACTUAL	2020 REQUESTED / 2019 RESTATED BUDGET	
	\$	\$	\$	\$	%	\$	%
<u>OPERATING EXPENDITURES:</u>							
Divisional Administration & Support	223,532	223,532	140,346	(0)	(0.0%)	(83,186)	(37.2%)
Customer Service	41,740	41,740	25,228	-	0.0%	(16,512)	(39.6%)
Outreach & Education	132,090	127,201	121,209	4,889	3.7%	(10,881)	(8.2%)
Service Co-ordination	858,810	764,680	756,595	94,130	11.0%	(102,215)	(11.9%)
Engineering Systems & Data Collection	128,690	128,690	135,186	-	0.0%	6,496	5.0%
Compliance & Regulations	20,880	20,880	23,415	-	0.0%	2,535	12.1%
Laboratory Services	135,921	135,921	141,028	-	0.0%	5,108	3.8%
Environmental Monitoring & Enforcement	65,810	65,810	64,371	-	0.0%	(1,439)	(2.2%)
Water Distribution & Wastewater Collection	534,510	534,510	550,627	-	0.0%	16,117	3.0%
Plant Operations & Maintenance	819,590	779,980	662,464	39,610	4.8%	(157,126)	(19.2%)
Capital Delivery	185,966	185,966	159,501	-	0.0%	(26,465)	(14.2%)
Sustainable Initiatives	149,739	149,739	143,111	-	0.0%	(6,628)	(4.4%)
Infrastructure Planning & System Design	246,487	246,487	199,922	-	0.0%	(46,565)	(18.9%)
Corporate & Departmental Support Services	430,250	430,250	466,742	-	0.0%	36,492	8.5%
Hamilton Harbour Remedial Action Plan	395,000	395,000	382,550	-	0.0%	(12,450)	(3.2%)
Protective Plumbing Program (3P)	1,250,000	885,034	1,250,000	364,966	29.2%	-	0.0%
	5,619,014	5,115,419	5,222,295	503,595	9.0%	(396,720)	(7.1%)
Capital and Reserve Recoveries	(820,754)	(820,754)	(811,331)	0	(0.0%)	820,754	(100.0%)
Sub-Total	4,798,261	4,294,665	4,410,964	503,595	10.5%	424,034	8.8%
<u>Capital and Reserve Impacts on Operating</u>							
<u>Contributions to Capital</u>							
Stormwater	3,205,000	3,205,000	15,685,000	-	0.0%	12,480,000	389.4%
Sub-Total Contributions to Capital	3,205,000	3,205,000	15,685,000	-	0.0%	12,480,000	389.4%
<u>Contributions for DC Exemptions</u>							
Stormwater	1,863,000	1,863,000	1,680,000	-	0.0%	(183,000)	(9.8%)
Sub-Total Contributions for DC Exemptions	1,863,000	1,863,000	1,680,000	-	0.0%	(183,000)	(9.8%)
<u>Debt Charges</u>							
Stormwater	3,950,054	651,022	3,399,997	3,299,032	83.5%	(550,057)	(13.9%)
DC Debt Charges Recoveries	(1,821,145)	(24,363)	(1,147,923)	(1,796,782)	98.7%	673,222	(37.0%)
Sub-Total Debt Charges	2,128,909	626,659	2,252,074	1,502,250	70.6%	123,165	5.8%
Sub-Total Capital Financing	7,196,909	5,694,659	19,617,074	1,502,250	20.9%	12,420,165	172.6%
Reserve Transfers	(11,827,169)	(9,821,324)	(23,860,038)	(2,005,845)	17.0%	(12,032,868)	101.7%
Sub-Total Cap\Reserve Impacts on Operating	(4,630,261)	(4,126,665)	(4,242,964)	(503,595)	10.9%	387,296	(8.4%)
TOTAL EXPENDITURES	168,000	168,000	168,000	0	0.00	0	0.00

CITY OF HAMILTON
2020 HAMILTON WATER OPERATING BUDGET
STORM

	2019 RESTATED BUDGET	2019 PROJECTED ACTUAL	2020 REQUESTED BUDGET	CHANGE		CHANGE	
	\$	\$	\$	2019 PROJECTED ACTUAL / 2019 RESTATED BUDGET	%	2020 REQUESTED / 2019 RESTATED BUDGET	%
REVENUES:							
Non-Rate Revenue							
General Fees and Recoveries	168,000	168,000	168,000	-	0.0%	-	0.0%
Sub-Total Non-Rate Revenue	168,000	168,000	168,000	-	0.0%	-	0.0%
TOTAL REVENUES	168,000	168,000	168,000	-	0.0%	-	0.0%
NET EXPENDITURES	-	(0)	0	0	-	0	-

CITY OF HAMILTON
2020 - 2023 WATER, WASTEWATER AND STORM OPERATING BUDGET
STORM

	2019	2020	2021	2022	2023	CHANGE		CHANGE		CHANGE	
	RESTATED BUDGET	REQUESTED BUDGET	PROJECTED BUDGET	PROJECTED BUDGET	PROJECTED BUDGET	2020 REQUESTED / 2019 RESTATED BUDGET	%	2021 PROJECTED / 2020 REQUESTED BUDGET	%	2022 PROJECTED / 2021 PROJECTED BUDGET	%
	\$	\$	\$	\$	\$	\$	%	\$	%	\$	%
OPERATING EXPENDITURES:											
Divisional Administration & Support	223,532	140,346	143,153	146,016	148,936	(83,186)	(37.2%)	2,807	2.0%	2,863	2.0%
Woodward Upgrades	-	-	-	-	-	-	0.0%	-	0.0%	-	0.0%
Customer Service	41,740	25,228	25,732	26,247	26,772	(16,512)	(39.6%)	505	2.0%	515	2.0%
Outreach & Education	132,090	121,209	123,633	126,105	128,627	(10,881)	(8.2%)	2,424	2.0%	2,473	2.0%
Service Co-ordination	858,810	756,595	771,727	787,162	802,905	(102,215)	(11.9%)	15,132	2.0%	15,435	2.0%
Engineering Systems & Data Collection	128,690	135,186	137,890	140,648	143,461	6,496	5.0%	2,704	2.0%	2,758	2.0%
Compliance & Regulations	20,880	23,415	23,883	24,361	24,848	2,535	12.1%	468	2.0%	478	2.0%
Laboratory Services	135,921	141,028	143,849	146,726	149,660	5,108	3.8%	2,821	2.0%	2,877	2.0%
Environmental Monitoring & Enforcement	65,810	64,371	65,658	66,971	68,311	(1,439)	(2.2%)	1,287	2.0%	1,313	2.0%
Water Distribution & Wastewater Collection	534,510	550,627	561,640	572,872	584,330	16,117	3.0%	11,013	2.0%	11,233	2.0%
Plant Operations & Maintenance	819,590	662,464	675,713	689,227	703,012	(157,126)	(19.2%)	13,249	2.0%	13,514	2.0%
Infrastructure Planning & System Design	246,487	199,922	203,920	207,999	212,159	(46,565)	(18.9%)	3,998	2.0%	4,078	2.0%
Corporate & Departmental Support Services	430,250	466,742	476,077	485,598	495,310	36,492	8.5%	9,335	2.0%	9,522	2.0%
Utilities Arrears Program	-	-	-	-	-	-	0.0%	-	0.0%	-	0.0%
Sewer Lateral Management Program	-	-	-	-	-	-	0.0%	-	0.0%	-	0.0%
Hamilton Harbour Remedial Action Plan	395,000	382,550	390,201	398,005	405,965	(12,450)	(3.2%)	7,651	2.0%	7,804	2.0%
Protective Plumbing Program (3P)	1,250,000	1,250,000	1,275,000	1,300,500	1,326,510	-	0.0%	25,000	2.0%	25,500	2.0%
	5,619,014	5,222,295	5,326,741	5,433,276	5,541,941	(396,720)	(7.1%)	104,446	2.0%	106,535	2.0%
Capital and Reserve Recoveries	(820,754)	(811,331)	(827,557)	(844,109)	(860,991)	9,423	(1.1%)	(16,227)	2.0%	(16,551)	2.0%
Sub-Total	4,798,261	4,410,964	4,499,183	4,589,167	4,680,950	(387,296)	(8.1%)	88,219	2.0%	89,984	2.0%
Capital and Reserve Impacts on Operating											
Contributions to Capital											
Stormwater	3,205,000	15,685,000	14,382,000	15,775,000	15,975,000	12,480,000	389.4%	(1,303,000)	(8.3%)	1,393,000	9.7%
Sub-Total Contributions to Capital	3,205,000	15,685,000	14,382,000	15,775,000	15,975,000	12,480,000	389.4%	(1,303,000)	(8.3%)	1,393,000	9.7%
Contributions for DC Exemptions											
Stormwater	1,863,000	1,680,000	1,680,000	1,680,000	1,680,000	(183,000)	(9.8%)	-	0.0%	-	0.0%
Sub-Total Contributions for DC Exemptions	1,863,000	1,680,000	1,680,000	1,680,000	1,680,000	(183,000)	(9.8%)	-	0.0%	-	0.0%
Debt Charges											
Stormwater	3,950,054	3,399,997	4,917,875	5,719,347	6,438,841	(550,057)	(13.9%)	1,517,878	44.6%	801,472	16.3%
DC Debt Charges Recoveries	(1,821,145)	(1,147,923)	(2,395,390)	(2,927,720)	(3,379,618)	673,222	(37.0%)	(1,247,467)	108.7%	(532,330)	22.2%
Sub-Total Debt Charges	2,128,909	2,252,074	2,522,484	2,791,626	3,059,223	123,165	5.8%	270,411	12.0%	269,142	10.7%
Sub-Total Capital Financing	7,196,909	19,617,074	18,584,484	20,246,626	20,714,223	12,420,165	172.6%	(1,032,589)	(5.3%)	1,662,142	8.9%
Reserve Transfers	(11,827,169)	(23,860,038)	(22,910,628)	(24,657,562)	(25,211,595)	(12,032,868)	101.7%	949,410	(4.0%)	(1,746,934)	7.6%
Sub-Total Capital and Reserve Impacts on Operating	(4,630,261)	(4,242,964)	(4,326,143)	(4,410,936)	(4,497,372)	387,296	(8.4%)	(83,179)	2.0%	(84,792)	2.0%
TOTAL EXPENDITURES	168,000	168,000	173,040	178,231	183,578	0	0.00	5,040	3.0%	5,191	3.0%

**CITY OF HAMILTON
2020 - 2023 WATER, WASTEWATER AND STORM OPERATING BUDGET
STORM**

	2019 RESTATED BUDGET	2020 REQUESTED BUDGET	2021 PROJECTED BUDGET	2022 PROJECTED BUDGET	2023 PROJECTED BUDGET	CHANGE 2020 REQUESTED / 2019 RESTATED BUDGET	CHANGE 2021 PROJECTED / 2020 REQUESTED BUDGET	CHANGE 2022 PROJECTED / 2021 PROJECTED BUDGET			
	\$	\$	\$	\$	\$	%	\$	%	\$	%	
REVENUES:											
Non-Rate Revenue											
General Fees and Recoveries	168,000	168,000	173,040	178,231	183,578	-	0.0%	5,040	3.0%	5,191	3.0%
Sub-Total Non-Rate Revenue	168,000	168,000	173,040	178,231	183,578	-	0.0%	5,040	3.0%	5,191	3.0%
TOTAL REVENUES	168,000	168,000	173,040	178,231	183,578	-	0.0%	5,040	3.0%	5,191	3.0%
NET EXPENDITURES	-	0	(0)	(0)	0	0	-	(0)	-	(0)	-

CITY OF HAMILTON
2020-2029 WATER, WASTEWATER & STORM OPERATING BUDGET
STORM
(\$ 000'S)

	2019 Restated	2020 Requested	2021 Forecast	2022 Forecast	2023 Forecast	2024 Forecast	2025 Forecast	2026 Forecast	2027 Forecast	2028 Forecast	2029 Forecast
OPERATING EXPENDITURES											
OPERATING COSTS	4,798	4,411	4,499	4,589	4,681	4,775	4,870	4,967	5,067	5,168	5,272
TOTAL OPERATING COSTS	4,798	4,411	4,499	4,589	4,681	4,775	4,870	4,967	5,067	5,168	5,272
CAPITAL & RESERVE IMPACTS ON OPERATING											
Contributions to Capital											
Stormwater	3,205	15,685	14,382	15,775	15,975	17,595	9,875	16,385	37,430	34,735	35,215
Sub-total Contributions to Capital	3,205	15,685	14,382	15,775	15,975	17,595	9,875	16,385	37,430	34,735	35,215
Contributions for DC Exemptions											
Stormwater	1,863	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680
Sub-total Contributions to Capital	1,863	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680
Debt Charges											
Stormwater	3,950	3,400	4,918	5,719	6,439	6,775	6,728	6,681	6,690	6,705	6,778
DC Debt Charges Recoveries	(1,821)	(1,148)	(2,395)	(2,928)	(3,380)	(3,603)	(3,599)	(3,595)	(3,590)	(3,593)	(3,595)
Sub-total Debt Charges	2,129	2,252	2,522	2,792	3,059	3,172	3,129	3,086	3,099	3,112	3,182
Transfer to Reserves	(11,827)	(23,860)	(22,911)	(24,658)	(25,213)	(27,036)	(19,365)	(25,925)	(47,079)	(44,495)	(45,144)
Sub-Total Capital & Reserve Impacts on Operating	(4,630)	(4,243)	(4,326)	(4,411)	(4,499)	(4,589)	(4,681)	(4,775)	(4,870)	(4,967)	(5,067)
TOTAL EXPENDITURES	168	168	173	178	182	185	189	193	197	201	205
REVENUES											
Non-Rate Revenue	168	168	173	178	182	185	189	193	197	201	205
TOTAL REVENUES	168	168	173	178	182	185	189	193	197	201	205
NET EXPENDITURES	-	0	(0)	0	0	(0)	-	0	0	0	(0)

**HAMILTON WATER
2020 RATE SUPPORTED STAFFING SUMMARY**

Deptid	Deptid Description	2019 REQUESTED	2019* RESTATED	2020 MAINTENANCE	2020	2020	2020
					PROGRAM CHANGES	REQUESTED	REQUESTED vs. 2019 RESTATED
510200	Director Hamilton Water	3.00	3.00	3.00	0.00	3.00	0.00
510203	WWW Operations Director	2.00	2.00	2.00	0.00	2.00	0.00
510205	Woodward Upgrades	11.00	11.00	11.00	4.00	15.00	4.00
510210	Customer Service & Community Outreach	2.00	2.00	2.00	0.00	2.00	0.00
510215	Education & Outreach	5.65	5.65	5.65	0.00	5.65	0.00
510220	Service Co-ordination	21.00	21.00	21.00	0.00	21.00	0.00
510230	Engineering Systems & Data Collection	9.00	9.00	9.00	0.00	9.00	0.00
510240	Compliance & Regulations	7.00	7.00	7.00	0.00	7.00	0.00
510250	Laboratory Services	26.00	26.00	26.00	0.00	26.00	0.00
510260	Environmental Monitoring & Enforcement	13.00	13.00	13.00	0.00	13.00	0.00
510270	Water Distribution (WD) & Wastewtr Collection (WWC) *	6.00	12.00	12.00	1.00	13.00	1.00
510275	WD & WWC Contracts	20.00	20.00	20.00	0.00	20.00	0.00
510280	WD & WWC Construction	23.00	23.00	23.00	0.00	23.00	0.00
510285	WD & WWC Maintenance	20.00	20.00	20.00	0.00	20.00	0.00
510290	WD & WWC Operations	20.00	20.00	20.00	0.00	20.00	0.00
510300	WWW Planning & Capital Director	2.00	2.00	2.00	0.00	2.00	0.00
510305	Sustainable Initiatives	7.00	7.00	7.00	0.00	7.00	0.00
510310	Plant Operations & Maintenance	8.00	8.00	8.00	0.00	8.00	0.00
510320	Plant Maintenance	35.00	35.00	35.00	0.00	35.00	0.00
510330	Plant Operations	37.00	37.00	37.00	0.00	37.00	0.00
510340	Capital Delivery	13.00	13.00	13.00	0.00	13.00	0.00
510350	Infrastructure Planning and System Design	17.00	17.00	17.00	2.00	19.00	2.00
Total RATE Supported Staff		307.65	313.65	313.65	7.00	320.65	7.00

Note: * Stormwater portfolio moved from Transportation Operations & Maintenance to HW after the budget was approved in 2019

2020 Rate Budget - Business Case Summary

DEPARTMENT: Public Works

DIVISION	SERVICE / PROGRAM	DESCRIPTION OF PROGRAM ENHANCEMENT	2020 IMPACT			ANNUALIZED IMPACT
			\$ GROSS	\$ NET	FTE Impact	\$ NET
Hamilton Water	Woodward Upgrades Operational Support	Maintenance Operators required to support Woodward Upgrades Project	\$ 440,000	\$ -	4.00	\$ -
Hamilton Water	Water & Wastewater Systems Planning	Project Manager Stormwater & Data Modeller Tech for stormwater systems infrastructure planning, computer modelling and related data analysis	\$ 246,000	\$ -	2.00	\$ -
Hamilton Water	Water Distribution	A 7th Supervisor was approved on a temporary basis in 2017 and requested to report back in 2020 <u>NOTE:</u> Council approved a 3 year temporary assignment and requested we report back in 2020	\$ 139,000	\$ -	1.00	\$ -
Divn Subtotal			\$ 825,000	\$ -	7.00	\$ -
DEPARTMENT TOTAL			\$ 825,000	\$ -	7.00	\$ -

TOTAL NET Impact = net annualized (full year) amount - please state under "Description of Program Enhancement" if other revenue sources will be used to offset the cost of the program change (therefore identify gross cost); also please identify if 2020 calendar (part-year) impact is significantly different due to delayed implementation.

CITY OF HAMILTON
2020 WATER AND WASTEWATER/STORM FEES AND CHARGES
Effective January 1, 2020

A) Daily Water & Wastewater/Storm Fixed Charges

The fixed daily charge is not related to the direct costs of consumption and are not dependent upon or related to the amount of consumption incurred. The fixed charges are intended to offset the fixed costs of maintaining the water, wastewater and storm systems.

Meter Size	Water Rate	Wastewater/ Storm Rate
15 mm	\$ 0.37	\$ 0.39
16 mm	\$ 0.37	\$ 0.39
20 mm	\$ 0.37	\$ 0.39
21 mm	\$ 0.37	\$ 0.39
25 mm	\$ 0.93	\$ 0.98
38 mm	\$ 1.85	\$ 1.95
50 mm	\$ 2.96	\$ 3.12
75 mm	\$ 5.92	\$ 6.24
100 mm	\$ 9.25	\$ 9.75
150 mm	\$ 18.50	\$ 19.50
200 mm	\$ 29.60	\$ 31.20
250 mm	\$ 42.55	\$ 44.85
300 mm	\$ 62.90	\$ 66.30

B) Metered Water Consumption Charges

Water consumption shall be charged on a per cubic metre basis at the rates indicated in the table below. The total monthly Water Consumption Charge is the sum of usage in all blocks at the rate for each block.

		Residential	Multi-Residential, Commercial, Institutional & Industrial
Consumption Block	Monthly Water Consumption (m3)	Rate (\$/m3)	Rate (\$/m3)
1	0-10	0.82	1.63
2	>10	1.63	1.63

C) Wastewater/Storm Treatment Charges

Wastewater/Storm Treatment Charges are based on metered water consumption and the cost of wastewater collection and treatment, and stormwater management. Charges are on a per cubic metre basis at the rates indicated in the table below. The total monthly Wastewater/Storm Treatment Charge is the sum of usage in all blocks at the rate for each block.

		Residential	Multi-Residential, Commercial, Institutional & Industrial
Treatment Block	Monthly Water Consumption (m3)	Rate (\$/m3)	Rate (\$/m3)
1	0-10	0.88	1.75
2	>10	1.75	1.75

D) Non-Metered Annual Water & Wastewater/Storm Rate

Flat Rate Water Customers Annual Rate: \$594.95

Flat Rate Wastewater/Storm Customers Annual Rate: \$638.75

Combined Flat Rate Water & Wastewater/Storm Customers Annual Rate: \$1,233.70

City of Hamilton - 2020 Private Fire Line Rates

This service shall consist of permanent unmetered connections to the main for the purpose of supplying water to private fire protection systems such as automatic sprinkler systems, standpipes and private hydrants. This service shall also include reasonable quantities of water used for testing check valves and other backflow protection devices.

Unmetered Service

Size of Connection		Monthly Rate
mm	inches	
25	1	\$ 3.60
38	1.5	\$ 8.28
50	2	\$ 14.40
75	3	\$ 32.40
100	4	\$ 57.60
150	6	\$ 129.60
200	8	\$ 230.40
250	10	\$ 230.40
300	12	\$ 230.40

2020 PROPOSED USER FEES AND CHARGES

PUBLIC WORKS
HAMILTON WATER

For Billing Purposes: M - F: 7:00am - 4:30pm
Regular Hours: M - F: 4:30pm - 7:00am, Weekends and Holidays

Dept. By-Law #	Dept ID	Account #	Ref #	Service Offered	2019 Including HST (if applicable)	2020 Proposed Fee	HST (y/n)	2020 Including HST (if applicable)	% Fee Change	Basis for Fee Increase or Decrease
R84-026	510220	47220	1	WATER DISTRIBUTION Water Meter Permit Fee Note: Charged for first-time meter installations. Includes supply and installation of water meter and remote reading device by City and related inspection.	\$359.70	\$359.70	n	\$359.70	0.0%	Current fee achieves full cost recovery
			1a)	16mm Displacement	\$404.60	\$404.60	n	\$404.60	0.0%	Current fee achieves full cost recovery
			1b)	20mm Displacement	\$404.60	\$404.60	n	\$404.60	0.0%	Current fee achieves full cost recovery
			1c)	21mm Displacement	\$559.40	\$559.40	n	\$559.40	0.0%	Current fee achieves full cost recovery
			1d)	25mm Displacement	\$866.76	\$866.76	n	\$866.76	2.1%	To achieve full cost recovery
			1e)	38mm Displacement	\$1,218.80	\$1,218.80	n	\$1,218.80	0.0%	Current fee achieves full cost recovery
			1f)	50mm Displacement	\$1,384.60	\$1,409.67	n	\$1,409.67	1.8%	To achieve full cost recovery
			1g)	50mm Turbine	\$3,316.40	\$3,316.40	n	\$3,316.40	0.0%	Current fee achieves full cost recovery
			1h)	50mm Compound	\$3,870.13	\$3,870.13	n	\$3,870.13	0.0%	Current fee achieves full cost recovery
			1i)	100mm Turbine	\$5,206.07	\$5,304.84	n	\$5,304.84	1.9%	To achieve full cost recovery
			1j)	100mm Compound	\$6,637.49	\$6,759.21	n	\$6,759.21	1.8%	To achieve full cost recovery
			1k)	100mm Fire Service Turbine	\$8,624.85	\$8,787.29	n	\$8,787.29	1.9%	To achieve full cost recovery
			1l)	100mm Fire Service Compound	\$8,899.76	\$9,067.33	n	\$9,067.33	1.9%	To achieve full cost recovery
			1m)	100mm Magnetic Flow Meter (Must be approved by Supervisor of Meter Operations)	\$9,297.22	\$9,472.19	n	\$9,472.19	1.9%	To achieve full cost recovery
			1n)	100mm Fire Rated Magnetic Flow Meter (Must be approved by Supervisor of Meter Operation)	\$7,467.78	\$7,608.67	n	\$7,608.67	1.9%	To achieve full cost recovery
			1o)	150mm Turbine	\$10,226.88	\$10,419.16	n	\$10,419.16	1.9%	To achieve full cost recovery
			1p)	150mm Compound	\$11,028.42	\$11,235.65	n	\$11,235.65	1.9%	To achieve full cost recovery
			1q)	150mm Fire Service Turbine	\$11,186.31	\$11,396.47	n	\$11,396.47	1.9%	To achieve full cost recovery
			1r)	150mm Magnetic Flow Meter (Must be approved by Supervisor of Meter Operations)	\$12,334.54	\$12,566.10	n	\$12,566.10	1.9%	To achieve full cost recovery
			1s)	150mm Fire Rated Magnetic Flow Meter (Must be approved by Supervisor of Meter Operation)	\$13,954.24	\$14,215.97	n	\$14,215.97	1.9%	To achieve full cost recovery
			1t)	200mm Turbine	\$8,998.80	\$9,187.68	n	\$9,187.68	2.1%	To achieve full cost recovery
			1u)	200mm Compound	\$12,097.96	\$12,344.57	n	\$12,344.57	2.0%	To achieve full cost recovery
			1v)	200mm Magnetic Flow Meter (Must be approved by Supervisor of Meter Operations)	\$12,041.98	\$12,268.08	n	\$12,268.08	1.9%	To achieve full cost recovery
			1w)	200mm Fire Rated Magnetic Flow Meter (Must be approved by Supervisor of Meter Operation)	\$13,160.41	\$13,407.34	n	\$13,407.34	1.9%	To achieve full cost recovery
			1x)	200mm Fire Rated Magnetic Flow Meter (Must be approved by Supervisor of Meter Operation)	\$14,171.75	\$14,437.52	n	\$14,437.52	1.9%	To achieve full cost recovery
			1y)	200mm Fire Service Turbine	\$19,092.63	\$19,450.06	n	\$19,450.06	1.9%	To achieve full cost recovery
			1z)	200mm Fire Service Compound	\$15,496.05	\$15,785.99	n	\$15,785.99	1.9%	To achieve full cost recovery
			1aa)	250mm Turbine	\$14,415.75	\$14,886.07	n	\$14,886.07	1.9%	To achieve full cost recovery
			1ab)	250mm Magnetic Flow Meter (Must be approved by Supervisor of Meter Operations)	\$17,063.33	\$17,382.96	n	\$17,382.96	1.9%	To achieve full cost recovery
			1ac)	250mm Fire Rated Magnetic Flow Meter (Must be approved by Supervisor of Meter Operation)	\$19,312.34	\$19,673.87	n	\$19,673.87	1.9%	To achieve full cost recovery
			1ad)	250mm Fire Service Turbine	\$24,832.75	\$25,297.11	n	\$25,297.11	1.9%	To achieve full cost recovery
			1ae)	250mm Fire Service Compound	\$209.80	\$214.63	n	\$214.63	2.3%	To achieve full cost recovery
			1af)	Radio Remote Read Equipment Installation						
R84-026	510220	45519	2	Water Meter Removal Fee Note: Cost to remove a meter prior to the building being demolished and/or the water service being decommissioned or abandoned. Failure to have the meter removed prior to the building being demolished will incur a meter replacement cost charge. Does not include a turn water off fee, which is required and charged separately as per Section 14 of this schedule.	\$123.62	\$112.87	y	\$127.54	3.2%	To achieve full cost recovery
			2a)	16mm Displacement	\$123.62	\$112.87	y	\$127.54	3.2%	To achieve full cost recovery
			2b)	20mm Displacement	\$123.62	\$112.87	y	\$127.54	3.2%	To achieve full cost recovery
			2c)	21mm Displacement	\$123.62	\$112.87	y	\$127.54	3.2%	To achieve full cost recovery
			2d)	25mm Displacement	\$123.62	\$112.87	y	\$127.54	3.2%	To achieve full cost recovery
			2e)	38mm - 250mm Meters (cost depends on size, labour, and meter location)	Cost + 10% OH	Cost + 10% OH	y	Cost + 10% OH	N/A	
R84-026	510220	45519	3	Water Meter Inspection Services Note: Cost for customer requested service relating to meter investigation	\$123.70	\$115.86	y	\$130.92	5.8%	To achieve full cost recovery
			3a)	Regular Hours Inspection	\$161.95	\$151.73	y	\$171.45	5.9%	To achieve full cost recovery
			3b)	After Hours Inspection						

*Costs not specifically addressed in the schedule will be invoiced at Actual Cost plus overhead
For general inquiries, please call (905) 546-4425 between 8:30am - 4:30pm

2020 PROPOSED USER FEES AND CHARGES

PUBLIC WORKS
HAMILTON WATER

For Billing Purposes: M - F: 7:00am - 4:30pm
Regular Hours: M - F: 4:30pm - 7:00am, Weekends and Holidays

Dept. By-Law #	Dept ID	Account #	Ref #	Service Offered	2019 Including HST (If applicable)	2020 Proposed Fee	HST (Y/n)	2020 Including HST (If applicable)	% Fee Change	Basis for Fee Increase or Decrease
R84-026	510220	45608	4	Replacement Cost for Lost Meter Note: Cost to replace a meter that has been lost, stolen or damaged. Includes meter, installation and administrative costs.						
			4a)	15mm Displacement	\$244.00	\$221.75	Y	\$250.58	2.7%	To achieve full cost recovery
			4b)	16mm Displacement	\$244.00	\$221.75	Y	\$250.58	2.7%	To achieve full cost recovery
			4c)	20mm Displacement	\$379.31	\$342.24	Y	\$386.73	2.0%	To achieve full cost recovery
			4d)	21mm Displacement	\$379.31	\$342.24	Y	\$386.73	2.0%	To achieve full cost recovery
			4e)	25mm Displacement	\$436.70	\$393.97	Y	\$445.19	1.9%	To achieve full cost recovery
			4f)	38mm Displacement	\$1,205.02	\$1,082.62	Y	\$1,223.36	1.5%	To achieve full cost recovery
			4g)	50mm Turbine	\$1,465.95	\$1,297.30	Y	\$1,465.95	0.0%	Current fee achieves full cost recovery
			4h)	50mm Displacement	\$1,804.05	\$1,596.50	Y	\$1,804.05	0.0%	Current fee achieves full cost recovery
			4i)	50mm Compound	\$2,338.65	\$2,069.60	Y	\$2,338.65	0.0%	Current fee achieves full cost recovery
			4j)	100mm Turbine	\$3,688.50	\$3,264.16	Y	\$3,688.50	0.0%	Current fee achieves full cost recovery
			4k)	100mm Compound	\$5,959.20	\$5,273.63	Y	\$5,959.20	0.0%	Current fee achieves full cost recovery
			4l)	100mm Fire Service Turbine	\$8,047.63	\$7,212.18	Y	\$8,149.76	1.3%	To achieve full cost recovery
			4m)	100mm Fire Service Compound	\$9,947.30	\$8,855.57	Y	\$10,006.80	0.6%	To achieve full cost recovery
			4n)	100mm Magnetic Flow Meter	\$10,972.29	\$9,855.25	Y	\$11,136.43	1.5%	To achieve full cost recovery
			4o)	150mm Fire Rated Magnetic Flow Meter	\$11,229.75	\$10,290.10	Y	\$11,627.81	3.5%	To achieve full cost recovery
			4p)	150mm Turbine	\$6,787.25	\$6,006.42	Y	\$6,787.25	0.0%	Current fee achieves full cost recovery
			4q)	150mm Compound	\$10,328.00	\$9,139.82	Y	\$10,328.00	0.0%	Current fee achieves full cost recovery
			4r)	150mm Fire Service Turbine	\$12,234.06	\$10,968.91	Y	\$12,394.87	1.3%	To achieve full cost recovery
			4s)	150mm Fire Service Compound	\$15,540.23	\$13,945.23	Y	\$15,762.63	1.4%	To achieve full cost recovery
			4t)	150mm Magnetic Flow Meter	\$12,255.20	\$10,918.06	Y	\$12,337.41	0.7%	To achieve full cost recovery
			4u)	150mm Fire Rated Magnetic Flow Meter	\$13,611.70	\$12,170.80	Y	\$13,753.00	1.0%	To achieve full cost recovery
			4v)	200mm Turbine	\$7,340.19	\$6,570.69	Y	\$7,424.88	1.2%	To achieve full cost recovery
			4w)	200mm Compound	\$11,551.00	\$10,222.12	Y	\$11,551.00	0.0%	Current fee achieves full cost recovery
			4x)	200mm Fire Service Turbine	\$14,454.48	\$12,855.10	Y	\$14,454.48	0.0%	Current fee achieves full cost recovery
			4y)	200mm Fire Service Compound	\$18,466.10	\$16,466.10	Y	\$18,466.10	0.0%	Current fee achieves full cost recovery
			4z)	200mm Magnetic Flow Meter	\$14,696.83	\$13,177.47	Y	\$14,890.54	1.3%	To achieve full cost recovery
			4aa)	200mm Fire Rated Magnetic Flow Meter	\$16,050.38	\$14,395.02	Y	\$16,266.37	1.3%	To achieve full cost recovery
			4ab)	250mm Turbine	\$12,754.60	\$11,424.07	Y	\$12,909.20	1.2%	To achieve full cost recovery
			4ac)	250mm Magnetic Flow Meter	\$14,766.00	\$13,336.65	Y	\$15,070.41	2.1%	To achieve full cost recovery
			4ad)	250mm Fire Rated Magnetic Flow Meter	\$17,726.90	\$16,225.00	Y	\$18,334.25	3.4%	To achieve full cost recovery
			4ae)	250mm Fire Service Turbine	\$20,293.29	\$18,219.75	Y	\$20,588.32	1.5%	To achieve full cost recovery
			4af)	250mm Fire Service Compound	\$29,046.50	\$25,704.87	Y	\$29,046.50	0.0%	Current fee achieves full cost recovery
			4ag)	50mm Strainer	\$462.97	\$419.15	Y	\$473.64	2.3%	To achieve full cost recovery
			4ah)	100mm Strainer	\$858.46	\$775.66	Y	\$876.50	2.1%	To achieve full cost recovery
			4ai)	150mm Strainer	\$1,374.34	\$1,240.69	Y	\$1,401.98	2.0%	To achieve full cost recovery
			4aj)	200mm Strainer	\$2,336.25	\$2,107.80	Y	\$2,381.81	2.0%	To achieve full cost recovery
			4ak)	250mm Strainer	\$3,993.11	\$3,533.73	Y	\$3,993.11	0.0%	Current fee achieves full cost recovery
R84-026	510220	45690	5	Bench Testing Water Meters Note: Cost to have a water meter tested for accuracy. If the meter tests within the accuracy standards as set out by AWWA then the property owner is responsible for the cost of the test and the replacement cost of the water meter; otherwise cost borne by the City. Fee includes removal of existing meter and installation of replacement meter.						
			5a)	15 mm & 16 mm Diameter	\$348.80	\$314.56	Y	\$355.45	1.9%	To achieve full cost recovery
			5b)	16-25mm Diameter - Test where meter has been removed from service within prior 90 days	\$144.19	\$130.39	Y	\$147.34	2.2%	To achieve full cost recovery
			5c)	20 mm Diameter	\$400.27	\$362.87	Y	\$410.04	2.4%	To achieve full cost recovery
			5d)	25 mm Diameter	\$457.67	\$414.60	Y	\$468.50	2.4%	To achieve full cost recovery
			5e)	38 mm Diameter	\$994.38	\$914.18	Y	\$1,033.02	3.9%	To achieve full cost recovery
			5f)	50 mm Diameter	\$1,742.55	\$1,542.08	Y	\$1,742.55	0.0%	Current fee achieves full cost recovery
			5g)	100 mm plus diameter (In Situ testing)	\$1,014.29	\$930.42	Y	\$1,051.37	3.7%	To achieve full cost recovery

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2020 PROPOSED USER FEES AND CHARGES

PUBLIC WORKS
HAMILTON WATER

For Billing Purposes:
M - F: 7:00am - 4:30pm
Regular Hours: M - F: 4:30pm - 7:00am, Weekends and Holidays

Dept. By-Law #	Dept ID	Account #	Ref #	Service Offered	2019 Including HST (if applicable)	2020 Proposed Fee	HST (y/n)	2020 Including HST (if applicable)	% Fee Change	Basis for Fee Increase or Decrease
10-103	510220	45644	6	<p>Backflow Prevention Program Note: Costs for contractor registration fee, administration fees for processing backflow prevention test reports and survey forms.</p> <p>6a) Annual Program Registration Fee 6b) Test Report receipt and processing (per submission of each test report) 6c) Cross Connection Survey Form processing (per form upon submission) 6d) Backflow Prevention Device Investigation - Regular Hours 6e) Backflow Prevention Device Investigation - After Hours</p>	\$150.89 \$72.61 \$179.16 \$159.10 \$233.80	\$134.96 \$64.26 \$160.28 \$142.12 \$206.90	y y y y y	\$152.51 \$72.61 \$181.12 \$160.60 \$233.80	1.1% 0.0% 1.1% 0.9% 0.0%	To achieve full cost recovery Current fee achieves full cost recovery To achieve full cost recovery To achieve full cost recovery Current fee achieves full cost recovery
R84-026	514330	45590	7	<p>Construction Water Note: Charge for unmetered water used for construction prior to meter installation. Paid at the time of submitting building permit payment.</p> <p>7a) Single Residential (per lot or townhouse) 7b) Multi-residential (per apartment/condo unit) 7c) Industrial/Commercial/Institutional (\$/1,000 sqft of building area or \$/ha where no structure is constructed)</p>	\$95.05 \$44.45 \$31.20	\$100.00 \$46.75 \$32.80	n n n	\$100.00 \$46.75 \$32.80	5.2% 5.2% 5.1%	Equal to variable water rate increase Equal to variable water rate increase Equal to variable water rate increase
R84-026	514330	41208	8	<p>Hydrant/Road Adaptor Fees Note: Costs to install or remove water meter & backflow prevention device. When moving a hydrant/road adaptor from one site to another for the same customer, both removal & installation fees apply. This service requires a usage deposit and a damage deposit.</p> <p>8a) Usage Cost (Metered Hauled Water Rate/m³) 8b) Hydrant/Road Adaptor Connection/Disconnection Fee (Regular Hours-Emergency-Fee for Both S 8c) Hydrant/Road Adaptor Connection/Disconnection Fee (After Hours/Emergency-Fee for Both S 8d) Non-Refundable Usage Deposit 8e) Security/Damage Deposit 8f) Hydrant/road adaptor rental fee for initial 7 days 8g) Per Diem hydrant/road adaptor rental fee after initial 7 days</p>	\$2.35 \$145.90 \$274.40 \$300.00 \$6,000.00 \$81.30 \$6.02	\$2.45 \$146.94 \$276.71 \$300.00 \$6,000.00 \$82.56 \$6.13	n n n n n n n	\$2.45 \$146.94 \$276.71 \$300.00 \$6,000.00 \$82.56 \$6.13	4.3% 0.7% 0.8% 0.0% 0.0% 1.5% 1.8%	Rate is 1.5x volumetric water rate To achieve full cost recovery To achieve full cost recovery Deposit rounded to the nearest \$100 Deposit rounded to the nearest \$100 To achieve full cost recovery To achieve full cost recovery
R84-026	514330	47244	9	<p>Private Water Station Agreement Fees Annual Renewal</p>	\$357.80	\$386.22	n	\$386.22	7.9%	To achieve full cost recovery
R84-026	514330	47232	10	<p>Water Haulage Fees Annual Water Haulage Permit Fee Note: Annual license fee to utilize the City's public filling stations.</p>	\$64.78	\$57.44	y	\$64.91	0.2%	No cards issued, Online Registration
R84-026	514330	41209	10b)	<p>Account review Note: Costs charged for administrative services to provide customer account information for personal or taxation purposes.</p>	\$99.08	\$87.91	y	\$99.34	0.3%	To achieve full cost recovery
R84-026	510220	45519	11	<p>General Administration Fees 11a) General Administrative Requests (per hour)/Report Requests 11b) Permit Cancellation administrative fee 11c) Permit Renewal Fee 11d) Lead Line Replacement Loan Application Fee 11e) Monthly AMI Manual Meter Read Fee 11f) Water Shut-off Admin Fee 11g) Water Shut-off Notice on Door</p>	\$77.64 \$46.36 \$46.36 \$58.04 \$3.39 \$22.60 \$28.25	\$69.16 \$41.14 \$41.14 \$51.60 \$3.00 \$20.00 \$28.25	y y y y y y y	\$78.15 \$46.49 \$46.49 \$58.31 \$3.39 \$22.60 \$31.92	0.7% 0.3% 0.3% 0.5% 0.0% 0.0% 13.0%	To achieve full cost recovery To achieve full cost recovery To achieve full cost recovery To achieve full cost recovery Current fee achieves full cost recovery Current fee achieves full cost recovery To achieve full cost recovery

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2020 PROPOSED USER FEES AND CHARGES

PUBLIC WORKS
HAMILTON WATER

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Regular Hours: M - F: 4:30pm - 7:00am, Weekends and Holidays

Dept. By-Law #	Dept ID	Account #	Ref #	Service Offered	2019 Including HST (if applicable)	2020 Proposed Fee	HST (y/n)	2020 Including HST (if applicable)	% Fee Change	Basis for Fee Increase or Decrease
R84-026			12	Water Inspection Services Note: Costs associated with various permit and inspection services related to water services for properties.						
	514330	47235	12a)	Private Water Service Repair/Replacement Inspection (Reg Hours - Max 1 Hour Total)	\$105.06	\$93.45	y	\$105.60	0.5%	Cost recovery - .01 for CS processing
	514330	47235	12b)	Private Water Service Repair/Replacement Inspection (After Hours /Emerg - Max 1 Hour Total)	\$177.60	\$158.36	y	\$178.95	0.8%	Cost recovery + .01 for CS processing
	514330	45690	12c)	Water Service Abandonment Inspection (Regular Hours - Max 1 Hour Total Labour)	\$93.73	\$83.47	y	\$94.32	0.6%	To achieve full cost recovery
	514330	45690	12d)	Water Service Abandonment Inspection (After Hours / Emergency - Max 1 Hour Total Labour)	\$166.32	\$148.36	y	\$167.65	0.8%	To achieve full cost recovery
	514330	45690	12e)	Water Service Inspection for Demolition (Regular Hours - Max 1 Hour Total Labour)	\$93.73	\$83.47	y	\$94.32	0.6%	To achieve full cost recovery
	514330	45690	12f)	Water Service Inspection for Demolition (After Hours / Emergency - Max 1 Hour Total Labour)	\$166.32	\$148.36	y	\$167.65	0.8%	To achieve full cost recovery
	514330	45690	12g)	Missed or Cancelled Inspection	\$88.25	\$60.65	y	\$68.53	0.4%	To achieve full cost recovery
R84-026	514330	45690	13	Upsize Public Portion Water Service from 20mm to 25mm Note: Charge for upsizing a public portion water service from 20mm to 25mm, when a public portion water service replacement is already being completed by the City.	\$150.00	\$155.00	n	\$155.00	3.3%	To achieve full cost recovery
R84-026	514330	45679	14	Turning Water Off or On Note: Turning water off at the curb to enable a property owner to complete internal plumbing repairs, or a private water service repair or replacement, and then turning the water back on.						
			14a)	Turning Water On/Off (Regular Hours)	\$123.35	\$124.10	n	\$124.10	0.6%	Cost recovery - .02 for CS processing
			14b)	Turning Water On/Off (After Hours/Emergency)	\$206.70	\$208.25	n	\$208.25	0.7%	Cost recovery - .01 for CS processing
			14c)	Turning Water On/Off During the Same Visit (Regular Hours - Max 1/2 Hour Total Labour)	\$82.95	\$83.47	n	\$83.47	0.6%	To achieve full cost recovery
			14d)	Labour	\$113.35	\$114.13	n	\$114.13	0.7%	To achieve full cost recovery
			14e)	Non-compliance Turn Water Off	\$82.95	\$83.47	n	\$83.47	0.6%	To achieve full cost recovery
			14f)	Non-compliance Turn Water On	\$82.95	\$83.47	n	\$83.47	0.6%	To achieve full cost recovery
R84-026	514330	45636	15	Hydrant Flow Test / Water Quality Flushing Note: Cost to operate a City Fire Hydrant(s) for a maximum of 1 hour total labour.	\$103.94	\$106.29	y	\$120.11	15.6%	Labour inc .3 hrs for cost recovery
R84-026	514330	45690	16	Water Quality/Quantity Service Calls Note: Cost for a service call to investigate a water quality/quantity complaint and the issue resides on private property. No charge for water quality/quantity complaints related to issues originating from the City's distribution system. Missed appointments will be billed the corresponding service call rate.						
			16a)	Service Call (Regular Hours - Max 1 Hour Total Labour)	\$93.73	\$83.47	y	\$94.32	0.6%	To achieve full cost recovery
			16b)	Service Call (After Hours - Max 1 Hour Total Labour)	\$166.32	\$148.36	y	\$167.65	0.8%	To achieve full cost recovery
R84-026	510290	45690	17	Hydrant Repair, Replace or Relocate Note: Cost to repair, replace, or relocate a City Fire Hydrant including labour, parts, materials, equipment, and permanent restoration.	Cost + 33% OH	Cost + 33% OH	y	Cost + 33% OH	N/A	To achieve full cost recovery
R84-026	514330	45690	18	Watermain Shutdowns Note: Costs associated with isolating a watermain to facilitate third party work.						
			18a)	Watermain Shutdown / Recharge (Regular Hours-Maximum 1 Hour Total Labour)	\$128.07	\$129.11	n	\$129.11	0.8%	To achieve full cost recovery
			18b)	Watermain Shutdown / Recharge (After Hours / Emergency-Maximum 1 Hour Total Labour)	\$230.54	\$232.49	n	\$232.49	0.8%	To achieve full cost recovery
R84-026	510350	45408	19	Environmental Records Search PRISM Reports related to soil contamination Reports - Environmental Assessments and Master Plans - plus fee per page	\$177.04	\$159.80	y	\$180.58	2.0%	2% allowed for inflation
					\$17.40	\$15.71	y	\$17.75	2.0%	2% allowed for inflation
					\$0.11	\$0.10	y	\$0.12	2.0%	2% allowed for inflation
R84-026	514330	45690	20	Miscellaneous Water Distribution System Repair Note: Cost for the City to repair damage to the water distribution system caused by a third party. Costs include labour, parts, materials, equipment, and permanent restoration.	Cost + 33% OH	Cost + 33% OH	y	Cost + 33% OH	N/A	To achieve full cost recovery
R84-026	514330	45690	21	Additional Labour Charges Note: Additional labour charge for all services/calls that exceed the allotted labour time. Costs are for a single Water Distribution Operator in minimum increments of 30 minutes.						
			21a)	1/2 Hour Additional Labour (Regular Hours)-Water Distribution Operator	\$25.50	\$22.83	y	\$25.80	1.2%	Cost recovery + .01 for CS processing
			21b)	1/2 Hour Additional Labour (After Hours)-Water Distribution Operator	\$36.25	\$34.25	y	\$38.70	1.2%	Cost recovery + .02 for CS processing
			21c)	1/2 Hour Additional Labour (Regular Hours)-Water Distribution Operator	\$22.55	\$22.82	n	\$22.82	1.2%	To achieve full cost recovery
			21d)	1/2 Hour Additional Labour (After Hours)-Water Distribution Operator	\$33.85	\$34.23	n	\$34.23	1.1%	To achieve full cost recovery

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HAMILTON WATER**

For Billing Purposes
Regular Hours: M - F, 7:00am - 4:30pm
After Hours: M - F, 4:30pm - 7:00am, Weekends and Holidays

Dept. By-Law #	Dept ID	Account #	Ref #	Service Offered	2019 including HST (if applicable)	2020 Proposed Fee	HST (y/n)	2020 including HST (if applicable)	% Fee Change	Basis for Fee Increase or Decrease
06-026	516175	47230	1	COLLECTION SYSTEM INSPECTION & MAINTENANCE	\$108.50	\$96.68	Y	\$109.25	0.7%	To achieve full cost recovery
				Wastewater Inspection Services Note: Costs associated with various permit and inspection services related to sewer laterals for properties.						
				Private Sewer Lateral Repair/Replacement Inspection (Regular Hours - Maximum 1 Hour Total Labour)						
				Private Sewer Lateral Repair/Replacement Inspection (After Hours / Emergency - Maximum 1 Hour Total Labour)						
				Missed or Cancelled Inspection						
06-026	516175	45690	2	Sewer Related Service Calls Note: Cost for a service call to investigate a sewer related complaint and the issue resides on private property. No charge for sewer complaints related to issues originating from the City's sewer system. Missed appointments will be billed the corresponding Service Call (Regular Hours - Maximum 1 Hour Total Labour)	\$96.72	\$86.11	Y	\$97.30	0.6%	To achieve full cost recovery
				Service Call (After Hours - Maximum 1 Hour Total Labour)						
				Sewer Lateral Cleaning and Investigation Fees Note: When a property owner qualifies for the Sewer Lateral Management Program and chooses to hire their own Plumbing Contractor, these prices represent the maximum amounts that will be reimbursed to the property owner for the sewer lateral cleaning and investigation services performed by the independent Plumbing Contractor						
				Complete Sewer Lateral Investigation - Regular Hours						
06-026	516175	45690	3	Complete Sewer Lateral Investigation - After Hours	\$449.69	\$405.91	Y	\$458.68	2.0%	Lower Contract Costs
				Complete Sewer Lateral Investigation - Regular Hours						
				Partial Sewer Lateral Cleaning - Regular Hours						
				Partial Sewer Lateral Cleaning - After Hours						
				Abandoned Sewer Lateral Investigation - Regular Hours						
				Abandoned Sewer Lateral Investigation - After Hours						
06-026	516175	45690	4	Miscellaneous Wastewater Collection System Repair Note: Cost for the City to repair damage to the wastewater collection system caused by a third party. Costs include labour, parts, materials, equipment, and permanent restoration.	Cost + 33% OH	Cost + 33% OH	Y	Cost + 33% OH	N/A	To achieve full cost recovery
				Additional Labour Charges Note: Additional labour charge for all services/calls that exceed the allotted labour time. Costs are for a single Wastewater Collection Operator or Contract Inspector in minimum increments of 30 minutes.						
06-026	516175	45690	5a)	1/2 Hour Additional Labour (Regular Hours) - Wastewater Collection	\$24.45	\$21.90	Y	\$24.75	1.2%	To achieve full cost recovery
				1/2 Hour Additional Labour (After Hours) - Wastewater Collection						
			5b)		\$36.70	\$32.83	Y	\$37.10	1.1%	Cost recovery - .02 for CS processing

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2020 PROPOSED USER FEES AND CHARGES

PUBLIC WORKS
HAMILTON WATER

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LABORATORY SERVICES									
Inorganic Tests:									
510250	45519	1	Solids						
		1a)	Total Suspended Solids (TSS)	\$24.52	\$21.70	Y	\$24.52	0.0%	Current fee achieves full cost recovery
		1b)	TSS plus Volatile Suspended Solids (VSS)	\$24.52	\$21.70	Y	\$24.52	0.0%	Current fee achieves full cost recovery
		1c)	Total Solids (TS)	\$21.36	\$19.10	Y	\$21.58	1.1%	To achieve full cost recovery
		1d)	TS plus Volatile Solids (VS)	\$22.15	\$20.10	Y	\$22.71	2.6%	To achieve full cost recovery
		1e)	Total Dissolved Solids	\$0.00	\$32.00	Y	\$36.16		New
Skalar									
		2a)	Total Cyanide	\$37.40	\$34.40	Y	\$38.87	3.9%	To achieve full cost recovery
		2b)	Phenolics	\$34.92	\$31.40	Y	\$35.93	2.9%	To achieve full cost recovery
		2c)	Total Kjeldhal Nitrogen (TKN)	\$35.48	\$31.80	Y	\$35.48	0.0%	Current fee achieves full cost recovery
		2d)	Ammonia	\$39.10	\$34.60	Y	\$39.10	0.0%	Current fee achieves full cost recovery
		2e)	Dissolved Organic Carbon	\$38.53	\$34.30	Y	\$38.76	0.6%	To achieve full cost recovery
		2f)	Total Organic Carbon	\$38.53	\$34.30	Y	\$38.76	0.6%	To achieve full cost recovery
		2g)	Reactive Silica	\$31.30	\$28.80	Y	\$32.54	4.0%	To achieve full cost recovery
510250	45519	3	Ion Chromatography (IC Scan)	\$56.95	\$50.40	Y	\$56.95	0.0%	Current fee achieves full cost recovery
510250	45519	4	PC Titrate						
		4a)	pH	\$18.19	\$16.50	Y	\$18.65	2.5%	To achieve full cost recovery
		4b)	Alkalinity	\$18.08	\$16.40	Y	\$18.53	2.5%	To achieve full cost recovery
		4c)	Conductivity	\$18.08	\$16.40	Y	\$18.53	2.5%	To achieve full cost recovery
		4d)	Fluoride	\$27.46	\$24.80	Y	\$28.02	2.1%	To achieve full cost recovery
		5	Turbidity	\$27.69	\$24.70	Y	\$27.91	0.8%	To achieve full cost recovery
		6	UV Transmittance	\$28.59	\$25.30	Y	\$28.59	0.0%	Current fee achieves full cost recovery
		7	Color Apparent	\$25.20	\$22.90	Y	\$25.88	2.7%	To achieve full cost recovery
		8	Color True	\$25.20	\$22.90	Y	\$25.88	2.7%	To achieve full cost recovery
		9	O Phosphate	\$0.00	\$26.70	Y	\$30.17		New
		10	Chemical Oxygen Demand (COD)	\$42.83	\$37.90	Y	\$42.83	0.0%	Current fee achieves full cost recovery
		11	Biochemical Oxygen Demand (BOD)	\$42.60	\$37.70	Y	\$42.60	0.0%	Current fee achieves full cost recovery
		12	Volatile Acid	\$42.15	\$37.30	Y	\$42.15	0.0%	Current fee achieves full cost recovery
Microbiology Tests:									
		13	Total Coliform/E coli	\$24.75	\$25.70	Y	\$29.04	17.4%	To achieve full cost recovery
510250	45519	14	EC	\$30.96	\$28.60	Y	\$32.32	4.4%	To achieve full cost recovery
510250	45519	15	Heterotrophic Plate Count	\$29.04	\$26.70	Y	\$30.17	3.9%	To achieve full cost recovery
510250	45519	16	Micro Examination	\$152.89	\$137.30	Y	\$155.15	1.5%	To achieve full cost recovery
510250	45519	17	Microcystin		\$515.00	Y	\$581.95		New
Metals:									
510250	45519	18	ICP OES						
		18a)	ICP OES Scan (Wastewater)	\$65.09	\$58.20	Y	\$65.77	1.0%	To achieve full cost recovery
		18b)	Total Phosphorous	\$30.40	\$27.70	Y	\$31.30	3.0%	To achieve full cost recovery
		18c)	Total Dissolved Phosphorous	\$30.40	\$27.70	Y	\$31.30	3.0%	To achieve full cost recovery
510250	45519	19	ICP MS						
		19a)	ICP MS Scan	\$65.09	\$58.20	Y	\$65.77	1.0%	To achieve full cost recovery
510250	45519	20	AA						
		20a)	Mercury	\$51.64	\$45.70	Y	\$51.64	0.0%	Current fee achieves full cost recovery
510250	45519	21	Organics						
		21a)	Caffeine		\$124.60	Y	\$140.80		New
510250	45519	22	Additional Fees						
		22a)	Weekend surcharge		\$100.00	Y	\$113.00		New

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14-090	516175	47232	1	ENVIRONMENTAL MONITORING & ENFORCEMENT To Regulate the Discharge of any Matter into the Sanitary, Combined, and Storm Sewer Systems. Annual Permit to Discharge Hauled Sewage Note: Cost for administration and processing of annual permits required to haul sewage within Hamilton	\$324.00	\$329.00	n	\$329.00	1.5%	To achieve full cost recovery
14-090	516175	41314	2a)	Discharge fees for Hauled Sewage generated: Inside the City - Compliant Note: Cost per truck full of sewage containing materials within Sewer Use By-law limits up to 1000 imperial gallons (4.54 m3) or any part thereof 2b) greater than 1000 (4.54 m3) but less than or equal to 3500 Imperial gallons (15.9m3) 2c) greater than 3500 (15.9 m3) but less than or equal to 5000 Imperial gallons (22.7 m3) 2d) greater than 5000 (22.7 m3) but less than or equal to 8000 Imperial gallons (36.3 m3) 2e) greater than 8000 (36.3 m3) but less than or equal to 10000 Imperial gallons (45.43 m3)	\$49.15	\$50.15	n	\$50.15	2.0%	To achieve full cost recovery
14-090	516175	41314	2b)		\$50.15	\$50.15	n	\$50.15	2.0%	Has to remain a multiple of \$49.15
14-090	516175	41314	2c)		\$98.30	\$100.30	n	\$100.30	2.0%	Has to remain a multiple of \$49.15
14-090	516175	41314	2d)		\$147.45	\$150.45	n	\$150.45	2.0%	Has to remain a multiple of \$49.15
14-090	516175	41314	2e)		\$196.60	\$200.60	n	\$200.60	2.0%	Has to remain a multiple of \$49.15
14-090	516175	41314	3	Discharge fees for Hauled Sewage generated: Inside the City - Non-Compliant Note: Cost per truck full of sewage containing materials that exceed one or more Sewer Use By-law limits	\$49.15	\$50.15	n	\$50.15	2.0%	To achieve full cost recovery
14-090	516175	41314	3a)	up to 1000 imperial gallons (4.54 m3) or any part thereof 3b) greater than 1000 (4.54 m3) but less than or equal to 3500 Imperial gallons (15.9m3) 3c) greater than 3500 (15.9 m3) but less than or equal to 5000 Imperial gallons (22.7 m3) 3d) greater than 5000 (22.7 m3) but less than or equal to 8000 Imperial gallons (36.3 m3) 3e) greater than 8000 (36.3 m3) but less than or equal to 10000 Imperial gallons (45.43 m3)	\$98.30	\$100.30	n	\$100.30	2.0%	Has to remain a multiple of \$49.15
14-090	516175	41314	3b)		\$147.45	\$150.45	n	\$150.45	2.0%	Has to remain a multiple of \$49.15
14-090	516175	41314	3c)		\$245.75	\$250.75	n	\$250.75	2.0%	Has to remain a multiple of \$49.15
14-090	516175	41314	3d)		\$294.90	\$300.90	n	\$300.90	2.0%	Has to remain a multiple of \$49.15
14-090	516175	41314	3e)		\$8.50	\$8.50	n	\$8.50	0.0%	Current fee achieves full cost recovery
14-090	516080	41315	5a)	Holding Tanks for Recreational Vehicles Note: Cost for Recreational Vehicles (RV's) to dump sewer waste at the Mountain Transfer Station Overstrength Discharge Fees Note: Cost per kilogram of each specified parameter that is in excess of Sewer Use By-law limits, and subject to a Sewer Discharge Permit 5a) Biochemical Oxygen Demand (charge per kg) 5b) Total suspended solids (charge per kg) 5c) Oil & grease (animal/vegetable) (charge per kg) 5d) Total Kjeldahl Nitrogen (charge per kg) 5e) Total Phosphorus (charge per kg)	\$0.78	\$0.78	n	\$0.78	0.0%	Current fee achieves full cost recovery
14-090	516080	41315	5b)		\$0.63	\$0.63	n	\$0.63	0.0%	Current fee achieves full cost recovery
14-090	516080	41315	5c)		\$0.66	\$0.44	n	\$0.44	-33.2%	Decrease reflecting rate review
14-090	516080	41315	5d)		\$2.39	\$1.00	n	\$1.00	-58.1%	Decrease reflecting rate review
14-090	516080	41315	5e)		\$1.68	\$1.78	n	\$1.78	6.1%	To achieve full cost recovery
14-090	516080	41317	6	Surcharge Discharge Fee (charge per m3)	\$1.68	\$1.75	n	\$1.75	4.2%	Equal to variable wastewater rate increase

Costs not specifically addressed in the schedule will be invoiced at Actual Cost plus overhead
For general inquiries, please call 905-560-5190 or email sewerusebylaw@hamilton.ca

2020 PROPOSED USER FEES AND CHARGES

PUBLIC WORKS
HAMILTON WATER

Dept. #	Dept ID	Account #	Ref #	Service Offered	2019 Including HST (if applicable)	2020 Proposed Fee	HST (y/n)	2020 Including HST (if applicable)	% Fee Change	Basis for Fee Increase or Decrease
14-090	510260	45519	7	Application Fees for Sewer Discharge Permits NOTE: Fee to be paid upon application for Sewer Discharge Permit	\$697.32	\$629.34	y	\$711.15	2.0%	Increase due to incorporating 7b) and 7c) fees into Application Fee
14-090	510260	45519	7a)	Application Fee	\$500.00	\$500.00	n	\$500.00	0.0%	To achieve full cost recovery
14-090	510260	45519	7b)	Wastewater Characterization deposit (optional)	\$327.34	\$295.47	y	\$333.88	2.0%	
14-090	510260	45519	7c)	Amendment Fee (all permit types)						
14-090	510260	45532	8	Administrative Fees for Sewer Discharge Permits Note: Multiple permit holders pay the higher administration fee (for example, if the permit holder has both an Overstrength Discharge Permit and a Compliance Program Permit, they will pay \$810.00 per quarter)	\$427.00	\$435.00	n	\$435.00	1.9%	Lab/equip. costs up in 2018. Previous 2015, 2012
14-090	510260	45532	8a)	Overstrength Discharge Permit (charged quarterly)	\$427.00	\$435.00	n	\$435.00	1.9%	Lab/equip. costs up in 2018. Previous 2015, 2012
14-090	510260	45532	8b)	Sanitary Discharge Permit (charged quarterly)	\$427.00	\$435.00	n	\$435.00	1.9%	Lab/equip. costs up in 2018. Previous 2015, 2012
14-090	510260	45532	8c)	Chloride Discharge Permit (charged quarterly)	\$1,050.00	\$1,071.00	n	\$1,071.00	2.0%	Lab/equip. costs up in 2018. Previous 2015, 2012
14-090	510260	45532	8d)	Compliance Discharge Permit (charged quarterly)	\$1,050.00	\$1,071.00	n	\$1,071.00	2.0%	Lab/equip. costs up in 2018. Previous 2015, 2012
14-090	510260	45532	8e)	Conditional Discharge Permit (charged quarterly)	\$167.13	\$150.86	y	\$170.47	2.0%	To achieve full cost recovery
14-090	510260	45532	9	Information Requests Note: Fee per property for records search related to Sewer Use By-law historical violations						
14-090	510260	45532	10	Wastewater Sampling (optional) Note: Per unit costs to conduct wastewater sampling to determine permit conditions and limits	\$1.34	\$1.21	y	\$1.37	1.7%	To achieve full cost recovery
14-090	510260	45532	10a)	Wastewater Sampling Vehicle Fee (per kilometer)	\$43.96	\$39.68	y	\$44.84	2.0%	To achieve full cost recovery
14-090	510260	45532	10b)	Wastewater Sampling Equipment Fee (per day)	\$55.44	\$50.04	y	\$56.55	2.0%	EMT position - replaced by RFT one pay grade higher
14-090	510260	45532	10c)	Wastewater Sampling Technician Fee (per hour) Mon - Fri	\$83.16	\$75.06	y	\$84.82	2.0%	EMT position - replaced by RFT one pay grade higher
14-090	510260	45532	10d)	Wastewater Sampling Technician Fee (per hour) Sat	\$110.86	\$100.07	y	\$113.08	2.0%	EMT position - replaced by RFT one pay grade higher
14-090	510260	45532	10e)	Wastewater Sampling Technician Fee (per hour) Sun						

Costs not specifically addressed in the schedule will be invoiced at Actual Cost plus overhead
For general inquiries, please call 905-546-5190 or email sewers@cityofhamilton.ca

2020 PROPOSED USER FEES AND CHARGES

PUBLIC WORKS
HAMILTON WATER

Dept. By-Law #	Dept ID	Account #	Ref #	Service Offered	2019 including HST (if applicable)	2020 Proposed Fee	HST (y/n)	2020 including HST (if applicable)	% Fee Change	Basis for Fee Increase or Decrease
03-272	510260	45532	1	ENVIRONMENTAL MONITORING & ENFORCEMENT Fees related to the Wastewater Abatement Program	\$423.19	\$374.50	y	\$423.19	0.0%	Current fee achieves full cost recovery
03-272	510260	45532	2	Annual Administration Fee	\$805.46	\$745.30	y	\$842.19	4.6%	To achieve full cost recovery

Costs not specifically addressed in the schedule will be invoiced at Actual Cost plus overhead
For general inquiries, please call 905-540-5190 or email sewerusebylaw@hamilton.ca

**SOURCE OF CAPITAL FINANCING
2020 to 2029 RATE PROGRAM CAPITAL BUDGET
\$(000'S)**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2020 to 2029
TOTAL RATE PROGRAM											
Capital Program	325,981	303,381	228,236	157,946	168,240	208,032	293,637	302,672	290,930	213,571	2,492,626
Source of Funding											
Subsidy/Other Revenue	86,759	24,246	75	75	75	105	75	75	75	75	111,635
Development Charges	76,608	95,883	56,244	22,366	15,851	41,497	128,141	122,131	97,648	4,980	661,349
Reserves & Other Internal Sources	27,060	12,860	640	640	640	640	640	640	-	-	43,760
Contribution from Operating	118,654	122,392	126,577	133,665	143,274	153,190	163,281	177,426	193,207	208,516	1,540,182
External Debt	16,900	48,000	44,700	1,200	8,400	12,600	1,500	2,400	-	-	135,700
Total	325,981	303,381	228,236	157,946	168,240	208,032	293,637	302,672	290,930	213,571	2,492,626

CITY OF HAMILTON
2020 - 2029 WATER / WASTEWATER / STORM CAPITAL FINANCING PLAN
(\$'s)

	Restated											
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2020 - 2029
NET EXPENDITURES FORECAST												
WASTEWATER (NET)	42,837,000	69,573,000	83,757,000	81,749,000	55,374,000	52,379,000	58,704,000	63,479,000	68,364,000	68,470,000	65,440,000	667,289,000
WATER (NET)	66,103,000	50,296,000	72,253,000	73,753,000	63,516,000	81,700,000	97,211,000	84,917,000	72,832,000	90,002,000	107,861,000	794,341,000
STORM (NET)	3,205,000	15,685,000	14,382,000	15,775,000	15,975,000	17,595,000	9,875,000	16,385,000	38,630,000	34,735,000	35,215,000	214,252,000
TOTAL NET EXPENDITURES	112,145,000	135,554,000	170,392,000	171,277,000	134,865,000	151,674,000	165,790,000	164,781,000	179,826,000	193,207,000	208,516,000	1,675,882,000
SOURCE OF FINANCING												
DEBT ISSUES	14,341,000	16,900,000	48,000,000	44,700,000	1,200,000	8,400,000	12,600,000	1,500,000	2,400,000	0	0	135,700,000
TRANSFER FROM OPERATING	97,804,000	118,654,000	122,392,000	126,577,000	133,665,000	143,274,000	153,190,000	163,281,000	177,426,000	193,207,000	208,516,000	1,540,182,000
TOTAL CAPITAL FINANCING	112,145,000	135,554,000	170,392,000	171,277,000	134,865,000	151,674,000	165,790,000	164,781,000	179,826,000	193,207,000	208,516,000	1,675,882,000
OPERATING BUDGET IMPACT												
TRANSFER FROM OPERATING	97,804,000	118,654,000	122,392,000	126,577,000	133,665,000	143,274,000	153,190,000	163,281,000	177,426,000	193,207,000	208,516,000	1,540,182,000
DC EXEMPTION FUNDING	9,000,000	8,000,000	8,000,000	8,000,000	8,000,000	8,000,000	8,000,000	8,000,000	8,000,000	8,000,000	8,000,000	80,000,000
DEBT CHARGES (NET)	19,365,685	19,682,108	25,295,182	32,246,955	36,943,695	38,456,182	39,081,885	39,379,712	37,784,300	35,328,058	35,168,939	339,367,017
TOTAL CAPITAL FINANCING COSTS	126,169,685	146,336,108	155,687,182	166,823,955	178,608,695	189,730,182	200,271,885	210,660,712	223,210,300	236,535,058	251,684,939	1,959,549,017

**CITY OF HAMILTON
2020- 2029 CAPITAL FINANCING CHARGES - RATE PROGRAMS
(\$'s)**

	<u>Restated</u> <u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2020 - 2029</u>
<u>Wastewater</u>												
Existing External Debt Charges	8,259,325	8,295,616	8,121,035	7,948,226	7,728,980	7,506,821	7,327,765	7,150,424	6,588,871	5,190,079	5,060,580	70,918,397
Existing - Recovery from DC's	-253,901	-271,296	-268,136	-264,824	-215,275	-165,624	-161,917	-158,163	-154,298	-150,383	-146,404	-1,956,321
New External Debt Charges - Funded from Rates	445,234	1,229,884	4,258,071	7,796,872	10,010,967	10,484,564	10,484,564	10,484,564	10,542,369	10,600,174	10,600,174	86,492,202
New External Debt Charges - Funded from DC's	1,415,821	1,988,874	5,845,134	9,091,350	11,366,309	12,410,086	12,705,379	16,660,054	24,213,931	31,707,626	35,475,737	161,464,479
Recovery from DC's	-1,415,821	-1,988,874	-5,845,134	-9,091,350	-11,366,309	-12,410,086	-12,705,379	-16,660,054	-24,213,931	-31,707,626	-35,475,737	-161,464,479
Contribution to Capital	42,837,000	52,673,000	55,057,000	54,249,000	54,174,000	52,379,000	58,704,000	63,479,000	67,164,000	68,470,000	65,440,000	591,789,000
DC Exemption Funding	4,590,000	4,080,000	4,080,000	4,080,000	4,080,000	4,080,000	4,080,000	4,080,000	4,080,000	4,080,000	4,080,000	40,800,000
Subtotal	55,877,658	66,007,204	71,247,970	73,809,274	75,778,672	74,284,760	80,434,412	85,035,824	88,220,941	88,189,871	85,034,351	788,043,278
% Incr (Decr) from Previous Year	-3%	18%	8%	4%	3%	-2%	8%	6%	4%	0%	-4%	
<u>Water</u>												
Existing External Debt Charges	7,409,901	7,379,737	7,217,846	7,054,799	6,880,544	6,702,952	6,534,526	6,369,135	5,187,000	4,053,873	3,949,285	61,329,697
Existing - Recovery from DC's	-58,344	-62,618	-61,954	-61,251	-48,216	-35,154	-34,358	-33,548	-32,712	-31,863	-31,000	-432,675
New External Debt Charges - Funded from Rates	1,434,561	858,711	3,505,837	6,981,506	9,527,473	10,790,821	11,802,416	12,481,629	12,553,885	12,553,885	12,553,885	93,610,049
New External Debt Charges - Funded from DC's	918,025	355,495	2,357,547	5,084,391	6,363,418	6,883,931	8,524,331	11,013,175	13,120,506	14,057,619	14,057,619	81,818,030
Recovery from DC's	-918,025	-355,495	-2,357,547	-5,084,391	-6,363,418	-6,883,931	-8,524,331	-11,013,175	-13,120,506	-14,057,619	-14,057,619	-81,818,030
Contribution to Capital	51,762,000	50,296,000	52,953,000	56,553,000	63,516,000	73,300,000	84,611,000	83,417,000	72,832,000	90,002,000	107,861,000	735,341,000
DC Exemption Funding	2,547,000	2,240,000	2,240,000	2,240,000	2,240,000	2,240,000	2,240,000	2,240,000	2,240,000	2,240,000	2,240,000	22,400,000
Subtotal	63,095,118	60,711,831	65,854,728	72,768,055	82,115,801	92,998,619	105,153,583	104,474,216	92,780,173	108,817,895	126,573,170	912,248,071
% Incr (Decr) from Previous Year	32%	-4%	8%	10%	13%	13%	13%	-1%	-11%	17%	16%	
<u>Storm</u>												
Existing External Debt Charges	2,152,705	2,303,036	2,261,712	2,218,943	2,174,438	2,128,860	2,081,704	2,034,189	1,985,472	1,936,291	1,886,251	21,010,897
Existing - Recovery from DC's	-185,049	-205,023	-201,408	-197,617	-193,636	-189,538	-185,295	-180,997	-176,573	-172,090	-167,535	-1,869,711
New External Debt Charges - Funded from Rates	161,253	154,060	462,180	770,300	1,078,421	1,232,481	1,232,481	1,232,481	1,290,286	1,348,091	1,463,702	10,264,482
New External Debt Charges - Funded from DC's	1,636,096	942,901	2,193,983	2,730,104	3,185,982	3,413,921	3,413,921	3,413,921	3,413,921	3,420,825	3,427,730	29,557,207
Recovery from DC's	-1,636,096	-942,901	-2,193,983	-2,730,104	-3,185,982	-3,413,921	-3,413,921	-3,413,921	-3,413,921	-3,420,825	-3,427,730	-29,557,207
Contribution to Capital	3,205,000	15,685,000	14,382,000	15,775,000	15,975,000	17,595,000	9,875,000	16,385,000	37,430,000	34,735,000	35,215,000	213,052,000
DC Exemption Funding	1,863,000	1,680,000	1,680,000	1,680,000	1,680,000	1,680,000	1,680,000	1,680,000	1,680,000	1,680,000	1,680,000	16,800,000
Subtotal	7,196,909	19,617,074	18,584,484	20,246,626	20,714,223	22,446,802	14,683,890	21,150,672	42,209,185	39,527,292	40,077,419	259,257,668
% Incr (Decr) from Previous Year	-37%	173%	-5%	9%	2%	8%	-35%	44%	100%	-6%	1%	
TOTAL FINANCING CHARGES	126,169,685	146,336,108	155,687,182	166,823,955	178,608,695	189,730,182	200,271,885	210,660,712	223,210,300	236,535,058	251,684,939	1,959,549,017
% Incr (Decr) from Previous Year	8%	16%	6%	7%	7%	6%	6%	5%	6%	6%	6%	
Total Rate Funded Debt Charges	19,365,685	19,682,108	25,295,182	32,246,955	36,943,695	38,456,182	39,081,885	39,379,712	37,784,300	35,328,058	35,168,939	339,367,017
Total DC Funded Debt Charges	4,467,237	3,826,205	10,928,162	17,429,536	21,372,836	23,098,254	25,025,199	31,459,858	41,111,941	49,540,406	53,306,025	277,098,424

**SOURCE OF CAPITAL FINANCING
2020 to 2029 RATE PROGRAM CAPITAL BUDGET
\$(000'S)**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2020 to 2029
WATER											
Capital Program	67,495	123,358	100,025	67,841	90,360	131,347	114,724	97,929	90,062	108,061	991,202
<u>Source of Funding</u>											
Subsidy/Other Revenue	6,353	1,681	-	-	-	30	-	-	-	-	8,064
Development Charges	9,186	48,784	25,632	3,685	8,020	33,466	29,167	24,457	60	200	182,657
Reserves & Other Internal Sources	1,660	640	640	640	640	640	640	640	-	-	6,140
Contribution from Operating	50,296	52,953	56,553	63,516	73,300	84,611	83,417	72,832	90,002	107,861	735,341
External Debt	-	19,300	17,200	-	8,400	12,600	1,500	-	-	-	59,000
Total	67,495	123,358	100,025	67,841	90,360	131,347	114,724	97,929	90,062	108,061	991,202

City of Hamilton
Water System
2020 Capital Budget Project List
(000's)

Appendix "K" to Report FCS19070 Page 1 of 3

City Ward	Project Number	Project Description	DC Debt	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
													From Operating	Debt
Annual Projects														
City Wide	4032058001	Consultation and Accommodation		30	-	-	-	-	-	-	-	30	30	-
City Wide	5142001099	Engineering Services Staffing Costs - Water		4,700	-	-	-	-	-	-	-	4,700	4,700	-
City Wide	5142060711	PW Capital Water Consumption Program		180	-	-	-	-	-	-	-	180	180	-
		<i>Sub-Total Annual Projects</i>		4,910	-	-	-	-	-	-	-	4,910	4,910	-
Building - New Construction														
City Wide	5142066350	WTP Chlorine Chemical Building		2,250	-	-	-	-	-	-	-	2,250	2,250	-
		<i>Sub-Total Building - New Construction</i>		2,250	-	-	-	-	-	-	-	2,250	2,250	-
Coordinated - Replacement Projects														
1	5142070006	Hillcrest - Chedoke to end - Road Restoration		60	-	-	-	-	-	-	-	60	60	-
4	5142070018	Roxborough - Kenilworth to Strathearne (Homeside Neighbourhood) - Road Restoration		700	-	-	-	-	-	-	-	700	700	-
1	5142071306	Hillcrest - Chedoke to end		120	-	-	-	-	-	-	-	120	120	-
4	5142071315	Delena / Beland / Dunsmore		150	-	-	-	-	-	-	-	150	150	-
4	5142071318	Roxborough - Kenilworth to Strathearne (Homeside Neighbourhood)		770	-	-	-	-	-	-	-	770	770	-
		<i>Sub-Total Coordinated - Replacement Projects</i>		1,800	-	-	-	-	-	-	-	1,800	1,800	-
Coordinated - Upgrade Projects														
3	5141971313	Sherman - King to south end (LRT Enabling Project)		1,130	1,000	-	-	-	-	-	-	130	130	-
3	5141971314	Wentworth - Wilson to King (LRT Enabling Project)		370	330	-	-	-	-	-	-	40	40	-
4	5141971315	Main - Delena to Normanhurst & Normanhurst - Main to Queenston (LRT Enabling Project)		4,800	4,800	-	-	-	-	-	-	-	-	-
4	5142070015	Main - Delena to Normanhurst & Normanhurst - Main to Queenston (LRT Enabling Project)		300	-	-	-	-	-	-	-	300	300	-
		<i>Sub-Total Coordinated - Upgrade Projects</i>		6,600	6,130	-	-	-	-	-	-	470	470	-
Demolition														
2	5142067420	St. Joseph's Tank Pulsation Dampener (HD002STK)		60	-	-	-	-	-	-	-	60	60	-
		<i>Sub-Total Demolition</i>		60	-	-	-	-	-	-	-	60	60	-
Development Projects														
15	5142080080	Dundas - 575m w/o Evans to 210 w/o Evans		410	-	-	410	-	-	-	-	-	-	-
		<i>Sub-Total Development Projects</i>		410	-	-	410	-	-	-	-	-	-	-
Master Plan														
City Wide	5141555264	City-Wide Water Master Plan		300	-	-	270	-	-	-	-	30	30	-
City Wide	5142055010	Water Systems Planning Program		300	-	-	-	-	-	-	-	300	300	-
		<i>Sub-Total Master Plan</i>		600	-	-	270	-	-	-	-	330	330	-
Master Plan - Horizontal Assets														
11	5142096250	Airport Lands External Water Servicing (Feedermain) (W-27)	*	1,080	-	223	857	-	-	-	-	-	-	-
12	5142096520	Garner Road Trunk Watermain - Southcote to Wilson (W-09)	*	3,390	-	-	3,390	-	-	-	-	-	-	-

City of Hamilton
Water System
2020 Capital Budget Project List
(000's)

Appendix "K" to Report FCS19070 Page 2 of 3

City Ward	Project Number	Project Description	DC Debt	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources		
													From Operating	Debt	
1	5142096850	Locke St Trunk Watermain - Main to Barton (W-19)	*	2,200	-	-	2,200	-	-	-	-	-	-	-	-
		<i>Sub-Total Master Plan - Horizontal Assets</i>		6,670	-	223	6,447	-	-	-	-	-	-	-	-
Master Plan - Vertical Assets															
11	5141495551	PD7 (Upper Stoney Creek/Glanbrook) Elevated Reservoir (W-23)	*	610	-	-	610	-	-	-	-	-	-	-	-
13	5141595553	PS HD12A (Governors @ Huntingwood) Rebuild with Capacity Upgrade & Standby Power Installation (W-04)		550	-	-	413	-	-	-	-	137	137	-	-
13	5141695883	PS HD016 (York and Valley) Capacity Upgrade, Standby Power & Building Expansion (W-26) (CASH FLOWED)		780	-	-	701	-	-	-	-	79	79	-	-
5	5141795850	Greenhill PS HD04B & HD05A Upgrades (W-28) (CASH FLOWED)	*	220	-	-	165	-	-	-	-	55	55	-	-
City Wide	5142695552	P.S. HD07A - New District 7 (Elfrida area) Pumping Station (W-21)	*	170	-	-	170	-	-	-	-	-	-	-	-
		<i>Sub-Total Master Plan - Vertical Assets</i>		2,330	-	-	2,059	-	-	-	-	271	271	-	-
Outstations-Sustainable Asset Mgt (SAM)															
12	5141667421	Glancaster Rd & Hwy 53 Pumping Station (HD018) Upgrades (CASH FLOWED)		660	-	-	-	-	-	-	-	660	660	-	-
14	5141767650	New Greensville Communal Well		150	-	-	-	-	-	-	-	150	150	-	-
12	5142067450	Lee Smith Reservoir (HDR00) Upgrades		280	-	-	-	-	-	-	-	280	280	-	-
City Wide	5142067752	Water Outstation Inspections - Asset Management		660	-	-	-	-	-	-	-	660	660	-	-
		<i>Sub-Total Outstations-Sustainable Asset Mgt (SAM)</i>		1,750	-	-	-	-	-	-	-	1,750	1,750	-	-
Plant - Sustainable Asset Mgt (SAM)															
4	5141166110	Water Treatment Plant - Process Upgrades (CASH FLOWED)		4,950	-	-	-	-	-	-	-	4,950	4,950	-	-
4	5141567575	High Lift Pumping Station (HLPS) Improvements - Phase 2 (CASH FLOWED)		550	-	-	-	-	-	-	-	550	550	-	-
City Wide	5142066310	WTP Pre-Treatment Isolation Valves		280	-	-	-	-	-	-	-	280	280	-	-
		<i>Sub-Total Plant - Sustainable Asset Mgt (SAM)</i>		5,780	-	-	-	-	-	-	-	5,780	5,780	-	-
Plant - Water Quality Initiatives (WQI)															
City Wide	5142069075	City Environmental Lab Improvements Program		150	-	-	-	-	-	-	-	150	150	-	-
		<i>Sub-Total Plant - Water Quality Initiatives (WQI)</i>		150	-	-	-	-	-	-	-	150	150	-	-
Rehabilitation Project															
City Wide	5141761777	Beach Trunkmain Rehab		1,200	-	-	-	-	-	-	-	1,200	1,200	-	-
City Wide	5142057626	Critical Watermain Inspection Program		660	-	-	-	-	-	160	-	500	500	-	-
City Wide	5142060750	Unscheduled Valve, Hydrant, Watermain & Misc Water Replace Program		3,000	-	-	-	-	-	-	-	3,000	3,000	-	-
3	5142061305	Burlington Trunkmain Repairs		910	-	-	-	-	-	460	-	450	450	-	-
City Wide	5142061502	Water Meter - Installation/Replacement/Repair - General Maintenance		2,920	-	-	-	640	-	-	-	2,280	2,280	-	-
		<i>Sub-Total Rehabilitation Project</i>		8,690	-	-	-	640	-	620	-	7,430	7,430	-	-
Replacement Project															
10	5141961341	Pineland/Teal/Community/Garden/South Service		1,680	-	-	-	-	-	-	-	1,680	1,680	-	-
City Wide	5142060080	Valve Replacement Program		3,700	-	-	-	-	-	300	-	3,400	3,400	-	-
1, 2	5142061302	Barton - Locke to Caroline & Locke - York to Barton		1,000	-	-	-	-	-	-	-	1,000	1,000	-	-

City of Hamilton
Water System
2020 Capital Budget Project List
(000's)

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City Ward	Project Number	Project Description	DC Debt	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
													From Operating	Debt
5	5142061310	Woodward Greenhill Transmission Main Pipeline repair on Summercrest		500	-	-	-	-	-	-	-	500	500	-
		<i>Sub-Total Replacement Project</i>		6,880	-	-	-	-	-	300	-	6,580	6,580	-
Restorations														
City Wide	5142011101	Road Restoration Program		5,400	-	-	-	-	-	-	-	5,400	5,400	-
		<i>Sub-Total Restorations</i>		5,400	-	-	-	-	-	-	-	5,400	5,400	-
Technical Services Projects														
City Wide	4031957944	PW Asset Management (PW-AM) System Implementation		1,000	-	-	-	-	-	-	-	1,000	1,000	-
City Wide	4032055522	State of the Infrastructure - Asset Management		100	-	-	-	-	-	100	-	-	-	-
City Wide	4032055588	O.Reg. 588/17 Compliance - Asset Management Plan Development		75	-	-	-	-	-	-	-	75	75	-
City Wide	5142049555	QA-QC Service Contract Program		140	-	-	-	-	-	-	-	140	140	-
City Wide	5142055022	Engineering Consultant Watermain Projects		300	-	-	-	-	-	-	-	300	300	-
City Wide	5142055425	Prestressed Concrete Cylinder Pipe Condition Assessment Inspection Program		400	-	-	-	-	-	-	-	400	400	-
City Wide	5142055556	Mapping Update Program		40	-	-	-	-	-	-	-	40	40	-
City Wide	5142055851	Water Efficiency Plan/Program		110	-	-	-	-	-	-	-	110	110	-
City Wide	5142057545	Water - Computer Model		280	-	-	-	-	-	-	-	280	280	-
City Wide	5142060577	Metallic Watermain Condition Assessment Program		630	-	-	-	-	-	-	-	630	630	-
		<i>Sub-Total Technical Services Projects</i>		3,075	-	-	-	-	-	100	-	2,975	2,975	-
Upgrade Projects														
City Wide	5142062073	Field Data Systems Program		110	-	-	-	-	-	-	-	110	110	-
City Wide	5142062078	Substandard Water Service Replacement Program		2,750	-	-	-	-	-	-	-	2,750	2,750	-
		<i>Sub-Total Upgrade Projects</i>		2,860	-	-	-	-	-	-	-	2,860	2,860	-
Vehicles-New														
City Wide	5141851810	Fleet Additions		1,630	-	-	-	-	-	-	-	1,630	1,630	-
		<i>Sub-Total Vehicles-New</i>		1,630	-	-	-	-	-	-	-	1,630	1,630	-
Water Quality Initiatives (WQI)														
City Wide	5141966911	Woodward WTP - Biological Filtration Pilot Study		250	-	-	-	-	-	-	-	250	250	-
		<i>Sub-Total Water Quality Initiatives (WQI)</i>		250	-	-	-	-	-	-	-	250	250	-
Watermain Lining														
City Wide	5142060072	Watermain Structural Lining		5,400	-	-	-	-	-	-	-	5,400	5,400	-
		<i>Sub-Total Watermain Lining</i>		5,400	-	-	-	-	-	-	-	5,400	5,400	-
Total All Projects				67,495	6,130	223	9,186	640	-	1,020	-	50,296	50,296	-

* DC Debt

**CITY OF HAMILTON
WATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Rehabilitation, Replacement, & Upgrade Programs (SAM)																
City Wide	4031957944	PW Asset Management (PW-AM) System Implementation	750	0	1,000	1,000	670	670	670	670	670	670	3,760	3,010	2019	2023
City Wide	4032014405	Contaminated Soil & Rock Disposal Program	0	0	0	0	220	220	0	0	440	440	660	660	2020	Ongoing
City Wide	4032055522	State of the Infrastructure - Asset Management	0	0	100	0	90	90	90	90	630	630	910	810	2020	Ongoing
City Wide	4032055588	O.Reg. 588/17 Compliance - Asset Management Plan Development	0	0	75	75	75	75	75	75	75	75	300	300	2020	2023
City Wide	4032058001	Consultation and Accommodation	0	0	30	30	30	30	30	30	210	210	300	300	2020	Ongoing
4	5141641226	Centralized Water and Wastewater Operations Centre (CASH FLOWED)	1,250	2,250	0	0	0	0	0	0	7,500	7,500	8,750	9,750	2016	2024
City Wide	5141761777	Beach Trunkmain Rehab	7,300	5,000	1,200	1,200	0	0	0	0	0	0	8,500	6,200	2017	2020
City Wide	5141851810	Fleet Additions	1,230	580	1,630	1,630	290	290	700	700	410	410	4,260	3,610	2018	2019
10	5141961341	Pineland/Teal/Community/Garden/South Service	0	0	1,680	1,680	0	0	0	0	0	0	1,680	1,680	2019	2020
City Wide	5142001099	Engineering Services Staffing Costs - Water	0	0	4,700	4,700	4,700	4,700	4,700	4,700	32,900	32,900	47,000	47,000	2020	Ongoing
City Wide	5142011101	Road Restoration Program	0	0	5,400	5,400	5,400	5,400	5,400	5,400	37,800	37,800	54,000	54,000	2020	Ongoing
City Wide	5142049555	QA-QC Service Contract Program	0	0	140	140	140	140	140	140	980	980	1,400	1,400	2020	Ongoing
City Wide	5142055022	Engineering Consultant Watermain Projects	0	0	300	300	300	300	300	300	2,100	2,100	3,000	3,000	2020	Ongoing
City Wide	5142055425	Prestressed Concrete Cylinder Pipe Condition Assessment Inspection Program	0	0	400	400	0	0	0	0	0	0	400	400	2020	2020
City Wide	5142055556	Mapping Update Program	0	0	40	40	40	40	40	40	280	280	400	400	2018	Ongoing
City Wide	5142055851	Water Efficiency Plan/Program	0	0	110	110	113	113	115	115	880	880	1,218	1,218	2020	Ongoing
City Wide	5142057545	Water - Computer Model	0	0	280	280	280	280	280	280	1,680	1,680	2,520	2,520	2020	Ongoing
City Wide	5142057626	Critical Watermain Inspection Program	0	0	660	500	300	300	300	300	2,100	2,100	3,360	3,200	2020	Ongoing
City Wide	5142060080	Valve Replacement Program	0	0	3,700	3,400	1,200	1,200	1,200	1,200	8,400	8,400	14,500	14,200	2020	Ongoing
City Wide	5142060577	Metallic Watermain Condition Assessment Program	0	0	630	630	630	630	630	630	4,410	4,410	6,300	6,300	2020	Ongoing
City Wide	5142060711	PW Capital Water Consumption Program	0	0	180	180	180	180	180	180	1,260	1,260	1,800	1,800	2020	Ongoing

**CITY OF HAMILTON
WATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Rehabilitation, Replacement, & Upgrade Programs (SAM)																
City Wide	5142060750	Unscheduled Valve, Hydrant, Watermain & Misc Water Replace Program	0	0	3,000	3,000	2,750	2,750	2,500	2,500	14,000	14,000	22,250	22,250	2020	Ongoing
City Wide	5142061300	Stand-Alone Watermain Replacement	0	0	0	0	0	0	0	0	1,500	1,500	1,500	1,500	2023	Ongoing
1, 2	5142061302	Barton - Locke to Caroline & Locke - York to Barton	0	0	1,000	1,000	0	0	0	0	0	0	1,000	1,000	2018	2020
3	5142061305	Burlington Trunkmain Repairs	0	0	910	450	0	0	0	0	0	0	910	450	2020	2020
5	5142061310	Woodward Greenhill Transmission Main Pipeline repair on Summercrest	0	0	500	500	0	0	0	0	0	0	500	500	2020	2020
City Wide	5142061502	Water Meter - Installation/Replacement/Repair - General Maintenance	0	0	2,920	2,280	3,610	2,970	3,680	3,040	23,640	20,440	33,850	28,730	2020	Ongoing
City Wide	5142062073	Field Data Systems Program	0	0	110	110	110	110	110	110	770	770	1,100	1,100	2020	Ongoing
City Wide	5142062078	Substandard Water Service Replacement Program	0	0	2,750	2,750	2,750	2,750	2,500	2,500	14,000	14,000	22,000	22,000	2020	Ongoing
City Wide	5142066350	WTP Chlorine Chemical Building	0	0	2,250	2,250	6,530	6,530	6,530	6,530	0	0	15,310	15,310	2020	2022
City Wide	5142071074	Contingency for Unscheduled Works Program	0	0	0	0	180	180	0	0	720	720	900	900	2020	Ongoing
City Wide	5142071940	Unspecified Water Works	0	0	0	0	0	0	0	0	80,000	80,000	80,000	80,000	2020	2024
2	5142161300	Duke - Queen to Hess	0	0	0	0	50	50	250	250	0	0	300	300	2021	2022
7	5142161300	Edwina - Lawson to Berko & Berko - Edwina to Lawfield	0	0	0	0	330	330	0	0	0	0	330	330	2021	2021
2	5142161300	Jackson - Catherine to Walnut	0	0	0	0	210	210	0	0	0	0	210	210	2021	2021
3	5142361300	Birge - Emerald to St. Matthews	0	0	0	0	0	0	0	0	270	270	270	270	2023	2023
3	5142361300	Evans - Wellington to East	0	0	0	0	0	0	0	0	360	360	360	360	2023	2023
1	5142461300	Amelia - Queen to West End	0	0	0	0	0	0	0	0	540	540	540	540	2024	2024
1	5142461300	Bold - Queen to Locke	0	0	0	0	0	0	0	0	700	700	700	700	2024	2024
1	5142461300	Caroline - Herkimer to Robinson	0	0	0	0	0	0	0	0	350	350	350	350	2024	2024
7	5142461300	Dallas - Upper Gage to West End	0	0	0	0	0	0	0	0	500	500	500	500	2024	2024
2	5142461300	James and Charlton Intersection	0	0	0	0	0	0	0	0	900	900	900	900	2024	2024
3	5142461300	Myler - Sanford to Milton/Milton - Barton to Princess	0	0	0	0	0	0	0	0	450	450	450	450	2024	2024

**CITY OF HAMILTON
WATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Rehabilitation, Replacement, & Upgrade Programs (SAM)																
13	5142471301	Hatt - Market to east end & York / Kerr	0	0	0	0	0	0	0	0	700	700	700	700	2024	2024
3	5142561300	Edward - Barnesdale to Lottridge	0	0	0	0	0	0	0	0	340	340	340	340	2025	2025
2	5142561300	Hess - Markland to Aberdeen	0	0	0	0	0	0	0	0	430	430	430	430	2025	2025
2	5142561300	Hughson - Wilson to Barton	0	0	0	0	0	0	0	0	500	500	500	500	2025	2025
2	5142561300	John - Cannon to Barton	0	0	0	0	0	0	0	0	760	760	760	760	2025	2025
2	5142661300	Robinson - Hess to Park	0	0	0	0	0	0	0	0	950	950	950	950	2026	2026
3	5142761300	Clinton(Case)\Ruth\Barnesdale	0	0	0	0	0	0	0	0	1,740	1,740	1,740	1,740	2027	2027
4	5142761300	Edgemont - Main to King	0	0	0	0	0	0	0	0	660	660	660	660	2027	2028
			10,530	7,830	35,695	34,035	31,178	30,538	30,420	29,780	247,505	244,305	355,328	346,488		
Projects Coordinated with Roads Program																
3	5141971313	Sherman - King to south end (LRT Enabling Project)	90	0	1,130	130	0	0	0	0	0	0	1,220	130	2019	2020
3	5141971314	Wentworth - Wilson to King (LRT Enabling Project)	90	0	370	40	0	0	0	0	0	0	460	40	2019	2020
4	5141971315	Main - Delena to Normanhurst & Normanhurst - Main to Queenston (LRT Enabling Project)	230	0	4,800	0	0	0	0	0	0	0	5,030	0	2019	2020
City Wide	5142070000	Coordinated Road and Subsurface Works	0	0	0	0	3,440	3,440	2,000	2,000	26,020	26,020	31,460	31,460	2020	Ongoing
1	5142070006	Hillcrest - Chedoke to end - Road Restoration	0	0	60	60	0	0	0	0	0	0	60	60	2020	2020
4	5142070015	Main - Delena to Normanhurst & Normanhurst - Main to Queenston (LRT Enabling Project)	0	0	300	300	0	0	0	0	0	0	300	300	2020	2020
4	5142070018	Roxborough - Kenilworth to Strathearne (Homeside Neighbourhood) - Road Restoration	0	0	700	700	0	0	0	0	0	0	700	700	2020	2020
City Wide	5142071301	Watermain Replacement Coordinated with Roads	0	0	0	0	0	0	2,000	2,000	49,400	49,400	51,400	51,400	2020	Ongoing
1	5142071306	Hillcrest - Chedoke to end	0	0	120	120	0	0	0	0	0	0	120	120	2020	2020
4	5142071315	Delena / Beland / Dunsmore	0	0	150	150	1,140	1,140	0	0	0	0	1,290	1,290	2020	2021

**CITY OF HAMILTON
WATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Projects Coordinated with Roads Program																
4	5142071318	Roxborough - Kenilworth to Strathearne (Homeside Neighbourhood)	0	0	770	770	0	0	0	0	0	0	770	770	2020	2020
4	5142171301	Barton - Parkdale to Talbot	0	0	0	0	1,080	1,080	0	0	0	0	1,080	1,080	2021	2021
2	5142171301	Strachan - James to east end	0	0	0	0	600	600	0	0	0	0	600	600	2021	2021
13	5142271301	Glenmorris Drive / Underhill Avenue (York Heights Neighbourhood)	0	0	0	0	0	0	330	330	0	0	330	330	2020	2022
1	5142271301	Marion - King to Dromore	0	0	0	0	0	0	300	300	0	0	300	300	2022	2022
8	5142371301	Fennell - Upper James to Upper Wellington	0	0	0	0	0	0	0	0	590	590	590	590	2023	2023
13	5142371301	Hatt & Bond - King to Market	0	0	0	0	0	0	0	0	560	560	560	560	2023	2023
1	5142371301	Jones / Oxford / Tecumseh (Strathcona Neighbourhood)	0	0	0	0	0	0	0	0	810	810	810	810	2023	2023
3	5142471301	Burlington & Industrial - Birch to Gage	0	0	0	0	0	0	0	0	2,760	2,760	2,760	2,760	2024	2024
13	5142471301	Cairns / East St N / Sleepy Hollow / Spencer / Wilmar (Hunter Neighbourhood)	0	0	0	0	0	0	0	0	1,090	1,090	1,090	1,090	2024	2024
1	5142471301	Carling / Macklin St S / Olmstead / Tope (Westdale South)	0	0	0	0	0	0	0	0	660	660	660	660	2024	2024
2	5142471301	Ferguson/Foster/Walnut/Patrick	200	0	0	0	0	0	0	0	1,710	1,710	1,910	1,710	2024	2024
8	5142471301	Upper James - Mohawk to Fennell	0	0	0	0	0	0	0	0	3,010	3,010	3,010	3,010	2024	2024
15	5142472304	Bridge 451 - Hwy 5 E, 120m e/o Mill St S	0	0	0	0	0	0	0	0	140	140	140	140	2024	2024
1	5142571301	Florence/Head/Morden/Napier/Nelson/Peel/Wellesley (Strathcona Neighbourhood)	0	0	0	0	0	0	0	0	720	720	720	720	2025	2025
7, 8	5142571301	Upper Wellington - Bryna to Mohawk	0	0	0	0	0	0	0	0	1,045	1,045	1,045	1,045	2025	2025
3	5142571301	Wilson - Wentworth to Sherman	0	0	0	0	0	0	0	0	810	810	810	810	2025	2025
1, 13	5142671301	Osler - South St to West Park	0	0	0	0	0	0	0	0	900	900	900	900	2026	2028
3	5142671301	Sanford - Main to Cannon	0	0	0	0	0	0	0	0	1,350	1,350	1,350	1,350	2026	2026
4	5142771301	Burlington & Industrial - Ottawa to Kenilworth	100	0	0	0	0	0	0	0	2,100	2,100	2,200	2,100	2027	2027
3	5142971301	Stipeley Neighbourhood (South) - Connaught / Balasm / Dunsmore	0	0	0	0	0	0	0	0	945	945	945	945	2029	2029

**CITY OF HAMILTON
WATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
			710	0	8,400	2,270	6,260	6,260	4,630	4,630	94,620	94,620	114,620	107,780		
Plant/Outstations Projects (SAM)																
4	5141166110	Water Treatment Plant - Process Upgrades (CASH FLOWED)	25,790	9,553	4,950	4,950	1,270	780	1,270	780	110,880	68,149	144,160	84,212	2011	2026
1	5141567273	Main / Whitney Pumping Station Replacement and Decommissioning	1,930	830	0	0	0	0	2,980	2,980	0	0	4,910	3,810	2015	2019
8	5141567520	Stone Church/Garth Water (HDR05) Reservoir	3,960	0	0	0	880	880	3,125	3,125	2,775	2,775	10,740	6,780	2015	2019
4	5141567575	High Lift Pumping Station (HLPS) Improvements - Phase 2 (CASH FLOWED)	880	220	550	550	2,470	2,470	2,470	2,470	0	0	6,370	5,710	2015	2019
12	5141667421	Glancaster Rd & Hwy 53 Pumping Station (HD018) Upgrades (CASH FLOWED)	6,040	4,400	660	660	5,900	5,900	2,200	2,200	0	0	14,800	13,160	2016	2022
14	5141767650	New Greensville Communal Well	1,250	500	150	150	5,250	5,250	0	0	0	0	6,650	5,900	2017	2021
9	5141867651	HD007 Highland Rd Reservoir Upgrades	260	260	0	0	0	0	990	990	0	0	1,250	1,250	2018	2019
15	5141895852	Carlisle Water Supply System - Additional Water Storage (CASH FLOWED)	440	440	0	0	440	440	6,600	6,600	0	0	7,480	7,480	2018	2022
City Wide	5142066310	WTP Pre-Treatment Isolation Valves	0	0	280	280	1,200	1,200	0	0	0	0	1,480	1,480	2020	2021
City Wide	5142066713	Water Maintenance Capital Program	0	0	0	0	2,000	2,000	2,000	2,000	14,000	14,000	18,000	18,000	2020	Ongoing
12	5142067450	Lee Smith Reservoir (HDR00) Upgrades	0	0	280	280	830	830	0	0	0	0	1,110	1,110	2020	2021
City Wide	5142067752	Water Outstation Inspections - Asset Management	0	0	660	660	660	660	660	660	4,400	4,400	6,380	6,380	2020	Ongoing
City Wide	5142367751	Water Outstation Upgrades - Asset Management Program	0	0	0	0	0	0	0	0	105,000	105,000	105,000	105,000	2023	Ongoing
			40,550	16,203	7,530	7,530	20,900	20,410	22,295	21,805	237,055	194,324	328,330	260,272		
Plant/Outstations Projects (WQI)																
City Wide	5141966911	Woodward WTP - Biological Filtration Pilot Study	150	0	250	250	0	0	0	0	0	0	400	250	2019	2020
City Wide	5142069075	City Environmental Lab Improvements Program	0	0	150	150	1,000	1,000	340	340	530	530	2,020	2,020	2020	Ongoing
4	5142666150	GAC Replacement	0	0	0	0	0	0	0	0	4,950	4,950	4,950	4,950	2020	Ongoing

**CITY OF HAMILTON
WATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
			150	0	400	400	1,000	1,000	340	340	5,480	5,480	7,370	7,220		
Master Plan - Horizontal Assets																
13, 15	5141796752	PD16 (Waterdown) Trunk Feedermain - PS HD016 to Hwy 5 at Algonquin (W-25) (CASH FLOWED)	2,570	422	0	0	0	0	8,370	2,092	0	0	10,940	2,514	2017	2019
11	5141996951	Binbrook Feedermain via Fletcher (W-30)	0	0	0	0	3,870	0	2,530	0	0	0	6,400	0	2019	2020
11	5142096250	Airport Lands External Water Servicing (Feedermain) (W-27)	0	0	1,080	0	7,170	0	0	0	10,340	0	18,590	0	2020	2025
12	5142096520	Garner Road Trunk Watermain - Southcote to Wilson (W-09)	0	0	3,390	0	13,550	0	0	0	0	0	16,940	0	2020	2021
1	5142096850	Locke St Trunk Watermain - Main to Barton (W-19)	0	0	2,200	0	0	0	0	0	2,524	0	4,724	0	2018	2019
6, 9	5142596250	HD07A Feedermain (W-22)	0	0	0	0	0	0	0	0	8,860	0	8,860	0	2025	2026
			2,570	422	6,670	0	24,590	0	10,900	2,092	21,724	0	66,454	2,514		
Master Plan - Vertical Assets																
12	5141395354	PD18 (Ancaster) Elevated Reservoir (W-14) (CASH FLOWED)	2,610	255	0	0	6,080	3,040	6,080	3,040	0	0	14,770	6,335	2013	2020
11	5141495551	PD7 (Upper Stoney Creek/Glanbrook) Elevated Reservoir (W-23)	1,990	0	610	0	5,500	0	5,500	0	0	0	13,600	0	2014	2020
City Wide	5141555264	City-Wide Water Master Plan	650	0	300	30	0	0	0	0	60	0	1,010	30	2015	2020
13	5141595553	PS HD12A (Governors @ Huntingwood) Rebuild with Capacity Upgrade & Standby Power Installation (W-04)	720	0	550	137	2,920	730	0	0	0	0	4,190	867	2015	2019
13	5141695883	PS HD016 (York and Valley) Capacity Upgrade, Standby Power & Building Expansion (W-26) (CASH FLOWED)	3,710	302	780	79	4,560	457	0	0	0	0	9,050	838	2016	2019
5	5141795850	Greenhill PS HD04B & HD05A Upgrades (W-28) (CASH FLOWED)	9,820	2,482	220	55	9,910	2,478	10,160	2,541	0	0	30,110	7,556	2017	2020
11	5141995951	PS HD019 (Binbrook) Capacity Upgrade (W-20)	220	0	0	0	1,810	0	0	0	0	0	2,030	0	2019	2020

**CITY OF HAMILTON
WATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Master Plan - Vertical Assets																
City Wide	5142055010	Water Systems Planning Program	0	0	300	300	300	300	300	300	2,100	2,100	3,000	3,000	2020	Ongoing
9	5142495251	Highland Reservoir HDR07 (W-11) Expansion (CASH FLOWED)	0	0	0	0	0	0	0	0	12,420	0	12,420	0	2024	2026
City Wide	5142695552	P.S. HD07A - New District 7 (Elfrida area) Pumping Station (W-21)	0	0	170	0	0	0	0	0	20,050	0	20,220	0	2025	2027
			19,720	3,039	2,930	601	31,080	7,005	22,040	5,881	34,630	2,100	110,400	18,626		
Development/Extension Projects																
15	5142080080	Dundas - 575m w/o Evans to 210 w/o Evans	0	0	410	0	0	0	0	0	0	0	410	0	2020	2020
City Wide	5142096011	Intensification Infrastructure Upgrades Program - Water	0	0	0	0	400	200	0	0	1,600	800	2,000	1,000	2020	Ongoing
12	5142171301	Southcote - Garner to Highway 403 Bridge	0	0	0	0	160	160	2,350	2,350	0	0	2,510	2,510	2021	2022
11	5142180120	RHBP - Twenty Rd Extension - Glover to Trinity Church	0	0	0	0	565	340	0	0	0	0	565	340	2021	2021
11	5142180182	Binbrook - Royal Winter/Binhaven to Fletcher	0	0	0	0	630	0	0	0	0	0	630	0	2021	2021
12	5142180182	Shaver - Kastura to Westview	0	0	0	0	225	170	700	525	0	0	925	695	2021	2022
11	5142580580	RHBP - Nebo - 900m s/o Twenty to Dickenson	0	0	0	0	0	0	0	0	400	0	400	0	2025	2025
11	5142780784	RHBP - Dickenson - Nebo to 800m e/o Nebo	0	0	0	0	0	0	0	0	900	0	900	0	2027	2027
10	5143480476	Millen - Arvin to South Service	0	0	0	0	0	0	0	0	0	0	0	0	2029	2029
			0	0	410	0	1,980	870	3,050	2,875	2,900	800	8,340	4,545		
Coordinated Projects																
City Wide	5141855777	Water infrastructure Analysis - Growth and Economic Opportunities	570	220	0	0	350	150	0	0	0	0	920	370	2018	2020
			570	220	0	0	350	150	0	0	0	0	920	370		
Demolition																
2	5142067420	St. Joseph's Tank Pulsation Dampener (HD002STK)	0	0	60	60	110	110	440	440	0	0	610	610	2020	2022

**CITY OF HAMILTON
WATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
			0	0	60	60	110	110	440	440	0	0	610	610		
Equipment Replacement																
City Wide	5141966151	SCADA servers and network	2,500	0	0	0	250	250	250	250	5,500	5,500	8,500	6,000	2019	2020
			2,500	0	0	0	250	250	250	250	5,500	5,500	8,500	6,000		
Plans/Studies																
City Wide	5141955713	Pressure Districts and Drinking Water System Optimization	220	0	0	0	110	110	110	110	110	110	550	330	2019	2022
City Wide	5142055247	Alterations to the Drinking Water System	0	0	0	0	150	150	150	150	900	900	1,200	1,200	2020	Ongoing
			220	0	0	0	260	260	260	260	1,010	1,010	1,750	1,530		
Pumping Station																
2	5142467422	New PD2 Water Pumping Station (CASH FLOWED)	500	500	0	0	0	0	0	0	12,100	12,100	12,600	12,600	2017	2021
			500	500	0	0	0	0	0	0	12,100	12,100	12,600	12,600		
Watermain Lining																
City Wide	5142060072	Watermain Structural Lining	0	0	5,400	5,400	5,400	5,400	4,050	4,050	37,800	37,800	52,650	52,650	2020	Ongoing
13	5142260072	WM Structural Lining - Dundas Valley Watermain	0	0	0	0	0	0	1,350	1,350	0	0	1,350	1,350	2022	2022
			0	0	5,400	5,400	5,400	5,400	5,400	5,400	37,800	37,800	54,000	54,000		
Total Water System			78,020	28,214	67,495	50,296	123,358	72,253	100,025	73,753	700,324	598,039	1,069,222	822,555		

**SOURCE OF CAPITAL FINANCING
2020 to 2029 RATE PROGRAM CAPITAL BUDGET
\$(000'S)**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2020 to 2029
WASTEWATER											
Capital Program	218,606	157,808	108,361	70,055	56,210	62,735	158,453	162,038	161,998	66,220	1,222,484
Source of Funding											
Subsidy/Other Revenue	80,036	22,092	-	-	-	-	-	-	-	-	102,128
Development Charges	44,227	39,739	26,612	14,681	3,831	4,031	94,974	93,674	93,528	780	416,077
Reserves & Other Internal Sources	24,770	12,220	-	-	-	-	-	-	-	-	36,990
Contribution from Operating	52,673	55,057	54,249	54,174	52,379	58,704	63,479	67,164	68,470	65,440	591,789
External Debt	16,900	28,700	27,500	1,200	-	-	-	1,200	-	-	75,500
Total	218,606	157,808	108,361	70,055	56,210	62,735	158,453	162,038	161,998	66,220	1,222,484

City of Hamilton
Wastewater System
2020 Capital Budget Project List
(000's)

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City Ward	Project Number	Project Description	DC Debt	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
													From Operating	Debt
Annual Projects														
City Wide	4032058001	Consultation and Accommodation		30	-	-	-	-	-	-	-	30	30	-
City Wide	5162001099	Engineering Services Staffing Costs - Wastewater		4,700	-	-	-	-	-	-	-	4,700	4,700	-
City Wide	5162060711	PW Capital Water Consumption Program		180	-	-	-	-	-	-	-	180	180	-
8	5162061006	Inverness Ave E - Combined Major Trunk Rehabilitation		200	-	-	-	-	-	200	-	-	-	-
<i>Sub-Total Annual Projects</i>				5,110	-	-	-	-	-	200	-	4,910	4,910	-
Building - New Construction														
City Wide	5161667421	New Haulage Receiving Station		550	-	-	-	-	-	-	-	550	550	-
<i>Sub-Total Building - New Construction</i>				550	-	-	-	-	-	-	-	550	550	-
Computer Software Purchases														
City Wide	5162057545	Wastewater Computer Model Update & Maintenance		660	-	-	-	-	-	-	-	660	660	-
<i>Sub-Total Computer Software Purchases</i>				660	-	-	-	-	-	-	-	660	660	-
Coordinated - Network Extension Projects														
9	5162080089	Rymal - Fletcher to Upper Centennial	*	5,330	-	-	5,330	-	-	-	-	-	-	-
<i>Sub-Total Coordinated - Network Extension Projects</i>				5,330	-	-	5,330	-	-	-	-	-	-	-
Coordinated - Replacement Projects														
1	5162071006	Hillcrest - Chedoke to end		60	-	-	-	-	-	-	-	60	60	-
<i>Sub-Total Coordinated - Replacement Projects</i>				60	-	-	-	-	-	-	-	60	60	-
Coordinated - Upgrade Projects														
4	5162071315	Main -Queenston Traffic Circle to Delena & Rosewood (LRT Enabling Project)		1,160	-	-	-	-	-	-	-	1,160	1,160	-
<i>Sub-Total Coordinated - Upgrade Projects</i>				1,160	-	-	-	-	-	-	-	1,160	1,160	-
Development Projects														
4	5162080961	Roxborough Park Intensification		1,500	-	-	1,500	-	-	-	-	-	-	-
<i>Sub-Total Development Projects</i>				1,500	-	-	1,500	-	-	-	-	-	-	-
Maintenance Projects														
5, 6	5161968920	Fennell/Greenhill Drop Shaft		500	-	-	-	-	-	-	-	500	500	-
<i>Sub-Total Maintenance Projects</i>				500	-	-	-	-	-	-	-	500	500	-
Master Plan														
City Wide	5161555264	City-Wide Wastewater Master Plan		300	-	-	270	-	-	-	-	30	30	-
City Wide	5162055010	Wastewater Systems Planning Program		380	-	-	-	-	-	-	-	380	380	-
<i>Sub-Total Master Plan</i>				680	-	-	270	-	-	-	-	410	410	-
Master Plan - Horizontal Assets														
11	5161696452	Airport Lands Dickenson Rd Trunk Sewer (WW-27, WW-26, WW-28) (CASH FLOWED)	*	26,800	-	-	26,800	-	-	-	-	-	-	-
<i>Sub-Total Master Plan - Horizontal Assets</i>				26,800	-	-	26,800	-	-	-	-	-	-	-

City of Hamilton
Wastewater System
2020 Capital Budget Project List
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City Ward	Project Number	Project Description	DC Debt	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
													From Operating	Debt
Master Plan - Vertical Assets														
15	5161796786	First Street (Waterdown Sanitary) PS Upgrade DC014		1,050	-	-	640	-	-	-	-	410	410	-
City Wide	5162055050	Municipal Class EA Studies		400	-	-	-	-	-	-	-	400	400	-
City Wide	5162095800	Flooding & Drainage Master Plan Capital Improvements		880	-	-	-	-	-	-	-	880	880	-
<i>Sub-Total Master Plan - Vertical Assets</i>				2,330	-	-	640	-	-	-	-	1,690	1,690	-
Outstations-Sustainable Asset Mgt (SAM)														
12	5161267270	Ancaster Wastewater Outstations Upgrades		110	-	-	-	-	-	-	-	110	110	-
13	5161267273	Dundas Wastewater Outstations Upgrades		600	-	-	-	-	-	-	-	600	600	-
12, 13, 15	5161667622	FC001, DC009 & HC011 Wastewater Pumping Stations Upgrades		1,500	-	-	-	-	-	-	-	1,500	1,500	-
4	5161767420	Parkdale Avenue HC001 Wastewater Pumping Station Upgrades		10	-	-	-	-	-	-	-	10	10	-
5	5162067065	Eastport Drive SPS (HC017) Upgrades		390	-	-	-	-	-	-	-	390	390	-
15	5162067275	FC001 Elgin Street Sewage Pumping Station		550	-	-	-	-	-	-	-	550	550	-
4, 12, 15	5162067375	Minor Upgrades to SPS Outstations		170	-	-	-	-	-	-	-	170	170	-
12	5162067425	Hillside SPS (DC006) Upgrades		280	-	-	-	-	-	-	-	280	280	-
City Wide	5162067752	Wastewater Outstation Inspections - Asset Management Program		520	-	-	-	-	-	-	-	520	520	-
<i>Sub-Total Outstations-Sustainable Asset Mgt (SAM)</i>				4,130	-	-	-	-	-	-	-	4,130	4,130	-
Plans/Studies														
City Wide	5162055801	Woodward WWTP Facility Plan		350	-	-	-	-	-	-	-	350	350	-
City Wide	5162062543	CSO Characterization Program		450	-	-	-	-	-	-	-	450	450	-
<i>Sub-Total Plans/Studies</i>				800	-	-	-	-	-	-	-	800	800	-
Plant - Sustainable Asset Mgt (SAM)														
City Wide	5161966102	Woodward WWTP - Expansion (CASH FLOWED)	*	1,750	-	-	1,750	-	-	-	-	-	-	-
City Wide	5161966511	Woodward WWTP - Digester #5 (CASH FLOWED)		2,500	-	-	-	-	-	-	-	2,500	2,500	-
City Wide	5162066311	Woodward WWTP - Digester #3 (CASH FLOWED)		250	-	-	-	-	-	-	-	250	250	-
City Wide	5162066813	Dundas WWTP - Health & Safety Immediate Needs		4,900	-	-	-	-	-	1,150	-	3,750	3,750	-
City Wide	5162067420	Main & King CSO Rehabilitation		350	-	-	-	-	-	-	-	350	350	-
<i>Sub-Total Plant - Sustainable Asset Mgt (SAM)</i>				9,750	-	-	1,750	-	-	1,150	-	6,850	6,850	-
Plant - Wastewater Investment Needs (WINS)														
City Wide	5160866801	Woodward WWTP - Clean Harbour (CASH FLOWED)	*	100,631	65,736	-	5,096	12,120	-	-	-	17,679	2,579	15,100
City Wide	5160966910	Woodward WWTP - Biosolids Management Facility	*	28,030	14,300	-	2,590	11,140	-	-	-	-	-	-
City Wide	5162069075	City Environmental Lab Improvements Program		150	-	-	-	-	-	-	-	150	150	-
<i>Sub-Total Plant - Wastewater Investment Needs (WINS)</i>				128,811	80,036	-	7,686	23,260	-	-	-	17,829	2,729	15,100
Rehabilitation Project														
12	5161960942	Ancaster Sewage Works Pipeline CIPP Rehab - CASH FLOW		500	-	-	-	-	-	-	-	500	500	-
5	5162060044	Battlefield Creek Major Trunk Cleaning & Condition Assessment		250	-	-	-	-	-	-	-	250	250	-
City Wide	5162060302	Emergency Repairs - Cross Connections Program		700	-	-	-	-	-	-	-	700	700	-

City of Hamilton
Wastewater System
2020 Capital Budget Project List
(000's)

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City Ward	Project Number	Project Description	DC Debt	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
													From Operating	Debt
City Wide	5162060390	Wastewater System Lining Program		4,050	-	-	-	-	-	-	-	4,050	4,050	-
City Wide	5162060522	Sewer Lateral Management Program (WWC)		4,250	-	-	-	-	-	-	-	4,250	4,250	-
City Wide	5162060533	Trenchless Manhole Rehabilitation		70	-	-	-	-	-	-	-	70	70	-
City Wide	5162060574	Pre-Construction Mainline Condition Assessment		500	-	-	-	-	-	-	-	500	500	-
City Wide	5162060575	Mainline Sewer Condition Assessment Program		1,640	-	-	-	-	-	-	-	1,640	1,640	-
City Wide	5162060576	Sewer Lateral Condition Assessment Program		540	-	-	-	-	-	-	-	540	540	-
City Wide	5162060577	Mainline Sewer Condition Assessment for Compliance & Regulations		100	-	-	-	-	-	-	-	100	100	-
5, 9	5162061051	Satellite City Trunk Sewer Rehabilitation		8,750	-	-	-	-	-	-	-	8,750	6,950	1,800
		<i>Sub-Total Rehabilitation Project</i>		21,350	-	-	-	-	-	-	-	21,350	19,550	1,800
Repairs														
City Wide	5162060820	Open Cut Repairs for CIPP Program		500	-	-	-	-	-	-	-	500	500	-
		<i>Sub-Total Repairs</i>		500	-	-	-	-	-	-	-	500	500	-
Replacement Project														
City Wide	5162061444	Sewer Lateral Replace/Rehab Program		3,600	-	-	-	-	-	-	-	3,600	3,600	-
City Wide	5162061740	Unscheduled Manhole and Sewermain Replacement Program		500	-	-	-	-	-	-	-	500	500	-
City Wide	5162071015	Sewer Lateral Replacement for Co-ordinated Projects		270	-	-	-	-	-	-	-	270	270	-
City Wide	5162071074	Contingency for Unscheduled Works Program		180	-	-	-	-	-	-	-	180	180	-
		<i>Sub-Total Replacement Project</i>		4,550	-	-	-	-	-	-	-	4,550	4,550	-
Restorations														
City Wide	5162011101	Road Restoration Program		1,800	-	-	-	-	-	-	-	1,800	1,800	-
		<i>Sub-Total Restorations</i>		1,800	-	-	-	-	-	-	-	1,800	1,800	-
Technical Services Projects														
City Wide	4032055522	State of the Infrastructure - Asset Management		100	-	-	-	-	-	100	-	-	-	-
City Wide	4032055588	O.Reg. 588/17 Compliance - Asset Management Plan Development		75	-	-	-	-	-	-	-	75	75	-
City Wide	5162049555	QA-QC Service Contract Program		140	-	-	-	-	-	-	-	140	140	-
City Wide	5162055022	Engineering Consultant Sewermain Projects		300	-	-	-	-	-	-	-	300	300	-
City Wide	5162055556	Mapping Update Program		40	-	-	-	-	-	-	-	40	40	-
City Wide	5162055878	Forcemain Condition Assessment Program		270	-	-	-	-	-	-	-	270	270	-
City Wide	5162055880	Inflow & Infiltration Studies and Flow Monitoring Program		500	-	-	251	-	-	-	-	249	249	-
		<i>Sub-Total Technical Services Projects</i>		1,425	-	-	251	-	-	100	-	1,074	1,074	-
Upgrade Projects														
City Wide	5162062073	Field Data Systems Program		110	-	-	-	-	-	60	-	50	50	-
		<i>Sub-Total Upgrade Projects</i>		110	-	-	-	-	-	60	-	50	50	-
Water Quality Initiatives (WQI)														
City Wide	5161468422	Randle Reef Sediment Remediation (CASH FLOWED)		550	-	-	-	-	-	-	-	550	550	-
		<i>Sub-Total Water Quality Initiatives (WQI)</i>		550	-	-	-	-	-	-	-	550	550	-

City of Hamilton
Wastewater System
2020 Capital Budget Project List
(000's)

City Ward	Project Number	Project Description	DC Debt	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
													From Operating	Debt
Waterfront Initiatives														
City Wide	5162055800	Sewer Outfall Monitoring Study		150	-	-	-	-	-	-	-	150	150	-
		<i>Sub-Total Waterfront Initiatives</i>		150	-	-	-	-	-	-	-	150	150	-
Total All Projects				218,606	80,036	-	44,227	23,260	-	1,510	-	69,573	52,673	16,900

* DC Debt

**CITY OF HAMILTON
WASTEWATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Rehabilitation, Replacement, & Upgrade Programs (SAM)																
City Wide	4032014405	Contaminated Soil & Rock Disposal Program	0	0	0	0	220	220	0	0	440	440	660	660	2020	Ongoing
City Wide	4032055522	State of the Infrastructure - Asset Management	0	0	100	0	90	90	90	90	630	630	910	810	2020	Ongoing
City Wide	4032055588	O.Reg. 588/17 Compliance - Asset Management Plan Development	0	0	75	75	75	75	75	75	75	75	300	300	2020	2023
City Wide	4032058001	Consultation and Accommodation	0	0	30	30	30	30	30	30	210	210	300	300	2020	Ongoing
4	5161641226	Centralized Water and Wastewater Operations Centre (CASH FLOWED)	1,250	2,250	0	0	0	0	0	0	7,500	7,500	8,750	9,750	2016	2024
6, 7	5161655351	Lawfield / Berrisfield Neighbourhoods	185	110	0	0	170	170	0	0	0	0	355	280	2016	2021
City Wide	5161667421	New Haulage Receiving Station	1,690	0	550	550	4,250	4,250	4,250	4,250	0	0	10,740	9,050	2016	2022
12	5161960942	Ancaster Sewage Works Pipeline CIPP Rehab - CASH FLOW	0	0	500	500	0	0	0	0	0	0	500	500	2019	2020
City Wide	5162001099	Engineering Services Staffing Costs - Wastewater	0	0	4,700	4,700	4,700	4,700	4,700	4,700	32,900	32,900	47,000	47,000	2020	Ongoing
City Wide	5162011101	Road Restoration Program	0	0	1,800	1,800	1,800	1,800	1,800	1,800	12,600	12,600	18,000	18,000	2020	Ongoing
City Wide	5162049555	QA-QC Service Contract Program	0	0	140	140	140	140	140	140	980	980	1,400	1,400	2020	Ongoing
City Wide	5162055022	Engineering Consultant Sewermain Projects	0	0	300	300	300	300	300	300	2,100	2,100	3,000	3,000	2020	Ongoing
City Wide	5162055556	Mapping Update Program	0	0	40	40	40	40	40	40	280	280	400	400	2020	Ongoing
City Wide	5162055878	Forcemain Condition Assessment Program	0	0	270	270	270	270	270	270	1,890	1,890	2,700	2,700	2020	Ongoing
City Wide	5162055880	Inflow & Infiltration Studies and Flow Monitoring Program	0	0	500	249	500	249	500	249	1,510	749	3,010	1,496	2020	Ongoing
City Wide	5162057545	Wastewater Computer Model Update & Maintenance	0	0	660	660	660	660	280	280	1,960	1,960	3,560	3,560	2020	Ongoing
5	5162060044	Battlefield Creek Major Trunk Cleaning & Condition Assessment	0	0	250	250	0	0	0	0	0	0	250	250	2020	2020
City Wide	5162060302	Emergency Repairs - Cross Connections Program	0	0	700	700	700	700	500	500	1,550	1,550	3,450	3,450	2020	Ongoing
City Wide	5162060390	Wastewater System Lining Program	0	0	4,050	4,050	4,050	4,050	4,050	4,050	28,350	28,350	40,500	40,500	2020	Ongoing
City Wide	5162060522	Sewer Lateral Management Program (WWC)	0	0	4,250	4,250	4,250	4,250	4,000	4,000	24,500	24,500	37,000	37,000	2020	Ongoing
City Wide	5162060533	Trenchless Manhole Rehabilitation	0	0	70	70	70	70	70	70	490	490	700	700	2020	Ongoing

**CITY OF HAMILTON
WASTEWATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Rehabilitation, Replacement, & Upgrade Programs (SAM)																
City Wide	5162060574	Pre-Construction Mainline Condition Assessment	0	0	500	500	500	500	500	500	3,500	3,500	5,000	5,000	2020	Ongoing
City Wide	5162060575	Mainline Sewer Condition Assessment Program	0	0	1,640	1,640	1,140	1,140	1,140	1,140	7,980	7,980	11,900	11,900	2020	Ongoing
City Wide	5162060576	Sewer Lateral Condition Assessment Program	0	0	540	540	540	540	540	540	3,780	3,780	5,400	5,400	2020	Ongoing
City Wide	5162060577	Mainline Sewer Condition Assessment for Compliance & Regulations	0	0	100	100	100	100	100	100	700	700	1,000	1,000	2020	Ongoing
City Wide	5162060711	PW Capital Water Consumption Program	0	0	180	180	180	180	180	180	940	940	1,480	1,480	2020	Ongoing
City Wide	5162060820	Open Cut Repairs for CIPP Program	0	0	500	500	500	500	500	500	3,500	3,500	5,000	5,000	2020	Ongoing
8	5162061006	Inverness Ave E - Combined Major Trunk Rehabilitation	0	0	200	0	770	770	0	0	0	0	970	770	2020	2021
5, 9	5162061051	Satellite City Trunk Sewer Rehabilitation	0	0	8,750	8,750	0	0	0	0	0	0	8,750	8,750	2020	2020
City Wide	5162061444	Sewer Lateral Replace/Rehab Program	0	0	3,600	3,600	3,600	3,600	3,600	3,600	25,200	25,200	36,000	36,000	2020	Ongoing
City Wide	5162061740	Unscheduled Manhole and Sewermain Replacement Program	0	0	500	500	400	400	400	400	2,500	2,500	3,800	3,800	2020	Ongoing
City Wide	5162062073	Field Data Systems Program	0	0	110	50	110	110	110	110	770	770	1,100	1,040	2020	Ongoing
City Wide	5162071015	Sewer Lateral Replacement for Co-ordinated Projects	0	0	270	270	270	270	270	270	2,610	2,610	3,420	3,420	2020	Ongoing
City Wide	5162071074	Contingency for Unscheduled Works Program	0	0	180	180	0	0	180	180	540	540	900	900	2020	Ongoing
City Wide	5162071940	Unspecified WW Works	0	0	0	0	0	0	0	0	36,300	36,300	36,300	36,300	2020	2024
6, 7, 8	5162260291	Fennell Combined Trunk Sewer Trenchless Rehabilitation - West 5th to Mountain Brow	0	0	0	0	0	0	2,000	2,000	0	0	2,000	2,000	2022	2022
4	5162361340	Strathearne Ave North Trunk Sewer Rehabilitation	0	0	0	0	0	0	0	0	3,000	3,000	3,000	3,000	2023	2023
15	5162418420	Grindstone Creek Utility Bridge	0	0	0	0	0	0	0	0	3,500	3,500	3,500	3,500	2024	2024
4	5162561540	Strathearne Ave South Trunk Sewer Rehabilitation	0	0	0	0	0	0	0	0	2,000	2,000	2,000	2,000	2025	2025
			3,125	2,360	36,055	35,444	30,425	30,174	30,615	30,364	214,785	214,024	315,005	312,366		

Projects Coordinated with Roads Program

**CITY OF HAMILTON
WASTEWATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Projects Coordinated with Roads Program																
1	5162071006	Hillcrest - Chedoke to end	0	0	60	60	0	0	0	0	0	0	60	60	2020	2020
4	5162071315	Main -Queenston Traffic Circle to Delena & Rosewood (LRT Enabling Project)	0	0	1,160	1,160	0	0	0	0	0	0	1,160	1,160	2020	2020
1	5162371326	Jones / Oxford / Tecumseh (Strathcona Neighbourhood)	0	0	0	0	0	0	0	0	410	410	410	410	2023	2023
3, 4	5162771220	Burlington & Industrial - Ottawa to Kenilworth	0	0	0	0	0	0	0	0	740	740	740	740	2027	2027
3	5162961925	Stipeley Neighbourhood (South) - Connaught / Balasm / Dunsmure	0	0	0	0	0	0	0	0	80	80	80	80	2029	2029
			0	0	1,220	1,220	0	0	0	0	1,230	1,230	2,450	2,450		
SERG Projects																
City Wide	5162696475	Flooding & Drainage Master Plan Capital Forecast	0	0	0	0	0	0	0	0	22,500	22,500	22,500	22,500	2026	2029
			0	0	0	0	0	0	0	0	22,500	22,500	22,500	22,500		
Waterfront Initiatives																
City Wide	5162055800	Sewer Outfall Monitoring Study	0	0	150	150	0	0	0	0	0	0	150	150	2020	2020
			0	0	150	150	0	0	0	0	0	0	150	150		
Plant/Outstations Projects (SAM)																
13	5161266213	Dundas WWTP Improvements (CASH FLOWED)	3,070	0	0	0	1,650	1,650	1,650	1,650	24,150	24,150	30,520	27,450	2012	2021
12	5161267270	Ancaster Wastewater Outstations Upgrades	8,320	0	110	110	0	0	0	0	0	0	8,430	110	2012	2020
13	5161267273	Dundas Wastewater Outstations Upgrades	2,730	280	600	600	2,290	2,290	0	0	0	0	5,620	3,170	2012	2020
5	5161467756	Greenhill & Cochrane HCS01 Combined Sewer Overflow Tank Cleaning & Upgrades (CASH FLOWED)	2,920	930	0	0	1,530	1,530	0	0	0	0	4,450	2,460	2014	2021
12, 13, 15	5161667622	FC001, DC009 & HC011 Wastewater Pumping Stations Upgrades	5,190	1,438	1,500	1,500	0	0	0	0	0	0	6,690	2,938	2016	2020

**CITY OF HAMILTON
WASTEWATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Plant/Outstations Projects (SAM)																
4	5161767420	Parkdale Avenue HC001 Wastewater Pumping Station Upgrades	660	110	10	10	250	250	2,860	2,860	0	0	3,780	3,230	2017	2019
City Wide	5161966102	Woodward WWTP - Expansion (CASH FLOWED)	1,500	0	1,750	0	1,750	0	2,500	0	288,874	0	296,374	0	2019	2028
City Wide	5161966511	Woodward WWTP - Digester #5 (CASH FLOWED)	500	0	2,500	2,500	2,500	2,500	0	0	0	0	5,500	5,000	2018	2021
City Wide	5162066311	Woodward WWTP - Digester #3 (CASH FLOWED)	0	0	250	250	2,500	2,500	2,500	2,500	0	0	5,250	5,250	2020	2022
City Wide	5162066713	Wastewater Maintenance Capital Program	0	0	0	0	2,000	2,000	2,000	2,000	14,000	14,000	18,000	18,000	2020	Ongoing
City Wide	5162066813	Dundas WWTP - Health & Safety Immediate Needs	0	0	4,900	3,750	0	0	0	0	0	0	4,900	3,750	2020	2020
5	5162067065	Eastport Drive SPS (HC017) Upgrades	0	0	390	390	1,320	1,320	0	0	0	0	1,710	1,710	2020	2022
15	5162067275	FC001 Elgin Street Sewage Pumping Station	0	0	550	550	1,700	1,700	0	0	0	0	2,250	2,250	2020	2021
4, 12, 15	5162067375	Minor Upgrades to SPS Outstations	0	0	170	170	990	990	0	0	0	0	1,160	1,160	2020	2021
City Wide	5162067420	Main & King CSO Rehabilitation	0	0	350	350	0	0	0	0	0	0	350	350	2020	2020
12	5162067425	Hillside SPS (DC006) Upgrades	0	0	280	280	1,100	1,100	0	0	0	0	1,380	1,380	2020	2021
City Wide	5162067752	Wastewater Outstation Inspections - Asset Management Program	0	0	520	520	520	520	520	520	3,040	3,040	4,600	4,600	2020	Ongoing
City Wide	5162266011	Woodward WWTP - Secondary Digester	0	0	0	0	0	0	500	500	4,000	4,000	4,500	4,500	2022	2023
City Wide	5162366420	Woodward WWTP - Primary Clarifiers (Galleries 1-8)	0	0	0	0	0	0	0	0	27,940	27,940	27,940	27,940	2018	2023
City Wide	5162367751	Wastewater Outstation Upgrades - Asset Management Program	0	0	0	0	0	0	0	0	28,000	28,000	28,000	28,000	2023	Ongoing
City Wide	5162466301	Woodward WWTP North Plant Rehabilitation (CASH FLOWED)	0	0	0	0	0	0	0	0	50,000	50,000	50,000	50,000	2024	2028
			24,890	2,758	13,880	10,980	20,100	18,350	12,530	10,030	440,004	151,130	511,404	193,248		
Plant/Outstations Projects (WQI)																
City Wide	5161468422	Randle Reef Sediment Remediation (CASH FLOWED)	5,100	1,550	550	550	500	500	0	0	0	0	6,150	2,600	2014	2021
			5,100	1,550	550	550	500	500	0	0	0	0	6,150	2,600		
Plant/Outstations Projects (WINS)																

**CITY OF HAMILTON
WASTEWATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Plant/Outstations Projects (WINS)																
City Wide	5160866801	Woodward WWTP - Clean Harbour (CASH FLOWED)	216,743	3,266	100,631	17,679	69,363	29,793	25,186	22,155	0	0	411,923	72,893	2008	2022
City Wide	5160966910	Woodward WWTP - Biosolids Management Facility	10,470	630	28,030	0	2,770	2,240	2,770	2,240	19,390	15,680	63,430	20,790	2009	2051
City Wide	5162069075	City Environmental Lab Improvements Program	0	0	150	150	200	200	340	340	530	530	1,220	1,220	2020	Ongoing
			227,213	3,896	128,811	17,829	72,333	32,233	28,296	24,735	19,920	16,210	476,573	94,903		
Master Plan - Horizontal Assets																
5, 9	5161695747	Battlefield Trunk Sewer Twinning (WW-33) (CASH FLOWED)	12,150	0	0	0	10,500	0	0	0	0	0	22,650	0	2016	2021
11	5161696452	Airport Lands Dickenson Rd Trunk Sewer (WW-27, WW-26, WW-28) (CASH FLOWED)	4,400	0	26,800	0	20,300	0	20,300	0	11,300	0	83,100	0	2016	2018
1	5161996954	Aberdeen at Hillside Neighbourhood Sewer Separation	450	0	0	0	0	0	2,230	2,230	990	990	3,670	3,220	2019	2025
			17,000	0	26,800	0	30,800	0	22,530	2,230	12,290	990	109,420	3,220		
Master Plan - Vertical Assets																
City Wide	5161555264	City-Wide Wastewater Master Plan	650	0	300	30	0	0	0	0	60	6	1,010	36	2015	2021
15	5161796786	First Street (Waterdown Sanitary) PS Upgrade DC014	4,930	1,345	1,050	410	0	0	0	0	0	0	5,980	1,755	2017	2019
City Wide	5162055010	Wastewater Systems Planning Program	0	0	380	380	380	380	380	380	3,080	3,080	4,220	4,220	2020	Ongoing
City Wide	5162055050	Municipal Class EA Studies	0	0	400	400	0	0	0	0	0	0	400	400	2020	2020
City Wide	5162095800	Flooding & Drainage Master Plan Capital Improvements	0	0	880	880	880	880	0	0	0	0	1,760	1,760	2020	2023
			5,580	1,345	3,010	2,100	1,260	1,260	380	380	3,140	3,086	13,370	8,171		
Development/Extension Projects																
9	5162080089	Rymal - Fletcher to Upper Centennial	0	0	5,330	0	0	0	0	0	0	0	5,330	0	2020	2020
6, 11	5162080584	RHBP - Nebo - Rymal to Twenty	0	0	0	0	750	0	0	0	0	0	750	0	2020	2021
4	5162080961	Roxborough Park Intensification	0	0	1,500	0	0	0	0	0	0	0	1,500	0	2020	2020
City Wide	5162096011	Intensification Infrastructure Upgrades Program - Wastewater	0	0	0	0	400	200	0	0	1,600	800	2,000	1,000	2020	Ongoing

**CITY OF HAMILTON
WASTEWATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Development/Extension Projects																
7	5162180281	Rymal - 150m e/o Massina to 140m easterly	0	0	0	0	30	30	0	0	0	0	30	30	2021	2021
			0	0	6,830	0	1,180	230	0	0	1,600	800	9,610	1,030		
Coordinated Projects																
City Wide	5161855777	Wastewater infrastructure Analysis - Growth and Economic Opportunities	570	220	0	0	350	150	0	0	0	0	920	370	2018	2020
			570	220	0	0	350	150	0	0	0	0	920	370		
Demolition																
1	5161767772	Decommissioning Aberdeen Sewage Pumping Station	60	0	0	0	0	0	110	110	1,190	1,190	1,360	1,300	2019	2023
			60	0	0	0	0	0	110	110	1,190	1,190	1,360	1,300		
Energy Management																
City Wide	5162241350	Hamilton Water Solar Power Energy Pilot	0	0	0	0	0	0	150	150	600	600	750	750	2022	2023
			0	0	0	0	0	0	150	150	600	600	750	750		
Equipment Replacement																
City Wide	5161966151	SCADA servers and network	1,500	0	0	0	250	250	250	250	5,500	5,500	7,500	6,000	2019	2019
			1,500	0	0	0	250	250	250	250	5,500	5,500	7,500	6,000		
Maintenance Projects																
5, 6	5161968920	Fennell/Greenhill Drop Shaft	180	0	500	500	350	350	0	0	15,000	15,000	16,030	15,850	2019	2026
4	5162068851	Pier 25 Dredging - Windermere Basin	170	170	0	0	0	0	13,500	13,500	0	0	13,670	13,670	2018	2021
4	5162161142	Eastern Sanitary Interceptor (ESI) at Battlefield Creek Trunk	0	0	0	0	260	260	0	0	0	0	260	260	2021	2021
			350	170	500	500	610	610	13,500	13,500	15,000	15,000	29,960	29,780		
Plans/Studies																
City Wide	5162055801	Woodward WWTP Facility Plan	0	0	350	350	0	0	0	0	0	0	350	350	2020	2020

**CITY OF HAMILTON
WASTEWATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Plans/Studies																
City Wide	5162062543	CSO Characterization Program	0	0	450	450	0	0	0	0	450	450	900	900	2020	2020
			0	0	800	800	0	0	0	0	450	450	1,250	1,250		
Total Wastewater System			285,388	12,299	218,606	69,573	157,808	83,757	108,361	81,749	738,209	432,710	1,508,372	680,088		

**SOURCE OF CAPITAL FINANCING
2020 to 2029 RATE PROGRAM CAPITAL BUDGET
\$(000'S)**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2020 to 2029
STORM SEWERS											
Capital Program	39,880	22,215	19,850	20,050	21,670	13,950	20,460	42,705	38,870	39,290	278,940
Source of Funding											
Subsidy/Other Revenue	370	473	75	75	75	75	75	75	75	75	1,443
Development Charges	23,195	7,360	4,000	4,000	4,000	4,000	4,000	4,000	4,060	4,000	62,615
Reserves & Other Internal Sources	630	-	-	-	-	-	-	-	-	-	630
Contribution from Operating	15,685	14,382	15,775	15,975	17,595	9,875	16,385	37,630	34,735	35,215	213,252
External Debt	-	-	-	-	-	-	-	1,000	-	-	1,000
Total	39,880	22,215	19,850	20,050	21,670	13,950	20,460	42,705	38,870	39,290	278,940

City of Hamilton
Storm Water Management
2020 Capital Budget Project List
(000's)

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City Ward	Project Number	Project Description	DC Debt	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
													From Operating	Debt
Annual Projects														
City Wide	4032058001	Consultation and Accommodation		30	-	-	-	-	-	-	-	30	30	-
City Wide	5182001099	Engineering Services Staffing Costs - Storm		1,100	-	-	-	-	-	-	-	1,100	1,100	-
		<i>Sub-Total Annual Projects</i>		1,130	-	-	-	-	-	-	-	1,130	1,130	-
Building - New Construction														
5	5182067875	Beach Strip Stormwater Pumping Stations (CASH FLOWED)		300	-	-	-	-	-	-	-	300	300	-
		<i>Sub-Total Building - New Construction</i>		300	-	-	-	-	-	-	-	300	300	-
Coordinated - Network Extension Projects														
9	5182080089	Rymal - Fletcher to Upper Centennial		1,100	-	-	935	-	-	-	-	165	165	-
		<i>Sub-Total Coordinated - Network Extension Projects</i>		1,100	-	-	935	-	-	-	-	165	165	-
Coordinated - Replacement Projects														
13, 14	5182070001	Highway 8 - Woodley's Lane to Hillcrest - Road Restoration		920	-	-	-	-	-	-	-	920	920	-
13	5182070002	Highway 8 - Hillcrest to Park - Road Restoration		660	-	-	-	-	-	-	-	660	660	-
13	5182072293	Highway 8 - Hillcrest to Park		300	-	-	-	-	-	-	-	300	300	-
13, 14	5182072295	Highway 8 - Woodley's Lane to Hillcrest		1,590	-	-	-	-	-	530	-	1,060	1,060	-
		<i>Sub-Total Coordinated - Replacement Projects</i>		3,470	-	-	-	-	-	530	-	2,940	2,940	-
Coordinated - Upgrade Projects														
15	5182072092	Cedar / Fern / Braeheid		100	-	-	-	-	-	-	-	100	100	-
		<i>Sub-Total Coordinated - Upgrade Projects</i>		100	-	-	-	-	-	-	-	100	100	-
Development Projects														
8	5181480486	SWMP - St. Elizabeth Ponds		200	-	-	200	-	-	-	-	-	-	-
15	5182080082	SWMP - W19 (Parkside Hills Phase 2)	*	3,740	-	-	3,740	-	-	-	-	-	-	-
9	5182080086	SWMP - SM2 (Red Hill Phase 3/4)	*	4,120	-	-	4,120	-	-	-	-	-	-	-
11	5182080087	SWMP - B-10 (Lancaster Subdivision)	*	9,960	-	-	9,960	-	-	-	-	-	-	-
City Wide	5182080090	Storm Water Management Program		4,000	-	-	4,000	-	-	-	-	-	-	-
		<i>Sub-Total Development Projects</i>		22,020	-	-	22,020	-	-	-	-	-	-	-
Maintenance Projects														
15	5182074950	Watercourse and Drainage Channel Maintenance		810	-	-	-	-	-	-	-	810	810	-
City Wide	5182074951	Shoreline Protection Program		400	-	-	-	-	-	-	-	400	400	-
		<i>Sub-Total Maintenance Projects</i>		1,210	-	-	-	-	-	-	-	1,210	1,210	-
Master Plan - Vertical Assets														
City Wide	5182095800	Flooding & Drainage Master Plan Capital Improvements		880	-	-	-	-	-	-	-	880	880	-
		<i>Sub-Total Master Plan - Vertical Assets</i>		880	-	-	-	-	-	-	-	880	880	-
Operations & Maintenance														
15	5181972940	Evans Road Culvert Twinning		540	-	-	-	-	-	-	-	540	540	-

City of Hamilton
Storm Water Management
2020 Capital Budget Project List
(000's)

Appendix "Q" to Report FCS19070 Page 2 of 2

City Ward	Project Number	Project Description	DC Debt	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
													From Operating	Debt
15	5182017040	Highway 97 - Culvert Improvement Project		180	-	-	-	-	-	-	-	180	180	-
City Wide	5182060622	SWM Facility Maintenance Program		1,700	-	-	-	-	-	-	-	1,700	1,700	-
10, 11, 12, 13, 14,	5182060722	Municipal Drain Program		610	-	370	-	-	-	-	-	240	240	-
<i>Sub-Total Operations & Maintenance</i>				3,030	-	370	-	-	-	-	-	2,660	2,660	-
Programs & Contracts T.O.M.														
City Wide	5182017152	Right of Way Drainage Program		1,400	-	-	-	-	-	-	-	1,400	1,400	-
City Wide	5182017458	Catch Basin Replacement/Rehabilitation Program		500	-	-	-	-	-	-	-	500	500	-
<i>Sub-Total Programs & Contracts T.O.M.</i>				1,900	-	-	-	-	-	-	-	1,900	1,900	-
Rehabilitation Project														
City Wide	5182060533	Trenchless Manhole Rehabilitation		70	-	-	-	-	-	-	-	70	70	-
13	5182061046	Osler Dr Outfall @ Grant Blvd		100	-	-	-	-	-	-	-	100	100	-
<i>Sub-Total Rehabilitation Project</i>				170	-	-	-	-	-	-	-	170	170	-
Replacement Project														
City Wide	5181767723	Pumping Stations		600	-	-	-	-	-	-	-	600	600	-
City Wide	5182017549	Concrete Box Culvert Rehab/Repair - T.O.M.		250	-	-	-	-	-	-	-	250	250	-
City Wide	5182017550	Concrete Box Culvert Rehab/Repair - Engineering Services		250	-	-	-	-	-	-	-	250	250	-
City Wide	5182061740	Unscheduled Manhole and Sewermain Replacement Program		50	-	-	-	-	-	-	-	50	50	-
<i>Sub-Total Replacement Project</i>				1,150	-	-	-	-	-	-	-	1,150	1,150	-
SERG														
13	5181823155	South St E and East St S in Dundas Drainage Improvement - SERG		110	-	-	-	-	-	-	-	110	110	-
11	5181872295	SERG - Winona Area Drainage Improvements		100	-	-	-	-	-	-	-	100	100	-
City Wide	5182055421	Stormwater System Planning Program		380	-	-	-	-	-	-	-	380	380	-
5	5182155101	SERG - Stoney Creek & Battlefield Creek Flood and Erosion Control		250	-	-	-	-	-	-	-	250	250	-
<i>Sub-Total SERG</i>				840	-	-	-	-	-	-	-	840	840	-
Technical Services Projects														
City Wide	4032055522	State of the Infrastructure - Asset Management		100	-	-	-	-	-	100	-	-	-	-
City Wide	4032055588	O.Reg. 588/17 Compliance - Asset Management Plan Development		50	-	-	-	-	-	-	-	50	50	-
City Wide	5181555422	City Wide GRIDS II Stormwater Master Plan		300	-	-	240	-	-	-	-	60	60	-
City Wide	5182049555	QA-QC Service Contract Program		140	-	-	-	-	-	-	-	140	140	-
City Wide	5182055556	Mapping Update Program		40	-	-	-	-	-	-	-	40	40	-
City Wide	5182057545	Stormwater Computer Model		1,080	-	-	-	-	-	-	-	1,080	1,080	-
<i>Sub-Total Technical Services Projects</i>				1,710	-	-	240	-	-	100	-	1,370	1,370	-
Upgrade Projects														
City Wide	5182055825	Stormwater Drainage Analysis and Conceptual Design for Road Corridor Upgrades		760	-	-	-	-	-	-	-	760	760	-
City Wide	5182062073	Field Data Systems Program		110	-	-	-	-	-	-	-	110	110	-
<i>Sub-Total Upgrade Projects</i>				870	-	-	-	-	-	-	-	870	870	-
Total All Projects				39,880	-	370	23,195	-	-	630	-	15,685	15,685	-

* DC Debt

**CITY OF HAMILTON
 STORM WATER MANAGEMENT
 2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Rehabilitation, Replacement, & Upgrade Programs (SAM)																
City Wide	4032014405	Contaminated Soil & Rock Disposal Program	0	0	0	0	220	220	0	0	440	440	660	660	2020	Ongoing
City Wide	4032055522	State of the Infrastructure - Asset Management	0	0	100	0	90	90	90	90	630	630	910	810	2020	Ongoing
City Wide	4032055588	O.Reg. 588/17 Compliance - Asset Management Plan Development	0	0	50	50	50	50	50	50	50	50	200	200	2020	2023
City Wide	4032058001	Consultation and Accommodation	0	0	30	30	30	30	30	30	210	210	300	300	2020	Ongoing
City Wide	5181555422	City Wide GRIDS II Stormwater Master Plan	650	0	300	60	0	0	0	0	60	0	1,010	60	2015	2020
9, 11, 12, 15	5181562590	SWMP Retrofits	720	500	0	0	0	0	0	0	220	220	940	720	2015	2023
City Wide	5181767723	Pumping Stations	100	100	600	600	0	0	100	100	50	50	850	850	2017	2026
15	5181972940	Evans Road Culvert Twinning	170	0	540	540	0	0	0	0	0	0	710	540	2019	2020
City Wide	5182001099	Engineering Services Staffing Costs - Storm	0	0	1,100	1,100	1,100	1,100	1,100	1,100	7,700	7,700	11,000	11,000	2020	Ongoing
15	5182017040	Highway 97 - Culvert Improvement Project	0	0	180	180	580	580	0	0	0	0	760	760	2020	2021
City Wide	5182017549	Concrete Box Culvert Rehab/Repair - T.O.M.	0	0	250	250	250	250	250	250	1,750	1,750	2,500	2,500	2020	Ongoing
City Wide	5182017550	Concrete Box Culvert Rehab/Repair - Engineering Services	0	0	250	250	250	250	250	250	1,750	1,750	2,500	2,500	2020	Ongoing
City Wide	5182049555	QA-QC Service Contract Program	0	0	140	140	140	140	140	140	980	980	1,400	1,400	2020	Ongoing
City Wide	5182055556	Mapping Update Program	0	0	40	40	40	40	0	0	160	160	240	240	2020	Ongoing
City Wide	5182055825	Stormwater Drainage Analysis and Conceptual Design for Road Corridor Upgrades	0	0	760	760	0	0	0	0	0	0	760	760	2020	2020
City Wide	5182057545	Stormwater Computer Model	0	0	1,080	1,080	0	0	1,080	1,080	2,200	2,200	4,360	4,360	2020	Ongoing
City Wide	5182060533	Trenchless Manhole Rehabilitation	0	0	70	70	70	70	70	70	490	490	700	700	2020	Ongoing
City Wide	5182060622	SWM Facility Maintenance Program	0	0	1,700	1,700	1,500	1,500	1,500	1,500	8,400	8,400	13,100	13,100	2020	Ongoing
10, 11, 12, 13, 14, 15	5182060722	Municipal Drain Program	0	0	610	240	700	227	100	25	700	175	2,110	667	2020	Ongoing
13	5182061046	Osler Dr Outfall @ Grant Blvd	0	0	100	100	380	380	0	0	0	0	480	480	2020	2021
City Wide	5182061740	Unscheduled Manhole and Sewermain Replacement Program	0	0	50	50	50	50	50	50	350	350	500	500	2020	Ongoing
City Wide	5182062073	Field Data Systems Program	0	0	110	110	110	110	110	110	770	770	1,100	1,100	2020	Ongoing

**CITY OF HAMILTON
STORM WATER MANAGEMENT
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Rehabilitation, Replacement, & Upgrade Programs (SAM)																
5	5182067875	Beach Strip Stormwater Pumping Stations (CASH FLOWED)	0	0	300	300	1,295	1,295	7,100	7,100	7,075	7,075	15,770	15,770	2020	2023
City Wide	5182072074	Contingency for Unscheduled Works Program	0	0	0	0	180	180	0	0	720	720	900	900	2020	Ongoing
			1,640	600	8,360	7,650	7,035	6,562	12,020	11,945	34,705	34,120	63,760	60,877		
Projects Coordinated with Roads Program																
13, 14	5182070001	Highway 8 - Woodley's Lane to Hillcrest - Road Restoration	0	0	920	920	0	0	0	0	0	0	920	920	2020	2020
13	5182070002	Highway 8 - Hillcrest to Park - Road Restoration	0	0	660	660	0	0	0	0	0	0	660	660	2020	2020
15	5182072092	Cedar / Fern / Braeheid	0	0	100	100	0	0	0	0	0	0	100	100	2020	2020
13	5182072293	Highway 8 - Hillcrest to Park	0	0	300	300	0	0	0	0	0	0	300	300	2020	2020
13, 14	5182072295	Highway 8 - Woodley's Lane to Hillcrest	0	0	1,590	1,060	0	0	0	0	0	0	1,590	1,060	2020	2020
4	5182172295	Barton - Parkdale to Talbot	0	0	0	0	1,530	1,530	0	0	0	0	1,530	1,530	2021	2021
1	5182372290	Jones / Oxford / Tecumseh (Strathcona Neighbourhood)	0	0	0	0	0	0	0	0	125	125	125	125	2023	2023
3	5182672290	Industrial - Ottawa to Gage / Gage / Depew	0	0	0	0	0	0	0	0	390	390	390	390	2026	2026
3, 4	5182772290	Burlington & Industrial - Ottawa to Kenilworth	0	0	0	0	0	0	0	0	675	675	675	675	2027	2027
3	5182972290	Stipeley Neighbourhood (South) - Connaught / Balasm / Dunsmure	0	0	0	0	0	0	0	0	850	850	850	850	2029	2029
			0	0	3,570	3,040	1,530	1,530	0	0	2,040	2,040	7,140	6,610		
SERG Projects																
1	5181260214	SERG - Parkside and Kipling Flood Solutions	1,890	170	0	0	1,000	1,000	0	0	0	0	2,890	1,170	2012	2027
6	5181372295	SERG - Mount Albion Stormwater Management Facility Rehabilitation	670	0	0	0	0	0	330	330	0	0	1,000	330	2013	2022
13	5181823155	South St E and East St S in Dundas Drainage Improvement - SERG	120	60	110	110	0	0	0	0	220	220	450	390	2018	2023
11	5181872295	SERG - Winona Area Drainage Improvements	500	330	100	100	440	440	170	170	1,100	1,100	2,310	2,140	2018	2025
City Wide	5181955347	SERG - Watercourse Erosion Assessment	0	0	0	0	770	770	130	130	1,100	1,100	2,000	2,000	2019	2024

**CITY OF HAMILTON
STORM WATER MANAGEMENT
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
SERG Projects																
City Wide	5182055421	Stormwater System Planning Program	0	0	380	380	380	380	380	380	2,660	2,660	3,800	3,800	2020	Ongoing
5	5182155101	SERG - Stoney Creek & Battlefield Creek Flood and Erosion Control	150	0	250	250	0	0	0	0	0	0	400	250	2019	2020
5	5182323875	Beach Strip Stormwater Collection System Improvements	0	0	0	0	0	0	150	150	2,850	2,850	3,000	3,000	2023	2024
City Wide	5182355075	SERG - Watershed Project Coordination and Stewardship Action Plans	0	0	0	0	0	0	0	0	2,000	2,000	2,000	2,000	2023	2029
1	5182460214	SERG - Parkside & Kipling Stormwater Facility	0	0	0	0	0	0	0	0	12,610	12,610	12,610	12,610	2024	2028
3	5182472295	Main - Prospect to Gage - SERG B-3	0	0	0	0	0	0	0	0	1,580	1,580	1,580	1,580	2024	2024
City Wide	5182674850	Stormwater Management Program	0	0	0	0	0	0	0	0	20,000	20,000	20,000	20,000	2026	2029
City Wide	5182696475	Flooding & Drainage Master Plan Capital Forecast	0	0	0	0	0	0	0	0	67,500	67,500	67,500	67,500	2026	2029
			3,330	560	840	840	2,590	2,590	1,160	1,160	111,620	111,620	119,540	116,770		
Master Plan - Vertical Assets																
City Wide	5182095800	Flooding & Drainage Master Plan Capital Improvements	0	0	880	880	880	880	0	0	0	0	1,760	1,760	2020	2023
			0	0	880	880	880	880	0	0	0	0	1,760	1,760		
Development/Extension Projects																
8	5181480486	SWMP - St. Elizabeth Ponds	360	0	200	0	0	0	0	0	0	0	560	0	2014	2020
15	5182080082	SWMP - W19 (Parkside Hills Phase 2)	0	0	3,740	0	0	0	0	0	0	0	3,740	0	2020	2020
9	5182080086	SWMP - SM2 (Red Hill Phase 3/4)	0	0	4,120	0	0	0	0	0	0	0	4,120	0	2020	2020
11	5182080087	SWMP - B-10 (Lancaster Subdivision)	0	0	9,960	0	0	0	0	0	0	0	9,960	0	2020	2020
9	5182080089	Rymal - Fletcher to Upper Centennial	0	0	1,100	165	0	0	0	0	0	0	1,100	165	2020	2020
City Wide	5182080090	Storm Water Management Program	0	0	4,000	0	4,000	0	4,000	0	28,000	0	40,000	0	2020	Ongoing
6, 11	5182080584	RHBP - Nebo - Rymal to Twenty	0	0	0	0	2,000	0	0	0	0	0	2,000	0	2020	2021
11	5182180280	Airport Road Storm Sewer - Homestead to Mountaingate	0	0	0	0	1,360	0	0	0	0	0	1,360	0	2021	2021

**CITY OF HAMILTON
 STORM WATER MANAGEMENT
 2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Development/Extension Projects																
7	5182180281	Rymal - 150m e/o Massina to 140m easterly	0	0	0	0	70	70	0	0	0	0	70	70	2021	2021
			360	0	23,120	165	7,430	70	4,000	0	28,000	0	62,910	235		
Maintenance Projects																
15	5182074950	Watercourse and Drainage Channel Maintenance	0	0	810	810	90	90	580	580	3,870	3,870	5,350	5,350	2020	Ongoing
City Wide	5182074951	Shoreline Protection Program	0	0	400	400	750	750	170	170	3,040	3,040	4,360	4,360	2020	Ongoing
			0	0	1,210	1,210	840	840	750	750	6,910	6,910	9,710	9,710		
Programs & Contracts T.O.M.																
City Wide	5182017152	Right of Way Drainage Program	0	0	1,400	1,400	1,410	1,410	1,420	1,420	10,220	10,220	14,450	14,450	2020	Ongoing
City Wide	5182017458	Catch Basin Replacement/Rehabilitation Program	0	0	500	500	500	500	500	500	3,500	3,500	5,000	5,000	2020	Ongoing
			0	0	1,900	1,900	1,910	1,910	1,920	1,920	13,720	13,720	19,450	19,450		
Total Storm Water Management			5,330	1,160	39,880	15,685	22,215	14,382	19,850	15,775	196,995	168,410	284,270	215,412		

CITY OF HAMILTON
2020 Rate Program Capital Budget Summary
(\$000'S)

	Gross Costs	Subsidy/ Other Revenues	Development Charges	WIP / Other Internal Sources	Reserves	Net Cost	Financing Source	
							Contribution From Operating	External Borrowings (Debentures)
2020 Sustainable Asset Management Strategy (SAM)								
Rehabilitation, Replacement & Upgrade Projects	76,010	370	-	560	-	75,080	58,690	1,800
Projects Coordinated with Roads Program	16,330	6,130	-	1,150	640	8,410	23,300	-
S.E.R.G. Projects	840	-	-	-	-	840	840	-
Treatment Plant/Outstations Projects	19,830	-	1,750	1,150	-	16,930	16,630	-
Treatment Plant/Outstations Projects-WQI	950	-	-	-	-	950	950	-
Watermain Lining	5,400	-	-	-	-	5,400	5,400	-
Sub-Total	119,360	6,500	1,750	2,860	640	107,610	105,810	1,800
Wastewater Investments Needs Strategies (WINS)								
Treatment Plant/Outstations Projects	128,811	80,036	7,686	-	23,260	17,829	2,729	15,100
Sub-Total	128,811	80,036	7,686	-	23,260	17,829	2,729	15,100
Master Plan								
Horizontal and Vertical Assets	39,010	223	35,946	-	-	2,841	2,841	-
Technical Service Projects	8,440	-	1,031	300	-	7,109	7,109	-
Sub-Total	47,450	223	36,977	300	-	9,950	9,950	-
Development Program								
Development/Extension Projects	30,360	-	30,195	-	-	165	165	-
Sub-Total	30,360	-	30,195	-	-	165	165	-
Total	325,981	86,759	76,608	3,160	23,900	135,554	118,654	16,900

City of Hamilton Treasurer's Updated 2019 Annual Repayment Limit

Annual Repayment Limit - <i>effective January 1, 2019, as calculated by the Ministry of Municipal Affairs and Housing, based on 2017 Financial Information Return</i>	\$266,191,448
Annual debt service charges on City Municipal debt approved to-date 2019 and prior years but not yet issued (\$468.4 M @ 5% for 15 year term)	-\$45,130,619
Annual debt service charges on City Municipal debt in respect of ICIP Transit debt approved but not yet issued (\$83.6 M @ 5% for 15 year term)	-\$8,055,294
Annual debt service charges on City Housing Hamilton debt approved but not yet issued and guaranteed by City of Hamilton (\$59.28 M @ 5% for 30 year term)	-\$3,856,250
Annual debt service charges in 2019 resulting from 2018 debenture issue of \$110.820 M;	-\$10,756,928
Annual debt service charges on debentures discharged in 2017 and 2018	\$11,802,452
Adjustment for annual debt service charges on existing City Housing Hamilton mortgages and City of Hamilton Tangible Capital Leases	-\$76,563
Updated 2019 Annual Repayment Limit - a calculation by the Treasurer representing an estimate of the maximum amount available to commit to annual debt service charges	\$210,118,246
Debenture amount at 5% interest rate for 15 year term (amortizer) corresponding to the annual debt service charges of \$210,118,246	\$2,180,955,548

**Amendments
to 2020
Recommended
Water, Wastewater
and Stormwater
Budget Report**



**GENERAL ISSUES COMMITTEE
(2020 RATE BUDGET)
REPORT 19-025**

9:30 a.m.

Monday, November 25, 2019
Council Chambers
Hamilton City Hall
71 Main Street West

Present: Deputy Mayor M. Wilson
Councillors J. Farr, N. Nann, C. Collins, T. Jackson, E. Pauls, J.P. Danko,
B. Clark, M. Pearson, L. Ferguson, A. VanderBeek

Absent: Mayor F. Eisenberger – Other City Business
Councillors B. Johnson, J. Partridge and S. Merulla – Other City Business
Councillor T. Whitehead – Personal

**THE GENERAL ISSUES COMMITTEE PRESENTS REPORT 19-025 AND
RESPECTFULLY RECOMMENDS:**

**1. Alectra Utilities Water, Wastewater and Storm 2019 Service Activity Report
(FCS19069) (City Wide) (Item 8.1)**

That Report FCS19069, respecting Alectra Utilities Water, Wastewater and Storm 2019 Service Activity Report, be received.

**2. 2020 Recommended Water, Wastewater and Stormwater Budget
(FCS19070) (City Wide) (Item 8.2)**

(a) That the metered water consumption charges for residential properties in the City of Hamilton be imposed at the following rates, effective January 1, 2020:

Monthly Water Consumption (m3)	Rate (\$/m3)
0 – 10	0.83
10 +	1.64

- (b) That the metered water consumption charge for commercial, industrial, institutional and multi-residential (bulk meter) properties in the City of Hamilton be imposed at the rate of \$1.64 per cubic metre, effective January 1, 2020;
- (c) That daily water fixed charges for all properties in the City of Hamilton be imposed at the following rates, effective January 1, 2020:

Meter Size	Daily Water Rate
15 mm	\$0.37
16 mm	\$0.37
20 mm	\$0.37
21 mm	\$0.37
25 mm	\$0.93
38 mm	\$1.85
50 mm	\$2.96
75 mm	\$5.92
100 mm	\$9.25
150 mm	\$18.50
200 mm	\$29.60
250 mm	\$42.55
300 mm	\$62.90

- (d) That the wastewater / storm treatment charges for residential properties in the City of Hamilton be imposed at the following rates, effective January 1, 2020:

Monthly Water Consumption (m3)	Rate (\$/m3)
0 – 10	0.88
10 +	1.75

- (e) That the wastewater / storm treatment charge for all commercial, industrial, institutional and multi-residential (bulk meter) properties in the

City of Hamilton be imposed at the rate of \$1.75 per cubic metre, effective January 1, 2020;

- (f) That daily wastewater /storm fixed charges for all properties in the City of Hamilton be imposed at the following rates, effective January 1, 2020:

Meter Size	Daily Wastewater / Storm Rate
15 mm	\$0.39
16 mm	\$0.39
20 mm	\$0.39
21 mm	\$0.39
25 mm	\$0.98
38 mm	\$1.95
50 mm	\$3.12
75 mm	\$6.24
100 mm	\$9.75
150 mm	\$19.50
200 mm	\$31.20
250 mm	\$44.85
300 mm	\$66.30

- (g) That the residential non-metered annual water rate be imposed at the flat rate of \$594.95 per annum, effective January 1, 2020;
- (h) That the residential non-metered annual wastewater / storm rate be imposed at the flat rate of \$638.75 per annum, effective January 1, 2020;
- (i) That the residential combined non-metered annual water and wastewater / storm rate be imposed at the flat rate of \$1,233.70 per annum, effective January 1, 2020;
- (j) That the Private Fire Line rates be imposed at the following rates, effective January 1, 2020:

Connection Size		Monthly Rate
mm	inches	
25	1.0	\$3.60
38	1.5	\$8.28
50	2.0	\$14.40
75	3.0	\$32.40
100	4.0	\$57.60

150	6.0	\$129.60
200	8.0	\$230.40
250	10.0	\$230.40
300	12.0	\$230.40

- (k) That the 2020 Water, Wastewater and Storm Proposed User Fees and Charges be imposed as per Appendix “A”, as amended, to Report 19-025, effective January 1, 2020;
- (l) That charges for raw water supplied to 690 Strathearne Avenue North by the City of Hamilton be imposed at the following rates, effective January 1, 2020:
 - (i) metered raw water at the rate of \$0.123 per cubic metre;
 - (ii) daily raw water fixed charges at the following rates:

Meter Size	Daily Rate
200 mm	\$31.20

- (iii) 2020 annual fee of \$18,500 for the purpose of a private raw water pipeline owned by AMLPC to convey raw water supplied by the City to 690 Strathearne Avenue North;
- (m) That the 2020 Water, Wastewater and Stormwater Rate Supported Operating Budget in the amount of \$233,011,802 be approved as per Appendix “B”, as amended, to Report 19-025;
- (n) That the long-term financing plan for the Water, Wastewater and Stormwater programs and related rate increases required to meet sustainable financing as identified in the 2020-2029 Water, Wastewater and Stormwater Rate Supported Operating Budget forecast (Appendix “B”, as amended, to Report 19-025) be approved, in principle;
- (o) That the 2020 Water, Wastewater and Stormwater Rate Supported Capital Budget and Financing Plan in the amount of \$329,981,000 be approved as per Appendices “C”, “D”, as amended, and “F”, to Report 19-025;
- (p) That the 2020-2029 Water, Wastewater and Stormwater Rate Supported Capital Budget forecast and financing plan (Appendix “G” to Report 19-025) be approved, in principle;

- (q) That the City Solicitor be authorized and directed to prepare, for Council approval, all necessary by-laws respecting the 2020 water and wastewater / storm user fees, charges and rates set out in recommendations (a) through (l) of Report FCS19070;
- (r) That the additional 12.0 Full Time Equivalent Rate Supported Staffing be approved as per Appendix "H", as amended, to Report 19-025;
- (s) That the General Manager, Finance and Corporate Services, be authorized to negotiate and confirm the terms and placement of all debenture issue(s), and / or private placement debenture issue(s), in either a public or private market and / or bank loan agreements and debenture issue(s) and / or variable interest rate bank loan agreements and debenture issue(s), in an amount not to exceed \$83,678,000 as attached in Appendices "C", "D", as amended, and "E" to Report 19-025, which includes \$16,900,000 in Rate Supported municipal debt and \$66,778,000 in Rate Supported Development Charges municipal debt;
- (t) That the General Manager, Finance and Corporate Services, be authorized to engage the services of all required professionals to secure the terms and issuance of the debenture issue(s) described in subsection (s) including, but not limited to, external legal counsel, fiscal agents and Infrastructure Ontario's Loan Program;
- (u) That the General Manager, Finance and Corporate Services, Mayor and City Clerk are each authorized and directed to enter into and / or execute, on behalf of the City of Hamilton, all agreements and necessary ancillary documents requiring their respective signatures, to secure the terms and issuance of the debenture issue(s) described in subsections (s) and (t), in a form satisfactory to the City Solicitor;
- (v) That the Mayor and City Clerk are authorized and directed to enter into and / or execute, on behalf of the City of Hamilton, all agreements and necessary ancillary documents not requiring any specific signing authority, to secure the terms and issuance of the debenture issue(s) described in subsections (s) and (t), in a form satisfactory to the City Solicitor and with content acceptable to the General Manager, Finance and Corporate Services; and,
- (w) That all necessary By-Law(s) be passed to authorize the debenture issue(s) negotiated, placed and secured, as they relate to the 2020 Water, Wastewater and Stormwater Budget, in accordance with subsections (s) and (t) to Report FCS19070.

FOR INFORMATION:

(a) APPROVAL OF AGENDA (Item 2)

The Committee Clerk advised of the following change to the agenda:

1. DELEGATION REQUESTS (Item 5)
 - (i) Don McLean, respecting Item 8.2 on this agenda – Report FCS19070 - 2020 Recommended Water, Wastewater and Stormwater Budget.

The agenda for the November 25, 2019 General Issues Committee (Rate Budget) meeting was approved, as amended.

(b) DECLARATIONS OF INTEREST (Item 3)

There were no declarations of interest.

(c) PUBLIC HEARING / DELEGATIONS (Item 7)

- (i) **Don McLean, respecting Item 8.2 on this agenda – Report FCS19070 - 2020 Recommended Water, Wastewater and Stormwater Budget Item (Item 7.1)**

Don McLean addressed Committee respecting Report FCS19070 - 2020 Recommended Water, Wastewater and Stormwater Budget.

The delegation, respecting Report FCS19070 - 2020 Recommended Water, Wastewater and Stormwater Budget, was received.

(d) STAFF PRESENTATIONS (Item 8)

- (i) **Alectra Utilities Water, Wastewater and Storm 2019 Service Activity Report (FCS19069) (City Wide) (Item 8.1)**

Eileen Campbell, Vice President of Customer Service, Alectra Utilities, addressed Committee and provided a PowerPoint presentation respecting Report FCS19069 - Alectra Utilities Water, Wastewater and Storm 2019 Service Activity Report, and answered questions of Committee.

The presentation, respecting Report FCS19069 - Alectra Utilities Water, Wastewater and Storm 2019 Service Activity Report, was received.

A copy of the presentation is available on the City's website at www.hamilton.ca or through the Office of the City Clerk.

For disposition of this matter, please refer to Item 1.

(ii) 2020 Recommended Water, Wastewater and Stormwater Budget (FCS19070) (City Wide) (Item 8.2)

Andrew Grice, Director of Hamilton Water; and, Brian McMullen, Director, Financial Planning & Policy, provided a PowerPoint presentation respecting Report FCS19070 - 2020 Recommended Water, Wastewater and Stormwater Budget, and answered questions of Committee.

The presentation, respecting Item FCS19070 - 2020 Recommended Water, Wastewater and Stormwater Budget, was received.

A copy of the presentation is available on the City's website at www.hamilton.ca or through the Office of the City Clerk.

The following Deferral Motion was DEFEATED:

(1) Enhanced Inspections and Monitoring - Hamilton Water and Wastewater

That the Motion, respecting Enhanced Inspections and Monitoring - Hamilton Water and Wastewater, be DEFERRED to the next GIC Rate Budget meeting.

The following Motion CARRIED, and the amendments were included in the recommendations of Report FCS19070, and were also reflected in the appropriate appendices, for Council's consideration:

WHEREAS, Hamilton Water operates 2 wastewater treatment plants, 71 wastewater pumping stations, 9 combined sewer overflow tanks, 1 water treatment plant, 21 water pumping stations, 13 reservoirs, 7 water towers, and 4 well systems, and;

WHEREAS, Hamilton Water is heavily reliant on automated systems to remotely monitor facility and process operations, including the identification of operational problems.

THEREFORE, BE IT RESOLVED:

- (a) That Appendix “F” to Report FCS19070, respecting 2020 Recommended Water, Wastewater and Stormwater Budget, be amended by adding 5 additional Full Time Equivalent Rate Supported staff consisting of the following:
 - (i) 4 (four) Maintenance Operators to improve the routine physical inspection and preventative maintenance programs for Hamilton Water infrastructure including water and wastewater treatment plants, pumping stations, reservoirs, water towers, well systems and combined sewer overflow tanks, at a gross annual cost of \$383,000;
 - (i) 1 (one) Water Quality Technologist to sample and analyse water and wastewater quality, and equipment/process related data, at a gross annual cost of \$114,000;
- (b) That staff be directed to report back to the Public Works Committee 1 (one) year after implementation of the additional 5 FTEs, for the maintenance of the water and wastewater facilities/equipment and water quality control, with information regarding the program improvements and the associated benefits that have been realized;
- (c) That staff be directed to include, in the new real time public notice protocol, the 14 monitored CSO overflow points for discharge to the natural environment; and,
- (d) That staff be directed to report back to the Public Works Committee in in 6 months with a matrix, stakeholder / partnership arrangements and testing locations, as it relates to enhanced inspections and monitoring for Hamilton water and wastewater.

The following Motion CARRIED, and the amendments were included in the recommendations of Report FCS19070, and were

also reflected in the appropriate appendices, for Council's consideration:

WHEREAS, the City's 2019 Development Charge (DC) Background Study in Table F-3 in the Airport Employment Growth District (AEGD) section had listed Project ID MH22-S-19 (HC019 and HC018 Upgrade Strategy) in the amount of \$10.9M (100% growth - split of 63% residential and 37% non-residential, linear wastewater);

WHEREAS, City Council, at its meeting of December 13, 2018, had approved \$11M be added to the City's 2019 Rates Capital Budget (funded \$6.93M from the City's Linear Wastewater Residential DC Reserve 110340 and \$4.07M from the City's Linear Wastewater Non-Residential DC Reserve 110341); and,

WHEREAS, City staff and Engineering Consultants GM BluePlan Engineering Limited have upgraded the strategy for 2020 to maximize the wastewater capacity as it relates to the proposed developments in the AEGD and surrounding developments;

THEREFORE, BE RESOLVED:

That increased funding in the amount of \$4M be added to the 2020 Recommended Water, Wastewater and Stormwater Capital Budget (Project ID 5161967123 – AEGD Growth Initiatives); increasing the Rate Supported 2020 Capital Budget Recommended amount from \$325,981,000 to \$329,981,000, to be funded as follows:

- (i) \$2,520,000 from the City's Linear Wastewater Residential DC Reserve 110340; and,
- (ii) \$1,480,000 from the City's Linear Wastewater Non-Residential DC Reserve 110341.

For further disposition of this matter, please refer to Item 2.

(f) **ADJOURNMENT (Item 5)**

There being no further business, the General Issues Committee adjourned at 1:27 p.m.

Respectfully submitted,

Deputy Mayor M. Wilson
Chair, General Issues Committee

Stephanie Paparella
Legislative Coordinator,
Office of the City Clerk

CITY OF HAMILTON
2020 WATER AND WASTEWATER/STORM FEES AND CHARGES
Effective January 1, 2020

A) Daily Water & Wastewater/Storm Fixed Charges

The fixed daily charge is not related to the direct costs of consumption and are not dependent upon or related to the amount of consumption incurred. The fixed charges are intended to offset the fixed costs of maintaining the water, wastewater and storm systems.

Meter Size	Water Rate	Wastewater/ Storm Rate
15 mm	\$ 0.37	\$ 0.39
16 mm	\$ 0.37	\$ 0.39
20 mm	\$ 0.37	\$ 0.39
21 mm	\$ 0.37	\$ 0.39
25 mm	\$ 0.93	\$ 0.98
38 mm	\$ 1.85	\$ 1.95
50 mm	\$ 2.96	\$ 3.12
75 mm	\$ 5.92	\$ 6.24
100 mm	\$ 9.25	\$ 9.75
150 mm	\$ 18.50	\$ 19.50
200 mm	\$ 29.60	\$ 31.20
250 mm	\$ 42.55	\$ 44.85
300 mm	\$ 62.90	\$ 66.30

B) Metered Water Consumption Charges

Water consumption shall be charged on a per cubic metre basis at the rates indicated in the table below. The total monthly Water Consumption Charge is the sum of usage in all blocks at the rate for each block.

Consumption Block	Monthly Water Consumption (m3)	Residential	Multi-Residential, Commercial, Institutional & Industrial
		Rate (\$/m3)	Rate (\$/m3)
1	0-10	0.83	1.64
2	>10	1.64	1.64

C) Wastewater/Storm Treatment Charges

Wastewater/Storm Treatment Charges are based on metered water consumption and the cost of wastewater collection and treatment, and stormwater management. Charges are on a per cubic metre basis at the rates indicated in the table below. The total monthly Wastewater/Storm Treatment Charge is the sum of usage in all blocks at the rate for each block.

Treatment Block	Monthly Water Consumption (m3)	Residential	Multi-Residential, Commercial, Institutional & Industrial
		Rate (\$/m3)	Rate (\$/m3)
1	0-10	0.88	1.75
2	>10	1.75	1.75

D) Non-Metered Annual Water & Wastewater/Storm Rate

Flat Rate Water Customers Annual Rate: \$594.95

Flat Rate Wastewater/Storm Customers Annual Rate: \$638.75

Combined Flat Rate Water & Wastewater/Storm Customers Annual Rate: \$1,233.70

City of Hamilton - 2020 Private Fire Line Rates

This service shall consist of permanent unmetered connections to the main for the purpose of supplying water to private fire protection systems such as automatic sprinkler systems, standpipes and private hydrants. This service shall also include reasonable quantities of water used for testing check valves and other backflow protection devices.

Unmetered Service

Size of Connection		Monthly Rate
mm	inches	
25	1	\$ 3.60
38	1.5	\$ 8.28
50	2	\$ 14.40
75	3	\$ 32.40
100	4	\$ 57.60
150	6	\$ 129.60
200	8	\$ 230.40
250	10	\$ 230.40
300	12	\$ 230.40

2020 PROPOSED USER FEES AND CHARGES

For Billing Purposes: M - F: 7:00am - 4:30pm
Regular Hours: M - F: 4:30pm - 7:00pm, Weekends and Holidays

PUBLIC WORKS
HAMILTON WATER

Dept. By-Law #	Dept ID	Account #	Ref #	Service Offered	2019 Including HST (if applicable)	2020 Proposed Fee	HST (y/n)	2020 Including HST (if applicable)	% Fee Change	Basis for Fee Increase or Decrease
R84-026	510220	47220	1	WATER DISTRIBUTION Water Meter Permit Fee Note: Charged for first-time meter installations. Includes supply and installation of water meter and remote reading device by City and related inspection.						
			1a)	16mm Displacement	\$359.70	\$359.70	n	\$359.70	0.0%	Current fee achieves full cost recovery
			1b)	20mm Displacement	\$404.60	\$404.60	n	\$404.60	0.0%	Current fee achieves full cost recovery
			1c)	21mm Displacement	\$404.60	\$404.60	n	\$404.60	0.0%	Current fee achieves full cost recovery
			1d)	25mm Displacement	\$559.40	\$559.40	n	\$559.40	0.0%	Current fee achieves full cost recovery
			1e)	38mm Displacement	\$886.76	\$905.08	n	\$905.08	2.1%	To achieve full cost recovery
			1f)	50mm Displacement	\$1,218.80	\$1,218.80	n	\$1,218.80	0.0%	Current fee achieves full cost recovery
			1g)	50mm Turbine	\$1,384.60	\$1,409.67	n	\$1,409.67	1.8%	To achieve full cost recovery
			1h)	50mm Compound	\$3,316.40	\$3,316.40	n	\$3,316.40	0.0%	Current fee achieves full cost recovery
			1i)	100mm Turbine	\$3,870.13	\$3,870.13	n	\$3,870.13	0.0%	Current fee achieves full cost recovery
			1j)	100mm Compound	\$5,206.07	\$5,304.84	n	\$5,304.84	1.9%	To achieve full cost recovery
			1k)	100mm Fire Service Turbine	\$6,637.49	\$6,759.21	n	\$6,759.21	1.8%	To achieve full cost recovery
			1l)	100mm Fire Service Compound	\$8,624.85	\$8,787.29	n	\$8,787.29	1.9%	To achieve full cost recovery
			1m)	100mm Magnetic Flow Meter (Must be approved by Supervisor of Meter Operations)	\$8,899.76	\$9,067.33	n	\$9,067.33	1.9%	To achieve full cost recovery
			1n)	100mm Fire Rated Magnetic Flow Meter (Must be approved by Supervisor of Meter Operations)	\$9,297.22	\$9,472.19	n	\$9,472.19	1.9%	To achieve full cost recovery
			1o)	150mm Turbine	\$7,467.78	\$7,608.67	n	\$7,608.67	1.9%	To achieve full cost recovery
			1p)	150mm Compound	\$10,226.88	\$10,419.16	n	\$10,419.16	1.9%	To achieve full cost recovery
			1q)	150mm Fire Service Turbine	\$12,097.96	\$12,344.57	n	\$12,344.57	2.0%	To achieve full cost recovery
			1r)	150mm Magnetic Flow Meter (Must be approved by Supervisor of Meter Operations)	\$12,041.98	\$12,268.08	n	\$12,268.08	1.9%	To achieve full cost recovery
			1s)	150mm Fire Rated Magnetic Flow Meter (Must be approved by Supervisor of Meter Operations)	\$13,160.41	\$13,407.34	n	\$13,407.34	1.9%	To achieve full cost recovery
			1t)	200mm Fire Service Turbine	\$14,171.75	\$14,437.52	n	\$14,437.52	1.9%	To achieve full cost recovery
			1u)	200mm Turbine	\$19,092.63	\$19,450.06	n	\$19,450.06	1.9%	To achieve full cost recovery
			1v)	200mm Compound	\$15,496.05	\$15,785.99	n	\$15,785.99	1.9%	To achieve full cost recovery
			1w)	200mm Magnetic Flow Meter (Must be approved by Supervisor of Meter Operations)	\$14,415.75	\$14,686.07	n	\$14,686.07	1.9%	To achieve full cost recovery
			1x)	200mm Fire Rated Magnetic Flow Meter (Must be approved by Supervisor of Meter Operations)	\$17,063.33	\$17,382.96	n	\$17,382.96	1.9%	To achieve full cost recovery
			1y)	250mm Fire Service Turbine	\$19,312.34	\$19,673.87	n	\$19,673.87	1.9%	To achieve full cost recovery
			1z)	250mm Fire Service Compound	\$24,832.75	\$25,297.11	n	\$25,297.11	1.9%	To achieve full cost recovery
			1aa)	250mm Turbine	\$209.80	\$214.63	n	\$214.63	2.3%	To achieve full cost recovery
			1ab)	250mm Magnetic Flow Meter (Must be approved by Supervisor of Meter Operations)						
			1ac)	250mm Fire Rated Magnetic Flow Meter (Must be approved by Supervisor of Meter Operations)						
			1ad)	250mm Fire Service Turbine						
			1ae)	250mm Fire Service Compound						
			1af)	Radio Remote Read Equipment Installation						
R84-026	510220	45519	2	Water Meter Removal Fee Note: Cost to remove a meter prior to the building being demolished and/or the water service being decommissioned or abandoned. Failure to have the meter removed prior to the building being demolished will incur a meter replacement cost charge. Does not include a turn water off fee, which is required and charged separately as per Section 14 of this schedule.						
			2a)	16mm Displacement	\$123.62	\$112.87	y	\$112.87	3.2%	To achieve full cost recovery
			2b)	20mm Displacement	\$123.62	\$112.87	y	\$112.87	3.2%	To achieve full cost recovery
			2c)	21mm Displacement	\$123.62	\$112.87	y	\$112.87	3.2%	To achieve full cost recovery
			2d)	25mm Displacement	\$123.62	\$112.87	y	\$112.87	3.2%	To achieve full cost recovery
			2e)	38mm - 250mm Meters (cost depends on size, labour, and meter location)	Cost + 10% OH	Cost + 10% OH	y	Cost + 10% OH	N/A	
R84-026	510220	45519	3	Water Meter Inspection Services Notes: Cost for customer requested service relating to meter investigation Regular Hours Inspection After Hours Inspection						
			3a)	Regular Hours Inspection	\$123.70	\$115.86	y	\$115.86	5.8%	To achieve full cost recovery
			3b)	After Hours Inspection	\$181.95	\$151.73	y	\$151.73	5.9%	To achieve full cost recovery

*Costs not specifically addressed in the schedule will be included at Actual Cost plus overhead

**For return inquiries, please call (905) 642-4422 between 6:30am - 4:30pm

2020 PROPOSED USER FEES AND CHARGES

Fee Billing
 Period: M - F, 7:00am - 4:30pm
 Regular Hours: M - F, 4:30pm - 7:00am, Weekends and Holidays

PUBLIC WORKS
 HAMILTON WATER

Dept By-Law #	Dept ID	Account #	Ref #	Service Offered	2019 Including HST (if applicable)	2020 Proposed Fee	HST (Y/N)	2020 Including HST (if applicable)	% Fee Change	Basis for Fee Increase or Decrease
R84-026	510220	45608	4	Replacement Cost for Lost Meter Note: Cost to replace a meter that has been lost, stolen or damaged. Includes meter, installation and administrative costs.						
			4a)	15mm Displacement	\$244.00	\$221.75	Y	\$250.58	2.7%	To achieve full cost recovery
			4b)	16mm Displacement	\$244.00	\$221.75	Y	\$250.58	2.7%	To achieve full cost recovery
			4c)	20mm Displacement	\$379.31	\$342.24	Y	\$386.73	2.0%	To achieve full cost recovery
			4d)	21mm Displacement	\$379.31	\$342.24	Y	\$386.73	2.0%	To achieve full cost recovery
			4e)	25mm Displacement	\$436.70	\$393.97	Y	\$445.19	1.9%	To achieve full cost recovery
			4f)	38mm Displacement	\$1,205.02	\$1,082.62	Y	\$1,223.36	1.5%	To achieve full cost recovery
			4g)	50mm Turbine	\$1,465.95	\$1,297.30	Y	\$1,465.95	0.0%	Current fee achieves full cost recovery
			4h)	50mm Displacement	\$1,804.05	\$1,596.50	Y	\$1,804.05	0.0%	Current fee achieves full cost recovery
			4i)	50mm Compound	\$2,338.65	\$2,069.60	Y	\$2,338.65	0.0%	Current fee achieves full cost recovery
			4j)	50mm Turbine	\$3,688.50	\$3,264.16	Y	\$3,688.50	0.0%	Current fee achieves full cost recovery
			4k)	100mm Compound	\$5,959.20	\$5,273.63	Y	\$5,959.20	0.0%	Current fee achieves full cost recovery
			4l)	100mm Fire Service Turbine	\$8,947.63	\$7,212.18	Y	\$8,149.76	1.3%	To achieve full cost recovery
			4m)	100mm Fire Service Compound	\$9,947.30	\$8,855.57	Y	\$10,006.80	0.6%	To achieve full cost recovery
			4n)	100mm Magnetic Flow Meter	\$10,372.29	\$9,855.25	Y	\$11,136.43	1.5%	To achieve full cost recovery
			4o)	100mm Fire Rated Magnetic Flow Meter	\$11,229.75	\$10,290.10	Y	\$11,627.81	3.5%	To achieve full cost recovery
			4p)	150mm Turbine	\$6,787.25	\$6,006.42	Y	\$6,787.25	0.0%	Current fee achieves full cost recovery
			4q)	150mm Compound	\$10,328.00	\$9,139.82	Y	\$10,328.00	0.0%	Current fee achieves full cost recovery
			4r)	150mm Fire Service Turbine	\$12,234.06	\$10,968.91	Y	\$12,394.87	1.3%	To achieve full cost recovery
			4s)	150mm Fire Service Compound	\$15,540.23	\$13,949.23	Y	\$15,762.63	1.4%	To achieve full cost recovery
			4t)	150mm Magnetic Flow Meter	\$12,255.20	\$10,918.06	Y	\$12,337.41	0.7%	To achieve full cost recovery
			4u)	150mm Fire Rated Magnetic Flow Meter	\$13,611.70	\$12,170.80	Y	\$13,753.00	1.0%	To achieve full cost recovery
			4v)	200mm Turbine	\$7,340.19	\$6,570.69	Y	\$7,424.88	1.2%	To achieve full cost recovery
			4w)	200mm Compound	\$11,551.00	\$10,222.12	Y	\$11,551.00	0.0%	Current fee achieves full cost recovery
			4x)	200mm Fire Service Turbine	\$16,119.89	\$14,454.48	Y	\$16,333.56	1.3%	To achieve full cost recovery
			4y)	200mm Fire Service Compound	\$21,679.46	\$19,466.10	Y	\$21,996.69	1.5%	To achieve full cost recovery
			4z)	200mm Magnetic Flow Meter	\$14,696.83	\$13,177.47	Y	\$14,890.54	1.3%	To achieve full cost recovery
			4aa)	200mm Fire Rated Magnetic Flow Meter	\$16,050.38	\$14,395.02	Y	\$16,266.37	1.3%	To achieve full cost recovery
			4ab)	250mm Turbine	\$17,754.50	\$16,050.38	Y	\$17,909.20	1.2%	To achieve full cost recovery
			4ac)	250mm Magnetic Flow Meter	\$14,766.00	\$13,326.65	Y	\$15,070.41	2.1%	To achieve full cost recovery
			4ad)	250mm Fire Rated Magnetic Flow Meter	\$17,726.90	\$16,225.00	Y	\$18,334.25	3.4%	To achieve full cost recovery
			4ae)	250mm Fire Service Turbine	\$20,293.29	\$18,219.75	Y	\$20,588.32	1.5%	To achieve full cost recovery
			4af)	250mm Fire Service Compound	\$29,046.50	\$25,704.87	Y	\$29,046.50	0.0%	Current fee achieves full cost recovery
			4ag)	50mm Strainer	\$462.97	\$419.15	Y	\$473.64	2.3%	To achieve full cost recovery
			4ah)	100mm Strainer	\$858.46	\$775.66	Y	\$876.50	2.1%	To achieve full cost recovery
			4ai)	150mm Strainer	\$1,374.34	\$1,240.69	Y	\$1,401.98	2.0%	To achieve full cost recovery
			4aj)	200mm Strainer	\$2,336.25	\$2,107.80	Y	\$2,381.81	2.0%	To achieve full cost recovery
			4ak)	250mm Strainer	\$3,993.11	\$3,533.73	Y	\$3,993.11	0.0%	Current fee achieves full cost recovery
R84-026	510220	45690	5	Bench Testing Water Meters Note: Cost to have a water meter tested for accuracy. If the meter tests within the accuracy standards as set out by AWWA then the property owner is responsible for the cost of the test and the replacement cost of the water meter, otherwise cost borne by the City. Fee includes removal of existing meter and installation of replacement meter.						
			5a)	15 mm & 16 mm Diameter	\$348.80	\$314.56	Y	\$355.45	1.9%	To achieve full cost recovery
			5b)	16-25mm Diameter - Test where meter has been removed from service within prior 90 days	\$144.19	\$130.39	Y	\$147.34	2.2%	To achieve full cost recovery
			5c)	20 mm Diameter	\$400.27	\$362.87	Y	\$410.04	2.4%	To achieve full cost recovery
			5d)	25 mm Diameter	\$457.67	\$414.60	Y	\$468.50	2.4%	To achieve full cost recovery
			5e)	38 mm Diameter	\$994.38	\$914.18	Y	\$1,033.02	3.9%	To achieve full cost recovery
			5f)	50 mm Diameter	\$1,742.55	\$1,542.08	Y	\$1,742.55	0.0%	Current fee achieves full cost recovery
			5g)	100 mm plus diameter (In Situ testing)	\$1,014.29	\$930.42	Y	\$1,051.37	3.7%	To achieve full cost recovery

Costs not specifically added in the schedule will be included at Actual Cost plus overhead

2020 PROPOSED USER FEES AND CHARGES

**PUBLIC WORKS
HAMILTON WATER**

For Billing: Purposes: M - F: 7:00am - 4:30pm
Regular Hours: M - F: 4:30pm - 7:00pm, Weekends and Holidays

Dept. By-Law #	Dept ID	Account #	Ref#	Service Offered	2019 including HST (if applicable)	2020 Proposed Fee	HST (y/n)	2020 including HST (if applicable)	% Fee Change	Basis for Fee Increase or Decrease
10-103	510220	45644	6	Backflow Prevention Program Note: Costs for contractor registration fee, administration fees for processing backflow prevention test reports and survey forms. 6a) Annual Program Registration Fee 6b) Test Report receipt and processing (per submission of each test report) 6c) Cross Connection Survey Form processing (per form upon submission) 6d) Backflow Prevention Device Investigation - Regular Hours 6e) Backflow Prevention Device Investigation - After Hours	\$150.89 \$72.61 \$179.16 \$159.10 \$233.80	\$134.96 \$64.26 \$160.28 \$142.12 \$206.90	y y y y y	\$152.51 \$72.61 \$181.12 \$160.80 \$233.80	1.1% 0.0% 1.1% 0.9% 0.0%	To achieve full cost recovery Current fee achieves full cost recovery To achieve full cost recovery To achieve full cost recovery Current fee achieves full cost recovery
R84-026	514330	45590	7	Construction Water Note: Charge for unmetered water used for construction prior to meter installation. Paid at the time of submitting building permit payment. 7a) Single Residential (per lot or townhouse) 7b) Multi-Residential (per apartment/condo unit) 7c) Industrial/Commercial/Institutional (\$/1,000 sqft of building area or \$/ha where no structure is constructed)	\$95.05 \$44.45 \$31.20	\$100.00 \$46.75 \$32.80	n n n	\$100.00 \$46.75 \$32.80	5.2% 5.2% 5.1%	Equal to variable water rate increase Equal to variable water rate increase Equal to variable water rate increase
R84-026	514330	41208	8	Hydrant/Road Adaptor Fees Note: Costs to install or remove water meter & backflow prevention device. When moving a hydrant/road adaptor from one site to another for the same customer, both removal & installation fees apply. This service requires a usage deposit and a damage deposit.	\$2.35	\$2.45	n	\$2.45	4.3%	Rate is 1.5x volumetric water rate To achieve full cost recovery
R84-026	514330	41209	8a)	Usage Cost (Metered Hauled Water Rate/m ³)	\$145.90	\$146.94	n	\$146.94	0.7%	To achieve full cost recovery
R84-026	514330	41209	8b)	Hydrant/Road Adaptor Connection/Disconnection Fee (Regular Hours-Emergency-Fee for Both Sides)	\$274.40	\$276.71	n	\$276.71	0.8%	To achieve full cost recovery
R84-026	514330	41209	8c)	Hydrant/Road Adaptor Connection/Disconnection Fee (After Hours-Emergency-Fee for Both Sides)	\$900.00	\$900.00	n	\$900.00	0.0%	Deposit rounded to the nearest \$100
R84-026	514330	41209	8d)	Non-Refundable Usage Deposit	\$6,000.00	\$6,000.00	n	\$6,000.00	0.0%	Deposit rounded to the nearest \$100
R84-026	514330	41209	8e)	Security/Damage Deposit	\$61.30	\$62.56	n	\$62.56	1.5%	To achieve full cost recovery
R84-026	514330	41209	8f)	Hydrant/road adaptor rental fee for initial 7 days	\$6.02	\$6.13	n	\$6.13	1.8%	To achieve full cost recovery
R84-026	514330	41209	8g)	Per Diem hydrant/road adaptor rental fee after initial 7 days						
R84-026	514330	47244	9	Private Water Station Agreement Fees Annual Renewal	\$357.80	\$386.22	n	\$386.22	7.9%	To achieve full cost recovery
R84-026	514330	47232	10	Water Haulage Fees Annual Water Haulage Permit Fee Note: Annual license fee to utilize the City's public filling stations.	\$64.78	\$57.44	y	\$64.51	0.2%	No cards issued, Online Registration
R84-026	514330	47232	10a)	Account review	\$99.08	\$87.91	y	\$99.34	0.3%	To achieve full cost recovery
R84-026	514330	47232	10b)	Note: Costs charged for administrative services to provide customer account information for personal or taxation purposes.						
R84-026	510220	45519	11	General Administration Fees	\$77.64	\$69.16	y	\$78.15	0.7%	To achieve full cost recovery
R84-026	510220	45519	11a)	General Administrative Requests (per hour)/Report Requests	\$46.36	\$41.14	y	\$46.49	0.3%	To achieve full cost recovery
R84-026	510220	45519	11b)	Permit Cancellation administrative fee	\$46.36	\$41.14	y	\$46.49	0.3%	To achieve full cost recovery
R84-026	510220	45519	11c)	Permit Renewal Fee	\$68.04	\$51.60	y	\$58.31	0.5%	To achieve full cost recovery
R84-026	510220	45519	11d)	Lead Line Replacement Loan Application Fee	\$3.39	\$3.00	y	\$3.39	0.0%	Current fee achieves full cost recovery
R84-026	510220	45519	11e)	Monthly AMI Manual Meter Read Fee	\$22.60	\$20.00	y	\$22.60	0.0%	Current fee achieves full cost recovery
R84-026	510220	45519	11f)	Water Shut-off Admin Fee	\$28.25	\$28.25	y	\$31.92	13.0%	To achieve full cost recovery
R84-026	510220	45519	11g)	Water Shut-off Notice on Door						

*Costs not specifically addressed in the schedule will be invoiced at Actual Cost plus overhead.
**For general inquiries, please call (603) 546-4426 between 8:30am - 4:30pm.

2020 PROPOSED USER FEES AND CHARGES

PUBLIC WORKS
HAMILTON WATER

Est. Billing
Purposes: M - F: 7:00am - 4:30pm
Regular Hours: M - F: 4:30pm - 7:00pm, Weekends and Holidays

Dept. #	By-Law #	Dept ID	Account #	Ref #	Service Offered	2019 Including HST (if applicable)	2020 Proposed Fee	HST (y/n)	2020 Including HST (if applicable)	% Fee Change	Basis for Fee Increase or Decrease
R84-026				12	Water Inspection Services Note: Costs associated with various permit and inspection services related to water services for properties.						
		514330	47235	12a)	Private Water Service Repair/Replacement Inspection (Reg Hours - Max 1 Hour Total)	\$105.06	\$93.45	Y	\$105.60	0.5%	Cost recovery - .01 for CS processing
		514330	47235	12b)	Private Water Service Repair/Replacement Inspection (After Hours /Emergency - Max 1 Hour)	\$177.60	\$158.36	Y	\$178.95	0.8%	Cost recovery + .01 for CS processing
		514330	45690	12c)	Water Service Abandonment Inspection (Regular Hours - Max 1 Hour Total Labour)	\$93.73	\$93.47	Y	\$94.32	0.6%	To achieve full cost recovery
		514330	45690	12d)	Water Service Abandonment Inspection (After Hours / Emergency - Max 1 Hour Total Labour)	\$166.32	\$148.36	Y	\$167.65	0.8%	To achieve full cost recovery
		514330	45690	12e)	Water Service Inspection for Demolition (Regular Hours - Max 1 Hour Total Labour)	\$93.73	\$83.47	Y	\$94.32	0.6%	To achieve full cost recovery
		514330	45690	12f)	Water Service Inspection for Demolition (After Hours / Emergency - Max 1 Hour Total Labour)	\$166.32	\$148.36	Y	\$167.65	0.8%	To achieve full cost recovery
		514330	45690	12g)	Missed or Cancelled Inspection	\$68.25	\$60.65	Y	\$68.53	0.4%	To achieve full cost recovery
R84-026		514330	45690	13	Upsize Public Portion Water Service from 20mm to 25mm Note: Charge for upsizing a public portion water service from 20mm to 25mm, when a public portion water service replacement is already being completed by the City.	\$150.00	\$155.00	n	\$155.00	3.3%	To achieve full cost recovery
R84-026		514330	45679	14	Turning Water Off or On Note: Turning water off at the curb to enable a property owner to complete internal plumbing repairs, or a private water service repair or replacement, and then turning the water back on.						
				14a)	Turning Water On/Off (Regular Hours)	\$123.35	\$124.10	n	\$124.10	0.6%	Cost recovery - .02 for CS processing
				14b)	Turning Water On/Off (After Hours/Emergency)	\$206.70	\$208.25	n	\$208.25	0.7%	Cost recovery - .01 for CS processing
				14c)	Turning Water On/Off During the Same Visit (Regular Hours - Max 1/2 Hour Total Labour)	\$82.95	\$83.47	n	\$83.47	0.6%	To achieve full cost recovery
				14d)	Labour	\$113.35	\$114.13	n	\$114.13	0.7%	To achieve full cost recovery
				14e)	Non-compliance Turn Water Off	\$82.95	\$83.47	n	\$83.47	0.6%	To achieve full cost recovery
				14f)	Non-compliance Turn Water On	\$82.95	\$83.47	n	\$83.47	0.6%	To achieve full cost recovery
R84-026		514330	45636	15	Hydrant Flow Test / Water Quality Flushing Note: Cost to operate a City Fire Hydrant(s) for a maximum of 1 hour total labour.	\$103.94	\$105.29	Y	\$120.11	15.6%	Labour inc. 3 hrs for cost recovery
R84-026		514330	45690	16	Water Quality/Quantity Service Calls Note: Cost for a service call to investigate a water quality/quantity complaint and the issue resides on private property. No charge for water quality/quantity complaints related to issues originating from the City's distribution system. Missed appointments will be billed the corresponding service call rate.						
				16a)	Service Call (Regular Hours - Max 1 Hour Total Labour)	\$93.73	\$83.47	Y	\$94.32	0.6%	To achieve full cost recovery
				16b)	Service Call (After Hours - Max 1 Hour Total Labour)	\$166.32	\$148.36	Y	\$167.65	0.8%	To achieve full cost recovery
R84-026		510290	45690	17	Hydrant Repair, Replace or Relocate Note: Cost to repair, replace, or relocate a City Fire Hydrant including labour, parts, materials, equipment, and permanent restoration.	Cost + 33% OH	Cost + 33% OH	Y	Cost + 33% OH	N/A	To achieve full cost recovery
R84-026		514330	45690	18	Watermain Shutdowns Note: Costs associated with isolating a watermain to facilitate third party work.						
				18a)	Watermain Shutdown / Recharge (Regular Hours-Maximum 1 Hour Total Labour)	\$126.07	\$129.11	n	\$129.11	0.8%	To achieve full cost recovery
				18b)	Watermain Shutdown / Recharge (After Hours / Emergency-Maximum 1 Hour Total Labour)	\$230.54	\$232.49	n	\$232.49	0.8%	To achieve full cost recovery
R84-026		510350	45408	19	Environmental Records Search PRISM Reports related to soil contamination Reports - Environmental Assessments and Master Plans - plus fee per page	\$177.04	\$159.80	Y	\$180.58	2.0%	2% allowed for inflation
						\$17.40	\$15.71	Y	\$17.75	2.0%	2% allowed for inflation
						\$0.11	\$0.10	Y	\$0.12	2.0%	2% allowed for inflation
R84-026		514330	45690	20	Miscellaneous Water Distribution System Repair Note: Cost for the City to repair damage to the water distribution system caused by a third party. Costs include labour, parts, materials, equipment, and permanent restoration.	Cost + 33% OH	Cost + 33% OH	Y	Cost + 33% OH	N/A	To achieve full cost recovery
R84-026		514330	45690	21	Additional Labour Charges Note: Additional labour charge for all services/calls that exceed the allotted labour time. Costs are for a single Water Distribution Operator in minimum increments of 30 minutes.						
				21a)	1/2 Hour Additional Labour (Regular Hours)-Water Distribution Operator	\$25.50	\$22.83	Y	\$25.80	1.2%	Cost recovery + .01 for CS processing
				21b)	1/2 Hour Additional Labour (After Hours)-Water Distribution Operator	\$36.25	\$34.25	Y	\$38.70	1.2%	Cost recovery + .02 for CS processing
				21c)	1/2 Hour Additional Labour (Regular Hours)-Water Distribution Operator	\$22.55	\$22.82	n	\$22.82	1.2%	To achieve full cost recovery
				21d)	1/2 Hour Additional Labour (After Hours)-Water Distribution Operator	\$33.85	\$34.23	n	\$34.23	1.1%	To achieve full cost recovery

Costs not specifically addressed in this schedule will be invoiced at Actual Cost plus overhead.
For general inquiries, please call (905) 546-5400 between 8:30am - 4:30pm.

2020 PROPOSED USER FEES AND CHARGES

**PUBLIC WORKS
HAMILTON WATER**

For Billing Purposes
Regular Hours: M - F, 7:00am - 4:30pm
After Hours: M - F, 4:30pm - 7:00am, Weekends and Holidays

Dept. By-Law #	Dept ID	Account #	Ref #	Service Offered	2019 including HST (if applicable)	2020 Proposed Fee	HST (y/n)	2020 including HST (if applicable)	% Fee Change	Basis for Fee Increase or Decrease
06-026	516175	47230	1	COLLECTION SYSTEM INSPECTION & MAINTENANCE Wastewater Inspection Services Note: Costs associated with various permit and inspection services related to sewer laterals for properties. Private Sewer Lateral Repair/Replacement Inspection (Regular Hours - Maximum 1 Hour Total Labour) Private Sewer Lateral Repair/Replacement Inspection (After Hours / Emergency - Maximum 1 Hour Total Labour) Missed or Cancelled Inspection Mainline Sewer Inspection	\$108.50 \$229.90 \$78.16 Cost + 33% OH	\$96.68 \$205.40 \$69.50 Cost + 33% OH	y y y y	\$109.25 \$232.10 \$78.54 OH	0.7% 1.0% 0.5% N/A	To achieve full cost recovery Cost recovery - .02 for CS processing To achieve full cost recovery To achieve full cost recovery
06-026	516175	45690	2	Sewer Related Service Calls Note: Cost for a service call to investigate a sewer related complaint and the issue resides on private property. No charge for sewer complaints related to issues originating from the City's sewer system. Missed appointments will be billed the corresponding Service Call (Regular Hours - Maximum 1 Hour Total Labour) Service Call (After Hours - Maximum 1 Hour Total Labour)	\$96.72 \$194.53	\$86.11 \$173.70	y y	\$97.30 \$196.28	0.6% 0.9%	To achieve full cost recovery To achieve full cost recovery
06-026	516175	45690	3	Sewer Lateral Cleaning and Investigation Fees Note: When a property owner qualifies for the Sewer Lateral Management Program and chooses to hire their own Plumbing Contractor, these prices represent the maximum amounts that will be reimbursed to the property owner for the sewer lateral cleaning and investigation services performed by the independent Plumbing Contractor	\$449.69 \$496.71 \$146.96 \$205.74 \$235.13 \$293.91	\$405.91 \$448.36 \$132.65 \$185.71 \$212.24 \$265.30	y y y y y y	\$458.68 \$506.65 \$149.89 \$209.85 \$239.83 \$299.79	2.0% 2.0% 2.0% 2.0% 2.0% 2.0%	Lower Contract Costs Lower Contract Costs Lower Contract Costs Lower Contract Costs Lower Contract Costs Lower Contract Costs
06-026	516175	45690	4	Miscellaneous Wastewater Collection System Repair Note: Cost for the City to repair damage to the wastewater collection system caused by a third party. Costs include labour, parts, materials, equipment, and permanent restoration.	Cost + 33% OH	Cost + 33% OH	y	Cost + 33% OH	N/A	To achieve full cost recovery
06-026	516175	45690	5	Additional Labour Charges Note: Additional labour charge for all services/calls that exceed the allotted labour time. Costs are for a single Wastewater Collection Operator or Contract Inspector in minimum increments of 30 minutes.	\$24.45 \$36.70	\$21.90 \$32.83	y y	\$24.75 \$37.40	1.2% 1.1%	To achieve full cost recovery Cost recovery - .02 for CS processing
			5a)	1/2 Hour Additional Labour (Regular Hours) - Wastewater Collection						
			5b)	1/2 Hour Additional Labour (After Hours) - Wastewater Collection						

Costs not specifically addressed in the schedule will be invoiced at Actual Cost plus overhead.
For general inquiries, please call (905) 546-4438 between 8:00am - 4:30pm.

2020 PROPOSED USER FEES AND CHARGES

PUBLIC WORKS
HAMILTON WATER

Dept ID	Account #	Ref #	Service Offered	2019 including HST (if applicable)	2020 Proposed Fee	HST (Y/N)	2020 including HST (if applicable)	% Fee Change	Basis for Fee Increase or Decrease
LABORATORY SERVICES									
Inorganic Tests:									
510250	45519	1	Solids						
		1a)	Total Suspended Solids (TSS)	\$24.52	\$21.70	Y	\$24.52	0.0%	Current fee achieves full cost recovery
		1b)	TSS plus Volatile Suspended Solids (VSS)	\$24.52	\$21.70	Y	\$24.52	0.0%	Current fee achieves full cost recovery
		1c)	Total Solids (TS)	\$21.36	\$19.10	Y	\$21.36	1.1%	To achieve full cost recovery
		1d)	TS plus Volatile Solids (VS)	\$22.15	\$20.10	Y	\$22.15	2.6%	To achieve full cost recovery
		1e)	Total Dissolved Solids	\$0.00	\$32.00	Y	\$36.16	New	New
		2	Skalar						
		2a)	Total Cyanide	\$37.40	\$34.40	Y	\$38.87	3.9%	To achieve full cost recovery
		2b)	Phenolics	\$34.92	\$31.80	Y	\$35.93	2.9%	To achieve full cost recovery
		2c)	Total Kjeldhal Nitrogen (TKN)	\$35.48	\$31.40	Y	\$35.48	0.0%	Current fee achieves full cost recovery
		2d)	Ammonia	\$39.10	\$34.60	Y	\$39.10	0.0%	Current fee achieves full cost recovery
		2e)	Dissolved Organic Carbon	\$38.53	\$34.30	Y	\$38.76	0.6%	To achieve full cost recovery
		2f)	Total Organic Carbon	\$31.30	\$28.80	Y	\$32.54	4.0%	To achieve full cost recovery
		2g)	Reactive Silica	\$56.95	\$50.40	Y	\$56.95	0.0%	Current fee achieves full cost recovery
		3	Ion Chromatography (IC Scan)						
510250	45519	4	PC Titrate	\$18.19	\$16.50	Y	\$18.65	2.5%	To achieve full cost recovery
		4a)	pH	\$18.08	\$16.40	Y	\$18.53	2.5%	To achieve full cost recovery
		4b)	Alkalinity	\$18.08	\$16.40	Y	\$18.53	2.5%	To achieve full cost recovery
		4c)	Conductivity	\$27.46	\$24.80	Y	\$28.02	2.1%	To achieve full cost recovery
		4d)	Fluoride						
		5	Turbidity	\$27.69	\$24.70	Y	\$27.91	0.8%	To achieve full cost recovery
		6	UV Transmittance	\$28.59	\$25.30	Y	\$28.59	0.0%	Current fee achieves full cost recovery
		7	Color Apparent	\$25.20	\$22.90	Y	\$25.88	2.7%	To achieve full cost recovery
		8	Color True	\$25.20	\$22.90	Y	\$25.88	2.7%	To achieve full cost recovery
		9	O Phosphate	\$0.00	\$26.70	Y	\$30.17	New	New
		10	Chemical Oxygen Demand (COD)	\$42.83	\$37.90	Y	\$42.83	0.0%	Current fee achieves full cost recovery
		11	Biochemical Oxygen Demand (BOD)	\$42.60	\$37.70	Y	\$42.60	0.0%	Current fee achieves full cost recovery
		12	Volatile Acid	\$42.15	\$37.30	Y	\$42.15	0.0%	Current fee achieves full cost recovery
		Microbiology Tests:							
		13	Total Coliform/E coli	\$24.75	\$25.70	Y	\$29.04	17.4%	To achieve full cost recovery
510250	45519	14	EC	\$30.96	\$28.60	Y	\$32.32	4.4%	To achieve full cost recovery
510250	45519	15	Heterotrophic Plate Count	\$29.04	\$26.70	Y	\$30.17	3.9%	To achieve full cost recovery
510250	45519	16	Micro Examination	\$152.89	\$137.30	Y	\$155.15	1.5%	To achieve full cost recovery
510250	45519	17	Microcystin		\$515.00	Y	\$581.95	New	New
		Metals:							
510250	45519	18	ICP OES	\$65.09	\$58.20	Y	\$65.77	1.0%	To achieve full cost recovery
		18a)	ICP OES Scan (Wastewater)	\$30.40	\$27.70	Y	\$31.30	3.0%	To achieve full cost recovery
		18b)	Total Phosphorous	\$30.40	\$27.70	Y	\$31.30	3.0%	To achieve full cost recovery
		18c)	Total Dissolved Phosphorous						
510250	45519	19	ICP MS	\$65.09	\$58.20	Y	\$65.77	1.0%	To achieve full cost recovery
		19a)	ICP MS Scan						
510250	45519	20	AA	\$51.64	\$45.70	Y	\$51.64	0.0%	Current fee achieves full cost recovery
		20a)	Mercury						
510250	45519	21	Organics		\$124.60	Y	\$140.80	New	New
		21a)	Caffeine						
510250	45519	22	Additional Fees		\$100.00	Y	\$113.00	New	New
		22a)	Weekend surcharge						

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For general inquiry, please call 600.549.4344 ext. 5858.

2020 PROPOSED USER FEES AND CHARGES

PUBLIC WORKS
HAMILTON WATER

Dept. By-Law #	Dept ID	Account #	Ref #	Service Offered	2019 Including HST (if applicable)	2020 Proposed Fee	HST (Y/N)	2020 Including HST (if applicable)	% Fee Change	Basis for Fee Increase or Decrease
14-090	516175	47232	1	ENVIRONMENTAL MONITORING & ENFORCEMENT To Regulate the Discharge of any Matter into the Sanitary, Combined, and Storm Sewer Systems. Annual Permit to Discharge Hauled Sewage Note: Cost for administration and processing of annual permits required to haul sewage within Hamilton	\$324.00	\$329.00	n	\$329.00	1.5%	To achieve full cost recovery
14-090	516175	41314	2	Discharge fees for Hauled Sewage generated: Inside the City - Compliant	\$49.15	\$50.15	n	\$50.15	2.0%	To achieve full cost recovery
14-090	516175	41314	2a)	Note: Cost per truck full of sewage containing materials within Sewer Use By-law limits up to 1000 imperial gallons (4.54 m3) or any part thereof	\$49.15	\$50.15	n	\$50.15	2.0%	Has to remain a multiple of \$49.15
14-090	516175	41314	2b)	greater than 1000 (4.54 m3) but less than or equal to 3500 imperial gallons (15.9m3)	\$98.30	\$100.30	n	\$100.30	2.0%	Has to remain a multiple of \$49.15
14-090	516175	41314	2c)	greater than 3500 (15.9 m3) but less than or equal to 5000 imperial gallons (22.7 m3)	\$147.45	\$150.45	n	\$150.45	2.0%	Has to remain a multiple of \$49.15
14-090	516175	41314	2d)	greater than 5000 (22.7 m3) but less than or equal to 8000 imperial gallons (36.3 m3)	\$196.60	\$200.60	n	\$200.60	2.0%	Has to remain a multiple of \$49.15
14-090	516175	41314	2e)	greater than 8000 (36.3 m3) but less than or equal to 10000 imperial gallons (45.43 m3)						
14-090	516175	41314	3	Discharge fees for Hauled Sewage generated: Inside the City - Non-Compliant	\$49.15	\$50.15	n	\$50.15	2.0%	To achieve full cost recovery
14-090	516175	41314	3a)	Note: Cost per truck full of sewage containing materials that exceed one or more Sewer Use By-law limits up to 1000 imperial gallons (4.54 m3) or any part thereof	\$98.30	\$100.30	n	\$100.30	2.0%	Has to remain a multiple of \$49.15
14-090	516175	41314	3b)	greater than 1000 (4.54 m3) but less than or equal to 3500 imperial gallons (15.9m3)	\$147.45	\$150.45	n	\$150.45	2.0%	Has to remain a multiple of \$49.15
14-090	516175	41314	3c)	greater than 3500 (15.9 m3) but less than or equal to 5000 imperial gallons (22.7 m3)	\$245.75	\$250.75	n	\$250.75	2.0%	Has to remain a multiple of \$49.15
14-090	516175	41314	3d)	greater than 5000 (22.7 m3) but less than or equal to 8000 imperial gallons (36.3 m3)	\$294.90	\$300.90	n	\$300.90	2.0%	Has to remain a multiple of \$49.15
14-090	516175	41314	3e)	greater than 8000 (36.3 m3) but less than or equal to 10000 imperial gallons (45.43 m3)						
14-090	516175	41314	4	Holding Tanks for Recreational Vehicles Note: Cost for Recreational Vehicles (RV's) to dump sewer waste at the Mountain Transfer Station	\$8.50	\$8.50	n	\$8.50	0.0%	Current fee achieves full cost recovery
14-090	516080	41315	5	Overstrength Discharge Fees Note: Cost per kilogram of each specified parameter that is in excess of Sewer Use By-law limits, and subject to a Sewer Discharge Permit	\$0.78	\$0.78	n	\$0.78	0.0%	Current fee achieves full cost recovery
14-090	516080	41315	5a)	Biochemical Oxygen Demand (charge per kg)	\$0.63	\$0.63	n	\$0.63	0.0%	Current fee achieves full cost recovery
14-090	516080	41315	5b)	Total suspended solids (charge per kg)	\$0.66	\$0.44	n	\$0.44	-33.2%	Decrease reflecting rate review
14-090	516080	41315	5c)	Oil & grease (animal/vegetable) (charge per kg)	\$2.39	\$1.00	n	\$1.00	-58.1%	Decrease reflecting rate review
14-090	516080	41315	5d)	Total Kjeldahl Nitrogen (charge per Kg)	\$1.68	\$1.78	n	\$1.78	6.1%	To achieve full cost recovery
14-090	516080	41315	5e)	Total Phosphorus (charge per kg)	\$1.68	\$1.75	n	\$1.75	4.2%	Equal to variable wastewater rate increase
14-090	516080	41317	6	Surcharge Discharge Fee (charge per m3)						

Costs not specifically addressed in the schedule will be included at Actual Cost plus overhead.
For central budgets: 361-545-6100 or small.wastewater@hamilton.on.ca

2020 PROPOSED USER FEES AND CHARGES

PUBLIC WORKS
HAMILTON WATER

Dept By-Law #	Dept ID	Account #	Ref #	Service Offered	2019 Including HST (if applicable)	2020 Proposed Fee	HST (y/n)	2020 Including HST (if applicable)	% Fee Change	Basis for Fee Increase or Decrease
14-090	510260	45519	7	Application Fees for Sewer Discharge Permits NOTE: Fee to be paid upon application for Sewer Discharge Permit	\$697.32	\$629.34	y	\$711.15	2.0%	Increase due to incorporating 7b) and 7c) fees into Application Fee
14-090	510260	45519	7a)	Application Fee	\$500.00	\$500.00	n	\$500.00	0.0%	To achieve full cost recovery
14-090	510260	45519	7b)	Wastewater Characterization deposit (optional)	\$327.34	\$295.47	y	\$333.88	2.0%	
14-090	510260	45532	8	Administrative Fees for Sewer Discharge Permits Note: Multiple permit holders pay the higher administration fee (for example, if the permit holder has both an Overstrength Discharge Permit and a Compliance Program Permit, they will pay \$810.00 per quarter)	\$427.00	\$435.00	n	\$435.00	1.9%	Lab/equip. costs up in 2018. Previous 2015, 2012
14-090	510260	45532	8a)	Overstrength Discharge Permit (charged quarterly)	\$427.00	\$435.00	n	\$435.00	1.9%	Lab/equip. costs up in 2018. Previous 2015, 2012
14-090	510260	45532	8b)	Sanitary Discharge Permit (charged quarterly)	\$427.00	\$435.00	n	\$435.00	1.9%	Lab/equip. costs up in 2018. Previous 2015, 2012
14-090	510260	45532	8c)	Chloride Discharge Permit (charged quarterly)	\$1,050.00	\$1,071.00	n	\$1,071.00	2.0%	Lab/equip. costs up in 2018. Previous 2015, 2012
14-090	510260	45532	8e)	Compliance Discharge Permit (charged quarterly)	\$1,050.00	\$1,071.00	n	\$1,071.00	2.0%	Lab/equip. costs up in 2018. Previous 2015, 2012
14-090	510260	45519	9	Information Requests Note: Fee per property for records search related to Sewer Use By-law historical violations	\$167.13	\$150.86	y	\$170.47	2.0%	To achieve full cost recovery
14-090	510260	45532	10	Wastewater Sampling (optional) Note: Per unit costs to conduct wastewater sampling to determine permit conditions and limits	\$1.34	\$1.21	y	\$1.37	1.7%	To achieve full cost recovery
			10a)	Wastewater Sampling Vehicle Fee (per kilometer)	\$43.96	\$39.68	y	\$44.84	2.0%	To achieve full cost recovery
			10b)	Wastewater Sampling Equipment Fee (per day)	\$55.44	\$50.04	y	\$56.55	2.0%	EMT position - replaced by RFT one pay grade higher
			10c)	Wastewater Sampling Technician Fee (per hour) Mon - Fri	\$83.16	\$75.06	y	\$84.82	2.0%	EMT position - replaced by RFT one pay grade higher
			10d)	Wastewater Sampling Technician Fee (per hour) Sat	\$110.86	\$100.07	y	\$113.08	2.0%	EMT position - replaced by RFT one pay grade higher
			10e)	Wastewater Sampling Technician Fee (per hour) Sun						

*Costs not specifically addressed in this schedule will be included in Actual Cost plus overhead

For annual financial reports call 905-545-3300 or email: k.schroeder@hamilton.ca

2020 PROPOSED USER FEES AND CHARGES

PUBLIC WORKS
HAMILTON WATER

Dept. By-Law #	Dept ID	Account #	Ref #	Service Offered	2019 including HST (if applicable)	2020 Proposed Fee	HST (y/n)	2020 including HST (if applicable)	% Fee Change	Basis for Fee Increase or Decrease
03-272	510260	45532	1	ENVIRONMENTAL MONITORING & ENFORCEMENT Fees related to the Wastewater Abatement Program	\$423.19	\$374.50	y	\$423.19	0.0%	Current fee achieves full cost recovery
03-272	510260	45532	2	Application Fee (plus cost recovery for peer review if Annual Administration Fee	\$805.46	\$745.30	y	\$842.19	4.6%	To achieve full cost recovery

*Costs not specifically addressed in the schedule will be invoiced at Actual Cost plus overhead.
**For general inquiries, please call 905-546-5199 or email sewerusebylaw@hamilton.ca

CITY OF HAMILTON
2020 HAMILTON WATER OPERATING BUDGET
COMBINED WATER, WASTEWATER AND STORM

	2019	2019	2020	CHANGE		CHANGE	
	RESTATED BUDGET	PROJECTED ACTUAL	REQUESTED BUDGET	2019 PROJECTED / 2019 RESTATED BUDGET	ACTUAL	2020 REQUESTED / 2019 RESTATED BUDGET	2019 RESTATED BUDGET
	\$	\$	\$	\$	%	\$	%
OPERATING EXPENDITURES:							
Divisional Administration & Support	2,242,620	2,242,620	1,408,041	(0)	(0.0%)	(834,579)	(37.2%)
Woodward Upgrades	1,524,540	1,524,540	1,108,390	-	0.0%	(416,150)	(27.3%)
Customer Service	421,610	421,610	254,823	-	0.0%	(166,787)	(39.6%)
Outreach & Education	1,350,860	1,300,860	1,239,577	50,000	3.7%	(111,283)	(8.2%)
Service Co-ordination	4,251,610	3,785,610	3,745,588	466,000	11.0%	(506,022)	(11.9%)
Engineering Systems & Data Collection	1,286,870	1,286,870	1,351,831	-	0.0%	64,961	5.0%
Compliance & Regulations	871,210	871,210	976,984	-	0.0%	105,774	12.1%
Laboratory Services	3,527,640	3,527,640	3,660,204	-	0.0%	132,564	3.8%
Environmental Monitoring & Enforcement	1,818,020	1,818,020	1,778,256	-	0.0%	(39,764)	(2.2%)
Water Distribution & Wastewater Collection	21,369,840	21,369,840	22,511,201	-	0.0%	1,141,361	5.3%
Plant Operations & Maintenance	41,383,390	39,383,390	33,449,649	2,000,000	4.8%	(7,933,741)	(19.2%)
Capital Delivery	1,859,660	1,859,660	1,595,011	-	0.0%	(264,649)	(14.2%)
Sustainable Initiatives	1,497,370	1,497,370	1,431,094	-	0.0%	(66,276)	(4.4%)
Infrastructure Planning & System Design	2,314,770	2,314,770	1,877,476	-	0.0%	(437,294)	(18.9%)
Wastewater Abatement Program	1,150,000	1,150,000	1,150,040	-	0.0%	40	0.0%
Alectra Utilities Service Contract	5,700,000	5,400,000	5,600,000	300,000	5.3%	(100,000)	(1.8%)
Corporate & Departmental Support Services	6,432,040	6,432,040	6,977,580	-	0.0%	545,540	8.5%
Utilities Arrears Program	500,000	500,000	500,080	-	0.0%	80	0
Sewer Lateral Management Program	500,000	500,000	414,738	-	0.0%	(85,262)	(0)
Hamilton Harbour Remedial Action Plan	395,000	395,000	382,550	-	0.0%	(12,450)	(3.2%)
Protective Plumbing Program (3P)	1,250,000	885,034	1,250,000	364,966	29.2%	-	0.0%
Financial Charges	177,000	177,000	86,019	-	0.0%	(90,981)	(51.4%)
	101,824,050	98,643,084	92,749,132	3,180,966	3.1%	(9,074,918)	(8.9%)
Capital and Reserve Recoveries	(6,099,580)	(6,099,580)	(6,029,550)	0	(0.0%)	70,030	(1.1%)
Sub-Total	95,724,470	92,543,504	86,719,582	3,180,966	3.3%	(9,004,888)	(9.4%)
Capital and Reserve Impacts on Operating							
Contributions to Capital							
Water Quality Initiatives	51,762,000	51,762,000	50,296,000	-	-	(1,466,000)	(2.8%)
Wastewater	42,837,000	42,837,000	52,673,000	-	-	9,836,000	23.0%
Stormwater	3,205,000	3,205,000	15,685,000	-	-	12,480,000	389.4%
Sub-Total Contributions to Capital	97,804,000	97,804,000	118,654,000	-	-	20,850,000	21.3%
Contributions for DC Exemptions							
Water Quality Initiatives	2,547,000	2,547,000	2,240,000	-	-	(307,000)	(12.1%)
Wastewater	4,590,000	4,590,000	4,080,000	-	-	(510,000)	(11.1%)
Stormwater	1,863,000	1,863,000	1,680,000	-	-	(183,000)	(9.8%)
Sub-Total Contributions for DC Exemptions	9,000,000	9,000,000	8,000,000	-	-	(1,000,000)	(11.1%)

CITY OF HAMILTON
2020 HAMILTON WATER OPERATING BUDGET
COMBINED WATER, WASTEWATER AND STORM

	2019	2019	2020	CHANGE		CHANGE	
	RESTATED BUDGET	PROJECTED ACTUAL	REQUESTED BUDGET	2019 PROJECTED / 2019 RESTATED BUDGET	ACTUAL	2020 REQUESTED / 2019 RESTATED BUDGET	
	\$	\$	\$	\$	%	\$	%
OPERATING EXPENDITURES:							
Capital Debt Charges							
Water Quality Initiatives	9,762,487	7,537,276	8,593,943	2,225,211	22.8%	(1,168,544)	(12.0%)
Wastewater	10,120,380	8,460,849	11,514,374	1,659,531	16.4%	1,393,994	13.8%
Stormwater	3,950,054	2,371,561	3,399,997	1,578,493	40.0%	(550,057)	(13.9%)
DC Debt Charges Recoveries	(4,467,237)	(904,431)	(3,826,205)	(3,562,806)	79.8%	641,032	(14.3%)
Sub-Total Debt Charges	19,365,685	17,465,255	19,682,108	1,900,430	9.8%	316,424	1.6%
Sub-Total Capital Financing	126,169,685	124,269,256	146,336,108	1,900,430	1.5%	20,166,424	16.0%
Reserve Transfers	365,324	365,324	(43,888)	0	0.0%	(409,212)	(112.0%)
Sub-Total Capital and Reserve Impacts on Operating	126,535,009	124,634,580	146,292,220	1,900,430	1.5%	19,757,211	15.6%
TOTAL EXPENDITURES	222,259,479	217,178,084	233,011,802	5,081,395	2.3%	10,752,323	4.8%
REVENUES:							
Rate Revenue							
Residential	97,938,766	98,938,766	102,226,242	1,000,000	1.0%	4,287,476	4.4%
Industrial/Commercial/Institutional/Multi-res	107,752,759	108,752,759	112,557,622	1,000,000	0.9%	4,804,863	4.5%
Haldimand	2,353,282	2,353,282	2,476,307	-	0.0%	123,025	5.2%
Halton	247,782	247,782	259,593	-	0.0%	11,811	4.8%
Raw Water	150,000	120,000	125,000	(30,000)	(20.0%)	(25,000)	(16.7%)
Non-Metered	580,000	1,700,000	580,000	1,120,000	193.1%	-	0.0%
Private Fire Lines	1,550,000	1,750,000	1,850,000	200,000	12.9%	300,000	19.4%
Hauler / 3rd Party Sales	1,225,000	1,225,000	1,225,000	-	0.0%	-	0.0%
Overstrength Agreements	2,249,480	3,098,294	2,892,902	848,814	37.7%	643,422	28.6%
Sewer Surcharge Agreements	5,200,000	5,200,000	5,806,726	-	0.0%	606,726	11.7%
Sub-Total Utility Rates	219,247,069	223,385,883	229,999,392	4,138,814	1.9%	10,752,323	4.9%
Non-Rate Revenue							
Local Improvement Recoveries	275,850	275,850	275,850	-	-	-	-
Permits / Leases / Agreements	1,365,050	1,365,050	1,365,050	-	-	-	0.0%
Investment Income	450,000	450,000	450,000	-	0.0%	-	-
General Fees and Recoveries	921,510	921,510	921,510	-	0.0%	-	0.0%
Sub-Total Non-Rate Revenue	3,012,410	3,012,410	3,012,410	-	0.0%	-	0.0%
TOTAL REVENUES	222,259,479	226,398,293	233,011,802	4,138,814	1.9%	10,752,323	4.8%
NET EXPENDITURES	-	(9,220,209)	-	9,220,209	-	-	-

CITY OF HAMILTON
2020 - 2023 WATER, WASTEWATER AND STORM OPERATING BUDGET
COMBINED WATER, WASTEWATER AND STORM

	2019 RESTATED BUDGET	2020 REQUESTED BUDGET	2021 PROJECTED BUDGET	2022 PROJECTED BUDGET	2023 PROJECTED BUDGET	CHANGE 2020 REQUESTED / 2019 RESTATED BUDGET	CHANGE 2021 PROJECTED / 2020 REQUESTED BUDGET	CHANGE 2022 PROJECTED / 2021 PROJECTED BUDGET					
	\$	\$	\$	\$	\$	\$	%	\$	%	\$	%	\$	%
OPERATING EXPENDITURES:													
Divisional Administration & Support	2,242,620	1,408,041	1,436,202	1,464,926	1,494,224	(834,579)	(37.2%)	28,161	2.0%	28,724	2.0%		
Woodward Upgrades	1,524,540	1,108,390	1,130,558	1,153,169	1,176,232	(416,150)	(27.3%)	22,168	2.0%	22,611	2.0%		
Customer Service	421,610	254,823	259,919	265,118	270,420	(166,787)	(39.6%)	5,096	2.0%	5,198	2.0%		
Outreach & Education	1,350,860	1,239,577	1,264,369	1,289,656	1,315,449	(111,283)	(8.2%)	24,792	2.0%	25,287	2.0%		
Service Co-ordination	4,251,610	3,745,588	3,820,500	3,896,910	3,974,848	(506,022)	(11.9%)	74,912	2.0%	76,410	2.0%		
Engineering Systems & Data Collection	1,286,870	1,351,831	1,378,868	1,406,445	1,434,574	64,961	5.0%	27,037	2.0%	27,577	2.0%		
Compliance & Regulations	871,210	976,984	996,524	1,016,454	1,036,783	105,774	12.1%	19,540	2.0%	19,930	2.0%		
Laboratory Services	3,527,640	3,660,204	3,733,408	3,808,076	3,884,238	132,564	3.8%	73,204	2.0%	74,668	2.0%		
Environmental Monitoring & Enforcement	1,818,020	1,778,256	1,813,821	1,850,098	1,887,099	(39,764)	(2.2%)	35,565	2.0%	36,276	2.0%		
Water Distribution & Wastewater Collection	21,369,840	22,511,201	22,961,425	23,420,654	23,889,067	1,141,361	5.3%	450,224	2.0%	459,229	2.0%		
Plant Operations & Maintenance	41,383,390	33,449,649	34,118,642	34,801,015	35,497,035	(7,933,741)	(19.2%)	668,993	2.0%	682,373	2.0%		
Capital Delivery	1,859,660	1,595,011	1,626,911	1,659,449	1,692,638	(264,649)	(14.2%)	31,900	2.0%	32,538	2.0%		
Sustainable Initiatives	1,497,370	1,431,094	1,459,716	1,488,910	1,518,688	(66,276)	(4.4%)	28,622	2.0%	29,194	2.0%		
Infrastructure Planning & System Design	2,314,770	1,877,476	1,915,026	1,953,326	1,992,393	(437,294)	(18.9%)	37,550	2.0%	38,301	2.0%		
Wastewater Abatement Program	1,150,000	1,150,040	1,173,041	1,196,502	1,220,432	40	0.0%	23,001	2.0%	23,461	2.0%		
Alectra Utilities Service Contract	5,700,000	5,600,000	5,712,000	5,826,240	5,942,765	(100,000)	(1.8%)	112,000	2.0%	114,240	2.0%		
Corporate & Departmental Support Services	6,432,040	6,977,580	7,117,132	7,259,474	7,404,664	545,540	8.5%	139,552	2.0%	142,343	2.0%		
Utilities Arrears Program	500,000	500,080	510,082	520,283	530,689	80	0.0%	10,002	2.0%	10,202	2.0%		
Sewer Lateral Management Program	500,000	414,738	423,033	431,493	440,123	(85,262)	(17.1%)	8,295	2.0%	8,461	2.0%		
Hamilton Harbour Remedial Action Plan	395,000	382,550	390,201	398,005	405,965	(12,450)	(3.2%)	7,651	2.0%	7,804	2.0%		
Protective Plumbing Program (3P)	1,250,000	1,250,000	1,275,000	1,300,500	1,326,510	-	0.0%	25,000	2.0%	25,500	2.0%		
Financial Charges	177,000	86,019	87,739	89,494	91,284	(90,981)	(51.4%)	1,720	2.0%	1,755	2.0%		
	101,824,050	92,749,132	94,604,115	96,496,197	98,426,121	(9,074,918)	(8.9%)	1,854,983	2.0%	1,892,082	2.0%		
Capital and Reserve Recoveries	(6,099,580)	(6,029,550)	(6,150,141)	(6,273,144)	(6,398,607)	70,030	(1.1%)	(120,591)	2.0%	(123,003)	2.0%		
Sub-Total	95,724,470	86,719,582	88,453,974	90,223,053	92,027,514	(9,004,888)	(9.4%)	1,734,392	2.0%	1,769,079	2.0%		
Capital and Reserve Impacts on Operating													
Contributions to Capital													
Water Quality Initiatives	51,762,000	50,296,000	52,953,000	56,553,000	63,516,000	(1,466,000)	(2.8%)	2,657,000	5.3%	3,600,000	6.8%		
Wastewater	42,837,000	52,673,000	55,057,000	54,249,000	54,174,000	9,836,000	23.0%	2,384,000	4.5%	(808,000)	(1.5%)		
Stormwater	3,205,000	15,685,000	14,382,000	15,775,000	15,975,000	12,480,000	389.4%	(1,303,000)	(8.3%)	1,393,000	9.7%		
Sub-Total Contributions to Capital	97,804,000	118,654,000	122,392,000	126,577,000	133,665,000	20,850,000	21.3%	3,738,000	3.2%	4,185,000	3.4%		
Contributions for DC Exemptions													
Water Quality Initiatives	2,547,000	2,240,000	2,240,000	2,240,000	2,240,000	(307,000)	(12.1%)	-	0.0%	-	0.0%		
Wastewater	4,590,000	4,080,000	4,080,000	4,080,000	4,080,000	(510,000)	(11.1%)	-	0.0%	-	0.0%		
Stormwater	1,863,000	1,680,000	1,680,000	1,680,000	1,680,000	(183,000)	(9.8%)	-	0.0%	-	0.0%		
Sub-Total Contributions for DC Exemptions	9,000,000	8,000,000	8,000,000	8,000,000	8,000,000	(1,000,000)	(11.1%)	-	0.0%	-	0.0%		
Debt Charges													
Water Quality Initiatives	9,762,487	8,593,943	13,081,230	19,120,697	22,771,434	(1,168,544)	(12.0%)	4,487,287	52.2%	6,039,467	46.2%		
Wastewater	10,120,380	11,514,374	18,224,240	24,836,447	29,106,256	1,393,994	13.8%	6,709,866	58.3%	6,612,207	36.3%		
Stormwater	3,950,054	3,399,997	4,917,875	5,719,347	6,438,841	(550,057)	(13.9%)	1,517,878	44.6%	801,472	16.3%		
DC Debt Charges Recoveries	(4,467,237)	(3,826,205)	(10,928,162)	(17,429,536)	(21,372,836)	641,032	(14.3%)	(7,101,957)	185.6%	(6,501,374)	59.5%		
Sub-Total Debt Charges	19,365,685	19,682,108	25,295,182	32,246,955	36,943,695	316,424	1.6%	5,613,074	28.5%	6,951,772	27.5%		
Sub-Total Capital Financing	126,169,685	146,336,108	155,687,182	166,823,955	178,608,695	20,166,424	16.0%	9,351,074	6.4%	11,136,772	7.2%		
Reserve Transfers	365,324	(43,888)	(402,492)	(370,598)	(393,081)	(409,212)	(112.0%)	(358,604)	817.1%	31,893	(7.9%)		
Sub-Total Capital and Reserve Impacts on Operating	126,535,009	146,292,220	155,284,690	166,453,356	178,215,614	19,757,211	15.6%	8,992,470	6.1%	11,168,666	7.2%		
TOTAL EXPENDITURES	222,259,479	233,011,802	243,738,664	256,676,409	270,243,128	10,752,323	4.8%	10,726,862	4.6%	12,937,745	5.3%		

CITY OF HAMILTON
 2020 - 2023 WATER, WASTEWATER AND STORM OPERATING BUDGET
COMBINED WATER, WASTEWATER AND STORM

	2019 RESTATED BUDGET	2020 REQUESTED BUDGET	2021 PROJECTED BUDGET	2022 PROJECTED BUDGET	2023 PROJECTED BUDGET	CHANGE 2020 REQUESTED / 2019 RESTATED BUDGET		CHANGE 2021 PROJECTED / 2020 REQUESTED BUDGET		CHANGE 2022 PROJECTED / 2021 PROJECTED BUDGET	
	\$	\$	\$	\$	\$	\$	%	\$	%	\$	%
REVENUES:											
Rate Revenue											
Residential	97,938,766	102,226,242	107,533,183	113,624,568	120,099,836	4,287,476	4.4%	5,306,940	5.2%	6,091,385	5.7%
Industrial/Commercial/Institutional/Multi-res	107,752,759	112,557,622	117,408,155	123,603,330	130,095,258	4,804,863	4.5%	4,850,533	4.3%	6,195,175	5.3%
Haldimand	2,353,282	2,476,307	2,591,366	2,739,374	2,931,659	123,025	5.2%	115,058	4.6%	148,008	5.7%
Halton	247,782	259,593	269,837	284,866	303,990	11,811	4.8%	10,245	3.9%	15,029	5.6%
Raw Water	150,000	125,000	128,750	132,613	136,591	(25,000)	(16.7%)	3,750	3.0%	3,863	3.0%
Non-Metered	580,000	580,000	580,000	610,000	640,000	-	0.0%	-	0.0%	30,000	5.2%
Private Fire Lines	1,550,000	1,850,000	1,924,000	2,000,960	2,080,998	300,000	19.4%	74,000	4.0%	76,960	4.0%
Hauler / 3rd Party Sales	1,225,000	1,225,000	1,261,750	1,299,603	1,325,709	-	0.0%	36,750	3.0%	37,853	3.0%
Overstrength Agreements	2,249,480	2,892,902	2,979,689	3,069,080	3,130,461	643,422	28.6%	86,787	3.0%	89,391	3.0%
Sewer Surcharge Agreements	5,200,000	5,806,726	5,980,928	6,160,356	6,283,563	606,726	11.7%	174,202	3.0%	179,428	3.0%
Sub-Total Utility Rates	219,247,069	229,999,392	240,657,657	253,524,748	267,028,066	10,752,323	4.9%	10,658,265	4.6%	12,867,091	5.3%
Non-Rate Revenue											
Local Improvement Recoveries	275,850	275,850	275,850	275,850	275,850	-	0.0%	-	0.0%	-	0.0%
Permits/Leases/Agreements	1,365,050	1,365,050	1,406,002	1,448,182	1,463,627	-	0.0%	40,952	3.0%	42,180	3.0%
Investment Income	450,000	450,000	450,000	450,000	450,000	-	0.0%	-	0.0%	-	0.0%
General Fees and Recoveries	921,510	921,510	949,155	977,630	1,025,585	-	0.0%	27,645	3.0%	28,475	3.0%
Sub-Total Non-Rate Revenue	3,012,410	3,012,410	3,081,007	3,151,662	3,215,062	-	0.0%	68,597	2.3%	70,655	2.3%
TOTAL REVENUES	222,259,479	233,011,802	243,738,664	256,676,409	270,243,128	10,752,323	4.8%	10,726,862	4.6%	12,937,745	5.3%
NET EXPENDITURES	-	-	-	-	-	(0)	-	(0)	-	0	-

CITY OF HAMILTON
2020-2029 WATER, WASTEWATER & STORM OPERATING BUDGET
COMBINED WATER, WASTEWATER AND STORM
(\$ 000'S)

	2019 Restated	2020 Requested	2021 Forecast	2022 Forecast	2023 Forecast	2024 Forecast	2025 Forecast	2026 Forecast	2027 Forecast	2028 Forecast	2029 Forecast
OPERATING EXPENDITURES											
OPERATING COSTS	91,224	82,720	84,224	84,494	86,181	87,901	89,655	91,444	93,269	95,128	97,124
BIO-SOLIDS	4,500	4,000	4,230	4,129	4,215	4,302	4,392	4,484	4,578	4,676	4,676
TERTIARY TREATMENT	-	-	-	1,600	1,632	1,665	1,698	1,732	1,767	1,802	1,838
TOTAL OPERATING COSTS	95,724	86,720	88,454	90,223	92,028	93,868	95,745	97,660	99,614	101,606	103,638
CAPITAL & RESERVE IMPACTS ON OPERATING											
Contributions to Capital											
Water	51,762	50,296	52,953	56,553	63,516	73,300	84,611	83,417	72,832	90,002	107,861
Wastewater	42,837	52,673	55,057	54,249	54,174	52,379	58,704	63,479	67,164	68,470	65,440
Stormwater	3,205	15,685	14,382	15,775	15,975	17,595	9,875	16,385	37,430	34,735	35,215
Sub-total Contributions to Capital	97,804	118,654	122,392	126,577	133,665	143,274	153,190	163,281	177,426	193,207	208,516
Contributions for DC Exemptions											
Water	2,547	2,240	2,240	2,240	2,240	2,240	2,240	2,240	2,240	2,240	2,240
Wastewater	4,590	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080
Stormwater	1,863	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680
Sub-total Contributions to Capital	9,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000
Debt Charges											
Water	9,762	8,594	13,081	19,121	22,771	24,378	26,861	29,864	30,861	30,665	30,561
Wastewater	10,120	11,514	18,224	24,836	29,106	30,401	30,518	34,295	41,345	47,498	51,136
Stormwater	3,950	3,400	4,918	5,719	6,439	6,775	6,728	6,681	6,690	6,705	6,778
DC Debt Charges Recoveries	(4,467)	(3,826)	(10,928)	(17,430)	(21,373)	(23,098)	(25,025)	(31,460)	(41,112)	(49,540)	(53,306)
Sub-total Debt Charges	19,366	19,682	25,295	32,247	36,944	38,456	39,082	39,380	37,784	35,328	35,169
Reserve Transfers											
	365	(44)	(402)	(371)	(394)	(353)	(304)	(282)	(313)	(318)	147
Sub-Total Capital & Reserve Impacts on Operating	126,535	146,292	155,285	166,453	178,215	189,377	199,968	210,379	222,897	236,217	251,832
TOTAL EXPENDITURES	222,259	233,012	243,739	256,676	270,243	283,245	295,714	308,039	322,511	337,823	355,470
REVENUES											
Residential	97,939	102,226	107,533	113,625	120,100	126,815	134,051	141,659	149,749	157,939	166,460
Industrial/Commercial/Institutional/Multi-res	107,753	112,558	117,408	123,603	130,095	135,830	140,539	144,771	150,606	157,123	165,607
Halldimand	2,353	2,476	2,591	2,739	2,932	3,074	3,179	3,241	3,351	3,507	3,687
Halton	248	260	270	285	304	318	331	340	351	367	385
Raw Water	150	125	129	133	137	141	145	149	154	158	163
Non-Metered	580	580	580	610	640	670	700	730	760	790	820
Private Fire Lines	1,550	1,850	1,924	2,001	2,081	2,164	2,251	2,341	2,434	2,532	2,633
Hauler / 3rd Party Sales	1,225	1,225	1,262	1,300	1,326	1,352	1,379	1,407	1,435	1,464	1,493
Overstrength Agreements	2,249	2,893	2,980	3,069	3,130	3,193	3,257	3,322	3,389	3,456	3,525
Sewer Surcharge Agreements	5,200	5,807	5,981	6,160	6,284	6,409	6,537	6,668	6,802	6,938	7,076
Non-Rate Revenue	3,012	3,012	3,081	3,152	3,215	3,279	3,345	3,411	3,480	3,549	3,620
TOTAL REVENUES	222,259	233,012	243,739	256,676	270,243	283,245	295,714	308,039	322,511	337,823	355,470
NET EXPENDITURES											
	-	-	-	-	-	-	-	-	-	-	-
Rate Increase	4.66%	4.11%	4.28%	4.50%	4.55%	4.41%	4.46%	4.41%	4.54%	4.34%	4.37%
RESIDENTIAL BILL (200m³ p.a.)	\$ 722.90	\$ 752.60	\$ 784.80	\$ 820.10	\$ 857.40	\$ 895.20	\$ 935.10	\$ 976.30	\$ 1,020.60	\$ 1,064.85	\$ 1,111.35

City of Hamilton
Water System
2020 Capital Budget Project List
(000's)

Appendix "C" to Item 2 of GIC Report 19-025 Page 1 of 3

City Ward	Project Number	Project Description	DC Debt	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
													From Operating	Debt
Annual Projects														
City Wide	4032058001	Consultation and Accommodation		30	-	-	-	-	-	-	-	30	30	-
City Wide	5142001099	Engineering Services Staffing Costs - Water		4,700	-	-	-	-	-	-	-	4,700	4,700	-
City Wide	5142060711	PW Capital Water Consumption Program		180	-	-	-	-	-	-	-	180	180	-
<i>Sub-Total Annual Projects</i>				4,910	-	-	-	-	-	-	-	4,910	4,910	-
Building - New Construction														
City Wide	5142066350	WTP Chlorine Chemical Building		2,250	-	-	-	-	-	-	-	2,250	2,250	-
<i>Sub-Total Building - New Construction</i>				2,250	-	-	-	-	-	-	-	2,250	2,250	-
Coordinated - Replacement Projects														
1	5142070006	Hillcrest - Chedoke to end - Road Restoration		60	-	-	-	-	-	-	-	60	60	-
4	5142070018	Roxborough - Kenilworth to Strathearne (Homeside Neighbourhood) - Road Restoration		700	-	-	-	-	-	-	-	700	700	-
1	5142071306	Hillcrest - Chedoke to end		120	-	-	-	-	-	-	-	120	120	-
4	5142071315	Delena / Beland / Dunsmure		150	-	-	-	-	-	-	-	150	150	-
4	5142071318	Roxborough - Kenilworth to Strathearne (Homeside Neighbourhood)		770	-	-	-	-	-	-	-	770	770	-
<i>Sub-Total Coordinated - Replacement Projects</i>				1,800	-	-	-	-	-	-	-	1,800	1,800	-
Coordinated - Upgrade Projects														
3	5141971313	Sherman - King to south end (LRT Enabling Project)		1,130	1,000	-	-	-	-	-	-	130	130	-
3	5141971314	Wentworth - Wilson to King (LRT Enabling Project)		370	330	-	-	-	-	-	-	40	40	-
4	5141971315	Main - Delena to Normanhurst & Normanhurst - Main to Queenston (LRT Enabling Project)		4,800	4,800	-	-	-	-	-	-	-	-	-
4	5142070015	Main - Delena to Normanhurst & Normanhurst - Main to Queenston (LRT Enabling Project)		300	-	-	-	-	-	-	-	300	300	-
<i>Sub-Total Coordinated - Upgrade Projects</i>				6,600	6,130	-	-	-	-	-	-	470	470	-
Demolition														
2	5142067420	St. Joseph's Tank Pulsation Dampener (HD002STK)		60	-	-	-	-	-	-	-	60	60	-
<i>Sub-Total Demolition</i>				60	-	-	-	-	-	-	-	60	60	-
Development Projects														
15	5142080080	Dundas - 575m w/o Evans to 210 w/o Evans		410	-	-	410	-	-	-	-	-	-	-
<i>Sub-Total Development Projects</i>				410	-	-	410	-	-	-	-	-	-	-
Master Plan														
City Wide	5141555264	City-Wide Water Master Plan		300	-	-	270	-	-	-	-	30	30	-
City Wide	5142055010	Water Systems Planning Program		300	-	-	-	-	-	-	-	300	300	-
<i>Sub-Total Master Plan</i>				600	-	-	270	-	-	-	-	330	330	-
Master Plan - Horizontal Assets														
11	5142096250	Airport Lands External Water Servicing (Feedermain) (W-27)	*	1,080	-	223	857	-	-	-	-	-	-	-
12	5142096520	Garner Road Trunk Watermain - Southcote to Wilson (W-09)	*	3,390	-	-	3,390	-	-	-	-	-	-	-

City of Hamilton
Water System
2020 Capital Budget Project List
(000's)

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City Ward	Project Number	Project Description	DC Debt	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
													From Operating	Debt
1	5142096850	Locke St Trunk Watermain - Main to Barton (W-19)	*	2,200	-	-	2,200	-	-	-	-	-	-	-
<i>Sub-Total Master Plan - Horizontal Assets</i>				6,670	-	223	6,447	-	-	-	-	-	-	-
Master Plan - Vertical Assets														
11	5141495551	PD7 (Upper Stoney Creek/Glanbrook) Elevated Reservoir (W-23)	*	610	-	-	610	-	-	-	-	-	-	-
13	5141595553	PS HD12A (Governors @ Huntingwood) Rebuild with Capacity Upgrade & Standby Power Installation (W-04)		550	-	-	413	-	-	-	-	137	137	-
13	5141695883	PS HD016 (York and Valley) Capacity Upgrade, Standby Power & Building Expansion (W-26) (CASH FLOWED)		780	-	-	701	-	-	-	-	79	79	-
5	5141795850	Greenhill PS HD04B & HD05A Upgrades (W-28) (CASH FLOWED)	*	220	-	-	165	-	-	-	-	55	55	-
City Wide	5142695552	P.S. HD07A - New District 7 (Elfrida area) Pumping Station (W-21)	*	170	-	-	170	-	-	-	-	-	-	-
<i>Sub-Total Master Plan - Vertical Assets</i>				2,330	-	-	2,059	-	-	-	-	271	271	-
Outstations-Sustainable Asset Mgt (SAM)														
12	5141667421	Glancaster Rd & Hwy 53 Pumping Station (HD018) Upgrades (CASH FLOWED)		660	-	-	-	-	-	-	-	660	660	-
14	5141767650	New Greensville Communal Well		150	-	-	-	-	-	-	-	150	150	-
12	5142067450	Lee Smith Reservoir (HDR00) Upgrades		280	-	-	-	-	-	-	-	280	280	-
City Wide	5142067752	Water Outstation Inspections - Asset Management		660	-	-	-	-	-	-	-	660	660	-
<i>Sub-Total Outstations-Sustainable Asset Mgt (SAM)</i>				1,750	-	-	-	-	-	-	-	1,750	1,750	-
Plant - Sustainable Asset Mgt (SAM)														
4	5141166110	Water Treatment Plant - Process Upgrades (CASH FLOWED)		4,950	-	-	-	-	-	-	-	4,950	4,950	-
4	5141567575	High Lift Pumping Station (HLPS) Improvements - Phase 2 (CASH FLOWED)		550	-	-	-	-	-	-	-	550	550	-
City Wide	5142066310	WTP Pre-Treatment Isolation Valves		280	-	-	-	-	-	-	-	280	280	-
<i>Sub-Total Plant - Sustainable Asset Mgt (SAM)</i>				5,780	-	-	-	-	-	-	-	5,780	5,780	-
Plant - Water Quality Initiatives (WQI)														
City Wide	5142069075	City Environmental Lab Improvements Program		150	-	-	-	-	-	-	-	150	150	-
<i>Sub-Total Plant - Water Quality Initiatives (WQI)</i>				150	-	-	-	-	-	-	-	150	150	-
Rehabilitation Project														
City Wide	5141761777	8each Trunkmain Rehab		1,200	-	-	-	-	-	-	-	1,200	1,200	-
City Wide	5142057626	Critical Watermain Inspection Program		660	-	-	-	-	-	160	-	500	500	-
City Wide	5142060750	Unscheduled Valve, Hydrant, Watermain & Misc Water Replace Program		3,000	-	-	-	-	-	-	-	3,000	3,000	-
3	5142061305	Burlington Trunkmain Repairs		910	-	-	-	-	-	460	-	450	450	-
City Wide	5142061502	Water Meter - Installation/Replacement/Repair - General Maintenance		2,920	-	-	-	640	-	-	-	2,280	2,280	-
<i>Sub-Total Rehabilitation Project</i>				8,690	-	-	-	640	-	620	-	7,430	7,430	-
Replacement Project														
10	5141961341	Pineland/Teal/Community/Garden/South Service		1,680	-	-	-	-	-	-	-	1,680	1,680	-
City Wide	5142060080	Valve Replacement Program		3,700	-	-	-	-	-	300	-	3,400	3,400	-
1, 2	5142061302	Barton - Locke to Caroline & Locke - York to Barton		1,000	-	-	-	-	-	-	-	1,000	1,000	-

City of Hamilton
Water System
2020 Capital Budget Project List
(000's)

City Ward	Project Number	Project Description	DC Debt	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources		
													From Operating	Debt	
5	5142061310	Woodward Greenhill Transmission Main Pipeline repair on Summercrest		500	-	-	-	-	-	-	-	500	500	-	
		<i>Sub-Total Replacement Project</i>		6,880	-	-	-	-	-	300	-	6,580	6,580	-	
Restorations															
City Wide	5142011101	Road Restoration Program		5,400	-	-	-	-	-	-	-	5,400	5,400	-	
		<i>Sub-Total Restorations</i>		5,400	-	-	-	-	-	-	-	5,400	5,400	-	
Technical Services Projects															
City Wide	4031957944	PW Asset Management (PW-AM) System Implementation		1,000	-	-	-	-	-	-	-	1,000	1,000	-	
City Wide	4032055522	State of the Infrastructure - Asset Management		100	-	-	-	-	-	100	-	-	-	-	
City Wide	4032055588	O.Reg. 588/17 Compliance - Asset Management Plan Development		75	-	-	-	-	-	-	-	75	75	-	
City Wide	5142049555	QA-QC Service Contract Program		140	-	-	-	-	-	-	-	140	140	-	
City Wide	5142055022	Engineering Consultant Watermain Projects		300	-	-	-	-	-	-	-	300	300	-	
City Wide	5142055425	Prestressed Concrete Cylinder Pipe Condition Assessment Inspection Program		400	-	-	-	-	-	-	-	400	400	-	
City Wide	5142055556	Mapping Update Program		40	-	-	-	-	-	-	-	40	40	-	
City Wide	5142055851	Water Efficiency Plan/Program		110	-	-	-	-	-	-	-	110	110	-	
City Wide	5142057545	Water - Computer Model		280	-	-	-	-	-	-	-	280	280	-	
City Wide	5142060577	Metallic Watermain Condition Assessment Program		630	-	-	-	-	-	-	-	630	630	-	
		<i>Sub-Total Technical Services Projects</i>		3,075	-	-	-	-	-	100	-	2,975	2,975	-	
Upgrade Projects															
City Wide	5142062073	Field Data Systems Program		110	-	-	-	-	-	-	-	110	110	-	
City Wide	5142062078	Substandard Water Service Replacement Program		2,750	-	-	-	-	-	-	-	2,750	2,750	-	
		<i>Sub-Total Upgrade Projects</i>		2,860	-	-	-	-	-	-	-	2,860	2,860	-	
Vehicles-New															
City Wide	5141851810	Fleet Additions		1,630	-	-	-	-	-	-	-	1,630	1,630	-	
		<i>Sub-Total Vehicles-New</i>		1,630	-	-	-	-	-	-	-	1,630	1,630	-	
Water Quality Initiatives (WQI)															
City Wide	5141966911	Woodward WTP - Biological Filtration Pilot Study		250	-	-	-	-	-	-	-	250	250	-	
		<i>Sub-Total Water Quality Initiatives (WQI)</i>		250	-	-	-	-	-	-	-	250	250	-	
Watermain Lining															
City Wide	5142060072	Watermain Structural Lining		5,400	-	-	-	-	-	-	-	5,400	5,400	-	
		<i>Sub-Total Watermain Lining</i>		5,400	-	-	-	-	-	-	-	5,400	5,400	-	
Total All Projects					67,495	6,130	223	9,186	640	-	1,020	-	50,296	50,296	-

* DC Debt

City of Hamilton
Wastewater System
2020 Capital Budget Project List
(000's)

City Ward	Project Number	Project Description	DC Debt	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
													From Operating	Debt
Annual Projects														
City Wide	4032058001	Consultation and Accommodation		30	-	-	-	-	-	-	-	30	30	-
City Wide	5162001099	Engineering Services Staffing Costs - Wastewater		4,700	-	-	-	-	-	-	-	4,700	4,700	-
City Wide	5162060711	PW Capital Water Consumption Program		180	-	-	-	-	-	-	-	180	180	-
8	5162061006	Inverness Ave E - Combined Major Trunk Rehabilitation		200	-	-	-	-	-	200	-	-	-	-
		<i>Sub-Total Annual Projects</i>		<u>5,110</u>	-	-	-	-	-	<u>200</u>	-	<u>4,910</u>	<u>4,910</u>	-
Building - New Construction														
City Wide	5161667421	New Haulage Receiving Station		550	-	-	-	-	-	-	-	550	550	-
		<i>Sub-Total Building - New Construction</i>		<u>550</u>	-	-	-	-	-	-	-	<u>550</u>	<u>550</u>	-
Computer Software Purchases														
City Wide	5162057545	Wastewater Computer Model Update & Maintenance		660	-	-	-	-	-	-	-	660	660	-
		<i>Sub-Total Computer Software Purchases</i>		<u>660</u>	-	-	-	-	-	-	-	<u>660</u>	<u>660</u>	-
Coordinated - Network Extension Projects														
9	5162080089	Rymal - Fletcher to Upper Centennial	*	5,330	-	-	5,330	-	-	-	-	-	-	-
		<i>Sub-Total Coordinated - Network Extension Projects</i>		<u>5,330</u>	-	-	<u>5,330</u>	-	-	-	-	-	-	-
Coordinated - Replacement Projects														
1	5162071006	Hillcrest - Chedoke to end		60	-	-	-	-	-	-	-	60	60	-
		<i>Sub-Total Coordinated - Replacement Projects</i>		<u>60</u>	-	-	-	-	-	-	-	<u>60</u>	<u>60</u>	-
Coordinated - Upgrade Projects														
4	5162071315	Main -Queenston Traffic Circle to Delena & Rosewood (LRT Enabling Project)		1,160	-	-	-	-	-	-	-	1,160	1,160	-
		<i>Sub-Total Coordinated - Upgrade Projects</i>		<u>1,160</u>	-	-	-	-	-	-	-	<u>1,160</u>	<u>1,160</u>	-
Development Projects														
4	5162080961	Roxborough Park Intensification		1,500	-	-	1,500	-	-	-	-	-	-	-
		<i>Sub-Total Development Projects</i>		<u>1,500</u>	-	-	<u>1,500</u>	-	-	-	-	-	-	-
Maintenance Projects														
5, 6	5161968920	Fennell/Greenhill Drop Shaft		500	-	-	-	-	-	-	-	500	500	-
		<i>Sub-Total Maintenance Projects</i>		<u>500</u>	-	-	-	-	-	-	-	<u>500</u>	<u>500</u>	-
Master Plan														
City Wide	5161555264	City-Wide Wastewater Master Plan		300	-	-	270	-	-	-	-	30	30	-
City Wide	5162055010	Wastewater Systems Planning Program		380	-	-	-	-	-	-	-	380	380	-
		<i>Sub-Total Master Plan</i>		<u>680</u>	-	-	<u>270</u>	-	-	-	-	<u>410</u>	<u>410</u>	-
Master Plan - Horizontal Assets														
11	5161696452	Airport Lands Dickenson Rd Trunk Sewer (WW-27, WW-26, WW-28) (CASH FLOWED)	*	26,800	-	-	26,800	-	-	-	-	-	-	-
		<i>Sub-Total Master Plan - Horizontal Assets</i>		<u>26,800</u>	-	-	<u>26,800</u>	-	-	-	-	-	-	-

City of Hamilton
Wastewater System
2020 Capital Budget Project List
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City Ward	Project Number	Project Description	DC Debt	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
													From Operating	Debt
Master Plan - Vertical Assets														
15	5161796786	First Street (Waterdown Sanitary) PS Upgrade DC014		1,050	-	-	640	-	-	-	-	410	410	-
City Wide	5162055050	Municipal Class EA Studies		400	-	-	-	-	-	-	-	400	400	-
City Wide	5162095800	Flooding & Drainage Master Plan Capital Improvements		880	-	-	-	-	-	-	-	880	880	-
<i>Sub-Total Master Plan - Vertical Assets</i>				2,330	-	-	640	-	-	-	-	1,690	1,690	-
Outstations-Sustainable Asset Mgt (SAM)														
12	5161267270	Ancaster Wastewater Outstations Upgrades		110	-	-	-	-	-	-	-	110	110	-
13	5161267273	Dundas Wastewater Outstations Upgrades		600	-	-	-	-	-	-	-	600	600	-
12, 13, 15	5161667622	FC001, DC009 & HC011 Wastewater Pumping Stations Upgrades		1,500	-	-	-	-	-	-	-	1,500	1,500	-
4	5161767420	Parkdale Avenue HC001 Wastewater Pumping Station Upgrades		10	-	-	-	-	-	-	-	10	10	-
11	5161967123	AEGD Infrastructure Growth Initiative (English Church Road Area)		4,000	-	-	4,000	-	-	-	-	-	-	-
5	5162067065	Eastport Drive SPS (HC017) Upgrades		390	-	-	-	-	-	-	-	390	390	-
15	5162067275	FC001 Elgin Street Sewage Pumping Station		550	-	-	-	-	-	-	-	550	550	-
4, 12, 15	5162067375	Minor Upgrades to SPS Outstations		170	-	-	-	-	-	-	-	170	170	-
12	5162067425	Hillside SPS (DC006) Upgrades		280	-	-	-	-	-	-	-	280	280	-
City Wide	5162067752	Wastewater Outstation Inspections - Asset Management Program		520	-	-	-	-	-	-	-	520	520	-
<i>Sub-Total Outstations-Sustainable Asset Mgt (SAM)</i>				8,130	-	-	4,000	-	-	-	-	4,130	4,130	-
Plans/Studies														
City Wide	5162055801	Woodward WWTP Facility Plan		350	-	-	-	-	-	-	-	350	350	-
City Wide	5162062543	CSO Characterization Program		450	-	-	-	-	-	-	-	450	450	-
<i>Sub-Total Plans/Studies</i>				800	-	-	-	-	-	-	-	800	800	-
Plant - Sustainable Asset Mgt (SAM)														
City Wide	5161966102	Woodward WWTP - Expansion (CASH FLOWED)	*	1,750	-	-	1,750	-	-	-	-	-	-	-
City Wide	5161966511	Woodward WWTP - Digester #5 (CASH FLOWED)		2,500	-	-	-	-	-	-	-	2,500	2,500	-
City Wide	5162066311	Woodward WWTP - Digester #3 (CASH FLOWED)		250	-	-	-	-	-	-	-	250	250	-
City Wide	5162066813	Dundas WWTP - Health & Safety Immediate Needs		4,900	-	-	-	-	-	1,150	-	3,750	3,750	-
City Wide	5162067420	Main & King CSO Rehabilitation		350	-	-	-	-	-	-	-	350	350	-
<i>Sub-Total Plant - Sustainable Asset Mgt (SAM)</i>				9,750	-	-	1,750	-	-	1,150	-	6,850	6,850	-
Plant - Wastewater Investment Needs (WINS)														
City Wide	5160866801	Woodward WWTP - Clean Harbour (CASH FLOWED)	*	100,631	65,736	-	5,096	12,120	-	-	-	17,679	2,579	15,100
City Wide	5160966910	Woodward WWTP - Biosolids Management Facility	*	28,030	14,300	-	2,590	11,140	-	-	-	-	-	-
City Wide	5162069075	City Environmental Lab Improvements Program		150	-	-	-	-	-	-	-	150	150	-
<i>Sub-Total Plant - Wastewater Investment Needs (WINS)</i>				128,811	80,036	-	7,686	23,260	-	-	-	17,829	2,729	15,100
Rehabilitation Project														
12	5161960942	Ancaster Sewage Works Pipeline CIPP Rehab - CASH FLOW		500	-	-	-	-	-	-	-	500	500	-
5	5162060044	Battlefield Creek Major Trunk Cleaning & Condition Assessment		250	-	-	-	-	-	-	-	250	250	-

City of Hamilton
Wastewater System
2020 Capital Budget Project List
(000's)

City Ward	Project Number	Project Description	DC Debt	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
													From Operating	Debt
City Wide	5162060302	Emergency Repairs - Cross Connections Program		700	-	-	-	-	-	-	-	700	700	-
City Wide	5162060390	Wastewater System Lining Program		4,050	-	-	-	-	-	-	-	4,050	4,050	-
City Wide	5162060522	Sewer Lateral Management Program (WWC)		4,250	-	-	-	-	-	-	-	4,250	4,250	-
City Wide	5162060533	Trenchless Manhole Rehabilitation		70	-	-	-	-	-	-	-	70	70	-
City Wide	5162060574	Pre-Construction Mainline Condition Assessment		500	-	-	-	-	-	-	-	500	500	-
City Wide	5162060575	Mainline Sewer Condition Assessment Program		1,640	-	-	-	-	-	-	-	1,640	1,640	-
City Wide	5162060576	Sewer Lateral Condition Assessment Program		540	-	-	-	-	-	-	-	540	540	-
City Wide	5162060577	Mainline Sewer Condition Assessment for Compliance & Regulations		100	-	-	-	-	-	-	-	100	100	-
5, 9	5162061051	Satellite City Trunk Sewer Rehabilitation		8,750	-	-	-	-	-	-	-	8,750	6,950	1,800
		<i>Sub-Total Rehabilitation Project</i>		21,350	-	-	-	-	-	-	-	21,350	19,550	1,800
Repairs														
City Wide	5162060820	Open Cut Repairs for CIPP Program		500	-	-	-	-	-	-	-	500	500	-
		<i>Sub-Total Repairs</i>		500	-	-	-	-	-	-	-	500	500	-
Replacement Project														
City Wide	5162061444	Sewer Lateral Replace/Rehab Program		3,600	-	-	-	-	-	-	-	3,600	3,600	-
City Wide	5162061740	Unscheduled Manhole and Sewermain Replacement Program		500	-	-	-	-	-	-	-	500	500	-
City Wide	5162071015	Sewer Lateral Replacement for Co-ordinated Projects		270	-	-	-	-	-	-	-	270	270	-
City Wide	5162071074	Contingency for Unscheduled Works Program		180	-	-	-	-	-	-	-	180	180	-
		<i>Sub-Total Replacement Project</i>		4,550	-	-	-	-	-	-	-	4,550	4,550	-
Restorations														
City Wide	5162011101	Road Restoration Program		1,800	-	-	-	-	-	-	-	1,800	1,800	-
		<i>Sub-Total Restorations</i>		1,800	-	-	-	-	-	-	-	1,800	1,800	-
Technical Services Projects														
City Wide	4032055522	State of the Infrastructure - Asset Management		100	-	-	-	-	-	100	-	-	-	-
City Wide	4032055588	O.Reg. 588/17 Compliance - Asset Management Plan Development		75	-	-	-	-	-	-	-	75	75	-
City Wide	5162049555	QA-QC Service Contract Program		140	-	-	-	-	-	-	-	140	140	-
City Wide	5162055022	Engineering Consultant Sewermain Projects		300	-	-	-	-	-	-	-	300	300	-
City Wide	5162055556	Mapping Update Program		40	-	-	-	-	-	-	-	40	40	-
City Wide	5162055878	Forcemain Condition Assessment Program		270	-	-	-	-	-	-	-	270	270	-
City Wide	5162055880	Inflow & Infiltration Studies and Flow Monitoring Program		500	-	-	251	-	-	-	-	249	249	-
		<i>Sub-Total Technical Services Projects</i>		1,425	-	-	251	-	-	100	-	1,074	1,074	-
Upgrade Projects														
City Wide	5162062073	Field Data Systems Program		110	-	-	-	-	-	60	-	50	50	-
		<i>Sub-Total Upgrade Projects</i>		110	-	-	-	-	-	60	-	50	50	-
Water Quality Initiatives (WQI)														
City Wide	5161468422	Randle Reef Sediment Remediation (CASH FLOWED)		550	-	-	-	-	-	-	-	550	550	-

City of Hamilton
Wastewater System
2020 Capital Budget Project List
(000's)

City Ward	Project Number	Project Description	DC Debt	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources		
													From Operating	Debt	
<i>Sub-Total Water Quality Initiatives (WQI)</i>				550	-	-	-	-	-	-	-	550	550	-	
Waterfront Initiatives															
City Wide	5162055800	Sewer Outfall Monitoring Study		150	-	-	-	-	-	-	-	150	150	-	
<i>Sub-Total Waterfront Initiatives</i>				150	-	-	-	-	-	-	-	150	150	-	
Total All Projects				222,606	80,036	-	48,227	23,260	-	1,510	-	69,573	52,673	16,900	

* DC Debt

City of Hamilton
Storm Water Management
2020 Capital Budget Project List
(000's)

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City Ward	Project Number	Project Description	DC Debt	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
													From Operating	Debt
Annual Projects														
City Wide	4032058001	Consultation and Accommodation		30	-	-	-	-	-	-	-	30	30	-
City Wide	5182001099	Engineering Services Staffing Costs - Storm		1,100	-	-	-	-	-	-	-	1,100	1,100	-
<i>Sub-Total Annual Projects</i>				1,130	-	-	-	-	-	-	-	1,130	1,130	-
Building - New Construction														
5	5182067875	Beach Strip Stormwater Pumping Stations (CASH FLOWED)		300	-	-	-	-	-	-	-	300	300	-
<i>Sub-Total Building - New Construction</i>				300	-	-	-	-	-	-	-	300	300	-
Coordinated - Network Extension Projects														
9	5182080089	Rymal - Fletcher to Upper Centennial		1,100	-	-	935	-	-	-	-	165	165	-
<i>Sub-Total Coordinated - Network Extension Projects</i>				1,100	-	-	935	-	-	-	-	165	165	-
Coordinated - Replacement Projects														
13, 14	5182070001	Highway 8 - Woodley's Lane to Hillcrest - Road Restoration		920	-	-	-	-	-	-	-	920	920	-
13	5182070002	Highway 8 - Hillcrest to Park - Road Restoration		660	-	-	-	-	-	-	-	660	660	-
13	5182072293	Highway 8 - Hillcrest to Park		300	-	-	-	-	-	-	-	300	300	-
13, 14	5182072295	Highway 8 - Woodley's Lane to Hillcrest		1,590	-	-	-	-	-	530	-	1,060	1,060	-
<i>Sub-Total Coordinated - Replacement Projects</i>				3,470	-	-	-	-	-	530	-	2,940	2,940	-
Coordinated - Upgrade Projects														
15	5182072092	Cedar / Fern / Braeheid		100	-	-	-	-	-	-	-	100	100	-
<i>Sub-Total Coordinated - Upgrade Projects</i>				100	-	-	-	-	-	-	-	100	100	-
Development Projects														
8	5181480486	SWMP - St. Elizabeth Ponds		200	-	-	200	-	-	-	-	-	-	-
15	5182080082	SWMP - W19 (Parkside Hills Phase 2)	*	3,740	-	-	3,740	-	-	-	-	-	-	-
9	5182080086	SWMP - SM2 (Red Hill Phase 3/4)	*	4,120	-	-	4,120	-	-	-	-	-	-	-
11	5182080087	SWMP - 8-10 (Lancaster Subdivision)	*	9,960	-	-	9,960	-	-	-	-	-	-	-
City Wide	5182080090	Storm Water Management Program		4,000	-	-	4,000	-	-	-	-	-	-	-
<i>Sub-Total Development Projects</i>				22,020	-	-	22,020	-	-	-	-	-	-	-
Maintenance Projects														
15	5182074950	Watercourse and Drainage Channel Maintenance		810	-	-	-	-	-	-	-	810	810	-
City Wide	5182074951	Shoreline Protection Program		400	-	-	-	-	-	-	-	400	400	-
<i>Sub-Total Maintenance Projects</i>				1,210	-	-	-	-	-	-	-	1,210	1,210	-
Master Plan - Vertical Assets														
City Wide	5182095800	Flooding & Drainage Master Plan Capital Improvements		880	-	-	-	-	-	-	-	880	880	-
<i>Sub-Total Master Plan - Vertical Assets</i>				880	-	-	-	-	-	-	-	880	880	-
Operations & Maintenance														
15	5181972940	Evans Road Culvert Twinning		540	-	-	-	-	-	-	-	540	540	-

City of Hamilton
Storm Water Management
2020 Capital Budget Project List
(000's)

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City Ward	Project Number	Project Description	DC Debt	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
													From Operating	Debt
15	5182017040	Highway 97 - Culvert Improvement Project		180	-	-	-	-	-	-	-	180	180	-
City Wide	5182060622	SWM Facility Maintenance Program		1,700	-	-	-	-	-	-	-	1,700	1,700	-
10, 11, 12, 13, 14,	5182060722	Municipal Drain Program		610	-	370	-	-	-	-	-	240	240	-
<i>Sub-Total Operations & Maintenance</i>				3,030	-	370	-	-	-	-	-	2,660	2,660	-
Programs & Contracts T.O.M.														
City Wide	5182017152	Right of Way Drainage Program		1,400	-	-	-	-	-	-	-	1,400	1,400	-
City Wide	5182017458	Catch Basin Replacement/Rehabilitation Program		500	-	-	-	-	-	-	-	500	500	-
<i>Sub-Total Programs & Contracts T.O.M.</i>				1,900	-	-	-	-	-	-	-	1,900	1,900	-
Rehabilitation Project														
City Wide	5182060533	Trenchless Manhole Rehabilitation		70	-	-	-	-	-	-	-	70	70	-
13	5182061046	Osler Dr Outfall @ Grant Blvd		100	-	-	-	-	-	-	-	100	100	-
<i>Sub-Total Rehabilitation Project</i>				170	-	-	-	-	-	-	-	170	170	-
Replacement Project														
City Wide	5181767723	Pumping Stations		600	-	-	-	-	-	-	-	600	600	-
City Wide	5182017549	Concrete Box Culvert Rehab/Repair - T.O.M.		250	-	-	-	-	-	-	-	250	250	-
City Wide	5182017550	Concrete Box Culvert Rehab/Repair - Engineering Services		250	-	-	-	-	-	-	-	250	250	-
City Wide	5182061740	Unscheduled Manhole and Sewermain Replacement Program		50	-	-	-	-	-	-	-	50	50	-
<i>Sub-Total Replacement Project</i>				1,150	-	-	-	-	-	-	-	1,150	1,150	-
SERG														
13	5181823155	South St E and East St S in Dundas Drainage Improvement - SERG		110	-	-	-	-	-	-	-	110	110	-
11	5181872295	SERG - Winona Area Drainage Improvements		100	-	-	-	-	-	-	-	100	100	-
City Wide	5182055421	Stormwater System Planning Program		380	-	-	-	-	-	-	-	380	380	-
5	5182155101	SERG - Stoney Creek & Battlefield Creek Flood and Erosion Control		250	-	-	-	-	-	-	-	250	250	-
<i>Sub-Total SERG</i>				840	-	-	-	-	-	-	-	840	840	-
Technical Services Projects														
City Wide	4032055522	State of the Infrastructure - Asset Management		100	-	-	-	-	-	100	-	-	-	-
City Wide	4032055588	O.Reg. 588/17 Compliance - Asset Management Plan Development		50	-	-	-	-	-	-	-	50	50	-
City Wide	5181555422	City Wide GRIDS II Stormwater Master Plan		300	-	-	240	-	-	-	-	60	60	-
City Wide	5182049555	QA-QC Service Contract Program		140	-	-	-	-	-	-	-	140	140	-
City Wide	5182055556	Mapping Update Program		40	-	-	-	-	-	-	-	40	40	-
City Wide	5182057545	Stormwater Computer Model		1,080	-	-	-	-	-	-	-	1,080	1,080	-
<i>Sub-Total Technical Services Projects</i>				1,710	-	-	240	-	-	100	-	1,370	1,370	-
Upgrade Projects														
City Wide	5182055825	Stormwater Drainage Analysis and Conceptual Design for Road Corridor Upgrades		760	-	-	-	-	-	-	-	760	760	-
City Wide	5182062073	Field Data Systems Program		110	-	-	-	-	-	-	-	110	110	-
<i>Sub-Total Upgrade Projects</i>				870	-	-	-	-	-	-	-	870	870	-
Total All Projects				39,880	-	370	23,195	-	-	630	-	15,685	15,685	-

* DC Debt

CITY OF HAMILTON
2020 Rate Program Capital Budget Summary
(\$000'S)

	Gross Costs	Subsidy/ Other Revenues	Development Charges	WIP / Other Internal Sources	Reserves	Net Cost	Financing Source	
							Contribution From Operating	External Borrowings (Debentures)
2020 Sustainable Asset Management Strategy (SAM)								
Rehabilitation, Replacement & Upgrade Projects	76,010	370	-	560	-	75,080	58,690	1,800
Projects Coordinated with Roads Program	16,330	6,130	-	1,150	640	8,410	23,300	-
S.E.R.G. Projects	840	-	-	-	-	840	840	-
Treatment Plant/Outstations Projects	19,830	-	1,750	1,150	-	16,930	16,630	-
Treatment Plant/Outstations Projects-WQI	950	-	-	-	-	950	950	-
Watermain Lining	5,400	-	-	-	-	5,400	5,400	-
Sub-Total	119,360	6,500	1,750	2,860	640	107,610	105,810	1,800
Wastewater Investments Needs Strategies (WINS)								
Treatment Plant/Outstations Projects	128,811	80,036	7,686	-	23,260	17,829	2,729	15,100
Sub-Total	128,811	80,036	7,686	-	23,260	17,829	2,729	15,100
Master Plan								
Horizontal and Vertical Assets	39,010	223	35,946	-	-	2,841	2,841	-
Technical Service Projects	8,440	-	1,031	300	-	7,109	7,109	-
Sub-Total	47,450	223	36,977	300	-	9,950	9,950	-
Development Program								
Development/Extension Projects	34,360	-	30,195	-	4,000	165	165	-
Sub-Total	34,360	-	30,195	-	4,000	165	165	-
Total	329,981	86,759	76,608	3,160	27,900	135,554	118,654	16,900

CITY OF HAMILTON
2020 - 2029 WATER / WASTEWATER / STORM CAPITAL FINANCING PLAN
(\$'s)

	Restated 2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2020 - 2029
NET EXPENDITURES FORECAST												
WASTEWATER (NET)	42,837,000	69,573,000	83,757,000	81,749,000	55,374,000	52,379,000	58,704,000	63,479,000	68,364,000	68,470,000	65,440,000	667,289,000
WATER (NET)	66,103,000	50,296,000	72,253,000	73,753,000	63,516,000	81,700,000	97,211,000	84,917,000	72,832,000	90,002,000	107,861,000	794,341,000
STORM (NET)	3,205,000	15,685,000	14,382,000	15,775,000	15,975,000	17,595,000	9,875,000	16,385,000	38,630,000	34,735,000	35,215,000	214,252,000
TOTAL NET EXPENDITURES	112,145,000	135,554,000	170,392,000	171,277,000	134,865,000	151,674,000	165,790,000	164,781,000	179,826,000	193,207,000	208,516,000	1,675,882,000
SOURCE OF FINANCING												
DEBT ISSUES	14,341,000	16,900,000	48,000,000	44,700,000	1,200,000	8,400,000	12,600,000	1,500,000	2,400,000	0	0	135,700,000
TRANSFER FROM OPERATING	97,804,000	118,654,000	122,392,000	126,577,000	133,665,000	143,274,000	153,190,000	163,281,000	177,426,000	193,207,000	208,516,000	1,540,182,000
TOTAL CAPITAL FINANCING	112,145,000	135,554,000	170,392,000	171,277,000	134,865,000	151,674,000	165,790,000	164,781,000	179,826,000	193,207,000	208,516,000	1,675,882,000
OPERATING BUDGET IMPACT												
TRANSFER FROM OPERATING	97,804,000	118,654,000	122,392,000	126,577,000	133,665,000	143,274,000	153,190,000	163,281,000	177,426,000	193,207,000	208,516,000	1,540,182,000
DC EXEMPTION FUNDING	9,000,000	8,000,000	8,000,000	8,000,000	8,000,000	8,000,000	8,000,000	8,000,000	8,000,000	8,000,000	8,000,000	80,000,000
DEBT CHARGES (NET)	19,365,685	19,682,108	25,295,182	32,246,955	36,943,695	38,456,182	39,081,885	39,379,712	37,784,300	35,328,058	35,168,939	339,367,017
TOTAL CAPITAL FINANCING COSTS	126,169,685	146,336,108	155,687,182	166,823,955	178,608,695	189,730,182	200,271,885	210,660,712	223,210,300	236,535,058	251,684,939	1,959,549,017

CITY OF HAMILTON
2020- 2029 CAPITAL FINANCING CHARGES - RATE PROGRAMS
(\$'s)

	Restated 2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2020 - 2029
Wastewater												
Existing External Debt Charges	8,259,325	8,295,616	8,121,035	7,948,226	7,728,980	7,506,821	7,327,765	7,150,424	6,588,871	5,190,079	5,060,580	70,918,397
Existing - Recovery from DC's	-253,901	-271,296	-268,136	-264,824	-215,275	-165,624	-161,917	-158,163	-154,298	-150,383	-146,404	-1,956,321
New External Debt Charges - Funded from Rates	445,234	1,229,884	4,258,071	7,796,872	10,010,967	10,484,564	10,484,564	10,484,564	10,542,369	10,600,174	10,600,174	86,492,202
New External Debt Charges - Funded from DC's	1,415,821	1,988,874	5,845,134	9,091,350	11,366,309	12,410,086	12,705,379	16,660,054	24,213,931	31,707,626	35,475,737	161,464,479
Recovery from DC's	-1,415,821	-1,988,874	-5,845,134	-9,091,350	-11,366,309	-12,410,086	-12,705,379	-16,660,054	-24,213,931	-31,707,626	-35,475,737	-161,464,479
Contribution to Capital	42,837,000	52,673,000	55,057,000	54,249,000	54,174,000	52,379,000	58,704,000	63,479,000	67,164,000	68,470,000	65,440,000	591,789,000
DC Exemption Funding	4,590,000	4,080,000	4,080,000	4,080,000	4,080,000	4,080,000	4,080,000	4,080,000	4,080,000	4,080,000	4,080,000	40,800,000
Subtotal	55,877,658	66,007,204	71,247,970	73,809,274	75,778,672	74,284,760	80,434,412	85,035,824	88,220,941	88,189,871	85,034,351	788,043,278
% Incr (Decr) from Previous Year	-3%	18%	8%	4%	3%	-2%	8%	6%	4%	0%	-4%	
Water												
Existing External Debt Charges	7,409,901	7,379,737	7,217,846	7,054,799	6,880,544	6,702,952	6,534,526	6,369,135	5,187,000	4,053,873	3,949,285	61,329,697
Existing - Recovery from DC's	-58,344	-62,618	-61,954	-61,251	-48,216	-35,154	-34,358	-33,548	-32,712	-31,863	-31,000	-432,675
New External Debt Charges - Funded from Rates	1,434,561	858,711	3,505,837	6,981,506	9,527,473	10,790,821	11,802,416	12,481,629	12,553,885	12,553,885	12,553,885	93,610,049
New External Debt Charges - Funded from DC's	918,025	355,495	2,357,547	5,084,391	6,363,418	6,883,931	8,524,331	11,013,175	13,120,506	14,057,619	14,057,619	81,818,030
Recovery from DC's	-918,025	-355,495	-2,357,547	-5,084,391	-6,363,418	-6,883,931	-8,524,331	-11,013,175	-13,120,506	-14,057,619	-14,057,619	-81,818,030
Contribution to Capital	51,762,000	50,296,000	52,953,000	56,553,000	63,516,000	73,300,000	84,611,000	83,417,000	72,832,000	90,002,000	107,861,000	735,341,000
DC Exemption Funding	2,547,000	2,240,000	2,240,000	2,240,000	2,240,000	2,240,000	2,240,000	2,240,000	2,240,000	2,240,000	2,240,000	22,400,000
Subtotal	63,095,118	60,711,831	65,854,728	72,768,055	82,115,801	92,998,619	105,153,583	104,474,216	92,780,173	108,817,895	126,573,170	912,248,071
% Incr (Decr) from Previous Year	32%	-4%	8%	10%	13%	13%	13%	-1%	-11%	17%	16%	
Storm												
Existing External Debt Charges	2,152,705	2,303,036	2,261,712	2,218,943	2,174,438	2,128,860	2,081,704	2,034,189	1,985,472	1,936,291	1,886,251	21,010,897
Existing - Recovery from DC's	-185,049	-205,023	-201,408	-197,617	-193,636	-189,538	-185,295	-180,997	-176,573	-172,090	-167,535	-1,869,711
New External Debt Charges - Funded from Rates	161,253	154,060	462,180	770,300	1,078,421	1,232,481	1,232,481	1,232,481	1,290,286	1,348,091	1,463,702	10,264,482
New External Debt Charges - Funded from DC's	1,636,096	942,901	2,193,983	2,730,104	3,185,982	3,413,921	3,413,921	3,413,921	3,413,921	3,420,825	3,427,730	29,557,207
Recovery from DC's	-1,636,096	-942,901	-2,193,983	-2,730,104	-3,185,982	-3,413,921	-3,413,921	-3,413,921	-3,413,921	-3,420,825	-3,427,730	-29,557,207
Contribution to Capital	3,205,000	15,685,000	14,382,000	15,775,000	15,975,000	17,595,000	9,875,000	16,385,000	37,430,000	34,735,000	35,215,000	213,052,000
DC Exemption Funding	1,863,000	1,680,000	1,680,000	1,680,000	1,680,000	1,680,000	1,680,000	1,680,000	1,680,000	1,680,000	1,680,000	16,800,000
Subtotal	7,196,909	19,617,074	18,584,484	20,246,626	20,714,223	22,446,802	14,683,890	21,150,672	42,209,185	39,527,292	40,077,419	259,257,668
% Incr (Decr) from Previous Year	-37%	173%	-5%	9%	2%	8%	-35%	44%	100%	-6%	1%	
TOTAL FINANCING CHARGES	126,169,685	146,336,108	155,687,182	166,823,955	178,608,695	189,730,182	200,271,885	210,660,712	223,210,300	236,535,058	251,684,939	1,959,549,017
% Incr (Decr) from Previous Year	8%	16%	6%	7%	7%	6%	6%	5%	6%	6%	6%	
Total Rate Funded Debt Charges	19,365,685	19,682,108	25,295,182	32,246,955	36,943,695	38,456,182	39,081,885	39,379,712	37,784,300	35,328,058	35,168,939	339,367,017
Total DC Funded Debt Charges	4,467,237	3,826,205	10,928,162	17,429,536	21,372,836	23,098,254	25,025,199	31,459,858	41,111,941	49,540,406	53,306,025	277,098,424

**HAMILTON WATER
2020 RATE SUPPORTED STAFFING SUMMARY**

Deptid	Deptid Description	2019	2019*	2020	2020	2020	2020
		REQUESTED	RESTATED	MAINTENANCE	PROGRAM CHANGES	REQUESTED	REQUESTED vs. 2019 RESTATED
510200	Director Hamilton Water	3.00	3.00	3.00	0.00	3.00	0.00
510203	WWW Operations Director	2.00	2.00	2.00	0.00	2.00	0.00
510205	Woodward Upgrades	11.00	11.00	11.00	4.00	15.00	4.00
510210	Customer Service & Community Outreach	2.00	2.00	2.00	0.00	2.00	0.00
510215	Education & Outreach	5.65	5.65	5.65	0.00	5.65	0.00
510220	Service Co-ordination	21.00	21.00	21.00	0.00	21.00	0.00
510230	Engineering Systems & Data Collection	9.00	9.00	9.00	0.00	9.00	0.00
510240	Compliance & Regulations	7.00	7.00	7.00	0.00	7.00	0.00
510250	Laboratory Services	26.00	26.00	26.00	0.00	26.00	0.00
510260	Environmental Monitoring & Enforcement	13.00	13.00	13.00	0.00	13.00	0.00
510270	Water Distribution (WD) & Wastewtr Collection (WWC) *	6.00	12.00	12.00	6.00	18.00	6.00
510275	WD & WWC Contracts	20.00	20.00	20.00	0.00	20.00	0.00
510280	WD & WWC Construction	23.00	23.00	23.00	0.00	23.00	0.00
510285	WD & WWC Maintenance	20.00	20.00	20.00	0.00	20.00	0.00
510290	WD & WWC Operations	20.00	20.00	20.00	0.00	20.00	0.00
510300	WWW Planning & Capital Director	2.00	2.00	2.00	0.00	2.00	0.00
510305	Sustainable Initiatives	7.00	7.00	7.00	0.00	7.00	0.00
510310	Plant Operations & Maintenance	8.00	8.00	8.00	0.00	8.00	0.00
510320	Plant Maintenance	35.00	35.00	35.00	0.00	35.00	0.00
510330	Plant Operations	37.00	37.00	37.00	0.00	37.00	0.00
510340	Capital Delivery	13.00	13.00	13.00	0.00	13.00	0.00
510350	Infrastructure Planning and System Design	17.00	17.00	17.00	2.00	19.00	2.00
Total RATE Supported Staff		307.65	313.65	313.65	12.00	325.65	12.0

Note: * Stormwater portfolio moved from Transportation Operations & Maintenance to HW after the budget was approved in 2019

2020 Rate Budget - Business Case Summary

DEPARTMENT: Public Works

DIVISION	SERVICE / PROGRAM	DESCRIPTION OF PROGRAM ENHANCEMENT	2020 IMPACT			ANNUALIZED IMPACT
			\$ GROSS	\$ NET	FTE Impact	\$ NET
Hamilton Water	Woodward Upgrades Operational Support	Maintenance Operators required to support Woodward Upgrades Project	\$ 440,000	\$ -	4.00	\$ -
Hamilton Water	Water & Wastewater Systems Planning	Project Manager Stormwater & Data Modeller Tech for stormwater systems infrastructure planning, computer modelling and related data analysis	\$ 246,000	\$ -	2.00	\$ -
Hamilton Water	Water Distribution	A 7th Supervisor was approved on a temporary basis in 2017 and requested to report back in 2020 <u>NOTE:</u> Council approved a 3 year temporary assignment and requested we report back in 2020	\$ 139,000	\$ -	1.00	\$ -
Divn Subtotal			\$ 825,000	\$ -	7.00	\$ -
DEPARTMENT TOTAL			\$ 825,000	\$ -	7.00	\$ -

TOTAL NET Impact = net annualized (full year) amount - please state under "Description of Program Enhancement" if other revenue sources will be used to offset the cost of the program change (therefore identify gross cost); also please identify if 2020 calendar (part-year) impact is significantly different due to delayed implementation.

2020-2022 Rate Capital Budget Summary

By Asset Category

**CITY OF HAMILTON
PUBLIC WORKS - RATES PROGRAM
2020 TO 2022 CAPITAL BUDGET**

	2020		2021		2022		3 Year Total	
	<u>Gross</u>	<u>Net</u>	<u>Gross</u>	<u>Net</u>	<u>Gross</u>	<u>Net</u>	<u>Gross</u>	<u>Net</u>
<u>Water System</u>								
Sustainable Asset Management Strategy (SAM)	43,225	41,565	52,078	50,948	52,715	51,585	148,018	144,098
Projects Coordinated with Roads Program	8,400	2,270	6,260	6,260	4,630	4,630	19,290	13,160
Water Quality Initiatives (WQI)	400	400	1,000	1,000	340	340	1,740	1,740
Master Plans	9,600	601	55,670	7,005	32,940	7,973	98,210	15,579
Development Program	410	0	1,980	870	3,050	2,875	5,440	3,745
Coordinated Projects	0	0	350	150	0	0	350	150
Demolition	60	60	110	110	440	440	610	610
Equipment Replacement	0	0	250	250	250	250	500	500
Plans/Studies	0	0	260	260	260	260	520	520
Pumping Station	0	0	0	0	0	0	0	0
Watermain Lining	5,400	5,400	5,400	5,400	5,400	5,400	16,200	16,200
	67,495	50,296	123,358	72,253	100,025	73,753	290,878	196,302
<u>Wastewater System</u>								
Sustainable Asset Management Strategy (SAM)	53,935	46,424	50,525	48,524	43,145	40,394	147,605	135,342
Projects Coordinated with Roads Program	1,220	1,220	0	0	0	0	1,220	1,220
S.E.R.G. Projects	0	0	0	0	0	0	0	0
Water Quality Initiatives (WQI)	550	550	500	500	0	0	1,050	1,050
Wastewater Investment Needs Strategies (WINS)	128,811	17,829	72,333	32,233	28,296	24,735	229,440	74,797
Master Plans	29,810	2,100	32,060	1,260	22,910	2,610	84,780	5,970
Development Program	6,830	0	1,180	230	0	0	8,010	230
Coordinated Projects	0	0	350	150	0	0	350	150
Demolition	0	0	0	0	110	110	110	110
Energy Management	0	0	0	0	150	150	150	150
Equipment Replacement	0	0	250	250	250	250	500	500
Maintenance Projects	500	500	610	610	13,500	13,500	14,610	14,610
Plans/Studies	800	800	0	0	0	0	800	800
Waterfront Initiatives	150	150	0	0	0	0	150	150

**CITY OF HAMILTON
PUBLIC WORKS - RATES PROGRAM
2020 TO 2022 CAPITAL BUDGET**

	2020		2021		2022		3 Year Total	
	<u>Gross</u>	<u>Net</u>	<u>Gross</u>	<u>Net</u>	<u>Gross</u>	<u>Net</u>	<u>Gross</u>	<u>Net</u>
	<u>222,606</u>	<u>69,573</u>	<u>157,808</u>	<u>83,757</u>	<u>108,361</u>	<u>81,749</u>	<u>488,775</u>	<u>235,079</u>
<u>Storm Water Management</u>								
Sustainable Asset Management Strategy (SAM)	8,360	7,650	7,035	6,562	12,020	11,945	27,415	26,157
Projects Coordinated with Roads Program	3,570	3,040	1,530	1,530	0	0	5,100	4,570
S.E.R.G. Projects	840	840	2,590	2,590	1,160	1,160	4,590	4,590
Master Plans	880	880	880	880	0	0	1,760	1,760
Development Program	23,120	165	7,430	70	4,000	0	34,550	235
Maintenance Projects	1,210	1,210	840	840	750	750	2,800	2,800
Programs & Contracts T.O.M.	1,900	1,900	1,910	1,910	1,920	1,920	5,730	5,730
	<u>39,880</u>	<u>15,685</u>	<u>22,215</u>	<u>14,382</u>	<u>19,850</u>	<u>15,775</u>	<u>81,945</u>	<u>45,842</u>
	<u>329,981</u>	<u>135,554</u>	<u>303,381</u>	<u>170,392</u>	<u>228,236</u>	<u>171,277</u>	<u>861,598</u>	<u>477,223</u>

2020-2029

Capital Projects

*Grouped by Ward,
Multi-Ward and City-Wide*

**CITY OF HAMILTON
2020 RECOMMENDED PROJECTS &
2021-2029 FORECAST
FOR WARD 1**

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>Start</u>	<u>End</u>
<u>Storm Water Management</u>												
SERG - Parkside and Kipling Flood Solutions	0	1,000	0	0	0	0	0	0	0	0	2012	2027
Jones / Oxford / Tecumseh (Strathcona Neighbourhood)	0	0	0	125	0	0	0	0	0	0	2023	2023
SERG - Parkside & Kipling Stormwater Facility	0	0	0	0	6,100	0	3,900	2,610	0	0	2024	2028
Sub - Total Storm Water Management	0	1,000	0	125	6,100	0	3,900	2,610	0	0		
<u>Wastewater System</u>												
Hillcrest - Chedoke to end	60	0	0	0	0	0	0	0	0	0	2020	2020
Decommissioning Aberdeen Sewage Pumping Station	0	0	110	1,190	0	0	0	0	0	0	2019	2023
Aberdeen at Hillside Neighbourhood Sewer Separation	0	0	2,230	0	0	990	0	0	0	0	2019	2025
Jones / Oxford / Tecumseh (Strathcona Neighbourhood)	0	0	0	410	0	0	0	0	0	0	2023	2023
Sub - Total Wastewater System	60	0	2,340	1,600	0	990	0	0	0	0		
<u>Water System</u>												
Hillcrest - Chedoke to end - Road Restoration	60	0	0	0	0	0	0	0	0	0	2020	2020
Hillcrest - Chedoke to end	120	0	0	0	0	0	0	0	0	0	2020	2020
Locke St Trunk Watermain - Main to Barton (W-19)	2,200	0	0	2,524	0	0	0	0	0	0	2018	2019
Main / Whitney Pumping Station Replacement and Decommissioning	0	0	2,980	0	0	0	0	0	0	0	2015	2019
Marion - King to Dromore	0	0	300	0	0	0	0	0	0	0	2022	2022
Jones / Oxford / Tecumseh (Strathcona Neighbourhood)	0	0	0	810	0	0	0	0	0	0	2023	2023
Amelia - Queen to West End	0	0	0	0	540	0	0	0	0	0	2024	2024
Bold - Queen to Locke	0	0	0	0	700	0	0	0	0	0	2024	2024
Carling / Macklin St S / Olmstead / Tope (Westdale South)	0	0	0	0	660	0	0	0	0	0	2024	2024
Florence/Head/Morden/Napier/Nelson/Peel/Wellesley (Strathcona Neighbourhood)	0	0	0	0	0	720	0	0	0	0	2025	2025
Sub - Total Water System	2,380	0	3,280	3,334	1,900	720	0	0	0	0		
Total Public Works Rate Funded	2,440	1,000	5,620	5,059	8,000	1,710	3,900	2,610	0	0		
Total Ward 1	2,440	1,000	5,620	5,059	8,000	1,710	3,900	2,610	0	0		

**CITY OF HAMILTON
2020 RECOMMENDED PROJECTS &
2021-2029 FORECAST
FOR WARD 2**

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>Start</u>	<u>End</u>
<u>Water System</u>												
St. Joseph's Tank Pulsation Dampener (HD002STK)	60	110	440	0	0	0	0	0	0	0	2020	2022
Jackson - Catherine to Walnut	0	210	0	0	0	0	0	0	0	0	2021	2021
Duke - Queen to Hess	0	50	250	0	0	0	0	0	0	0	2021	2022
Strachan - James to east end	0	600	0	0	0	0	0	0	0	0	2021	2021
Caroline - Herkimer to Robinson	0	0	0	0	350	0	0	0	0	0	2024	2024
James and Charlton Intersection	0	0	0	0	900	0	0	0	0	0	2024	2024
New PD2 Water Pumping Station (CASH FLOWED)	0	0	0	0	1,100	5,500	5,500	0	0	0	2017	2021
Ferguson/Foster/Walnut/Patrick	0	0	0	0	1,710	0	0	0	0	0	2024	2024
John - Cannon to Barton	0	0	0	0	0	760	0	0	0	0	2025	2025
Hess - Markland to Aberdeen	0	0	0	0	0	430	0	0	0	0	2025	2025
Hughson - Wilson to Barton	0	0	0	0	0	500	0	0	0	0	2025	2025
Robinson - Hess to Park	0	0	0	0	0	0	950	0	0	0	2026	2026
<i>Sub - Total Water System</i>	60	970	690	0	4,060	7,190	6,450	0	0	0		
<i>Total Public Works Rate Funded</i>	60	970	690	0	4,060	7,190	6,450	0	0	0		
<i>Total Ward 2</i>	60	970	690	0	4,060	7,190	6,450	0	0	0		

**CITY OF HAMILTON
2020 RECOMMENDED PROJECTS &
2021-2029 FORECAST
FOR WARD 3**

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>Start</u>	<u>End</u>
<u>Storm Water Management</u>												
Main - Prospect to Gage - SERG B-3	0	0	0	0	1,580	0	0	0	0	0	2024	2024
Industrial - Ottawa to Gage / Gage / Depew	0	0	0	0	0	0	390	0	0	0	2026	2026
Stipeley Neighbourhood (South) - Connaught / Balasm / Dunsmure	0	0	0	0	0	0	0	0	0	850	2029	2029
Sub - Total Storm Water Management	0	0	0	0	1,580	0	390	0	0	850		
<u>Wastewater System</u>												
Stipeley Neighbourhood (South) - Connaught / Balasm / Dunsmure	0	0	0	0	0	0	0	0	0	80	2029	2029
Sub - Total Wastewater System	0	0	0	0	0	0	0	0	0	80		
<u>Water System</u>												
Sherman - King to south end	1,130	0	0	0	0	0	0	0	0	0	2019	2020
Wentworth - Wilson to King	370	0	0	0	0	0	0	0	0	0	2019	2020
Burlington Trunkmain Repairs	910	0	0	0	0	0	0	0	0	0	2020	2020
Evans - Wellington to East	0	0	0	360	0	0	0	0	0	0	2023	2023
Birge - Emerald to St. Matthews	0	0	0	270	0	0	0	0	0	0	2023	2023
Myler - Sanford to Milton/Milton - Barton to Princess	0	0	0	0	450	0	0	0	0	0	2024	2024
Burlington & Industrial - Birch to Gage	0	0	0	0	2,760	0	0	0	0	0	2024	2024
Edward - Barnesdale to Lottridge	0	0	0	0	0	340	0	0	0	0	2025	2025
Wilson - Wentworth to Sherman	0	0	0	0	0	810	0	0	0	0	2025	2025
Sanford - Main to Cannon	0	0	0	0	0	0	1,350	0	0	0	2026	2026
Clinton\Case\Ruth\Barnesdale	0	0	0	0	0	0	0	1,740	0	0	2027	2027
Stipeley Neighbourhood (South) - Connaught / Balasm / Dunsmure	0	0	0	0	0	0	0	0	0	945	2029	2029
Sub - Total Water System	2,410	0	0	630	3,210	1,150	1,350	1,740	0	945		
Total Public Works Rate Funded	2,410	0	0	630	4,790	1,150	1,740	1,740	0	1,875		
Total Ward 3	2,410	0	0	630	4,790	1,150	1,740	1,740	0	1,875		

**CITY OF HAMILTON
2020 RECOMMENDED PROJECTS &
2021-2029 FORECAST
FOR WARD 4**

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>Start</u>	<u>End</u>
<u>Storm Water Management</u>												
Barton - Parkdale to Talbot	0	1,530	0	0	0	0	0	0	0	0	2021	2021
Sub - Total Storm Water Management	0	1,530	0	0	0	0	0	0	0	0		
<u>Wastewater System</u>												
Parkdale Avenue HC001 Wastewater Pumping Station Upgrades	10	250	2,860	0	0	0	0	0	0	0	2017	2019
Main - Queenston Traffic Circle to Delena & Rosewood	1,160	0	0	0	0	0	0	0	0	0	2020	2020
Roxborough Park Intensification	1,500	0	0	0	0	0	0	0	0	0	2020	2020
Centralized Water and Wastewater Operations Centre (CASH FLOWED)	0	0	0	2,500	5,000	0	0	0	0	0	2016	2024
Pier 25 Dredging - Windermere Basin	0	0	13,500	0	0	0	0	0	0	0	2018	2021
Eastern Sanitary Interceptor (ESI) at Battlefield Creek Trunk	0	260	0	0	0	0	0	0	0	0	2021	2021
Strathearne Ave North Trunk Sewer Rehabilitation	0	0	0	3,000	0	0	0	0	0	0	2023	2023
Strathearne Ave South Trunk Sewer Rehabilitation	0	0	0	0	0	2,000	0	0	0	0	2025	2025
Burlington & Industrial - Ottawa to Kenilworth	0	0	0	0	0	0	0	740	0	0	2027	2027
Sub - Total Wastewater System	2,670	510	16,360	5,500	5,000	2,000	0	740	0	0		
<u>Water System</u>												
Water Treatment Plant - Process Upgrades (CASH FLOWED)	4,950	1,270	1,270	2,490	12,270	45,370	34,250	16,500	0	0	2011	2026
High Lift Pumping Station (HLPS) Improvements - Phase 2 (CASH FLOWED)	550	2,470	2,470	0	0	0	0	0	0	0	2015	2019
Main - Delena to Normanhurst & Normanhurst - Main to Queenston	4,800	0	0	0	0	0	0	0	0	0	2019	2020
Main - Delena to Normanhurst & Normanhurst - Main to Queenston	300	0	0	0	0	0	0	0	0	0	2020	2020
Roxborough - Kenilworth to Strathearne (Homeside Neighbourhood) - Road Restoration	700	0	0	0	0	0	0	0	0	0	2020	2020
Delena / Beland / Dunsmore	150	1,140	0	0	0	0	0	0	0	0	2020	2021
Roxborough - Kenilworth to Strathearne (Homeside Neighbourhood)	770	0	0	0	0	0	0	0	0	0	2020	2020
Centralized Water and Wastewater Operations Centre (CASH FLOWED)	0	0	0	2,500	5,000	0	0	0	0	0	2016	2024
Barton - Parkdale to Talbot	0	1,080	0	0	0	0	0	0	0	0	2021	2021
GAC Replacement	0	0	0	0	0	0	550	4,400	0	0	2020	Ongoing
Edgemont - Main to King	0	0	0	0	0	0	0	60	600	0	2027	2028
Burlington & Industrial - Ottawa to Kenilworth	0	0	0	0	0	0	0	2,100	0	0	2027	2027
Sub - Total Water System	12,220	5,960	3,740	4,990	17,270	45,370	34,800	23,060	600	0		
Total Public Works Rate Funded	14,890	8,000	20,100	10,490	22,270	47,370	34,800	23,800	600	0		

**CITY OF HAMILTON
 2020 RECOMMENDED PROJECTS &
 2021-2029 FORECAST
 FOR WARD 4**

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>Start</u>	<u>End</u>
<i>Total Ward 4</i>	14,890	8,000	20,100	10,490	22,270	47,370	34,800	23,800	600	0		

**CITY OF HAMILTON
2020 RECOMMENDED PROJECTS &
2021-2029 FORECAST
FOR WARD 5**

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>Start</u>	<u>End</u>
<u>Storm Water Management</u>												
Beach Strip Stormwater Pumping Stations (CASH FLOWED)	300	1,295	7,100	7,075	0	0	0	0	0	0	2020	2023
SERG - Stoney Creek & Battlefield Creek Flood and Erosion Control	250	0	0	0	0	0	0	0	0	0	2019	2020
Beach Strip Stormwater Collection System Improvements	0	0	150	500	2,350	0	0	0	0	0	2023	2024
Sub - Total Storm Water Management	550	1,295	7,250	7,575	2,350	0	0	0	0	0		
<u>Wastewater System</u>												
Battlefield Creek Major Trunk Cleaning & Condition Assessment	250	0	0	0	0	0	0	0	0	0	2020	2020
Eastport Drive SPS (HC017) Upgrades	390	1,320	0	0	0	0	0	0	0	0	2020	2022
Greenhill & Cochrane HCS01 Combined Sewer Overflow Tank Cleaning & Upgrades (CASH FLOWED)	0	1,530	0	0	0	0	0	0	0	0	2014	2021
Sub - Total Wastewater System	640	2,850	0	0	0	0	0	0	0	0		
<u>Water System</u>												
Greenhill PS HD04B & HD05A Upgrades (W-28) (CASH FLOWED)	220	9,910	10,160	0	0	0	0	0	0	0	2017	2020
Woodward Greenhill Transmission Main Pipeline repair on Summercrest	500	0	0	0	0	0	0	0	0	0	2020	2020
Sub - Total Water System	720	9,910	10,160	0	0	0	0	0	0	0		
Total Public Works Rate Funded	1,910	14,055	17,410	7,575	2,350	0	0	0	0	0		
Total Ward 5	1,910	14,055	17,410	7,575	2,350	0	0	0	0	0		

**CITY OF HAMILTON
 2020 RECOMMENDED PROJECTS &
 2021-2029 FORECAST
 FOR WARD 6**

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>Start</u>	<u>End</u>
<u>Storm Water Management</u>												
SERG - Mount Albion Stormwater Management Facility Rehabilitation	0	0	330	0	0	0	0	0	0	0	2013	2022
<i>Sub - Total Storm Water Management</i>	0	0	330	0	0	0	0	0	0	0		
<i>Total Public Works Rate Funded</i>	0	0	330	0	0	0	0	0	0	0		
<i>Total Ward 6</i>	0	0	330	0	0	0	0	0	0	0		

**CITY OF HAMILTON
2020 RECOMMENDED PROJECTS &
2021-2029 FORECAST
FOR WARD 7**

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>Start</u>	<u>End</u>
<u>Storm Water Management</u>												
Rymal - 150m e/o Massina to 140m easterly	0	70	0	0	0	0	0	0	0	0	2021	2021
Sub - Total Storm Water Management	0	70	0	0	0	0	0	0	0	0		
<u>Wastewater System</u>												
Rymal - 150m e/o Massina to 140m easterly	0	30	0	0	0	0	0	0	0	0	2021	2021
Sub - Total Wastewater System	0	30	0	0	0	0	0	0	0	0		
<u>Water System</u>												
Edwina - Lawson to Berko & Berko - Edwina to Lawfield	0	330	0	0	0	0	0	0	0	0	2021	2021
Dallas - Upper Gage to West End	0	0	0	0	500	0	0	0	0	0	2024	2024
Sub - Total Water System	0	330	0	0	500	0	0	0	0	0		
Total Public Works Rate Funded	0	430	0	0	500	0	0	0	0	0		
Total Ward 7	0	430	0	0	500	0	0	0	0	0		

**CITY OF HAMILTON
2020 RECOMMENDED PROJECTS &
2021-2029 FORECAST
FOR WARD 8**

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>Start</u>	<u>End</u>
<u>Storm Water Management</u>												
SWMP - St. Elizabeth Ponds	200	0	0	0	0	0	0	0	0	0	2014	2020
<i>Sub - Total Storm Water Management</i>	200	0	0	0	0	0	0	0	0	0		
<u>Wastewater System</u>												
Inverness Ave E - Combined Major Trunk Rehabilitation	200	770	0	0	0	0	0	0	0	0	2020	2021
<i>Sub - Total Wastewater System</i>	200	770	0	0	0	0	0	0	0	0		
<u>Water System</u>												
Stone Church/Garth Water (HDR05) Reservoir	0	880	3,125	2,775	0	0	0	0	0	0	2015	2019
Fennell - Upper James to Upper Wellington	0	0	0	590	0	0	0	0	0	0	2023	2023
Upper James - Mohawk to Fennell	0	0	0	0	3,010	0	0	0	0	0	2024	2024
<i>Sub - Total Water System</i>	0	880	3,125	3,365	3,010	0	0	0	0	0		
<i>Total Public Works Rate Funded</i>	400	1,650	3,125	3,365	3,010	0	0	0	0	0		
<i>Total Ward 8</i>	400	1,650	3,125	3,365	3,010	0	0	0	0	0		

**CITY OF HAMILTON
2020 RECOMMENDED PROJECTS &
2021-2029 FORECAST
FOR WARD 9**

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>Start</u>	<u>End</u>
<u>Storm Water Management</u>												
SWMP - SM2 (Red Hill Phase 3/4)	4,120	0	0	0	0	0	0	0	0	0	2020	2020
Rymal - Fletcher to Upper Centennial	1,100	0	0	0	0	0	0	0	0	0	2020	2020
Sub - Total Storm Water Management	5,220	0	0	0	0	0	0	0	0	0		
<u>Wastewater System</u>												
Rymal - Fletcher to Upper Centennial	5,330	0	0	0	0	0	0	0	0	0	2020	2020
Sub - Total Wastewater System	5,330	0	0	0	0	0	0	0	0	0		
<u>Water System</u>												
HD007 Highland Rd Reservoir Upgrades	0	0	990	0	0	0	0	0	0	0	2018	2019
Highland Reservoir HDR07 (W-11) Expansion (CASH FLOWED)	0	0	0	0	1,980	5,220	5,220	0	0	0	2024	2026
Sub - Total Water System	0	0	990	0	1,980	5,220	5,220	0	0	0		
Total Public Works Rate Funded	10,550	0	990	0	1,980	5,220	5,220	0	0	0		
Total Ward 9	10,550	0	990	0	1,980	5,220	5,220	0	0	0		

**CITY OF HAMILTON
 2020 RECOMMENDED PROJECTS &
 2021-2029 FORECAST
 FOR WARD 10**

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>Start</u>	<u>End</u>
<u>Water System</u>												
Pineland/Teal/Community/Garden/South Service	1,680	0	0	0	0	0	0	0	0	0	2019	2020
Sub - Total Water System	1,680	0	0	0	0	0	0	0	0	0		
Total Public Works Rate Funded	1,680	0	0	0	0	0	0	0	0	0		
Total Ward 10	1,680	0	0	0	0	0	0	0	0	0		

**CITY OF HAMILTON
2020 RECOMMENDED PROJECTS &
2021-2029 FORECAST
FOR WARD 11**

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>Start</u>	<u>End</u>
<u>Storm Water Management</u>												
SERG - Winona Area Drainage Improvements	100	440	170	0	0	1,100	0	0	0	0	2018	2025
SWMP - B-10 (Lancaster Subdivision)	9,960	0	0	0	0	0	0	0	0	0	2020	2020
Airport Road Storm Sewer - Homestead to Mountaingate	0	1,360	0	0	0	0	0	0	0	0	2021	2021
Sub - Total Storm Water Management	10,060	1,800	170	0	0	1,100	0	0	0	0		
<u>Wastewater System</u>												
Airport Lands Dickenson Rd Trunk Sewer (WW-27, WW-26, WW-28) (CASH FLOWED)	26,800	20,300	20,300	11,300	0	0	0	0	0	0	2016	2018
AEGD Infrastructure Growth Initiative (English Church Road Area)	4,000	0	0	0	0	0	0	0	0	0	2019	2019
Sub - Total Wastewater System	30,800	20,300	20,300	11,300	0	0	0	0	0	0		
<u>Water System</u>												
PD7 (Upper Stoney Creek/Glanbrook) Elevated Reservoir (W-23)	610	5,500	5,500	0	0	0	0	0	0	0	2014	2020
Airport Lands External Water Servicing (Feedermain) (W-27)	1,080	7,170	0	0	1,310	9,030	0	0	0	0	2020	2025
PS HD019 (Binbrook) Capacity Upgrade (W-20)	0	1,810	0	0	0	0	0	0	0	0	2019	2020
Binbrook Feedermain via Fletcher (W-30)	0	3,870	2,530	0	0	0	0	0	0	0	2019	2020
RHBP - Twenty Rd Extension - Glover to Trinity Church	0	565	0	0	0	0	0	0	0	0	2021	2021
Binbrook - Royal Winter/Binhaven to Fletcher	0	630	0	0	0	0	0	0	0	0	2021	2021
RHBP - Nebo - 900m s/o Twenty to Dickenson	0	0	0	0	0	400	0	0	0	0	2025	2025
RHBP - Dickenson - Nebo to 800m e/o Nebo	0	0	0	0	0	0	0	900	0	0	2027	2027
Sub - Total Water System	1,690	19,545	8,030	0	1,310	9,430	0	900	0	0		
Total Public Works Rate Funded	42,550	41,645	28,500	11,300	1,310	10,530	0	900	0	0		
Total Ward 11	42,550	41,645	28,500	11,300	1,310	10,530	0	900	0	0		

**CITY OF HAMILTON
2020 RECOMMENDED PROJECTS &
2021-2029 FORECAST
FOR WARD 12**

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>Start</u>	<u>End</u>
<u>Wastewater System</u>												
Ancaster Wastewater Outstations Upgrades	110	0	0	0	0	0	0	0	0	0	2012	2020
Ancaster Sewage Works Pipeline CIPP Rehab - CASH FLOW	500	0	0	0	0	0	0	0	0	0	2019	2020
Hillside SPS (DC006) Upgrades	280	1,100	0	0	0	0	0	0	0	0	2020	2021
Sub - Total Wastewater System	890	1,100	0	0	0	0	0	0	0	0		
<u>Water System</u>												
Glancaster Rd & Hwy 53 Pumping Station (HD018) Upgrades (CASH FLOWED)	660	5,900	2,200	0	0	0	0	0	0	0	2016	2022
Lee Smith Reservoir (HDR00) Upgrades	280	830	0	0	0	0	0	0	0	0	2020	2021
Garner Road Trunk Watermain - Southcote to Wilson (W-09)	3,390	13,550	0	0	0	0	0	0	0	0	2020	2021
PD18 (Ancaster) Elevated Reservoir (W-14) (CASH FLOWED)	0	6,080	6,080	0	0	0	0	0	0	0	2013	2020
Southcote - Garner to Highway 403 Bridge	0	160	2,350	0	0	0	0	0	0	0	2021	2022
Shaver - Kastura to Westview	0	225	700	0	0	0	0	0	0	0	2021	2022
Sub - Total Water System	4,330	26,745	11,330	0	0	0	0	0	0	0		
Total Public Works Rate Funded	5,220	27,845	11,330	0	0	0	0	0	0	0		
Total Ward 12	5,220	27,845	11,330	0	0	0	0	0	0	0		

**CITY OF HAMILTON
2020 RECOMMENDED PROJECTS &
2021-2029 FORECAST
FOR WARD 13**

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>Start</u>	<u>End</u>
<u>Storm Water Management</u>												
South St E and East St S in Dundas Drainage Improvement - SERG	110	0	0	220	0	0	0	0	0	0	2018	2023
Osler Dr Outfall @ Grant Blvd	100	380	0	0	0	0	0	0	0	0	2020	2021
Highway 8 - Hillcrest to Park - Road Restoration	660	0	0	0	0	0	0	0	0	0	2020	2020
Highway 8 - Hillcrest to Park	300	0	0	0	0	0	0	0	0	0	2020	2020
Sub - Total Storm Water Management	1,170	380	0	220	0	0	0	0	0	0		
<u>Wastewater System</u>												
Dundas Wastewater Outstations Upgrades	600	2,290	0	0	0	0	0	0	0	0	2012	2020
Dundas WWTP Improvements (CASH FLOWED)	0	1,650	1,650	9,250	7,650	7,250	0	0	0	0	2012	2021
Sub - Total Wastewater System	600	3,940	1,650	9,250	7,650	7,250	0	0	0	0		
<u>Water System</u>												
PS HD12A (Governors @ Huntingwood) Rebuild with Capacity Upgrade & Standby Power Installation (W-04)	550	2,920	0	0	0	0	0	0	0	0	2015	2019
PS HD016 (York and Valley) Capacity Upgrade, Standby Power & Building Expansion (W-26) (CASH FLOWED)	780	4,560	0	0	0	0	0	0	0	0	2016	2019
WM Structural Lining - Dundas Valley Watermain	0	0	1,350	0	0	0	0	0	0	0	2022	2022
Glenmorris Drive / Underhill Avenue (York Heights Neighbourhood)	0	0	330	0	0	0	0	0	0	0	2020	2022
Hatt & Bond - King to Market	0	0	0	560	0	0	0	0	0	0	2023	2023
Cairns / East St N / Sleepy Hollow / Spencer / Wilmar (Hunter Neighbourhood)	0	0	0	0	1,090	0	0	0	0	0	2024	2024
Hatt - Market to east end & York / Kerr	0	0	0	0	700	0	0	0	0	0	2024	2024
Sub - Total Water System	1,330	7,480	1,680	560	1,790	0	0	0	0	0		
Total Public Works Rate Funded	3,100	11,800	3,330	10,030	9,440	7,250	0	0	0	0		
Total Ward 13	3,100	11,800	3,330	10,030	9,440	7,250	0	0	0	0		

**CITY OF HAMILTON
 2020 RECOMMENDED PROJECTS &
 2021-2029 FORECAST
 FOR WARD 14**

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>Start</u>	<u>End</u>
<u>Water System</u>												
New Greensville Communal Well	150	5,250	0	0	0	0	0	0	0	0	2017	2021
<i>Sub - Total Water System</i>	150	5,250	0	0	0	0	0	0	0	0		
<i>Total Public Works Rate Funded</i>	150	5,250	0	0	0	0	0	0	0	0		
<i>Total Ward 14</i>	150	5,250	0	0	0	0	0	0	0	0		

**CITY OF HAMILTON
2020 RECOMMENDED PROJECTS &
2021-2029 FORECAST
FOR WARD 15**

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>Start</u>	<u>End</u>
<u>Storm Water Management</u>												
Evans Road Culvert Twinning	540	0	0	0	0	0	0	0	0	0	2019	2020
Highway 97 - Culvert Improvement Project	180	580	0	0	0	0	0	0	0	0	2020	2021
Cedar / Fern / Braeheid	100	0	0	0	0	0	0	0	0	0	2020	2020
Watercourse and Drainage Channel Maintenance	810	90	580	460	460	860	460	460	860	310	2020	Ongoing
SWMP - W19 (Parkside Hills Phase 2)	3,740	0	0	0	0	0	0	0	0	0	2020	2020
Sub - Total Storm Water Management	5,370	670	580	460	460	860	460	460	860	310		
<u>Wastewater System</u>												
First Street (Waterdown Sanitary) PS Upgrade DC014	1,050	0	0	0	0	0	0	0	0	0	2017	2019
FC001 Elgin Street Sewage Pumping Station	550	1,700	0	0	0	0	0	0	0	0	2020	2021
Grindstone Creek Utility Bridge	0	0	0	0	3,500	0	0	0	0	0	2024	2024
Sub - Total Wastewater System	1,600	1,700	0	0	3,500	0	0	0	0	0		
<u>Water System</u>												
Dundas - 575m w/o Evans to 210 w/o Evans	410	0	0	0	0	0	0	0	0	0	2020	2020
Carlisle Water Supply System - Additional Water Storage (CASH FLOWED)	0	440	6,600	0	0	0	0	0	0	0	2018	2022
Bridge 451 - Hwy 5 E, 120m e/o Mill St S	0	0	0	0	140	0	0	0	0	0	2024	2024
Sub - Total Water System	410	440	6,600	0	140	0	0	0	0	0		
Total Public Works Rate Funded	7,380	2,810	7,180	460	4,100	860	460	460	860	310		
Total Ward 15	7,380	2,810	7,180	460	4,100	860	460	460	860	310		

**CITY OF HAMILTON
2020 RECOMMENDED PROJECTS &
2021-2029 FORECAST
MULTI-WARD**

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>Start</u>	<u>End</u>
<u>Storm Water Management</u>												
Municipal Drain Program	610	700	100	100	100	100	100	100	100	100	2020	Ongoing
Highway 8 - Woodleys Lane to Hillcrest - Road Restoration	920	0	0	0	0	0	0	0	0	0	2020	2020
Highway 8 - Woodleys Lane to Hillcrest	1,590	0	0	0	0	0	0	0	0	0	2020	2020
SWMP Retrofits	0	0	0	220	0	0	0	0	0	0	2015	2023
RHBP - Nebo - Rymal to Twenty	0	2,000	0	0	0	0	0	0	0	0	2020	2021
Burlington & Industrial - Ottawa to Kenilworth	0	0	0	0	0	0	0	675	0	0	2027	2027
Sub - Total Storm Water Management	3,120	2,700	100	320	100	100	100	775	100	100		
<u>Wastewater System</u>												
FC001, DC009 & HC011 Wastewater Pumping Stations Upgrades	1,500	0	0	0	0	0	0	0	0	0	2016	2020
Fennell/Greenhill Drop Shaft	500	350	0	0	0	0	0	11,710	3,290	0	2019	2026
Satellite City Trunk Sewer Rehabilitation	8,750	0	0	0	0	0	0	0	0	0	2020	2020
Minor Upgrades to SPS Outstations	170	990	0	0	0	0	0	0	0	0	2020	2021
Lawfield / Berrisfield Neighbourhoods	0	170	0	0	0	0	0	0	0	0	2016	2021
Battlefield Trunk Sewer Twinning (WW-33) (CASH FLOWED)	0	10,500	0	0	0	0	0	0	0	0	2016	2021
RHBP - Nebo - Rymal to Twenty	0	750	0	0	0	0	0	0	0	0	2020	2021
Fennell Combined Trunk Sewer Trenchless Rehabilitation - West 5th to Mountain Brow	0	0	2,000	0	0	0	0	0	0	0	2022	2022
Sub - Total Wastewater System	10,920	12,760	2,000	0	0	0	0	11,710	3,290	0		
<u>Water System</u>												
Barton - Locke to Caroline & Locke - York to Barton	1,000	0	0	0	0	0	0	0	0	0	2018	2020
PD16 (Waterdown) Trunk Feedermain - PS HD016 to Hwy 5 at Algonquin (W-25) (CASH FLOWED)	0	0	8,370	0	0	0	0	0	0	0	2017	2019
Upper Wellington - Bryna to Mohawk	0	0	0	0	0	1,045	0	0	0	0	2025	2025
HD07A Feedermain (W-22)	0	0	0	0	0	1,160	7,700	0	0	0	2025	2026
Osler - South St to West Park	0	0	0	0	0	0	90	0	810	0	2026	2028
Sub - Total Water System	1,000	0	8,370	0	0	2,205	7,790	0	810	0		
Total Public Works Rate Funded	15,040	15,460	10,470	320	100	2,305	7,890	12,485	4,200	100		
Total Multi-Ward Projects	15,040	15,460	10,470	320	100	2,305	7,890	12,485	4,200	100		

**CITY OF HAMILTON
2020 RECOMMENDED PROJECTS &
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	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>Start</u>	<u>End</u>
<u>Storm Water Management</u>												
State of the Infrastructure - Asset Management	100	90	90	90	90	90	90	90	90	90	2020	Ongoing
O.Reg. 588/17 Compliance - Asset Management Plan Development	50	50	50	50	0	0	0	0	0	0	2020	2023
Consultation and Accommodation	30	30	30	30	30	30	30	30	30	30	2020	Ongoing
City Wide GRIDS II Stormwater Master Plan	300	0	0	0	0	0	0	0	60	0	2015	2020
Pumping Stations	600	0	100	0	0	0	50	0	0	0	2017	2026
Engineering Services Staffing Costs - Storm	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	2020	Ongoing
Right of Way Drainage Program	1,400	1,410	1,420	1,430	1,440	1,450	1,460	1,470	1,480	1,490	2020	Ongoing
Catch Basin Replacement/Rehabilitation Program	500	500	500	500	500	500	500	500	500	500	2020	Ongoing
Concrete Box Culvert Rehab/Repair - T.O.M.	250	250	250	250	250	250	250	250	250	250	2020	Ongoing
Concrete Box Culvert Rehab/Repair - Engineering Services	250	250	250	250	250	250	250	250	250	250	2020	Ongoing
QA-QC Service Contract Program	140	140	140	140	140	140	140	140	140	140	2020	Ongoing
Stormwater System Planning Program	380	380	380	380	380	380	380	380	380	380	2020	Ongoing
Mapping Update Program	40	40	0	40	0	40	0	40	0	40	2020	Ongoing
Stormwater Drainage Analysis and Conceptual Design for Road Corridor Upgrades	760	0	0	0	0	0	0	0	0	0	2020	2020
Stormwater Computer Model	1,080	0	1,080	1,080	0	280	280	280	280	0	2020	Ongoing
Trenchless Manhole Rehabilitation	70	70	70	70	70	70	70	70	70	70	2020	Ongoing
SWM Facility Maintenance Program	1,700	1,500	1,500	1,200	1,200	1,200	1,200	1,200	1,200	1,200	2020	Ongoing
Unscheduled Manhole and Sewermain Replacement Program	50	50	50	50	50	50	50	50	50	50	2020	Ongoing
Field Data Systems Program	110	110	110	110	110	110	110	110	110	110	2020	Ongoing
Shoreline Protection Program	400	750	170	400	750	170	400	750	170	400	2020	Ongoing
Storm Water Management Program	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	2020	Ongoing
Flooding & Drainage Master Plan Capital Improvements	880	880	0	0	0	0	0	0	0	0	2020	2023
SERG - Watershed Project Coordination and Stewardship Action Plans	0	0	0	0	500	500	250	250	250	250	2023	2029
Stormwater Management Program	0	0	0	0	0	0	5,000	5,000	5,000	5,000	2026	2029
Flooding & Drainage Master Plan Capital Forecast	0	0	0	0	0	0	0	22,500	22,500	22,500	2026	2029
Contaminated Soil & Rock Disposal Program	0	220	0	0	220	0	0	220	0	0	2020	Ongoing
SERG - Watercourse Erosion Assessment	0	770	130	0	0	1,100	0	0	0	0	2019	2024
Contingency for Unscheduled Works Program	0	180	0	180	0	180	0	180	0	180	2020	Ongoing
Sub - Total Storm Water Management	14,190	12,770	11,420	11,350	11,080	11,890	15,610	38,860	37,910	38,030		
<u>Wastewater System</u>												
State of the Infrastructure - Asset Management	100	90	90	90	90	90	90	90	90	90	2020	Ongoing
O.Reg. 588/17 Compliance - Asset Management Plan Development	75	75	75	75	0	0	0	0	0	0	2020	2023
Consultation and Accommodation	30	30	30	30	30	30	30	30	30	30	2020	Ongoing
Woodward WWTP - Clean Harbour (CASH FLOWED)	100,631	69,363	25,186	0	0	0	0	0	0	0	2008	2022
Woodward WWTP - Biosolids Management Facility	28,030	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2009	2051
Randle Reef Sediment Remediation (CASH FLOWED)	550	500	0	0	0	0	0	0	0	0	2014	2021

**CITY OF HAMILTON
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	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>Start</u>	<u>End</u>
<u>Wastewater System</u>												
City-Wide Wastewater Master Plan	300	0	0	0	0	0	0	0	60	0	2015	2021
New Haulage Receiving Station	550	4,250	4,250	0	0	0	0	0	0	0	2016	2022
Woodward WWTP - Expansion (CASH FLOWED)	1,750	1,750	2,500	2,500	3,150	3,150	94,358	92,858	92,858	0	2019	2028
Woodward WWTP - Digester #5 (CASH FLOWED)	2,500	2,500	0	0	0	0	0	0	0	0	2018	2021
Engineering Services Staffing Costs - Wastewater	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	2020	Ongoing
Road Restoration Program	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	2020	Ongoing
QA-QC Service Contract Program	140	140	140	140	140	140	140	140	140	140	2020	Ongoing
Wastewater Systems Planning Program	380	380	380	440	440	440	440	440	440	440	2020	Ongoing
Engineering Consultant Sewermain Projects	300	300	300	300	300	300	300	300	300	300	2020	Ongoing
Municipal Class EA Studies	400	0	0	0	0	0	0	0	0	0	2020	2020
Mapping Update Program	40	40	40	40	40	40	40	40	40	40	2020	Ongoing
Sewer Outfall Monitoring Study	150	0	0	0	0	0	0	0	0	0	2020	2020
Woodward WWTP Facility Plan	350	0	0	0	0	0	0	0	0	0	2020	2020
Forcemain Condition Assessment Program	270	270	270	270	270	270	270	270	270	270	2020	Ongoing
Inflow & Infiltration Studies and Flow Monitoring Program	500	500	500	300	300	300	170	170	170	100	2020	Ongoing
Wastewater Computer Model Update & Maintenance	660	660	280	280	280	280	280	280	280	280	2020	Ongoing
Emergency Repairs - Cross Connections Program	700	700	500	400	400	400	350	0	0	0	2020	Ongoing
Wastewater System Lining Program	4,050	4,050	4,050	4,050	4,050	4,050	4,050	4,050	4,050	4,050	2020	Ongoing
Sewer Lateral Management Program (WWC)	4,250	4,250	4,000	3,500	3,500	3,500	3,500	3,500	3,500	3,500	2020	Ongoing
Trenchless Manhole Rehabilitation	70	70	70	70	70	70	70	70	70	70	2020	Ongoing
Pre-Construction Mainline Condition Assessment	500	500	500	500	500	500	500	500	500	500	2020	Ongoing
Mainline Sewer Condition Assessment Program	1,640	1,140	1,140	1,140	1,140	1,140	1,140	1,140	1,140	1,140	2020	Ongoing
Sewer Lateral Condition Assessment Program	540	540	540	540	540	540	540	540	540	540	2020	Ongoing
Mainline Sewer Condition Assessment for Compliance & Regulations	100	100	100	100	100	100	100	100	100	100	2020	Ongoing
PW Capital Water Consumption Program	180	180	180	180	180	180	100	100	100	100	2020	Ongoing
Open Cut Repairs for CIPP Program	500	500	500	500	500	500	500	500	500	500	2020	Ongoing
Sewer Lateral Replace/Rehab Program	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	2020	Ongoing
Unscheduled Manhole and Sewermain Replacement Program	500	400	400	400	350	350	350	350	350	350	2020	Ongoing
Field Data Systems Program	110	110	110	110	110	110	110	110	110	110	2020	Ongoing
CSO Characterization Program	450	0	0	0	0	450	0	0	0	0	2020	2020
Woodward WWTP - Digester #3 (CASH FLOWED)	250	2,500	2,500	0	0	0	0	0	0	0	2020	2022
Dundas WWTP - Health & Safety Immediate Needs	4,900	0	0	0	0	0	0	0	0	0	2020	2020
Main & King CSO Rehabilitation	350	0	0	0	0	0	0	0	0	0	2020	2020
Wastewater Outstation Inspections - Asset Management Program	520	520	520	520	520	520	520	520	220	220	2020	Ongoing
City Environmental Lab Improvements Program	150	200	340	190	90	50	50	50	50	50	2020	Ongoing
Sewer Lateral Replacement for Co-ordinated Projects	270	270	270	270	270	270	450	450	450	450	2020	Ongoing
Contingency for Unscheduled Works Program	180	0	180	0	180	0	180	0	180	0	2020	Ongoing
Flooding & Drainage Master Plan Capital Improvements	880	880	0	0	0	0	0	0	0	0	2020	2023
Pilot solar power installation at a Class B Hamilton Water facility	0	0	150	600	0	0	0	0	0	0	2022	2023

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	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>Start</u>	<u>End</u>
Wastewater System												
Woodward WWTP North Plant Rehabilitation (CASH FLOWED)	0	0	0	0	0	0	18,000	16,000	16,000	0	2024	2028
Flooding & Drainage Master Plan Capital Forecast	0	0	0	0	0	0	0	7,500	7,500	7,500	2026	2029
Contaminated Soil & Rock Disposal Program	0	220	0	0	220	0	0	220	0	0	2020	Ongoing
Wastewater infrastructure Analysis - Growth and Economic Opportunities	0	350	0	0	0	0	0	0	0	0	2018	2020
SCADA servers and network	0	250	250	500	2,500	2,500	0	0	0	0	2019	2019
Wastewater Maintenance Capital Program	0	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2020	Ongoing
Unspecified WW Works	0	0	0	0	0	0	0	0	9,800	26,000	2020	2024
Intensification Infrastructure Upgrades Program - Wastewater	0	400	0	400	0	400	0	400	0	400	2020	Ongoing
Woodward WWTP - Secondary Digester	0	0	500	4,000	0	0	0	0	0	0	2022	2023
Woodward WWTP - Primary Clarifiers (Galleries 1-8)	0	0	0	1,100	930	12,955	12,955	0	0	0	2018	2023
Wastewater Outstation Upgrades - Asset Management Program	0	0	0	4,000	4,000	4,000	4,000	4,000	4,000	4,000	2023	Ongoing
Sub - Total Wastewater System	168,896	113,848	65,711	42,405	40,060	52,495	158,453	149,588	158,708	66,140		
Water System												
PW Asset Management (PW-AM) System Implementation	1,000	670	670	670	0	0	0	0	0	0	2019	2023
State of the Infrastructure - Asset Management	100	90	90	90	90	90	90	90	90	90	2020	Ongoing
O.Reg. 588/17 Compliance - Asset Management Plan Development	75	75	75	75	0	0	0	0	0	0	2020	2023
Consultation and Accommodation	30	30	30	30	30	30	30	30	30	30	2020	Ongoing
City-Wide Water Master Plan	300	0	0	0	0	0	0	0	60	0	2015	2020
Beach Trunkmain Rehab	1,200	0	0	0	0	0	0	0	0	0	2017	2020
Fleet Additions	1,630	290	700	410	0	0	0	0	0	0	2018	2019
Woodward WTP - Biological Filtration Pilot Study	250	0	0	0	0	0	0	0	0	0	2019	2020
Engineering Services Staffing Costs - Water	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	2020	Ongoing
Road Restoration Program	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	2020	Ongoing
QA-QC Service Contract Program	140	140	140	140	140	140	140	140	140	140	2020	Ongoing
Water Systems Planning Program	300	300	300	300	300	300	300	300	300	300	2020	Ongoing
Engineering Consultant Watermain Projects	300	300	300	300	300	300	300	300	300	300	2020	Ongoing
Prestressed Concrete Cylinder Pipe Condition Assessment Inspection Program	400	0	0	0	0	0	0	0	0	0	2020	2020
Mapping Update Program	40	40	40	40	40	40	40	40	40	40	2018	Ongoing
Water Efficiency Plan/Program	110	113	115	117	120	122	124	129	132	136	2020	Ongoing
Water - Computer Model	280	280	280	280	280	280	280	280	280	0	2020	Ongoing
Critical Watermain Inspection Program	660	300	300	300	300	300	300	300	300	300	2020	Ongoing
Watermain Structural Lining	5,400	5,400	4,050	5,400	5,400	5,400	5,400	5,400	5,400	5,400	2020	Ongoing
Valve Replacement Program	3,700	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	2020	Ongoing
Metallic Watermain Condition Assessment Program	630	630	630	630	630	630	630	630	630	630	2020	Ongoing
PW Capital Water Consumption Program	180	180	180	180	180	180	180	180	180	180	2020	Ongoing
Unscheduled Valve, Hydrant, Watermain & Misc Water Replace Program	3,000	2,750	2,500	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2020	Ongoing

**CITY OF HAMILTON
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	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>Start</u>	<u>End</u>
Water System												
Water Meter - Installation/Replacement/Repair - General Maintenance	2,920	3,610	3,680	3,750	3,160	3,220	3,280	3,340	3,410	3,480	2020	Ongoing
Field Data Systems Program	110	110	110	110	110	110	110	110	110	110	2020	Ongoing
Substandard Water Service Replacement Program	2,750	2,750	2,500	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2020	Ongoing
WTP Pre-Treatment Isolation Valves	280	1,200	0	0	0	0	0	0	0	0	2020	2021
WTP Chlorine Chemical Building	2,250	6,530	6,530	0	0	0	0	0	0	0	2020	2022
Water Outstation Inspections - Asset Management	660	660	660	660	660	660	660	660	550	550	2020	Ongoing
City Environmental Lab Improvements Program	150	1,000	340	190	90	50	50	50	50	50	2020	Ongoing
P.S. HD07A - New District 7 (Elfrida area) Pumping Station (W-21)	170	0	0	0	0	0	3,050	17,000	0	0	2025	2027
Contaminated Soil & Rock Disposal Program	0	220	0	0	220	0	0	220	0	0	2020	Ongoing
Water infrastructure Analysis - Growth and Economic Opportunities	0	350	0	0	0	0	0	0	0	0	2018	2020
Pressure Districts and Drinking Water System Optimization	0	110	110	110	0	0	0	0	0	0	2019	2022
SCADA servers and network	0	250	250	500	2,500	2,500	0	0	0	0	2019	2020
Alterations to the Drinking Water System	0	150	150	150	150	150	150	150	150	0	2020	Ongoing
Stand-Alone Watermain Replacement	0	0	0	0	0	0	0	0	0	1,500	2023	Ongoing
Water Maintenance Capital Program	0	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2020	Ongoing
Coordinated Road and Subsurface Works	0	3,440	2,000	1,650	8,190	4,180	3,000	3,000	3,000	3,000	2020	Ongoing
Contingency for Unscheduled Works Program	0	180	0	180	0	180	0	180	0	180	2020	Ongoing
Watermain Replacement Coordinated with Roads	0	0	2,000	6,000	0	8,500	8,700	7,000	9,200	10,000	2020	Ongoing
Unspecified Water Works	0	0	0	0	0	0	0	0	32,000	48,000	2020	2024
Intensification Infrastructure Upgrades Program - Water	0	400	0	400	0	400	0	400	0	400	2020	Ongoing
Water Outstation Upgrades - Asset Management Program	0	0	0	15,000	15,000	15,000	15,000	15,000	15,000	15,000	2023	Ongoing
Sub - Total Water System	39,115	45,848	42,030	54,962	55,190	60,062	59,114	72,229	88,652	107,116		
Total Public Works Rate Funded	222,201	172,466	119,161	108,717	106,330	124,447	233,177	260,677	285,270	211,286		
Total City-Wide Projects	222,201	172,466	119,161	108,717	106,330	124,447	233,177	260,677	285,270	211,286		
Grand Total	329,981	303,381	228,236	157,946	168,240	208,032	293,637	302,672	290,930	213,571		

Water Services

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2020 Funding By Source

City of Hamilton
Water System
2020 Capital Budget Project List
(000's)

City Ward	Project Number	Project Description	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
												From Operating	Debt
Annual Projects													
City Wide	4032058001	Consultation and Accommodation	30	-	-	-	-	-	-	-	30	30	-
City Wide	5142001099	Engineering Services Staffing Costs - Water	4,700	-	-	-	-	-	-	-	4,700	4,700	-
City Wide	5142060711	PW Capital Water Consumption Program	180	-	-	-	-	-	-	-	180	180	-
<i>Sub-Total Annual Projects</i>			4,910	-	-	-	-	-	-	-	4,910	4,910	-
Building - New Construction													
City Wide	5142066350	WTP Chlorine Chemical Building	2,250	-	-	-	-	-	-	-	2,250	2,250	-
<i>Sub-Total Building - New Construction</i>			2,250	-	-	-	-	-	-	-	2,250	2,250	-
Coordinated - Replacement Projects													
1	5142070006	Hillcrest - Chedoke to end - Road Restoration	60	-	-	-	-	-	-	-	60	60	-
4	5142070018	Roxborough - Kenilworth to Strathearne (Homeside Neighbourhood) - Road Restoration	700	-	-	-	-	-	-	-	700	700	-
1	5142071306	Hillcrest - Chedoke to end	120	-	-	-	-	-	-	-	120	120	-
4	5142071315	Delena / Beland / Dunsmore	150	-	-	-	-	-	-	-	150	150	-
4	5142071318	Roxborough - Kenilworth to Strathearne (Homeside Neighbourhood)	770	-	-	-	-	-	-	-	770	770	-
<i>Sub-Total Coordinated - Replacement Projects</i>			1,800	-	-	-	-	-	-	-	1,800	1,800	-
Coordinated - Upgrade Projects													
3	5141971313	Sherman - King to south end	1,130	1,000	-	-	-	-	-	-	130	130	-
3	5141971314	Wentworth - Wilson to King	370	330	-	-	-	-	-	-	40	40	-
4	5141971315	Main - Delena to Normanhurst & Normanhurst - Main to Queenston	4,800	4,800	-	-	-	-	-	-	-	-	-
4	5142070015	Main - Delena to Normanhurst & Normanhurst - Main to Queenston	300	-	-	-	-	-	-	-	300	300	-
<i>Sub-Total Coordinated - Upgrade Projects</i>			6,600	6,130	-	-	-	-	-	-	470	470	-
Demolition													
2	5142067420	St. Joseph's Tank Pulsation Dampener (HD002STK)	60	-	-	-	-	-	-	-	60	60	-
<i>Sub-Total Demolition</i>			60	-	-	-	-	-	-	-	60	60	-
Development Projects													
15	5142080080	Dundas - 575m w/o Evans to 210 w/o Evans	410	-	-	410	-	-	-	-	-	-	-
<i>Sub-Total Development Projects</i>			410	-	-	410	-	-	-	-	-	-	-
Master Plan													
City Wide	5141555264	City-Wide Water Master Plan	300	-	-	270	-	-	-	-	30	30	-

City of Hamilton
Water System
2020 Capital Budget Project List
(000's)

City Ward	Project Number	Project Description	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
												From Operating	Debt
City Wide	5142055010	Water Systems Planning Program	300	-	-	-	-	-	-	-	300	300	-
		<i>Sub-Total Master Plan</i>	600	-	-	270	-	-	-	-	330	330	-
Master Plan - Horizontal Assets													
11	5142096250	Airport Lands External Water Servicing (Feedermain) (W-27)	1,080	-	223	857	-	-	-	-	-	-	-
12	5142096520	Garner Road Trunk Watermain - Southcote to Wilson (W-09)	3,390	-	-	3,390	-	-	-	-	-	-	-
1	5142096850	Locke St Trunk Watermain - Main to Barton (W-19)	2,200	-	-	2,200	-	-	-	-	-	-	-
		<i>Sub-Total Master Plan - Horizontal Assets</i>	6,670	-	223	6,447	-	-	-	-	-	-	-
Master Plan - Vertical Assets													
11	5141495551	PD7 (Upper Stoney Creek/Glanbrook) Elevated Reservoir (W-23)	610	-	-	610	-	-	-	-	-	-	-
13	5141595553	PS HD12A (Governors @ Huntingwood) Rebuild with Capacity Upgrade & Standby Power Installation (W-04)	550	-	-	413	-	-	-	-	137	137	-
13	5141695883	PS HD016 (York and Valley) Capacity Upgrade, Standby Power & Building Expansion (W-26) (CASH FLOWED)	780	-	-	701	-	-	-	-	79	79	-
5	5141795850	Greenhill PS HD04B & HD05A Upgrades (W-28) (CASH FLOWED)	220	-	-	165	-	-	-	-	55	55	-
City Wide	5142695552	P.S. HD07A - New District 7 (Elfrida area) Pumping Station (W-21)	170	-	-	170	-	-	-	-	-	-	-
		<i>Sub-Total Master Plan - Vertical Assets</i>	2,330	-	-	2,059	-	-	-	-	271	271	-
Outstations-Sustainable Asset Mgt (SAM)													
12	5141667421	Glancaster Rd & Hwy 53 Pumping Station (HD018) Upgrades (CASH FLOWED)	660	-	-	-	-	-	-	-	660	660	-
14	5141767650	New Greensville Communal Well	150	-	-	-	-	-	-	-	150	150	-
12	5142067450	Lee Smith Reservoir (HDR00) Upgrades	280	-	-	-	-	-	-	-	280	280	-
City Wide	5142067752	Water Outstation Inspections - Asset Management	660	-	-	-	-	-	-	-	660	660	-
		<i>Sub-Total Outstations-Sustainable Asset Mgt (SAM)</i>	1,750	-	-	-	-	-	-	-	1,750	1,750	-
Plant - Sustainable Asset Mgt (SAM)													
4	5141166110	Water Treatment Plant - Process Upgrades (CASH FLOWED)	4,950	-	-	-	-	-	-	-	4,950	4,950	-
4	5141567575	High Lift Pumping Station (HLPS) Improvements - Phase 2 (CASH FLOWED)	550	-	-	-	-	-	-	-	550	550	-
City Wide	5142066310	WTP Pre-Treatment Isolation Valves	280	-	-	-	-	-	-	-	280	280	-
		<i>Sub-Total Plant - Sustainable Asset Mgt (SAM)</i>	5,780	-	-	-	-	-	-	-	5,780	5,780	-
Plant - Water Quality Initiatives (WQI)													
City Wide	5142069075	City Environmental Lab Improvements Program	150	-	-	-	-	-	-	-	150	150	-
		<i>Sub-Total Plant - Water Quality Initiatives (WQI)</i>	150	-	-	-	-	-	-	-	150	150	-

City of Hamilton
Water System
2020 Capital Budget Project List
(000's)

City Ward	Project Number	Project Description	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
												From Operating	Debt
Rehabilitation Project													
City Wide	5141761777	Beach Trunkmain Rehab	1,200	-	-	-	-	-	-	-	1,200	1,200	-
City Wide	5142057626	Critical Watermain Inspection Program	660	-	-	-	-	-	160	-	500	500	-
City Wide	5142060750	Unscheduled Valve, Hydrant, Watermain & Misc Water Replace Program	3,000	-	-	-	-	-	-	-	3,000	3,000	-
3	5142061305	Burlington Trunkmain Repairs	910	-	-	-	-	-	460	-	450	450	-
City Wide	5142061502	Water Meter - Installation/Replacement/Repair - General Maintenance	2,920	-	-	-	640	-	-	-	2,280	2,280	-
<i>Sub-Total Rehabilitation Project</i>			8,690	-	-	-	640	-	620	-	7,430	7,430	-
Replacement Project													
10	5141961341	Pineland/Teal/Community/Garden/South Service	1,680	-	-	-	-	-	-	-	1,680	1,680	-
City Wide	5142060080	Valve Replacement Program	3,700	-	-	-	-	-	300	-	3,400	3,400	-
1, 2	5142061302	Barton - Locke to Caroline & Locke - York to Barton	1,000	-	-	-	-	-	-	-	1,000	1,000	-
5	5142061310	Woodward Greenhill Transmission Main Pipeline repair on Summercrest	500	-	-	-	-	-	-	-	500	500	-
<i>Sub-Total Replacement Project</i>			6,880	-	-	-	-	-	300	-	6,580	6,580	-
Restorations													
City Wide	5142011101	Road Restoration Program	5,400	-	-	-	-	-	-	-	5,400	5,400	-
<i>Sub-Total Restorations</i>			5,400	-	-	-	-	-	-	-	5,400	5,400	-
Technical Services Projects													
City Wide	4031957944	PW Asset Management (PW-AM) System Implementation	1,000	-	-	-	-	-	-	-	1,000	1,000	-
City Wide	4032055522	State of the Infrastructure - Asset Management	100	-	-	-	-	-	100	-	-	-	-
City Wide	4032055588	O.Reg. 588/17 Compliance - Asset Management Plan Development	75	-	-	-	-	-	-	-	75	75	-
City Wide	5142049555	QA-QC Service Contract Program	140	-	-	-	-	-	-	-	140	140	-
City Wide	5142055022	Engineering Consultant Watermain Projects	300	-	-	-	-	-	-	-	300	300	-
City Wide	5142055425	Prestressed Concrete Cylinder Pipe Condition Assessment Inspection Program	400	-	-	-	-	-	-	-	400	400	-
City Wide	5142055556	Mapping Update Program	40	-	-	-	-	-	-	-	40	40	-
City Wide	5142055851	Water Efficiency Plan/Program	110	-	-	-	-	-	-	-	110	110	-
City Wide	5142057545	Water - Computer Model	280	-	-	-	-	-	-	-	280	280	-
City Wide	5142060577	Metallic Watermain Condition Assessment Program	630	-	-	-	-	-	-	-	630	630	-
<i>Sub-Total Technical Services Projects</i>			3,075	-	-	-	-	-	100	-	2,975	2,975	-
Upgrade Projects													
City Wide	5142062073	Field Data Systems Program	110	-	-	-	-	-	-	-	110	110	-
City Wide	5142062078	Substandard Water Service Replacement Program	2,750	-	-	-	-	-	-	-	2,750	2,750	-

City of Hamilton
Water System
2020 Capital Budget Project List
(000's)

City Ward	Project Number	Project Description	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
												From Operating	Debt
		<i>Sub-Total Upgrade Projects</i>	2,860	-	-	-	-	-	-	-	2,860	2,860	-
<i>Vehicles-New</i>													
City Wide	5141851810	Fleet Additions	1,630	-	-	-	-	-	-	-	1,630	1,630	-
		<i>Sub-Total Vehicles-New</i>	1,630	-	-	-	-	-	-	-	1,630	1,630	-
<i>Water Quality Initiatives (WQI)</i>													
City Wide	5141966911	Woodward WTP - Biological Filtration Pilot Study	250	-	-	-	-	-	-	-	250	250	-
		<i>Sub-Total Water Quality Initiatives (WQI)</i>	250	-	-	-	-	-	-	-	250	250	-
<i>Watermain Lining</i>													
City Wide	5142060072	Watermain Structural Lining	5,400	-	-	-	-	-	-	-	5,400	5,400	-
		<i>Sub-Total Watermain Lining</i>	5,400	-	-	-	-	-	-	-	5,400	5,400	-
Total All Projects			67,495	6,130	223	9,186	640	-	1,020	-	50,296	50,296	-

2020-2029 Capital Budget List

**CITY OF HAMILTON
WATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Rehabilitation, Replacement, & Upgrade Programs (SAM)																
City Wide	4031957944	PW Asset Management (PW-AM) System Implementation	750	0	1,000	1,000	670	670	670	670	670	670	3,760	3,010	2019	2023
City Wide	4032014405	Contaminated Soil & Rock Disposal Program	0	0	0	0	220	220	0	0	440	440	660	660	2020	Ongoing
City Wide	4032055522	State of the Infrastructure - Asset Management	0	0	100	0	90	90	90	90	630	630	910	810	2020	Ongoing
City Wide	4032055588	O.Reg. 588/17 Compliance - Asset Management Plan Development	0	0	75	75	75	75	75	75	75	75	300	300	2020	2023
City Wide	4032058001	Consultation and Accommodation	0	0	30	30	30	30	30	30	210	210	300	300	2020	Ongoing
4	5141641226	Centralized Water and Wastewater Operations Centre (CASH FLOWED)	1,250	2,250	0	0	0	0	0	0	7,500	7,500	8,750	9,750	2016	2024
City Wide	5141761777	Beach Trunkmain Rehab	7,300	5,000	1,200	1,200	0	0	0	0	0	0	8,500	6,200	2017	2020
City Wide	5141851810	Fleet Additions	1,230	580	1,630	1,630	290	290	700	700	410	410	4,260	3,610	2018	2019
10	5141961341	Pineland/Teal/Community/Garden/South Service	0	0	1,680	1,680	0	0	0	0	0	0	1,680	1,680	2019	2020
City Wide	5142001099	Engineering Services Staffing Costs - Water	0	0	4,700	4,700	4,700	4,700	4,700	4,700	32,900	32,900	47,000	47,000	2020	Ongoing
City Wide	5142011101	Road Restoration Program	0	0	5,400	5,400	5,400	5,400	5,400	5,400	37,800	37,800	54,000	54,000	2020	Ongoing
City Wide	5142049555	QA-QC Service Contract Program	0	0	140	140	140	140	140	140	980	980	1,400	1,400	2020	Ongoing
City Wide	5142055022	Engineering Consultant Watermain Projects	0	0	300	300	300	300	300	300	2,100	2,100	3,000	3,000	2020	Ongoing
City Wide	5142055425	Prestressed Concrete Cylinder Pipe Condition Assessment Inspection Program	0	0	400	400	0	0	0	0	0	0	400	400	2020	2020
City Wide	5142055556	Mapping Update Program	0	0	40	40	40	40	40	40	280	280	400	400	2018	Ongoing
City Wide	5142055851	Water Efficiency Plan/Program	0	0	110	110	113	113	115	115	880	880	1,218	1,218	2020	Ongoing
City Wide	5142057545	Water - Computer Model	0	0	280	280	280	280	280	280	1,680	1,680	2,520	2,520	2020	Ongoing
City Wide	5142057626	Critical Watermain Inspection Program	0	0	660	500	300	300	300	300	2,100	2,100	3,360	3,200	2020	Ongoing
City Wide	5142060080	Valve Replacement Program	0	0	3,700	3,400	1,200	1,200	1,200	1,200	8,400	8,400	14,500	14,200	2020	Ongoing
City Wide	5142060577	Metallic Watermain Condition Assessment Program	0	0	630	630	630	630	630	630	4,410	4,410	6,300	6,300	2020	Ongoing
City Wide	5142060711	PW Capital Water Consumption Program	0	0	180	180	180	180	180	180	1,260	1,260	1,800	1,800	2020	Ongoing

**CITY OF HAMILTON
WATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Rehabilitation, Replacement, & Upgrade Programs (SAM)																
City Wide	5142060750	Unscheduled Valve, Hydrant, Watermain & Misc Water Replace Program	0	0	3,000	3,000	2,750	2,750	2,500	2,500	14,000	14,000	22,250	22,250	2020	Ongoing
City Wide	5142061300	Stand-Alone Watermain Replacement	0	0	0	0	0	0	0	0	1,500	1,500	1,500	1,500	2023	Ongoing
1, 2	5142061302	Barton - Locke to Caroline & Locke - York to Barton	0	0	1,000	1,000	0	0	0	0	0	0	1,000	1,000	2018	2020
3	5142061305	Burlington Trunkmain Repairs	0	0	910	450	0	0	0	0	0	0	910	450	2020	2020
5	5142061310	Woodward Greenhill Transmission Main Pipeline repair on Summercrest	0	0	500	500	0	0	0	0	0	0	500	500	2020	2020
City Wide	5142061502	Water Meter - Installation/Replacement/Repair - General Maintenance	0	0	2,920	2,280	3,610	2,970	3,680	3,040	23,640	20,440	33,850	28,730	2020	Ongoing
City Wide	5142062073	Field Data Systems Program	0	0	110	110	110	110	110	110	770	770	1,100	1,100	2020	Ongoing
City Wide	5142062078	Substandard Water Service Replacement Program	0	0	2,750	2,750	2,750	2,750	2,500	2,500	14,000	14,000	22,000	22,000	2020	Ongoing
City Wide	5142066350	WTP Chlorine Chemical Building	0	0	2,250	2,250	6,530	6,530	6,530	6,530	0	0	15,310	15,310	2020	2022
City Wide	5142071074	Contingency for Unscheduled Works Program	0	0	0	0	180	180	0	0	720	720	900	900	2020	Ongoing
City Wide	5142071940	Unspecified Water Works	0	0	0	0	0	0	0	0	80,000	80,000	80,000	80,000	2020	2024
2	5142161300	Duke - Queen to Hess	0	0	0	0	50	50	250	250	0	0	300	300	2021	2022
7	5142161300	Edwina - Lawson to Berko & Berko - Edwina to Lawfield	0	0	0	0	330	330	0	0	0	0	330	330	2021	2021
2	5142161300	Jackson - Catherine to Walnut	0	0	0	0	210	210	0	0	0	0	210	210	2021	2021
3	5142361300	Birge - Emerald to St. Matthews	0	0	0	0	0	0	0	0	270	270	270	270	2023	2023
3	5142361300	Evans - Wellington to East	0	0	0	0	0	0	0	0	360	360	360	360	2023	2023
1	5142461300	Amelia - Queen to West End	0	0	0	0	0	0	0	0	540	540	540	540	2024	2024
1	5142461300	Bold - Queen to Locke	0	0	0	0	0	0	0	0	700	700	700	700	2024	2024
2	5142461300	Caroline - Herkimer to Robinson	0	0	0	0	0	0	0	0	350	350	350	350	2024	2024
7	5142461300	Dallas - Upper Gage to West End	0	0	0	0	0	0	0	0	500	500	500	500	2024	2024
2	5142461300	James and Charlton Intersection	0	0	0	0	0	0	0	0	900	900	900	900	2024	2024
3	5142461300	Myler - Sanford to Milton/Milton - Barton to Princess	0	0	0	0	0	0	0	0	450	450	450	450	2024	2024

**CITY OF HAMILTON
WATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Rehabilitation, Replacement, & Upgrade Programs (SAM)																
13	5142471301	Hatt - Market to east end & York / Kerr	0	0	0	0	0	0	0	0	700	700	700	700	2024	2024
3	5142561300	Edward - Barnesdale to Lottridge	0	0	0	0	0	0	0	0	340	340	340	340	2025	2025
2	5142561300	Hess - Markland to Aberdeen	0	0	0	0	0	0	0	0	430	430	430	430	2025	2025
2	5142561300	Hughson - Wilson to Barton	0	0	0	0	0	0	0	0	500	500	500	500	2025	2025
2	5142561300	John - Cannon to Barton	0	0	0	0	0	0	0	0	760	760	760	760	2025	2025
2	5142661300	Robinson - Hess to Park	0	0	0	0	0	0	0	0	950	950	950	950	2026	2026
3	5142761300	Clinton(Case)\Ruth\Barnesdale	0	0	0	0	0	0	0	0	1,740	1,740	1,740	1,740	2027	2027
4	5142761300	Edgemont - Main to King	0	0	0	0	0	0	0	0	660	660	660	660	2027	2028
			10,530	7,830	35,695	34,035	31,178	30,538	30,420	29,780	247,505	244,305	355,328	346,488		
Projects Coordinated with Roads Program																
3	5141971313	Sherman - King to south end	90	0	1,130	130	0	0	0	0	0	0	1,220	130	2019	2020
3	5141971314	Wentworth - Wilson to King	90	0	370	40	0	0	0	0	0	0	460	40	2019	2020
4	5141971315	Main - Delena to Normanhurst & Normanhurst - Main to Queenston	230	0	4,800	0	0	0	0	0	0	0	5,030	0	2019	2020
City Wide	5142070000	Coordinated Road and Subsurface Works	0	0	0	0	3,440	3,440	2,000	2,000	26,020	26,020	31,460	31,460	2020	Ongoing
1	5142070006	Hillcrest - Chedoke to end - Road Restoration	0	0	60	60	0	0	0	0	0	0	60	60	2020	2020
4	5142070015	Main - Delena to Normanhurst & Normanhurst - Main to Queenston	0	0	300	300	0	0	0	0	0	0	300	300	2020	2020
4	5142070018	Roxborough - Kenilworth to Strathearne (Homeside Neighbourhood) - Road Restoration	0	0	700	700	0	0	0	0	0	0	700	700	2020	2020
City Wide	5142071301	Watermain Replacement Coordinated with Roads	0	0	0	0	0	0	2,000	2,000	49,400	49,400	51,400	51,400	2020	Ongoing
1	5142071306	Hillcrest - Chedoke to end	0	0	120	120	0	0	0	0	0	0	120	120	2020	2020
4	5142071315	Delena / Beland / Dunsmure	0	0	150	150	1,140	1,140	0	0	0	0	1,290	1,290	2020	2021
4	5142071318	Roxborough - Kenilworth to Strathearne (Homeside Neighbourhood)	0	0	770	770	0	0	0	0	0	0	770	770	2020	2020
4	5142171301	Barton - Parkdale to Talbot	0	0	0	0	1,080	1,080	0	0	0	0	1,080	1,080	2021	2021

**CITY OF HAMILTON
WATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Projects Coordinated with Roads Program																
2	5142171301	Strachan - James to east end	0	0	0	0	600	600	0	0	0	0	600	600	2021	2021
13	5142271301	Glenmorris Drive / Underhill Avenue (York Heights Neighbourhood)	0	0	0	0	0	0	330	330	0	0	330	330	2020	2022
1	5142271301	Marion - King to Dromore	0	0	0	0	0	0	300	300	0	0	300	300	2022	2022
8	5142371301	Fennell - Upper James to Upper Wellington	0	0	0	0	0	0	0	0	590	590	590	590	2023	2023
13	5142371301	Hatt & Bond - King to Market	0	0	0	0	0	0	0	0	560	560	560	560	2023	2023
1	5142371301	Jones / Oxford / Tecumseh (Strathcona Neighbourhood)	0	0	0	0	0	0	0	0	810	810	810	810	2023	2023
3	5142471301	Burlington & Industrial - Birch to Gage	0	0	0	0	0	0	0	0	2,760	2,760	2,760	2,760	2024	2024
13	5142471301	Cairns / East St N / Sleepy Hollow / Spencer / Wilmar (Hunter Neighbourhood)	0	0	0	0	0	0	0	0	1,090	1,090	1,090	1,090	2024	2024
1	5142471301	Carling / Macklin St S / Olmstead / Tope (Westdale South)	0	0	0	0	0	0	0	0	660	660	660	660	2024	2024
2	5142471301	Ferguson/Foster/Walnut/Patrick	200	0	0	0	0	0	0	0	1,710	1,710	1,910	1,710	2024	2024
8	5142471301	Upper James - Mohawk to Fennell	0	0	0	0	0	0	0	0	3,010	3,010	3,010	3,010	2024	2024
15	5142472304	Bridge 451 - Hwy 5 E, 120m e/o Mill St S	0	0	0	0	0	0	0	0	140	140	140	140	2024	2024
1	5142571301	Florence/Head/Morden/Napier/Nelson/Peel/Wellesley (Strathcona Neighbourhood)	0	0	0	0	0	0	0	0	720	720	720	720	2025	2025
7, 8	5142571301	Upper Wellington - Bryna to Mohawk	0	0	0	0	0	0	0	0	1,045	1,045	1,045	1,045	2025	2025
3	5142571301	Wilson - Wentworth to Sherman	0	0	0	0	0	0	0	0	810	810	810	810	2025	2025
1, 13	5142671301	Osler - South St to West Park	0	0	0	0	0	0	0	0	900	900	900	900	2026	2028
3	5142671301	Sanford - Main to Cannon	0	0	0	0	0	0	0	0	1,350	1,350	1,350	1,350	2026	2026
4	5142771301	Burlington & Industrial - Ottawa to Kenilworth	100	0	0	0	0	0	0	0	2,100	2,100	2,200	2,100	2027	2027
3	5142971301	Stipeley Neighbourhood (South) - Connaught / Balasm / Dunsmure	0	0	0	0	0	0	0	0	945	945	945	945	2029	2029
			710	0	8,400	2,270	6,260	6,260	4,630	4,630	94,620	94,620	114,620	107,780		

Plant/Outstations Projects (SAM)

**CITY OF HAMILTON
WATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Plant/Outstations Projects (SAM)																
4	5141166110	Water Treatment Plant - Process Upgrades (CASH FLOWED)	25,790	9,553	4,950	4,950	1,270	780	1,270	780	110,880	68,149	144,160	84,212	2011	2026
1	5141567273	Main / Whitney Pumping Station Replacement and Decommissioning	1,930	830	0	0	0	0	2,980	2,980	0	0	4,910	3,810	2015	2019
8	5141567520	Stone Church/Garth Water (HDR05) Reservoir	3,960	0	0	0	880	880	3,125	3,125	2,775	2,775	10,740	6,780	2015	2019
4	5141567575	High Lift Pumping Station (HLPS) Improvements - Phase 2 (CASH FLOWED)	880	220	550	550	2,470	2,470	2,470	2,470	0	0	6,370	5,710	2015	2019
12	5141667421	Glancaster Rd & Hwy 53 Pumping Station (HD018) Upgrades (CASH FLOWED)	6,040	4,400	660	660	5,900	5,900	2,200	2,200	0	0	14,800	13,160	2016	2022
14	5141767650	New Greensville Communal Well	1,250	500	150	150	5,250	5,250	0	0	0	0	6,650	5,900	2017	2021
9	5141867651	HD007 Highland Rd Reservoir Upgrades	260	260	0	0	0	0	990	990	0	0	1,250	1,250	2018	2019
15	5141895852	Carlisle Water Supply System - Additional Water Storage (CASH FLOWED)	440	440	0	0	440	440	6,600	6,600	0	0	7,480	7,480	2018	2022
City Wide	5142066310	WTP Pre-Treatment Isolation Valves	0	0	280	280	1,200	1,200	0	0	0	0	1,480	1,480	2020	2021
City Wide	5142066713	Water Maintenance Capital Program	0	0	0	0	2,000	2,000	2,000	2,000	14,000	14,000	18,000	18,000	2020	Ongoing
12	5142067450	Lee Smith Reservoir (HDR00) Upgrades	0	0	280	280	830	830	0	0	0	0	1,110	1,110	2020	2021
City Wide	5142067752	Water Outstation Inspections - Asset Management	0	0	660	660	660	660	660	660	4,400	4,400	6,380	6,380	2020	Ongoing
City Wide	5142367751	Water Outstation Upgrades - Asset Management Program	0	0	0	0	0	0	0	0	105,000	105,000	105,000	105,000	2023	Ongoing
			40,550	16,203	7,530	7,530	20,900	20,410	22,295	21,805	237,055	194,324	328,330	260,272		
Plant/Outstations Projects (WQI)																
City Wide	5141966911	Woodward WTP - Biological Filtration Pilot Study	150	0	250	250	0	0	0	0	0	0	400	250	2019	2020
City Wide	5142069075	City Environmental Lab Improvements Program	0	0	150	150	1,000	1,000	340	340	530	530	2,020	2,020	2020	Ongoing
4	5142666150	GAC Replacement	0	0	0	0	0	0	0	0	4,950	4,950	4,950	4,950	2020	Ongoing
			150	0	400	400	1,000	1,000	340	340	5,480	5,480	7,370	7,220		

**CITY OF HAMILTON
WATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Master Plan - Horizontal Assets																
13, 15	5141796752	PD16 (Waterdown) Trunk Feedermain - PS HD016 to Hwy 5 at Algonquin (W-25) (CASH FLOWED)	2,570	422	0	0	0	0	8,370	2,092	0	0	10,940	2,514	2017	2019
11	5141996951	Binbrook Feedermain via Fletcher (W-30)	0	0	0	0	3,870	0	2,530	0	0	0	6,400	0	2019	2020
11	5142096250	Airport Lands External Water Servicing (Feedermain) (W-27)	0	0	1,080	0	7,170	0	0	0	10,340	0	18,590	0	2020	2025
12	5142096520	Garner Road Trunk Watermain - Southcote to Wilson (W-09)	0	0	3,390	0	13,550	0	0	0	0	0	16,940	0	2020	2021
1	5142096850	Locke St Trunk Watermain - Main to Barton (W-19)	0	0	2,200	0	0	0	0	0	2,524	0	4,724	0	2018	2019
6, 9	5142596250	HD07A Feedermain (W-22)	0	0	0	0	0	0	0	0	8,860	0	8,860	0	2025	2026
			2,570	422	6,670	0	24,590	0	10,900	2,092	21,724	0	66,454	2,514		
Master Plan - Vertical Assets																
12	5141395354	PD18 (Ancaster) Elevated Reservoir (W-14) (CASH FLOWED)	2,610	255	0	0	6,080	3,040	6,080	3,040	0	0	14,770	6,335	2013	2020
11	5141495551	PD7 (Upper Stoney Creek/Glanbrook) Elevated Reservoir (W-23)	1,990	0	610	0	5,500	0	5,500	0	0	0	13,600	0	2014	2020
City Wide	5141555264	City-Wide Water Master Plan	650	0	300	30	0	0	0	0	60	0	1,010	30	2015	2020
13	5141595553	PS HD12A (Governors @ Huntingwood) Rebuild with Capacity Upgrade & Standby Power Installation (W-04)	720	0	550	137	2,920	730	0	0	0	0	4,190	867	2015	2019
13	5141695883	PS HD016 (York and Valley) Capacity Upgrade, Standby Power & Building Expansion (W-26) (CASH FLOWED)	3,710	302	780	79	4,560	457	0	0	0	0	9,050	838	2016	2019
5	5141795850	Greenhill PS HD04B & HD05A Upgrades (W-28) (CASH FLOWED)	9,820	2,482	220	55	9,910	2,478	10,160	2,541	0	0	30,110	7,556	2017	2020
11	5141995951	PS HD019 (Binbrook) Capacity Upgrade (W-20)	220	0	0	0	1,810	0	0	0	0	0	2,030	0	2019	2020
City Wide	5142055010	Water Systems Planning Program	0	0	300	300	300	300	300	300	2,100	2,100	3,000	3,000	2020	Ongoing
9	5142495251	Highland Reservoir HDR07 (W-11) Expansion (CASH FLOWED)	0	0	0	0	0	0	0	0	12,420	0	12,420	0	2024	2026

**CITY OF HAMILTON
WATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Master Plan - Vertical Assets																
City Wide	514269552	P.S. HD07A - New District 7 (Elfrida area) Pumping Station (W-21)	0	0	170	0	0	0	0	0	20,050	0	20,220	0	2025	2027
			19,720	3,039	2,930	601	31,080	7,005	22,040	5,881	34,630	2,100	110,400	18,626		
Development/Extension Projects																
15	5142080080	Dundas - 575m w/o Evans to 210 w/o Evans	0	0	410	0	0	0	0	0	0	0	410	0	2020	2020
City Wide	5142096011	Intensification Infrastructure Upgrades Program - Water	0	0	0	0	400	200	0	0	1,600	800	2,000	1,000	2020	Ongoing
12	5142171301	Southcote - Garner to Highway 403 Bridge	0	0	0	0	160	160	2,350	2,350	0	0	2,510	2,510	2021	2022
11	5142180120	RHBP - Twenty Rd Extension - Glover to Trinity Church	0	0	0	0	565	340	0	0	0	0	565	340	2021	2021
11	5142180182	Binbrook - Royal Winter/Binhaven to Fletcher	0	0	0	0	630	0	0	0	0	0	630	0	2021	2021
12	5142180182	Shaver - Kastura to Westview	0	0	0	0	225	170	700	525	0	0	925	695	2021	2022
11	5142580580	RHBP - Nebo - 900m s/o Twenty to Dickenson	0	0	0	0	0	0	0	0	400	0	400	0	2025	2025
11	5142780784	RHBP - Dickenson - Nebo to 800m e/o Nebo	0	0	0	0	0	0	0	0	900	0	900	0	2027	2027
10	5143480476	Millen - Arvin to South Service	0	0	0	0	0	0	0	0	0	0	0	0	2029	2029
			0	0	410	0	1,980	870	3,050	2,875	2,900	800	8,340	4,545		
Coordinated Projects																
City Wide	5141855777	Water infrastructure Analysis - Growth and Economic Opportunities	570	220	0	0	350	150	0	0	0	0	920	370	2018	2020
			570	220	0	0	350	150	0	0	0	0	920	370		
Demolition																
2	5142067420	St. Joseph's Tank Pulsation Dampener (HD002STK)	0	0	60	60	110	110	440	440	0	0	610	610	2020	2022
			0	0	60	60	110	110	440	440	0	0	610	610		
Equipment Replacement																
City Wide	5141966151	SCADA servers and network	2,500	0	0	0	250	250	250	250	5,500	5,500	8,500	6,000	2019	2020

**CITY OF HAMILTON
WATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
			2,500	0	0	0	250	250	250	250	5,500	5,500	8,500	6,000		
Plans/Studies																
City Wide	5141955713	Pressure Districts and Drinking Water System Optimization	220	0	0	0	110	110	110	110	110	110	550	330	2019	2022
City Wide	5142055247	Alterations to the Drinking Water System	0	0	0	0	150	150	150	150	900	900	1,200	1,200	2020	Ongoing
			220	0	0	0	260	260	260	260	1,010	1,010	1,750	1,530		
Pumping Station																
2	5142467422	New PD2 Water Pumping Station (CASH FLOWED)	500	500	0	0	0	0	0	0	12,100	12,100	12,600	12,600	2017	2021
			500	500	0	0	0	0	0	0	12,100	12,100	12,600	12,600		
Watermain Lining																
City Wide	5142060072	Watermain Structural Lining	0	0	5,400	5,400	5,400	5,400	4,050	4,050	37,800	37,800	52,650	52,650	2020	Ongoing
13	5142260072	WM Structural Lining - Dundas Valley Watermain	0	0	0	0	0	0	1,350	1,350	0	0	1,350	1,350	2022	2022
			0	0	5,400	5,400	5,400	5,400	5,400	5,400	37,800	37,800	54,000	54,000		
Total Water System			78,020	28,214	67,495	50,296	123,358	72,253	100,025	73,753	700,324	598,039	1,069,222	822,555		

2020
Capital Project
Detail Sheets

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded

Project ID: 4031957944

Category: Technical Services Projects

Project Name: PW Asset Management (PW-AM) System Implementation

Ward(s): City Wide

Objective:

This project focuses on implementing an optimized number of asset management system(s) for use by all divisions within Public Works. Following a positive outcome from Phase 1 of this project, Phase 2 (detailed review, business case & approvals) and Phase 3 (Project team setup & implementation) will commence in 2019. Note: Phase 1 = evaluation of current business & functional requirements, fit-gap analysis, summary of potential scenarios and initial business case. Phase 2 was approved Q2 2019; Council approval of Phase 3 is expected Q4 2019. See report PW19035 FCS19040 for estimated cost savings.

Start Date: 2019

Completion Date: 2023

Status: Recommended (funded)

Tangible Capital Asset: Yes

Capital Budget Initiation: 2019

Program Type: Computer Technology

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	1,860	435	435	330	330	330							
Other Capital Expenditures	1,900	315	565	340	340	340							
Total: Expenses	3,760	750	1,000	670	670	670							

Net Cost	3,760	750	1,000	670	670	670	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	1,750	750	1,000										
Total: Financing Sources	1,750	750	1,000										

Funding Required	2,010	0	0	670	670	670	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded

Project ID: 4032055522

Category: Technical Services Projects

Project Name: State of the Infrastructure - Asset Management

Ward(s): City Wide

Objective:

For the ongoing condition assessment, needs analysis and capital prioritization and reporting of right of way assets necessary to maintain such reports as the State of the Infrastructure, Service Level Delivery, etc. This is to include the ongoing development and monitoring of the Provincially required Asset Management Plan.

Start Date: 2020

Completion Date: Ongoing

Status: Recommended (funded)

Tangible Capital Asset: No

Capital Budget Initiation: 2020

Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	2,260		100	90	90	90	90	90	90	90	90	90	1,350
Total: Expenses	2,260		100	90	90	90	90	90	90	90	90	90	1,350

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From WIP Transfers	100		100										
Total: Revenues	100		100										

Net Cost	2,160	0	0	90	90	90	90	90	90	90	90	90	1,350
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Funding Required	2,160	0	0	90	90	90	90	90	90	90	90	90	1,350
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded

Project ID: 4032055588

Category: Technical Services Projects

Project Name: O.Reg. 588/17 Compliance - Asset Management Plan Development

Ward(s): City Wide

Objective:

To develop and deliver a provincially mandated Asset Management Plan in compliance with O.Reg 588/17 – Infrastructure for Jobs & Prosperity Act.

Start Date: 2020

Completion Date: 2023

Status: Recommended (funded)

Tangible Capital Asset: No

Capital Budget Initiation: 2020

Program Type: Technical Studies &

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	300		75	75	75	75							
Total: Expenses	300		75	75	75	75							

Net Cost	300	0	75	75	75	75	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	75		75										
Total: Financing Sources	75		75										

Funding Required	225	0	0	75	75	75	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Consultation and Accommodation

Project ID: 4032058001

Category: Annual Projects
Ward(s): City Wide

Objective:
Site-specific project requirements for appropriate and thorough project consultation solutions.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Other

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Other Capital Expenditures	750		30	30	30	30	30	30	30	30	30	30	450
Total: Expenses	750		30	30	30	30	30	30	30	30	30	30	450
Net Cost	750	0	30	30	30	30	30	30	30	30	30	30	450
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	30		30										
Total: Financing Sources	30		30										
Funding Required	720	0	0	30	30	30	30	30	30	30	30	30	450

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded **Project ID:** 5141166110 **Category:** Plant - Sustainable Asset Mgt (SAM)
Project Name: Water Treatment Plant - Process Upgrades (CASH FLOWED) **Ward(s):** 4

Objective:
 To design and undertake required upgrades to the process components of the water treatment facility which have reached the end of their useful life. Three separate phases of work will be tendered for design and construction. Each phase will be awarded in full and the expenditures have been projected on a cash flow basis to accommodate the recommended financing strategy.

Start Date: 2011
Completion Date: 2026
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2008
Program Type: Plant (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	148,950	19,540	4,500				9,780	42,880	32,340	15,760			24,150
Consultant	150		150										
Design	21,210	5,500		1,170	1,170	2,340	2,340	2,340	1,760	590			4,000
Internal Resources/Staffing	2,500	750	300	100	100	150	150	150	150	150			500
Total: Expenses	172,810	25,790	4,950	1,270	1,270	2,490	12,270	45,370	34,250	16,500			28,650

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Non Res DEBT	26,006			181	181	356	1,750	6,470	4,883	2,352			9,833
Dev Charges - Non-Res-TCA	115	115											
Dev Charges - Res DEBT	44,281			309	309	605	2,980	11,016	8,314	4,005			16,743
Dev Charges - Res-TCA	222	222											
From WIP Transfers	550	550											
Total: Revenues	71,174	887		490	490	961	4,730	17,486	13,197	6,357			26,576

Net Cost	101,636	24,903	4,950	780	780	1,529	7,540	27,884	21,053	10,143	0	0	2,074
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Debt Borrowings	10,000	10,000											
From Operating Fund	10,300	5,350	4,950										
Total: Financing Sources	20,300	15,350	4,950										

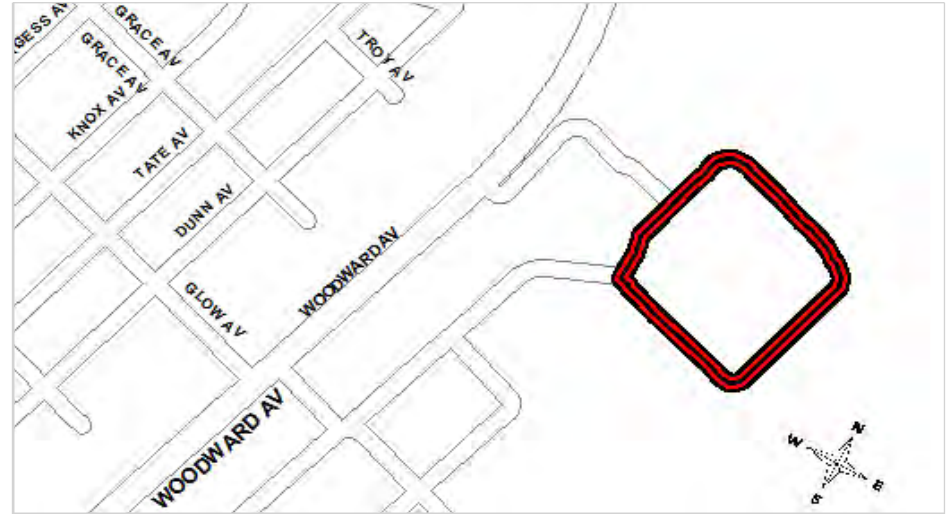
Funding Required	81,336	9,553	0	780	780	1,529	7,540	27,884	21,053	10,143	0	0	2,074
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**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded **Project ID:** 5141166110 **Category:** Plant - Sustainable Asset Mgt (SAM)
Project Name: Water Treatment Plant - Process Upgrades (CASH FLOWED) **Ward(s):** 4

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



Comments:

Phase 1 (2018-2020) - Process components of the water treatment facility which have reached the end of their useful life.
Phase 2 (Tender for Construction, 2022) - Security of supply, retrofit of sedimentation tanks for growth and performance enhancements of filters.
Phase 3 (Tender for Construction, Post 2028) - New settling process to provide ultimate capacity at the water treatment facility.

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded

Project ID: 5141495551

Category: Master Plan - Vertical Assets

Project Name: PD7 (Upper Stoney Creek/Glanbrook) Elevated Reservoir (W-23)

Ward(s): 11

Objective:

To provide emergency and balancing storage for new growth area in Pressure District 7 as per Citywide Water/Wastewater Master Plan. 9.9 ML of storage south of Highland Road and east of Nebo Rd. (DC Study Project ID # HM28-W-14) to service growth are in Elfrida area.

Start Date: 2014

Completion Date: 2020

Status: Recommended (funded)

Tangible Capital Asset: Yes

Capital Budget Initiation: 2007

Program Type: Reservoir

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	10,500			5,250	5,250								
Design	1,500	950	550										
Environmental Assesments	100	100											
Internal Resources/Staffing	750	190	60	250	250								
Land/Property	750	750											
Total: Expenses	13,600	1,990	610	5,500	5,500								

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Non Res DEBT	4,296		226	2,035	2,035								
Dev Charges - Non-Res-TCA	702	702											
Dev Charges - Res DEBT	7,314		384	3,465	3,465								
Dev Charges - Res-TCA	1,288	1,288											
Total: Revenues	13,600	1,990	610	5,500	5,500								

Net Cost	0	0	0	0	0	0	0	0	0	0	0	0	0
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Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			.3

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: City-Wide Water Master Plan

Project ID: 5141555264

Category: Master Plan
Ward(s): City Wide

Objective:
10 year window on the Master Plan is expiring. Water Systems Master Planning study to determine system needs for growth and performance. Coordinated with GRIDS 2.

Start Date: 2015
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2015
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	800	500	250								50		
Internal Resources/Staffing	210	150	50								10		
Total: Expenses	1,010	650	300								60		

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Non Res DEBT	33	33											
Dev Charges - Non Res-NCA	122		100								22		
Dev Charges - Res DEBT	57	57											
Dev Charges - Res-NCA	208		170								38		
From WIP Transfers	260	260											
Total: Revenues	680	350	270								60		

Net Cost	330	300	30	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	330	300	30										
Total: Financing Sources	330	300	30										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded

Project ID: 5141567575

Category: Plant - Sustainable Asset Mgt (SAM)

Project Name: High Lift Pumping Station (HLPS) Improvements - Phase 2 (CASH FLOWED)

Ward(s): 4

Objective:

Electrical upgrades required at the Woodward Avenue WTP Highlift Pumping Station to improve the reliability of various systems within the facility. Upgrades include: cabling improvements, replacement of low voltage wiring/receptacles, removal of redundant wiring, upgrade of old control room, HVAC improvements, electrical room floor finishes, security enhancements, emergency lighting, among other miscellaneous electrical items. Tender for construction will be awarded in full and the expenditures are projected on a cash flow basis to accommodate the recommended financing strategy.

Start Date: 2015

Completion Date: 2019

Status: Recommended (funded)

Tangible Capital Asset: Yes

Capital Budget Initiation: 2015

Program Type: Plant (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	4,500			2,250	2,250								
Consultant	100	100											
Design	1,200	700	500										
Internal Resources/Staffing	570	80	50	220	220								
Total: Expenses	6,370	880	550	2,470	2,470								

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From WIP Transfers	110	110											
Total: Revenues	110	110											

Net Cost	6,260	770	550	2,470	2,470	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	1,100	550	550										
Total: Financing Sources	1,100	550	550										

Funding Required	5,160	220	0	2,470	2,470	0	0	0	0	0	0	0	0
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**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded

Project ID: 5141567575

Category: Plant - Sustainable Asset Mgt (SAM)

Project Name: High Lift Pumping Station (HLPS) Improvements - Phase 2 (CASH FLOWED)

Ward(s): 4

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded

Project ID: 5141595553

Category: Master Plan - Vertical Assets

Project Name: PS HD12A (Governors @ Huntingwood) Rebuild with Capacity Upgrade & Standby Power Installation (W-04)

Ward(s): 13

Objective:

To decommission and replace an existing pumping station and provide pumping capacity to meet demand and fire flows in pressure districts 12 and 22 and to increase system security by adding emergency stand-by power as per Citywide Water/Wastewater Master Plan. Additional capacity of 3 ML/d will address security of supply in PD22 west Dundas (DC Study Project ID #CW5-W-14).

Start Date: 2015

Completion Date: 2019

Status: Recommended (funded)

Tangible Capital Asset: Yes

Capital Budget Initiation: 2015

Program Type: Pumping Station

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	2,670			2,670									
Design	850	450	400										
Environmental Assesments	100	100											
Internal Resources/Staffing	470	70	150	250									
Land/Property	100	100											
Total: Expenses	4,190	720	550	2,920									

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Non-Res-TCA	1,208	245	153	810									
Dev Charges - Res-TCA	2,115	475	260	1,380									
Total: Revenues	3,323	720	413	2,190									

Net Cost	867	0	137	730	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	137		137										
Total: Financing Sources	137		137										

Funding Required	730	0	0	730	0	0	0	0	0	0	0	0	0
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**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded

Project ID: 5141595553

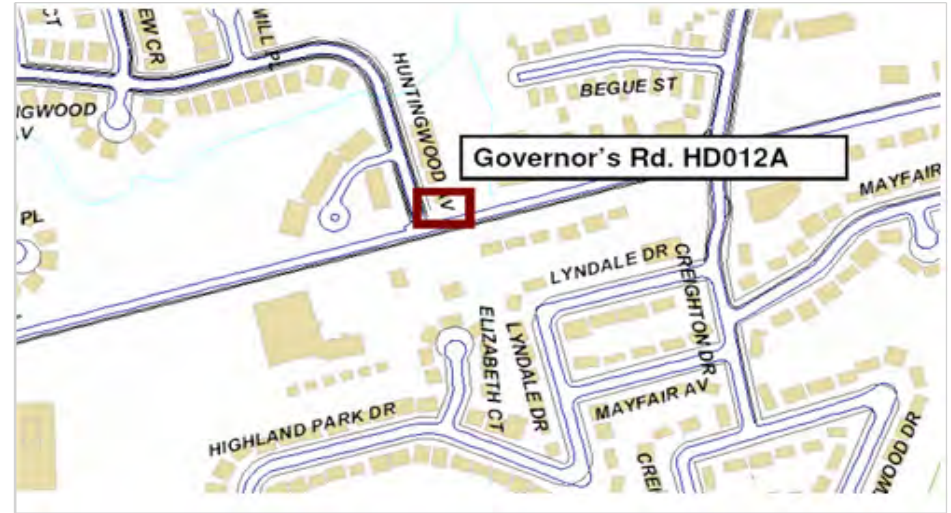
Category: Master Plan - Vertical Assets

Project Name: PS HD12A (Governors @ Huntingwood) Rebuild with Capacity Upgrade & Standby Power Installation (W-04)

Ward(s): 13

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded **Project ID:** 5141667421 **Category:** Outstations-Sustainable Asset Mgt (SAM)
Project Name: Glancaster Rd & Hwy 53 Pumping Station (HD018) Upgrades (CASH FLOWED) **Ward(s):** 12

Objective:
 Civil, Structural, Architectural, Mechanical and Electrical upgrades required to improve operational efficiency and prolong the useful life of Water Outstation HD018 as per recommendations of the Sustainable Plant Asset Management program. Replace Pumps with two 12 ML/d constant speed pumps, one 24 ML/d constant speed pump and one 24 ML/d variable speed pump. Replacement of all other related process, mechanical and electrical upgrades within pumping station and any architectural upgrades to the existing building. Tender for construction will be awarded in full and the expenditures are projected on a cash flow basis to accommodate the recommended financing strategy.

Start Date: 2016
Completion Date: 2022
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2016
Program Type: Outstation (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	11,650	4,000		5,650	2,000								
Design	2,090	1,490	600										
Internal Resources/Staffing	1,060	550	60	250	200								
Total: Expenses	14,800	6,040	660	5,900	2,200								

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From WIP Transfers	1,640	1,640											
Total: Revenues	1,640	1,640											

Net Cost	13,160	4,400	660	5,900	2,200	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	660		660										
Total: Financing Sources	660		660										

Funding Required	12,500	4,400	0	5,900	2,200	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded

Project ID: 5141695883

Category: Master Plan - Vertical Assets

Project Name: PS HD016 (York and Valley) Capacity Upgrade, Standby Power & Building Expansion (W-26) (CASH)

Ward(s): 13

Objective:

To provide additional pumping capacity at station serving Waterdown to accommodate projected new growth as per Citywide Water/Wastewater Master Plan. New pumps and controls 20.52 MLD; Size and timing to be finalized subsequent to GRIDS completion; New Standby Power installation and building expansion (DC Project ID # W6-W-14). Tender for construction will be awarded in full and the expenditures are projected on a cash flow basis to accommodate the recommended financing strategy.

Start Date: 2016

Completion Date: 2019

Status: Recommended (funded)

Tangible Capital Asset: Yes

Capital Budget Initiation: 2004

Program Type: Pumping Station

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	7,070	2,760		4,310									
Consultant	1,320	610	710										
Internal Resources/Staffing	660	340	70	250									
Total: Expenses	9,050	3,710	780	4,560									

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Non-Res-TCA	2,912	1,135	259	1,518									
Dev Charges - Res-TCA	5,233	2,206	442	2,585									
Total: Revenues	8,145	3,341	701	4,103									

Net Cost	905	369	79	457	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	146	67	79										
Total: Financing Sources	146	67	79										

Funding Required	759	302	0	457	0	0	0	0	0	0	0	0	0
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**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded

Project ID: 5141695883

Category: Master Plan - Vertical Assets

Project Name: PS HD016 (York and Valley) Capacity Upgrade, Standby Power & Building Expansion (W-26) (CASH)

Ward(s): 13

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)	28.5		
Staffing Impacts (F.T.E)			.1

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Beach Trunkmain Rehab

Project ID: 5141761777

Category: Rehabilitation Project
Ward(s): City Wide

Objective:

Due to recorded failures and predicted high probability for increased failure rates in the near future, the existing joints of the 900mm watermain have become deficient and requires rehabilitation. This is intended to reduce overall service outages. The joints will be repaired internally and the main will be lined which will extend the service life of the asset. The lining limits are Beach - Burlington to Ottawa and Ottawa - Beach to Barton.

Start Date: 2017
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2017
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	7,700	6,500	1,200										
Internal Resources/Staffing	800	800											
Total: Expenses	8,500	7,300	1,200										

Net Cost	8,500	7,300	1,200	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	3,500	2,300	1,200										
Total: Financing Sources	3,500	2,300	1,200										

Funding Required	5,000	5,000	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: New Greensville Communal Well

Project ID: 5141767650

Category: Outstations-Sustainable Asset Mgt (SAM)
Ward(s): 14

Objective:
New production well and treatment system. Design and Construct an additional groundwater well house within the Greensville Communal system.

Start Date: 2017
Completion Date: 2021
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2015
Program Type: Outstation (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	5,000			5,000									
Design	1,000	850	150										
Internal Resources/Staffing	550	300		250									
Land/Property	100	100											
Total: Expenses	6,650	1,250	150	5,250									

Net Cost	6,650	1,250	150	5,250	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	900	750	150										
Total: Financing Sources	900	750	150										

Funding Required	5,750	500	0	5,250	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			.8

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded

Project ID: 5141795850

Category: Master Plan - Vertical Assets

Project Name: Greenhill PS HD04B & HD05A Upgrades (W-28) (CASH FLOWED)

Ward(s): 5

Objective:

Project includes civil, structural, mechanical and electrical upgrades required to improve operational efficiency and prolong the useful life of the HD04B & HD05A Pumping Stations (Greenhill & Summercrest) as per the recommendations of the Sustainable Asset Management Program. Process Mechanical, Electrical equipment have exceeded their useful life. Structural and architectural assets are in need of repair due to general wear. Process equipment not performing as intended and requires replacement. Standby power is recommended at this station. Conceptual Design (2017) to assess Sustainable Asset Management & Growth component of additional capacity to 155 ML/day supplying new growth areas above the escarpment and to provide standby power for system security as per Citywide Water/Wastewater Master Plan (DC Study Project ID # SCU18-W-14). Tender for construction will be awarded in full and the expenditures are projected on a cash flow basis to accommodate the recommended financing strategy.

Start Date: 2017

Completion Date: 2020

Status: Recommended (funded)

Tangible Capital Asset: Yes

Capital Budget Initiation: 2007

Program Type: Pumping Station

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	25,720	6,150		9,660	9,910								
Consultant	300	300											
Design	3,000	2,800	200										
Internal Resources/Staffing	1,090	570	20	250	250								
Total: Expenses	30,110	9,820	220	9,910	10,160								

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Non Res DEBT	6,048	418	61	2,750	2,819								
Dev Charges - Non-Res-TCA	1,968	1,968											
Dev Charges - Res DEBT	10,298	712	104	4,682	4,800								
Dev Charges - Res-TCA	3,820	3,820											
Total: Revenues	22,134	6,918	165	7,432	7,619								

Net Cost	7,976	2,902	55	2,478	2,541	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	475	420	55										
Total: Financing Sources	475	420	55										

Funding Required	7,501	2,482	0	2,478	2,541	0	0	0	0	0	0	0	0
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**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded

Project ID: 5141795850

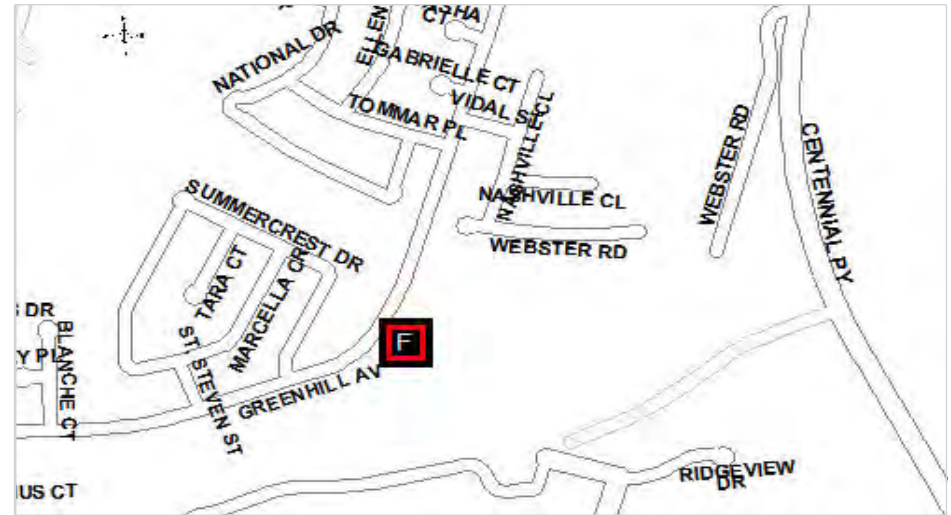
Category: Master Plan - Vertical Assets

Project Name: Greenhill PS HD04B & HD05A Upgrades (W-28) (CASH FLOWED)

Ward(s): 5

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Fleet Additions

Project ID: 5141851810

Category: Vehicles-New
Ward(s): City Wide

Objective:
To acquire & upgrade vehicles for Water Distribution & Wastewater Collection

Start Date: 2018
Completion Date: 2019
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2018
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Vehicle Purchases	4,260	1,230	1,630	290	700	410							
Total: Expenses	4,260	1,230	1,630	290	700	410							
Net Cost	4,260	1,230	1,630	290	700	410	0	0	0	0	0	0	0
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	2,280	650	1,630										
Total: Financing Sources	2,280	650	1,630										
Funding Required	1,980	580	0	290	700	410	0	0	0	0	0	0	0

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Fleet Additions

Project ID: 5141851810

Category: Vehicles-New
Ward(s): City Wide

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

Comments:

2020

Plant Operations
\$130 AVL Shelving and Tools
\$15 Vehicle addition

CSCO
\$ 30 Vehicle addition

WDWWC
\$ 97,500 AVL Shelving and Tools
\$ 817,500 Vehicle addition
\$100 Hydrant Truck upgrades
\$200 Chaser Truck upgrades
\$50 Vactor Truck upgrade
\$185,000 Valve truck addition

\$1,625,000 TOTAL

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Pineland/Teal/Community/Garden/South Service

Project ID: 5141961341

Category: Replacement Project
Ward(s): 10

Objective:

Due to recorded failures and predicted high probability for increased failure rates in the near future, the existing watermain has become structurally deficient and requires replacement. This is intended to reduce overall service outages. This project is not to be coordinated with road work. A provisional item for road resurfacing is included in the cost. Replacement of existing watermain along with all associated hydrants, valves, and substandard services.

Start Date: 2019
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2017
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	1,680		1,680										
Design	95	95											
Internal Resources/Staffing	15	15											
Total: Expenses	1,790	110	1,680										

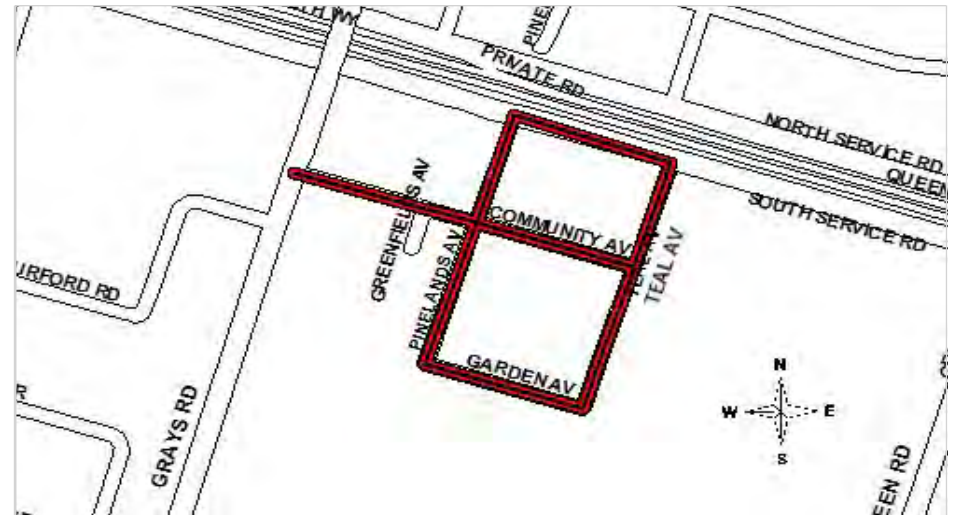
Net Cost	1,790	110	1,680	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	1,790	110	1,680										
Total: Financing Sources	1,790	110	1,680										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Woodward WTP - Biological Filtration Pilot Study

Project ID: 5141966911

Category: Water Quality Initiatives (WQI)
Ward(s): City Wide

Objective:

The City completed an investigation in 2016 to review and determine what process upgrades would be needed at the plant to keep pace with regulatory developments and maintain an appropriate level of reliability and redundancy. Once of the findings in the study included converting the current conventional filters to biological filtration. This project involves the development of a pilot in order to prove the effectiveness of this approach.

Start Date: 2019
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2019
Program Type: Plant (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	250		250										
Design	150	150											
Total: Expenses	400	150	250										

Net Cost	400	150	250	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	400	150	250										
Total: Financing Sources	400	150	250										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Sherman - King to south end

Project ID: 5141971313

Category: Coordinated - Upgrade Projects
Ward(s): 3

Objective:
Metrolinx has initiated watermain installation works along Sherman Ave. The city will coordinate water distribution system enhancements with the water replacement on Sherman. Subject to Metrolinx funding.

Start Date: 2019
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2019
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	130		130										
Construction - LRT	1,000		1,000										
Design - LRT	90	90											
Total: Expenses	1,220	90	1,130										

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Provincial Grants/Subsidies	1,090	90	1,000										
Total: Revenues	1,090	90	1,000										

Net Cost	130	0	130	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	130		130										
Total: Financing Sources	130		130										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded

Project ID: 5141971313

Category: Coordinated - Upgrade Projects

Project Name: Sherman - King to south end

Ward(s): 3

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Wentworth - Wilson to King

Project ID: 5141971314

Category: Coordinated - Upgrade Projects
Ward(s): 3

Objective:
Metrolinx has initiated watermain installation works along Wentworth St. The city will coordinate water distribution system enhancements with the water replacement and new installation on Wentworth. Subject to Metrolinx funding.

Start Date: 2019
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2019
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	40		40										
Construction - LRT	330		330										
Design - LRT	90	90											
Total: Expenses	460	90	370										

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Provincial Grants/Subsidies	420	90	330										
Total: Revenues	420	90	330										

Net Cost	40	0	40	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	40		40										
Total: Financing Sources	40		40										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Wentworth - Wilson to King

Project ID: 5141971314

Category: Coordinated - Upgrade Projects
Ward(s): 3

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Main - Delena to Normanhurst & Normanhurst - Main to Queenston

Project ID: 5141971315

Category: Coordinated - Upgrade Projects
Ward(s): 4

Objective:

The realignment of the existing 1200mm trunkmain on Queenston from Delena to Normanhurst is required to accommodate the proposed LRT tracks. The new alignment will be on Main St - Delena to Normanhurst and Normanhurst - Main to Queenston. Installation on a 1200mm trunkmain, chambers, and valves. Subject to Metrolinx funding.

Start Date: 2019
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2019
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction - LRT	4,800		4,800										
Design - LRT	230	230											
Total: Expenses	5,030	230	4,800										

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Provincial Grants/Subsidies	5,030	230	4,800										
Total: Revenues	5,030	230	4,800										

Net Cost	0	0	0	0	0	0	0	0	0	0	0	0	0
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Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Engineering Services Staffing Costs - Water

Project ID: 5142001099

Category: Annual Projects
Ward(s): City Wide

Objective:

To fund Engineering Services staffing costs through capital for work on water related capital projects, both in-year and future. In the past, these charges were built into in-year approved capital projects on a pro-rated basis. In order to provide more transparency and capture staffing costs for future works in a more accurate way, these staffing costs are now reflected in this project and removed from all other individual Engineering Services projects.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Other

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Internal Resources/Staffing	117,500		4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	70,500
Total: Expenses	117,500		4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	70,500
Net Cost	117,500	0	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	70,500
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	4,700		4,700										
Total: Financing Sources	4,700		4,700										
Funding Required	112,800	0	0	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	70,500

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Road Restoration Program

Project ID: 5142011101

Category: Restorations
Ward(s): City Wide

Objective:
Complete final restoration on public right-of-way due to damage caused by the repair or replacement of water assets (eg, watermain break repair, valve replacements, chamber replacement, water service replacement, etc)

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Replacement Program

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	118,800		5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	64,800
Total: Expenses	118,800		5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	64,800
Net Cost	118,800	0	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	64,800
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	5,400		5,400										
Total: Financing Sources	5,400		5,400										
Funding Required	113,400	0	0	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	64,800

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: QA-QC Service Contract Program

Project ID: 5142049555

Category: Technical Services Projects
Ward(s): City Wide

Objective:
Allocated funding to provide quality assurance and control for existing road rehabilitation and replacement contracts. Includes but not limited to: coupon testing, CCTV, soil resistivity and compaction.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	3,500		140	140	140	140	140	140	140	140	140	140	2,100
Total: Expenses	3,500		140	140	140	140	140	140	140	140	140	140	2,100
Net Cost	3,500	0	140	140	140	140	140	140	140	140	140	140	2,100
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	140		140										
Total: Financing Sources	140		140										
Funding Required	3,360	0	0	140	140	140	140	140	140	140	140	140	2,100

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded

Project ID: 5142055010

Category: Master Plan

Project Name: Water Systems Planning Program

Ward(s): City Wide

Objective:

Master Plans, Servicing Studies, Source Water Protection and Environmental Assessments. On an as-required basis along GRIDS-identified Nodes and Corridors, and using City data/models, analyse water system servicing capability (local street and district-wide) for individual intensification development proposals and recommend upgrades required to accommodate. Undertake conceptual design for Master Plan projects. Service planning for new subdivisions, intensification areas and system performance. Includes field data systems. Evaluation of level of service and related infrastructure improvements including non-standard operational scenarios (shutdown routes, temporary offline conditions, forensic analysis).

Start Date: 2020

Completion Date: Ongoing

Status: Recommended (funded)

Tangible Capital Asset: No

Capital Budget Initiation: 2020

Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	2,700		270	270	270	270	270	270	270	270	270	270	
Internal Resources/Staffing	630		30	30	30	30	30	30	30	30	30	30	330
Total: Expenses	3,330		300	300	300	300	300	300	300	300	300	300	330

Net Cost	3,330	0	300	300	300	300	300	300	300	300	300	300	330
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	300		300										
Total: Financing Sources	300		300										

Funding Required	3,030	0	0	300	300	300	300	300	300	300	300	300	330
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Engineering Consultant Watermain Projects

Project ID: 5142055022

Category: Technical Services Projects
Ward(s): City Wide

Objective:

Various subsurface infrastructure condition assessment and trenchless rehabilitation engineering consulting services. Work includes but not limited to; Design of various infrastructure renewal and rehabilitation applications, technology and industry reviews of assessment and rehabilitation technologies, project management of sub-surface projects, and development and application of technical review and audit of QA/QC procedures.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	7,500		300	300	300	300	300	300	300	300	300	300	4,500
Total: Expenses	7,500		300	300	300	300	300	300	300	300	300	300	4,500

Net Cost	7,500	0	300	300	300	300	300	300	300	300	300	300	4,500
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	300		300										
Total: Financing Sources	300		300										

Funding Required	7,200	0	0	300	300	300	300	300	300	300	300	300	4,500
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded

Project ID: 5142055425

Category: Technical Services Projects

Project Name: Prestressed Concrete Cylinder Pipe Condition Assessment Inspection Program

Ward(s): City Wide

Objective:

Prestressed Concrete Cylinder Pipe Condition Assessment Inspection Program using remote field transform coupling (RFTC) inspection is required. The RFTC inspection will provide information of the condition of Prestressed Concrete Cylinder Pipe (PCCP). RFTC inspections detect breaks in the pre-stressed wires. These wires give the pipe its strength. The inspection help to manage future needs of these pipelines and prevent any major ruptures for occur.

Start Date: 2020

Completion Date: 2020

Status: Recommended (funded)

Tangible Capital Asset: No

Capital Budget Initiation: 2020

Program Type: Distribution (Water)

The following main will be inspected: Pipeline 39 - Fennell Trunkmain

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	400		400										
Total: Expenses	400		400										

Net Cost	400	0	400	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	400		400										
Total: Financing Sources	400		400										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Mapping Update Program

Project ID: 5142055556

Category: Technical Services Projects
Ward(s): City Wide

Objective:

Acquire updated air photos, update the City's Digital Terrain Model (DEM) and mapping of road edges, sidewalks, building footprints etc. This supports the study of Storm water issues, supports operating and capital programs, assists in land development reviews. Develop and Maintain Horizontal (Lat / Long) and Vertical (Elevation) control networks across the City to allow correct data integration and alignment of ground based surveys with the City's mapping program.

Start Date: 2018
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	1,000		40	40	40	40	40	40	40	40	40	40	600
Total: Expenses	1,000		40	40	40	40	40	40	40	40	40	40	600

Net Cost	1,000	0	40	40	40	40	40	40	40	40	40	40	600
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	40		40										
Total: Financing Sources	40		40										

Funding Required	960	0	0	40	40	40	40	40	40	40	40	40	600
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Water Efficiency Plan/Program

Project ID: 5142055851

Category: Technical Services Projects
Ward(s): City Wide

Objective:

To support the development of Hamilton Water water efficiency programs or projects and related outreach materials to educate City of Hamilton residents and businesses. This includes the creation of the Carlisle Conservation Plan and Carlisle water conservation programs i.e. irrigation controllers incentives, CIC, Irrigation Contractor System Checkups, community retro-fits etc. Outside of the Carlisle project the capital budget supports a wide variety of conservation and educational activities related to drinking water, wastewater and storm water.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	210	210											
Other Capital Expenditures	3,137		110	113	115	117	120	122	124	129	132	136	1,919
Total: Expenses	3,347	210	110	113	115	117	120	122	124	129	132	136	1,919

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From WIP Transfers	210	210											
Total: Revenues	210	210											

Net Cost	3,137	0	110	113	115	117	120	122	124	129	132	136	1,919
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	110		110										
Total: Financing Sources	110		110										

Funding Required	3,027	0	0	113	115	117	120	122	124	129	132	136	1,919
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Water - Computer Model

Project ID: 5142057545

Category: Technical Services Projects
Ward(s): City Wide

Objective:
Provision of computer modeling services for the City's drinking water system related to non-standard operations, capital upgrade verification and design assessments of ad-hoc growth scenarios.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	2,250		250	250	250	250	250	250	250	250	250		
Internal Resources/Staffing	270		30	30	30	30	30	30	30	30	30		
Total: Expenses	2,520		280	280	280	280	280	280	280	280	280		

Net Cost	2,520	0	280	280	280	280	280	280	280	280	280	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	280		280										
Total: Financing Sources	280		280										

Funding Required	2,240	0	0	280	280	280	280	280	280	280	280	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded

Project ID: 5142057626

Category: Rehabilitation Project

Project Name: Critical Watermain Inspection Program

Ward(s): City Wide

Objective:

Critical high risk watermain data collection and analysis to facilitate condition assessment, prioritization of rehabilitation / replacement, or inspection cycle needs of approximately 3,200 m of pipe. Project involves data collection through various technologies such as non-destructive acoustical testing, pipe sample laboratory testing, and project assignments to engineering consulting firms.

Start Date: 2020

Completion Date: Ongoing

Status: Recommended (funded)

Tangible Capital Asset: No

Capital Budget Initiation: 2020

Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	7,560		660	300	300	300	300	300	300	300	300	300	4,200
Total: Expenses	7,560		660	300	300	300	300	300	300	300	300	300	4,200

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From WIP Transfers	160		160										
Total: Revenues	160		160										

Net Cost	7,400	0	500	300	300	300	300	300	300	300	300	300	4,200
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	500		500										
Total: Financing Sources	500		500										

Funding Required	6,900	0	0	300	300	300	300	300	300	300	300	300	4,200
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Watermain Structural Lining

Project ID: 5142060072

Category: Watermain Lining
Ward(s): City Wide

Objective:
Due to recorded failures and predicted high probability for increased failure rates in the near future, the existing watermain (approx. 2,500 m) has become structurally deficient and requires rehabilitation. This is intended to reduce overall service outages. The watermain will be lined with a structural liner which will extend the service life of the asset.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	128,250		5,400	5,400	4,050	5,400	5,400	5,400	5,400	5,400	5,400	5,400	75,600
Total: Expenses	128,250		5,400	5,400	4,050	5,400	5,400	5,400	5,400	5,400	5,400	5,400	75,600
Net Cost	128,250	0	5,400	5,400	4,050	5,400	5,400	5,400	5,400	5,400	5,400	5,400	75,600
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	5,400		5,400										
Total: Financing Sources	5,400		5,400										
Funding Required	122,850	0	0	5,400	4,050	5,400	5,400	5,400	5,400	5,400	5,400	5,400	75,600

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Watermain Structural Lining

Project ID: 5142060072

Category: Watermain Lining
Ward(s): City Wide

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

Comments:

2020

- Parkdale Av N - Queenston Rd to Roxborough Av
- Glassco Av - Queenston Rd to Roxborough Av
- Adair Av N - Queenston Rd to Roxborough Av
- Main St E - Parkdale Av N to Reid Av N
- Roxborough Av - Parkdale Av N to Reid Av N

2021

- Atwater Cr - Marlowe Dr to Marlowe Dr
- Marlowe Dr - West 5th to Westmount Dr
- Tyrone Dr -West 5th to Burrwood Dr
- Clearwater Dr - Burrwood DR to Mountbatten Dr
- Miami Dr - Mountbattten Dr to Rolston Dr
- Lynbrook Dr - Rolston Dr to Southlea Dr
- Burrwood Dr - Malowe Dr to Mountbatten Dr
- Elkwood Dr - West 5th to Mountbatten Dr
- Mountbatten Dr - Marlowe Dr to Elkwood Dr
- Sarasota Ave - Miami Dr to Rolston Dr
- Rolston Dr - Miami Dr to Mountbatten Dr
- Westmount Dr - Lynbrook Dr to Marlowe Dr
- Silvercrest Dr - Westmount Dr to Southlea
- Southlea Dr - Lynbrook Dr to Mohawk Dr

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Valve Replacement Program

Project ID: 5142060080

Category: Replacement Project
Ward(s): City Wide

Objective:

To replace large inoperable distribution valves in order to minimize operational risk. Valves are identified for replacement through ongoing valve preventative maintenance programs. At present, 23 valves have been identified for replacement throughout the City. Each valve replacement requires full engineering design, tendering and construction and cost of valve replacements vary from \$250k - \$500k each, depending on valve size and complexity.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	32,500		3,700	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	18,000
Total: Expenses	32,500		3,700	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	18,000

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From WIP Transfers	300		300										
Total: Revenues	300		300										

Net Cost	32,200	0	3,400	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	18,000
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	3,400		3,400										
Total: Financing Sources	3,400		3,400										

Funding Required	28,800	0	0	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	18,000
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**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Valve Replacement Program

Project ID: 5142060080

Category: Replacement Project
Ward(s): City Wide

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

Comments:

2020 (\$4,400k)

1. (HC10V054): Fennell Ave E @ East 17th St
2. (HC10V055): Fennell @ East 12th
3. (HC11V052): Fennell @ Upper Wentworth
4. (HD09V051): Fennell @ East 34th
5. (HD06V031): Fennell @ Upper Ottawa
6. (HD13V056): Upper Ottawa @ 105 s/o Sandalwood
7. (HA10V007): Robert @ West Ave North
8. (HB22V027): Barton @ Kenilworth

2021 (\$1,300k)

1. (HC27V042): Garth @ Mohawk
2. (SE04V001): 100 m w/o Centennial PKY

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded

Project ID: 5142060577

Category: Technical Services Projects

Project Name: Metallic Watermain Condition Assessment Program

Ward(s): City Wide

Objective:

A detailed inspection of approximately 3,000 m of metallic watermain will help determine remaining life of the watermain. This will dictate management strategies, future needs, will help reduce the risk associated with major ruptures, and service outages. This project involves data collection through various technologies such as non-destructive acoustical testing, pipe sample laboratory testing, and project assignments to engineering consulting firms. Detailed condition assessment - Inspection of pipeline using specialized equipment.

Start Date: 2020

Completion Date: Ongoing

Status: Recommended (funded)

Tangible Capital Asset: No

Capital Budget Initiation: 2020

Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	15,120		630	630	630	630	630	630	630	630	630	630	8,820
Total: Expenses	15,120		630	630	630	630	630	630	630	630	630	630	8,820
Net Cost	15,120	0	630	630	630	630	630	630	630	630	630	630	8,820
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	630		630										
Total: Financing Sources	630		630										
Funding Required	14,490	0	0	630	630	630	630	630	630	630	630	630	8,820

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: PW Capital Water Consumption Program

Project ID: 5142060711

Category: Annual Projects
Ward(s): City Wide

Objective:
Water consumption used for watermain works on City contracts, during constructions i.e. flushing watermain, etc.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	3,960		180	180	180	180	180	180	180	180	180	180	2,160
Total: Expenses	3,960		180	180	180	180	180	180	180	180	180	180	2,160
Net Cost	3,960	0	180	180	180	180	180	180	180	180	180	180	2,160
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	180		180										
Total: Financing Sources	180		180										
Funding Required	3,780	0	0	180	180	180	180	180	180	180	180	180	2,160

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded **Project ID:** 5142060750
Project Name: Unscheduled Valve, Hydrant, Watermain & Misc Water Replace Program

Category: Rehabilitation Project
Ward(s): City Wide

Objective:
 For the repair of watermains and the replacement of valves and hydrants as a result of failures in the system. The majority of the described works are unscheduled, emergency works on the water distribution system that occur throughout the City and throughout the year.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	52,250		3,000	2,750	2,500	2,000	2,000	2,000	2,000	2,000	2,000	2,000	30,000
Total: Expenses	52,250		3,000	2,750	2,500	2,000	2,000	2,000	2,000	2,000	2,000	2,000	30,000
Net Cost	52,250	0	3,000	2,750	2,500	2,000	2,000	2,000	2,000	2,000	2,000	2,000	30,000
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	3,000		3,000										
Total: Financing Sources	3,000		3,000										
Funding Required	49,250	0	0	2,750	2,500	2,000	2,000	2,000	2,000	2,000	2,000	2,000	30,000

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Barton - Locke to Caroline & Locke - York to Barton

Project ID: 5142061302

Category: Replacement Project
Ward(s): 1, 2

Objective:
Replace the existing cast iron watermain which is hydraulically deficient and corroded internally. The project is intended to improve domestic and fire water flows to a residential area and to improve quality of water delivered while replacing undersized lead services. Replacement of approximately 410 m of existing watermain along with all associated hydrants, valves, and substandard services.

Start Date: 2018
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2017
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	1,000		1,000										
Total: Expenses	1,000		1,000										
Net Cost	1,000	0	1,000	0	0	0	0	0	0	0	0	0	0
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	1,000		1,000										
Total: Financing Sources	1,000		1,000										
Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Burlington Trunkmain Repairs

Project ID: 5142061305

Category: Rehabilitation Project
Ward(s): 3

Objective:

Replacement of four pipes of the 1200mm concrete pressure pipe on Industrial drive at Gage Ave. Pure Technologies inspected this line in June 2015. Based on their inspection and engineering analysis these pipes were flagged as a concern. This work will eliminate the risk of these pipes failing. Replace six pipe lengths on the Burlington Trunkmain on Industrial Drive at Gage Ave.

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2017
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	910		910										
Total: Expenses	910		910										

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From WIP Transfers	460		460										
Total: Revenues	460		460										

Net Cost	450	0	450	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	450		450										
Total: Financing Sources	450		450										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded **Project ID:** 5142061310
Project Name: Woodward Greenhill Transmission Main Pipeline repair on Summercrest

Category: Replacement Project
Ward(s): 5

Objective:

The City completed a PipeDiver inspection of the Woodward Greenhill Transmission Main between Barton and Nash and the Greenhill Reservoir. The PipeDiver is able to identify any pipes with wire breaks, a number of pipes with wire breaks were found. The worst pipe was located at 60 Summercrest this 16ft pipe length had 35 wire breaks. It is recommended that this 16ft pipe length be replaced to prevent a failure at this location. Replace a 16 ft pipe length of 1200mm Concrete Pressure Pipe on Summercrest.

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	500		500										
Total: Expenses	500		500										

Net Cost	500	0	500	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	500		500										
Total: Financing Sources	500		500										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded **Project ID:** 5142061502
Project Name: Water Meter - Installation/Replacement/Repair - General Maintenance

Category: Rehabilitation Project
Ward(s): City Wide

Objective:
 For the purchase and installation of water meters and equipment for all new construction; as well as the replacement and maintenance of existing water meters and equipment.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	95,145		2,920	3,610	3,680	3,750	3,160	3,220	3,280	3,340	3,410	3,480	61,295
Total: Expenses	95,145		2,920	3,610	3,680	3,750	3,160	3,220	3,280	3,340	3,410	3,480	61,295

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Program Reserves	5,120		640	640	640	640	640	640	640	640			
Total: Revenues	5,120		640	640	640	640	640	640	640	640			

Net Cost	90,025	0	2,280	2,970	3,040	3,110	2,520	2,580	2,640	2,700	3,410	3,480	61,295
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	2,280		2,280										
Total: Financing Sources	2,280		2,280										

Funding Required	87,745	0	0	2,970	3,040	3,110	2,520	2,580	2,640	2,700	3,410	3,480	61,295
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Field Data Systems Program

Project ID: 5142062073

Category: Upgrade Projects
Ward(s): City Wide

Objective:
To maintain, upgrade and acquire data and information for various asset management systems involved with the overall management of the water distribution network. (IPS; IRISS; ESRI and Bentley Suite Software)

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Other Capital Expenditures	2,750		110	110	110	110	110	110	110	110	110	110	1,650
Total: Expenses	2,750		110	110	110	110	110	110	110	110	110	110	1,650

Net Cost	2,750	0	110	110	110	110	110	110	110	110	110	110	1,650
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	110		110										
Total: Financing Sources	110		110										

Funding Required	2,640	0	0	110	110	110	110	110	110	110	110	110	1,650
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Substandard Water Service Replacement Program

Project ID: 5142062078

Category: Upgrade Projects
Ward(s): City Wide

Objective:
Remove and replace substandard water services (improper size and material), primarily to residential properties. This includes lead service replacements as mandated by the Provincial Government. This is a voluntary program available to all residents who have a substandard water service. The City currently replaces approximately 600 services annually under this program.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	48,000		2,750	2,750	2,500	2,000	2,000	2,000	2,000	2,000	2,000	2,000	26,000
Total: Expenses	48,000		2,750	2,750	2,500	2,000	2,000	2,000	2,000	2,000	2,000	2,000	26,000
Net Cost	48,000	0	2,750	2,750	2,500	2,000	2,000	2,000	2,000	2,000	2,000	2,000	26,000
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	2,750		2,750										
Total: Financing Sources	2,750		2,750										
Funding Required	45,250	0	0	2,750	2,500	2,000	2,000	2,000	2,000	2,000	2,000	2,000	26,000

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: WTP Pre-Treatment Isolation Valves

Project ID: 5142066310

Category: Plant - Sustainable Asset Mgt (SAM)
Ward(s): City Wide

Objective:
The existing pre-treatment isolation valving/chambers are critical for accommodating key maintenance/construction activities at the Woodward WTP and are at the end of their useful life and require replacement.

Start Date: 2020
Completion Date: 2021
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Plant (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	1,100			1,100									
Design	250		250										
Internal Resources/Staffing	130		30	100									
Total: Expenses	1,480		280	1,200									

Net Cost	1,480	0	280	1,200	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	280		280										
Total: Financing Sources	280		280										

Funding Required	1,200	0	0	1,200	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: WTP Chlorine Chemical Building

Project ID: 5142066350

Category: Building - New Construction
Ward(s): City Wide

Objective:
Design and Construction project to facilitate the following: 1) Replacement of the existing chlorine building due to the facility being beyond it's useful service life, 2) Short-term capital needs for the existing chlorine facility until the new facility is completed.

Start Date: 2020
Completion Date: 2022
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Plant (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	12,560			6,280	6,280								
Design	2,050		2,050										
Internal Resources/Staffing	700		200	250	250								
Total: Expenses	15,310		2,250	6,530	6,530								

Net Cost	15,310	0	2,250	6,530	6,530	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	2,250		2,250										
Total: Financing Sources	2,250		2,250										

Funding Required	13,060	0	0	6,530	6,530	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: St. Joseph's Tank Pulsation Dampener (HD002STK)

Project ID: 5142067420

Category: Demolition
Ward(s): 2

Objective:
 Decommissioning of the St. Joseph's Tank Pulsation Dampener (HD002STK).

Start Date: 2020
Completion Date: 2022
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2018
Program Type: Outstation (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	400				400								
Design	150		50	100									
Internal Resources/Staffing	60		10	10	40								
Total: Expenses	610		60	110	440								

Net Cost	610	0	60	110	440	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	60		60										
Total: Financing Sources	60		60										

Funding Required	550	0	0	110	440	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Lee Smith Reservoir (HDR00) Upgrades

Project ID: 5142067450

Category: Outstations-Sustainable Asset Mgt (SAM)
Ward(s): 12

Objective:
Multi-discipline upgrades required to improve operational efficiency and prolong the useful life of the Lee Smith Reservoir (HDR00) as per recommendations of the Sustainable Asset Management program.

Start Date: 2020
Completion Date: 2021
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Reservoir

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	750			750									
Design	250		250										
Internal Resources/Staffing	110		30	80									
Total: Expenses	1,110		280	830									

Net Cost	1,110	0	280	830	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	280		280										
Total: Financing Sources	280		280										

Funding Required	830	0	0	830	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded **Project ID:** 5142067752 **Category:** Outstations-Sustainable Asset Mgt (SAM)
Project Name: Water Outstation Inspections - Asset Management **Ward(s):** City Wide

Objective:
Condition Assessment of sequenced facilities on an annual basis as per recommendations of the Sustainable Asset Management Program to ensure sustainable operations.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Outstation (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Design	10,500		500	500	500	500	500	500	500	500	500	500	5,500
Internal Resources/Staffing	1,930		160	160	160	160	160	160	160	160	50	50	550
Total: Expenses	12,430		660	660	660	660	660	660	660	660	550	550	6,050

Net Cost	12,430	0	660	660	660	660	660	660	660	660	550	550	6,050
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	660		660										
Total: Financing Sources	660		660										

Funding Required	11,770	0	0	660	660	660	660	660	660	660	550	550	6,050
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded **Project ID:** 5142069075 **Category:** Plant - Water Quality Initiatives (WQI)
Project Name: City Environmental Lab Improvements Program **Ward(s):** City Wide

Objective: To upgrade / automate instrumentation required for monitoring and compliance testing of the City's drinking water.
Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Plant (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	2,770		150	1,000	340	190	90	50	50	50	50	50	750
Total: Expenses	2,770		150	1,000	340	190	90	50	50	50	50	50	750

Net Cost	2,770	0	150	1,000	340	190	90	50	50	50	50	50	750
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	150		150										
Total: Financing Sources	150		150										

Funding Required	2,620	0	0	1,000	340	190	90	50	50	50	50	50	750
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Hillcrest - Chedoke to end - Road Restoration

Project ID: 5142070006

Category: Coordinated - Replacement Projects
Ward(s): 1

Objective:
In accordance with the coordinated infrastructure cost-sharing policy, to reimburse the roads program for the reconstruction of roads being a direct result of coordinated watermain replacement works.

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	60		60										
Total: Expenses	60		60										

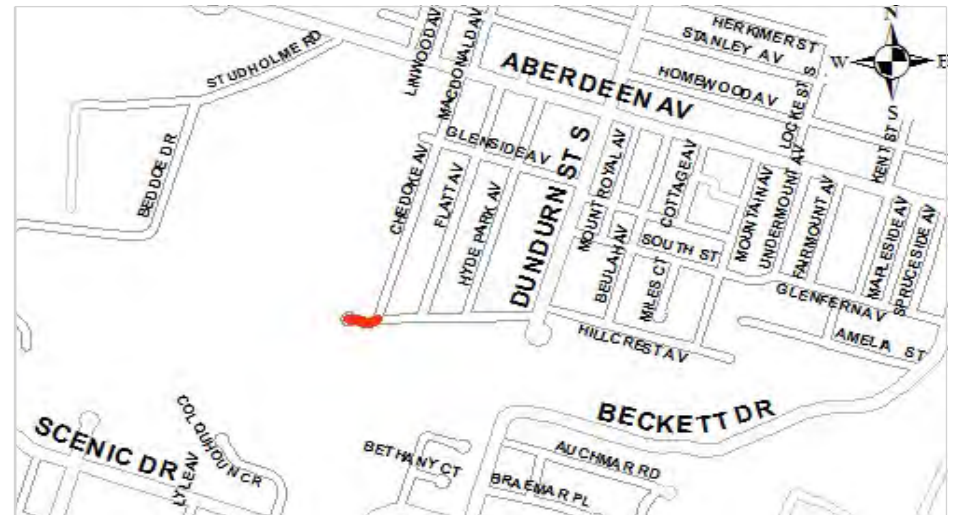
Net Cost	60	0	60	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	60		60										
Total: Financing Sources	60		60										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Main - Delena to Normanhurst & Normanhurst - Main to Queenston

Project ID: 5142070015

Category: Coordinated - Upgrade Projects
Ward(s): 4

Objective:
In accordance with the coordinated infrastructure cost-sharing policy, to reimburse the roads program for the reconstruction of roads being a direct result of coordinated wastewater works. Subject to Metrolinx funding.

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	300		300										
Total: Expenses	300		300										
Net Cost	300	0	300	0	0	0	0	0	0	0	0	0	0
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	300		300										
Total: Financing Sources	300		300										
Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded **Project ID:** 5142070018 **Category:** Coordinated - Replacement Projects
Project Name: Roxborough - Kenilworth to Strathearne (Homeside Neighbourhood) - Road Restoration **Ward(s):** 4

Objective:
 In accordance with the coordinated infrastructure cost-sharing policy, to reimburse the roads program for the reconstruction of roads being a direct result of coordinated watermain replacement works.

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	700		700										
Total: Expenses	700		700										

Net Cost	700	0	700	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	700		700										
Total: Financing Sources	700		700										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Hillcrest - Chedoke to end

Project ID: 5142071306

Category: Coordinated - Replacement Projects
Ward(s): 1

Objective:
Replacement of the existing watermain which is hydraulically deficient and corroded internally. The project is intended to improve domestic and fire flows and to improve quality of water delivered while replacing undersized lead services. Replacement of existing watermain along with all associated hydrants, valves, and substandard services. This project is to be coordinated with sewer and road reconstruction.

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	120		120										
Total: Expenses	120		120										

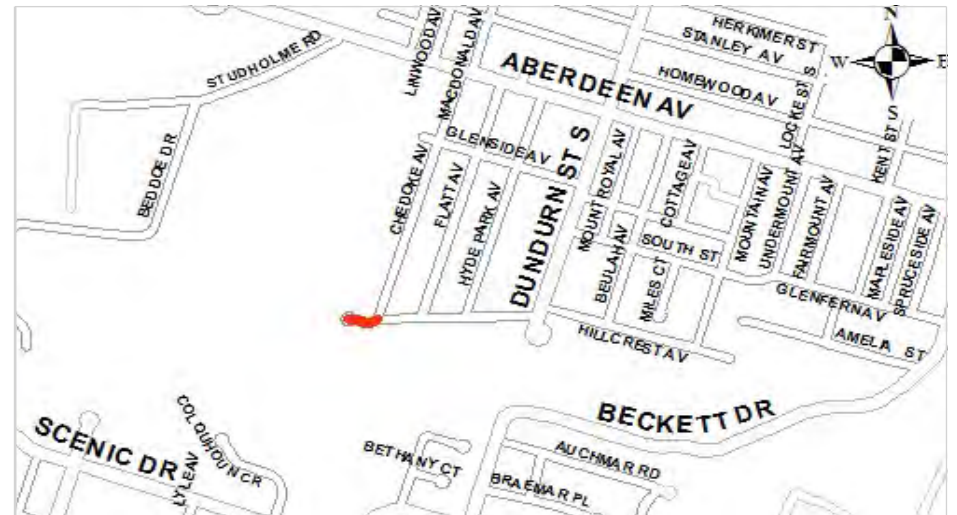
Net Cost	120	0	120	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	120		120										
Total: Financing Sources	120		120										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Delena / Beland / Dunsmore

Project ID: 5142071315

Category: Coordinated - Replacement Projects
Ward(s): 4

Objective:
Due to recorded failures and predicted high probability for increased failure rates in the near future, the existing watermain has become structurally deficient and requires replacment in coordination with road reconstruction.

Start Date: 2020
Completion Date: 2021
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2019
Program Type: Distribution (Water)

Scope: Delana & Beland - Queenston to Roxborough

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	1,140			1,140									
Design	150		150										
Total: Expenses	1,290		150	1,140									

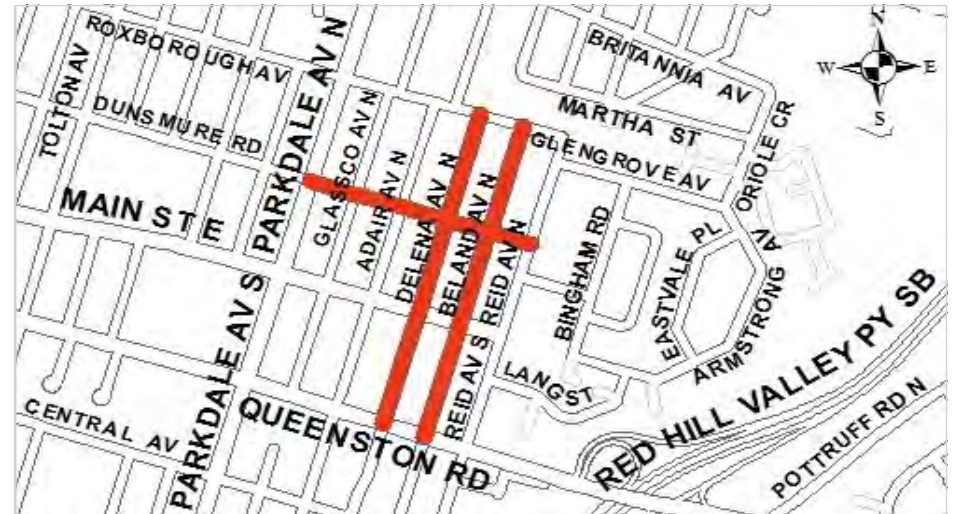
Net Cost	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
	1,290	0	150	1,140	0	0	0	0	0	0	0	0	0

Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	150		150										
Total: Financing Sources	150		150										

Funding Required	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
	1,140	0	0	1,140	0	0	0	0	0	0	0	0	0

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded **Project ID:** 5142071318 **Category:** Coordinated - Replacement Projects
Project Name: Roxborough - Kenilworth to Strathearne (Homeside Neighbourhood) **Ward(s):** 4

Objective:
 Due to recorded failures and predicted high probability for increased failure rates in the near future, the existing watermain has become structurally deficient and requires replacement. This is intended to reduce overall service outages. Replacement of existing watermain along with all associated hydrants, valves, and substandard services. This project is to be coordinated with road reconstruction.

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2017
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	770		770										
Total: Expenses	770		770										

Net Cost	770	0	770	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	770		770										
Total: Financing Sources	770		770										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Dundas - 575m w/o Evans to 210 w/o Evans

Project ID: 5142080080

Category: Development Projects
Ward(s): 15

Objective:
Loop watermain distribution system. 2019 DC Background Study, Project W11-W-19 (100% DC)

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	310		310										
Design	60		60										
Internal Resources/Staffing	40		40										
Total: Expenses	410		410										

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Non-Res-TCA	150		150										
Dev Charges - Res-TCA	260		260										
Total: Revenues	410		410										

Net Cost	0	0	0	0	0	0	0	0	0	0	0	0	0
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Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Airport Lands External Water Servicing (Feedermain) (W-27)

Project ID: 5142096250

Category: Master Plan - Horizontal Assets
Ward(s): 11

Objective:

To provide external servicing to the airport lands as per Citywide Water/Wastewater Master Plan. 300/400 mm watermains on Glancaster Rd, Southcote Rd, Book Rd and proposed New roads. (DC Study Projects IDs MH1-W-19 to MH3-W-19; MH5-W-19; MH7-W-19 to MH19-W-19; MH22-W-19 to MH30-W-19; MH44-W-19).

Start Date: 2020
Completion Date: 2025
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2007
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	14,720			6,520				8,200					
Design	2,180		980				1,200						
Internal Resources/Staffing	1,690		100	650			110	830					
Total: Expenses	18,590		1,080	7,170			1,310	9,030					

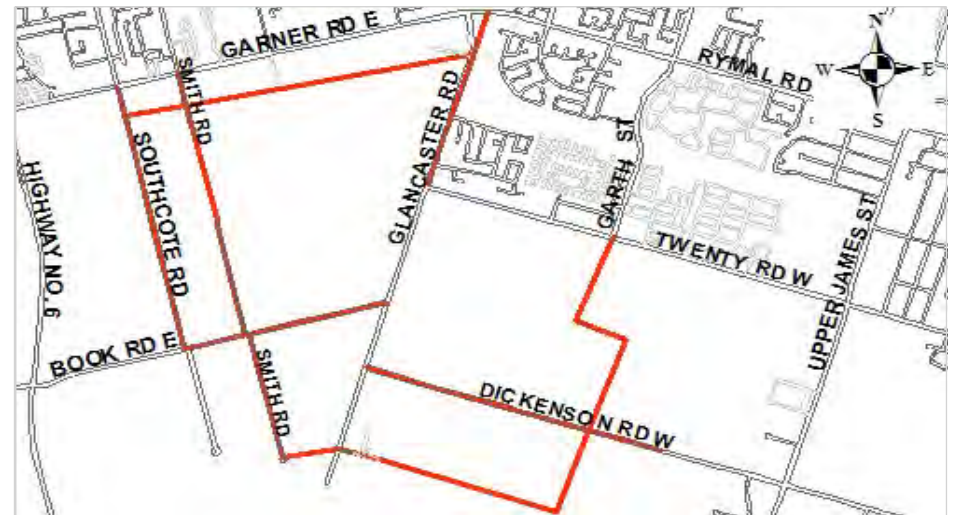
Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Non Res DEBT	6,237		317	2,105			485	3,330					
Dev Charges - Res DEBT	10,619		540	3,584			825	5,670					
Other Revenues - External	1,038		136	902									
Third Party Billings	696		87	579				30					
Total: Revenues	18,590		1,080	7,170			1,310	9,030					

Net Cost	0	0	0	0	0	0	0	0	0	0	0	0	0
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Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Garner Road Trunk Watermain - Southcote to Wilson (W-09)

Project ID: 5142096520

Category: Master Plan - Horizontal Assets
Ward(s): 12

Objective:
To provide additional distribution capacity to service new development in Ancaster and AEGD as per Citywide Water/Wastewater Master Plan. 500/600mm watermain (DC Study Project ID # A1-W-19, A16-W-19 & A17-W-19).

Start Date: 2020
Completion Date: 2021
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	13,550			13,550									
Design	3,390		3,390										
Total: Expenses	16,940		3,390	13,550									

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Non Res DEBT	6,268		1,255	5,013									
Dev Charges - Res DEBT	10,672		2,135	8,537									
Total: Revenues	16,940		3,390	13,550									

Net Cost	0	0	0	0	0	0	0	0	0	0	0	0	0
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Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded
Project Name: Locke St Trunk Watermain - Main to Barton (W-19)

Project ID: 5142096850

Category: Master Plan - Horizontal Assets
Ward(s): 1

Objective:
To provide additional distribution capacity to accommodate new and redevelopment in central Hamilton and at the harbour as per Citywide Water/Wastewater Master Plan. 1,500m of 400mm watermain (DC Study Project ID # CW11-W-14).

Start Date: 2018
Completion Date: 2019
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2007
Program Type: Distribution (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	3,794		1,800			1,994							
Design	500		200			300							
Internal Resources/Staffing	430		200			230							
Total: Expenses	4,724		2,200			2,524							

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Non Res DEBT	1,748		814			934							
Dev Charges - Res DEBT	2,976		1,386			1,590							
Total: Revenues	4,724		2,200			2,524							

Net Cost	0	0	0	0	0	0	0	0	0	0	0	0	0
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Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)	11.0		
Staffing Impacts (F.T.E)			.06

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Water System - Public Works Rate Funded

Project ID: 5142695552

Category: Master Plan - Vertical Assets

Project Name: P.S. HD07A - New District 7 (Elfrida area) Pumping Station (W-21)

Ward(s): City Wide

Objective:

To construct a new pumping station to provide additional pumping capacity to supply the Elfrida area of Zone 7 and to provide additional system security through redundancy. 100 ML/d capacity (DC Study Project ID #SCU21-W-14). Project to be coordinated with Pressure District H7 Dedicated Trunk Feedermain (W-22).

Start Date: 2025

Completion Date: 2027

Status: Recommended (funded)

Tangible Capital Asset: Yes

Capital Budget Initiation: 2014

Program Type: Pumping Station

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	16,750									16,750			
Consultant	150		150										
Design	2,800								2,800				
Internal Resources/Staffing	550	30	20						250	250			
Land/Property	250	250											
Total: Expenses	20,500	280	170						3,050	17,000			

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Non Res DEBT	7,577	96	63						1,128	6,290			
Dev Charges - Res DEBT	12,923	184	107						1,922	10,710			
Total: Revenues	20,500	280	170						3,050	17,000			

Net Cost	0	0	0	0	0	0	0	0	0	0	0	0	0

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



Wastewater Services

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2020 RATE SUPPORTED CAPITAL AND OPERATING BUDGET BOOK
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2020 Funding By Source

City of Hamilton
Wastewater System
2020 Capital Budget Project List
(000's)

City Ward	Project Number	Project Description	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
												From Operating	Debt
Annual Projects													
City Wide	4032058001	Consultation and Accommodation	30	-	-	-	-	-	-	-	30	30	-
City Wide	5162001099	Engineering Services Staffing Costs - Wastewater	4,700	-	-	-	-	-	-	-	4,700	4,700	-
City Wide	5162060711	PW Capital Water Consumption Program	180	-	-	-	-	-	-	-	180	180	-
8	5162061006	Inverness Ave E - Combined Major Trunk Rehabilitation	200	-	-	-	-	-	200	-	-	-	-
<i>Sub-Total Annual Projects</i>			5,110	-	-	-	-	-	200	-	4,910	4,910	-
Building - New Construction													
City Wide	5161667421	New Haulage Receiving Station	550	-	-	-	-	-	-	-	550	550	-
<i>Sub-Total Building - New Construction</i>			550	-	-	-	-	-	-	-	550	550	-
Computer Software Purchases													
City Wide	5162057545	Wastewater Computer Model Update & Maintenance	660	-	-	-	-	-	-	-	660	660	-
<i>Sub-Total Computer Software Purchases</i>			660	-	-	-	-	-	-	-	660	660	-
Coordinated - Network Extension Projects													
9	5162080089	Rymal - Fletcher to Upper Centennial	5,330	-	-	5,330	-	-	-	-	-	-	-
<i>Sub-Total Coordinated - Network Extension Projects</i>			5,330	-	-	5,330	-	-	-	-	-	-	-
Coordinated - Replacement Projects													
1	5162071006	Hillcrest - Chedoke to end	60	-	-	-	-	-	-	-	60	60	-
<i>Sub-Total Coordinated - Replacement Projects</i>			60	-	-	-	-	-	-	-	60	60	-
Coordinated - Upgrade Projects													
4	5162071315	Main - Queenston Traffic Circle to Delena & Rosewood	1,160	-	-	-	-	-	-	-	1,160	1,160	-
<i>Sub-Total Coordinated - Upgrade Projects</i>			1,160	-	-	-	-	-	-	-	1,160	1,160	-
Development Projects													
4	5162080961	Roxborough Park Intensification	1,500	-	-	1,500	-	-	-	-	-	-	-
<i>Sub-Total Development Projects</i>			1,500	-	-	1,500	-	-	-	-	-	-	-
Maintenance Projects													
5, 6	5161968920	Fennell/Greenhill Drop Shaft	500	-	-	-	-	-	-	-	500	500	-
<i>Sub-Total Maintenance Projects</i>			500	-	-	-	-	-	-	-	500	500	-

City of Hamilton
Wastewater System
2020 Capital Budget Project List
(000's)

City Ward	Project Number	Project Description	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
												From Operating	Debt
Master Plan													
City Wide	516155264	City-Wide Wastewater Master Plan	300	-	-	270	-	-	-	-	30	30	-
City Wide	5162055010	Wastewater Systems Planning Program	380	-	-	-	-	-	-	-	380	380	-
<i>Sub-Total Master Plan</i>			680	-	-	270	-	-	-	-	410	410	-
Master Plan - Horizontal Assets													
11	5161696452	Airport Lands Dickenson Rd Trunk Sewer (WW-27, WW-26, WW-28) (CASH FLOWED)	26,800	-	-	26,800	-	-	-	-	-	-	-
<i>Sub-Total Master Plan - Horizontal Assets</i>			26,800	-	-	26,800	-	-	-	-	-	-	-
Master Plan - Vertical Assets													
15	5161796786	First Street (Waterdown Sanitary) PS Upgrade DC014	1,050	-	-	640	-	-	-	-	410	410	-
City Wide	5162055050	Municipal Class EA Studies	400	-	-	-	-	-	-	-	400	400	-
City Wide	5162095800	Flooding & Drainage Master Plan Capital Improvements	880	-	-	-	-	-	-	-	880	880	-
<i>Sub-Total Master Plan - Vertical Assets</i>			2,330	-	-	640	-	-	-	-	1,690	1,690	-
Outstations-Sustainable Asset Mgt (SAM)													
12	5161267270	Ancaster Wastewater Outstations Upgrades	110	-	-	-	-	-	-	-	110	110	-
13	5161267273	Dundas Wastewater Outstations Upgrades	600	-	-	-	-	-	-	-	600	600	-
12, 13, 15	5161667622	FC001, DC009 & HC011 Wastewater Pumping Stations Upgrades	1,500	-	-	-	-	-	-	-	1,500	1,500	-
4	5161767420	Parkdale Avenue HC001 Wastewater Pumping Station Upgrades	10	-	-	-	-	-	-	-	10	10	-
11	5161967123	AEGD Infrastructure Growth Initiative (English Church Road Area)	4,000	-	-	4,000	-	-	-	-	-	-	-
5	5162067065	Eastport Drive SPS (HC017) Upgrades	390	-	-	-	-	-	-	-	390	390	-
15	5162067275	FC001 Elgin Street Sewage Pumping Station	550	-	-	-	-	-	-	-	550	550	-
4, 12, 15	5162067375	Minor Upgrades to SPS Outstations	170	-	-	-	-	-	-	-	170	170	-
12	5162067425	Hillside SPS (DC006) Upgrades	280	-	-	-	-	-	-	-	280	280	-
City Wide	5162067752	Wastewater Outstation Inspections - Asset Management Program	520	-	-	-	-	-	-	-	520	520	-
<i>Sub-Total Outstations-Sustainable Asset Mgt (SAM)</i>			8,130	-	-	4,000	-	-	-	-	4,130	4,130	-
Plans/Studies													
City Wide	5162055801	Woodward WWTP Facility Plan	350	-	-	-	-	-	-	-	350	350	-
City Wide	5162062543	CSO Characterization Program	450	-	-	-	-	-	-	-	450	450	-
<i>Sub-Total Plans/Studies</i>			800	-	-	-	-	-	-	-	800	800	-
Plant - Sustainable Asset Mgt (SAM)													
City Wide	5161966102	Woodward WWTP - Expansion (CASH FLOWED)	1,750	-	-	1,750	-	-	-	-	-	-	-

City of Hamilton
Wastewater System
2020 Capital Budget Project List
(000's)

City Ward	Project Number	Project Description	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
												From Operating	Debt
City Wide	5161966511	Woodward WWTP - Digester #5 (CASH FLOWED)	2,500	-	-	-	-	-	-	-	2,500	2,500	-
City Wide	5162066311	Woodward WWTP - Digester #3 (CASH FLOWED)	250	-	-	-	-	-	-	-	250	250	-
City Wide	5162066813	Dundas WWTP - Health & Safety Immediate Needs	4,900	-	-	-	-	-	1,150	-	3,750	3,750	-
City Wide	5162067420	Main & King CSO Rehabilitation	350	-	-	-	-	-	-	-	350	350	-
<i>Sub-Total Plant - Sustainable Asset Mgt (SAM)</i>			9,750	-	-	1,750	-	-	1,150	-	6,850	6,850	-
Plant - Wastewater Investment Needs (WINS)													
City Wide	5160866801	Woodward WWTP - Clean Harbour (CASH FLOWED)	100,631	65,736	-	5,096	12,120	-	-	-	17,679	2,579	15,100
City Wide	5160966910	Woodward WWTP - Biosolids Management Facility	28,030	14,300	-	2,590	11,140	-	-	-	-	-	-
City Wide	5162069075	City Environmental Lab Improvements Program	150	-	-	-	-	-	-	-	150	150	-
<i>Sub-Total Plant - Wastewater Investment Needs (WINS)</i>			128,811	80,036	-	7,686	23,260	-	-	-	17,829	2,729	15,100
Rehabilitation Project													
12	5161960942	Ancaster Sewage Works Pipeline CIPP Rehab - CASH FLOW	500	-	-	-	-	-	-	-	500	500	-
5	5162060044	Battlefield Creek Major Trunk Cleaning & Condition Assessment	250	-	-	-	-	-	-	-	250	250	-
City Wide	5162060302	Emergency Repairs - Cross Connections Program	700	-	-	-	-	-	-	-	700	700	-
City Wide	5162060390	Wastewater System Lining Program	4,050	-	-	-	-	-	-	-	4,050	4,050	-
City Wide	5162060522	Sewer Lateral Management Program (WWC)	4,250	-	-	-	-	-	-	-	4,250	4,250	-
City Wide	5162060533	Trenchless Manhole Rehabilitation	70	-	-	-	-	-	-	-	70	70	-
City Wide	5162060574	Pre-Construction Mainline Condition Assessment	500	-	-	-	-	-	-	-	500	500	-
City Wide	5162060575	Mainline Sewer Condition Assessment Program	1,640	-	-	-	-	-	-	-	1,640	1,640	-
City Wide	5162060576	Sewer Lateral Condition Assessment Program	540	-	-	-	-	-	-	-	540	540	-
City Wide	5162060577	Mainline Sewer Condition Assessment for Compliance & Regulations	100	-	-	-	-	-	-	-	100	100	-
5, 9	5162061051	Satellite City Trunk Sewer Rehabilitation	8,750	-	-	-	-	-	-	-	8,750	6,950	1,800
<i>Sub-Total Rehabilitation Project</i>			21,350	-	-	-	-	-	-	-	21,350	19,550	1,800
Repairs													
City Wide	5162060820	Open Cut Repairs for CIPP Program	500	-	-	-	-	-	-	-	500	500	-
<i>Sub-Total Repairs</i>			500	-	-	-	-	-	-	-	500	500	-
Replacement Project													
City Wide	5162061444	Sewer Lateral Replace/Rehab Program	3,600	-	-	-	-	-	-	-	3,600	3,600	-
City Wide	5162061740	Unscheduled Manhole and Sewermain Replacement Program	500	-	-	-	-	-	-	-	500	500	-
City Wide	5162071015	Sewer Lateral Replacement for Co-ordinated Projects	270	-	-	-	-	-	-	-	270	270	-
City Wide	5162071074	Contingency for Unscheduled Works Program	180	-	-	-	-	-	-	-	180	180	-
<i>Sub-Total Replacement Project</i>			4,550	-	-	-	-	-	-	-	4,550	4,550	-

City of Hamilton
Wastewater System
2020 Capital Budget Project List
(000's)

City Ward	Project Number	Project Description	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
												From Operating	Debt
Restorations													
City Wide	5162011101	Road Restoration Program	1,800	-	-	-	-	-	-	-	1,800	1,800	-
		<i>Sub-Total Restorations</i>	1,800	-	-	-	-	-	-	-	1,800	1,800	-
Technical Services Projects													
City Wide	4032055522	State of the Infrastructure - Asset Management	100	-	-	-	-	-	100	-	-	-	-
City Wide	4032055588	O.Reg. 588/17 Compliance - Asset Management Plan Development	75	-	-	-	-	-	-	-	75	75	-
City Wide	5162049555	QA-QC Service Contract Program	140	-	-	-	-	-	-	-	140	140	-
City Wide	5162055022	Engineering Consultant Sewermain Projects	300	-	-	-	-	-	-	-	300	300	-
City Wide	5162055556	Mapping Update Program	40	-	-	-	-	-	-	-	40	40	-
City Wide	5162055878	Forcemain Condition Assessment Program	270	-	-	-	-	-	-	-	270	270	-
City Wide	5162055880	Inflow & Infiltration Studies and Flow Monitoring Program	500	-	-	251	-	-	-	-	249	249	-
		<i>Sub-Total Technical Services Projects</i>	1,425	-	-	251	-	-	100	-	1,074	1,074	-
Upgrade Projects													
City Wide	5162062073	Field Data Systems Program	110	-	-	-	-	-	60	-	50	50	-
		<i>Sub-Total Upgrade Projects</i>	110	-	-	-	-	-	60	-	50	50	-
Water Quality Initiatives (WQI)													
City Wide	5161468422	Randle Reef Sediment Remediation (CASH FLOWED)	550	-	-	-	-	-	-	-	550	550	-
		<i>Sub-Total Water Quality Initiatives (WQI)</i>	550	-	-	-	-	-	-	-	550	550	-
Waterfront Initiatives													
City Wide	5162055800	Sewer Outfall Monitoring Study	150	-	-	-	-	-	-	-	150	150	-
		<i>Sub-Total Waterfront Initiatives</i>	150	-	-	-	-	-	-	-	150	150	-
Total All Projects			222,606	80,036	-	48,227	23,260	-	1,510	-	69,573	52,673	16,900

2020-2029 Capital Budget List

**CITY OF HAMILTON
WASTEWATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Rehabilitation, Replacement, & Upgrade Programs (SAM)																
City Wide	4032014405	Contaminated Soil & Rock Disposal Program	0	0	0	0	220	220	0	0	440	440	660	660	2020	Ongoing
City Wide	4032055522	State of the Infrastructure - Asset Management	0	0	100	0	90	90	90	90	630	630	910	810	2020	Ongoing
City Wide	4032055588	O.Reg. 588/17 Compliance - Asset Management Plan Development	0	0	75	75	75	75	75	75	75	75	300	300	2020	2023
City Wide	4032058001	Consultation and Accommodation	0	0	30	30	30	30	30	30	210	210	300	300	2020	Ongoing
4	5161641226	Centralized Water and Wastewater Operations Centre (CASH FLOWED)	1,250	2,250	0	0	0	0	0	0	7,500	7,500	8,750	9,750	2016	2024
6, 7	5161655351	Lawfield / Berrisfield Neighbourhoods	185	110	0	0	170	170	0	0	0	0	355	280	2016	2021
City Wide	5161667421	New Haulage Receiving Station	1,690	0	550	550	4,250	4,250	4,250	4,250	0	0	10,740	9,050	2016	2022
12	5161960942	Ancaster Sewage Works Pipeline CIPP Rehab - CASH FLOW	0	0	500	500	0	0	0	0	0	0	500	500	2019	2020
City Wide	5162001099	Engineering Services Staffing Costs - Wastewater	0	0	4,700	4,700	4,700	4,700	4,700	4,700	32,900	32,900	47,000	47,000	2020	Ongoing
City Wide	5162011101	Road Restoration Program	0	0	1,800	1,800	1,800	1,800	1,800	1,800	12,600	12,600	18,000	18,000	2020	Ongoing
City Wide	5162049555	QA-QC Service Contract Program	0	0	140	140	140	140	140	140	980	980	1,400	1,400	2020	Ongoing
City Wide	5162055022	Engineering Consultant Sewermain Projects	0	0	300	300	300	300	300	300	2,100	2,100	3,000	3,000	2020	Ongoing
City Wide	5162055556	Mapping Update Program	0	0	40	40	40	40	40	40	280	280	400	400	2020	Ongoing
City Wide	5162055878	Forcemain Condition Assessment Program	0	0	270	270	270	270	270	270	1,890	1,890	2,700	2,700	2020	Ongoing
City Wide	5162055880	Inflow & Infiltration Studies and Flow Monitoring Program	0	0	500	249	500	249	500	249	1,510	749	3,010	1,496	2020	Ongoing
City Wide	5162057545	Wastewater Computer Model Update & Maintenance	0	0	660	660	660	660	280	280	1,960	1,960	3,560	3,560	2020	Ongoing
5	5162060044	Battlefield Creek Major Trunk Cleaning & Condition Assessment	0	0	250	250	0	0	0	0	0	0	250	250	2020	2020
City Wide	5162060302	Emergency Repairs - Cross Connections Program	0	0	700	700	700	700	500	500	1,550	1,550	3,450	3,450	2020	Ongoing
City Wide	5162060390	Wastewater System Lining Program	0	0	4,050	4,050	4,050	4,050	4,050	4,050	28,350	28,350	40,500	40,500	2020	Ongoing
City Wide	5162060522	Sewer Lateral Management Program (WWC)	0	0	4,250	4,250	4,250	4,250	4,000	4,000	24,500	24,500	37,000	37,000	2020	Ongoing
City Wide	5162060533	Trenchless Manhole Rehabilitation	0	0	70	70	70	70	70	70	490	490	700	700	2020	Ongoing

**CITY OF HAMILTON
WASTEWATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Rehabilitation, Replacement, & Upgrade Programs (SAM)																
City Wide	5162060574	Pre-Construction Mainline Condition Assessment	0	0	500	500	500	500	500	500	3,500	3,500	5,000	5,000	2020	Ongoing
City Wide	5162060575	Mainline Sewer Condition Assessment Program	0	0	1,640	1,640	1,140	1,140	1,140	1,140	7,980	7,980	11,900	11,900	2020	Ongoing
City Wide	5162060576	Sewer Lateral Condition Assessment Program	0	0	540	540	540	540	540	540	3,780	3,780	5,400	5,400	2020	Ongoing
City Wide	5162060577	Mainline Sewer Condition Assessment for Compliance & Regulations	0	0	100	100	100	100	100	100	700	700	1,000	1,000	2020	Ongoing
City Wide	5162060711	PW Capital Water Consumption Program	0	0	180	180	180	180	180	180	940	940	1,480	1,480	2020	Ongoing
City Wide	5162060820	Open Cut Repairs for CIPP Program	0	0	500	500	500	500	500	500	3,500	3,500	5,000	5,000	2020	Ongoing
8	5162061006	Inverness Ave E - Combined Major Trunk Rehabilitation	0	0	200	0	770	770	0	0	0	0	970	770	2020	2021
5, 9	5162061051	Satellite City Trunk Sewer Rehabilitation	0	0	8,750	8,750	0	0	0	0	0	0	8,750	8,750	2020	2020
City Wide	5162061444	Sewer Lateral Replace/Rehab Program	0	0	3,600	3,600	3,600	3,600	3,600	3,600	25,200	25,200	36,000	36,000	2020	Ongoing
City Wide	5162061740	Unscheduled Manhole and Sewermain Replacement Program	0	0	500	500	400	400	400	400	2,500	2,500	3,800	3,800	2020	Ongoing
City Wide	5162062073	Field Data Systems Program	0	0	110	50	110	110	110	110	770	770	1,100	1,040	2020	Ongoing
City Wide	5162071015	Sewer Lateral Replacement for Co-ordinated Projects	0	0	270	270	270	270	270	270	2,610	2,610	3,420	3,420	2020	Ongoing
City Wide	5162071074	Contingency for Unscheduled Works Program	0	0	180	180	0	0	180	180	540	540	900	900	2020	Ongoing
City Wide	5162071940	Unspecified WW Works	0	0	0	0	0	0	0	0	35,800	35,800	35,800	35,800	2020	2024
6, 7, 8	5162260291	Fennell Combined Trunk Sewer Trenchless Rehabilitation - West 5th to Mountain Brow	0	0	0	0	0	0	2,000	2,000	0	0	2,000	2,000	2022	2022
4	5162361340	Strathearne Ave North Trunk Sewer Rehabilitation	0	0	0	0	0	0	0	0	3,000	3,000	3,000	3,000	2023	2023
15	5162418420	Grindstone Creek Utility Bridge	0	0	0	0	0	0	0	0	3,500	3,500	3,500	3,500	2024	2024
4	5162561540	Strathearne Ave South Trunk Sewer Rehabilitation	0	0	0	0	0	0	0	0	2,000	2,000	2,000	2,000	2025	2025
			3,125	2,360	36,055	35,444	30,425	30,174	30,615	30,364	214,285	213,524	314,505	311,866		

Projects Coordinated with Roads Program

**CITY OF HAMILTON
WASTEWATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Projects Coordinated with Roads Program																
1	5162071006	Hillcrest - Chedoke to end	0	0	60	60	0	0	0	0	0	0	60	60	2020	2020
4	5162071315	Main - Queenston Traffic Circle to Delena & Rosewood	0	0	1,160	1,160	0	0	0	0	0	0	1,160	1,160	2020	2020
1	5162371326	Jones / Oxford / Tecumseh (Strathcona Neighbourhood)	0	0	0	0	0	0	0	0	410	410	410	410	2023	2023
4	5162771220	Burlington & Industrial - Ottawa to Kenilworth	0	0	0	0	0	0	0	0	740	740	740	740	2027	2027
3	5162961925	Stipeley Neighbourhood (South) - Connaught / Balasm / Dunsmure	0	0	0	0	0	0	0	0	80	80	80	80	2029	2029
			0	0	1,220	1,220	0	0	0	0	1,230	1,230	2,450	2,450		
SERG Projects																
City Wide	5162696475	Flooding & Drainage Master Plan Capital Forecast	0	0	0	0	0	0	0	0	22,500	22,500	22,500	22,500	2026	2029
			0	0	0	0	0	0	0	0	22,500	22,500	22,500	22,500		
Waterfront Initiatives																
City Wide	5162055800	Sewer Outfall Monitoring Study	0	0	150	150	0	0	0	0	0	0	150	150	2020	2020
			0	0	150	150	0	0	0	0	0	0	150	150		
Plant/Outstations Projects (SAM)																
13	5161266213	Dundas WWTP Improvements (CASH FLOWED)	3,070	0	0	0	1,650	1,650	1,650	1,650	24,150	24,150	30,520	27,450	2012	2021
12	5161267270	Ancaster Wastewater Outstations Upgrades	8,320	0	110	110	0	0	0	0	0	0	8,430	110	2012	2020
13	5161267273	Dundas Wastewater Outstations Upgrades	2,730	280	600	600	2,290	2,290	0	0	0	0	5,620	3,170	2012	2020
5	5161467756	Greenhill & Cochrane HCS01 Combined Sewer Overflow Tank Cleaning & Upgrades (CASH FLOWED)	2,920	930	0	0	1,530	1,530	0	0	0	0	4,450	2,460	2014	2021
12, 13, 15	5161667622	FC001, DC009 & HC011 Wastewater Pumping Stations Upgrades	5,190	1,438	1,500	1,500	0	0	0	0	0	0	6,690	2,938	2016	2020
4	5161767420	Parkdale Avenue HC001 Wastewater Pumping Station Upgrades	660	110	10	10	250	250	2,860	2,860	0	0	3,780	3,230	2017	2019

**CITY OF HAMILTON
WASTEWATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Plant/Outstations Projects (SAM)																
City Wide	5161966102	Woodward WWTP - Expansion (CASH FLOWED)	1,500	0	1,750	0	1,750	0	2,500	0	288,874	0	296,374	0	2019	2028
City Wide	5161966511	Woodward WWTP - Digester #5 (CASH FLOWED)	500	0	2,500	2,500	2,500	2,500	0	0	0	0	5,500	5,000	2018	2021
11	5161967123	AEGD Infrastructure Growth Initiative (English Church Road Area)	0	0	4,000	0	0	0	0	0	0	0	4,000	0	2019	2019
City Wide	5162066311	Woodward WWTP - Digester #3 (CASH FLOWED)	0	0	250	250	2,500	2,500	2,500	2,500	0	0	5,250	5,250	2020	2022
City Wide	5162066713	Wastewater Maintenance Capital Program	0	0	0	0	2,000	2,000	2,000	2,000	14,000	14,000	18,000	18,000	2020	Ongoing
City Wide	5162066813	Dundas WWTP - Health & Safety Immediate Needs	0	0	4,900	3,750	0	0	0	0	0	0	4,900	3,750	2020	2020
5	5162067065	Eastport Drive SPS (HC017) Upgrades	0	0	390	390	1,320	1,320	0	0	0	0	1,710	1,710	2020	2022
15	5162067275	FC001 Elgin Street Sewage Pumping Station	0	0	550	550	1,700	1,700	0	0	0	0	2,250	2,250	2020	2021
4, 12, 15	5162067375	Minor Upgrades to SPS Outstations	0	0	170	170	990	990	0	0	0	0	1,160	1,160	2020	2021
City Wide	5162067420	Main & King CSO Rehabilitation	0	0	350	350	0	0	0	0	0	0	350	350	2020	2020
12	5162067425	Hillside SPS (DC006) Upgrades	0	0	280	280	1,100	1,100	0	0	0	0	1,380	1,380	2020	2021
City Wide	5162067752	Wastewater Outstation Inspections - Asset Management Program	0	0	520	520	520	520	520	520	3,040	3,040	4,600	4,600	2020	Ongoing
City Wide	5162266011	Woodward WWTP - Secondary Digester	0	0	0	0	0	0	500	500	4,000	4,000	4,500	4,500	2022	2023
City Wide	5162366420	Woodward WWTP - Primary Clarifiers (Galleries 1-8)	0	0	0	0	0	0	0	0	27,940	27,940	27,940	27,940	2018	2023
City Wide	5162367751	Wastewater Outstation Upgrades - Asset Management Program	0	0	0	0	0	0	0	0	28,000	28,000	28,000	28,000	2023	Ongoing
City Wide	5162466301	Woodward WWTP North Plant Rehabilitation (CASH FLOWED)	0	0	0	0	0	0	0	0	50,000	50,000	50,000	50,000	2024	2028
			24,890	2,758	17,880	10,980	20,100	18,350	12,530	10,030	440,004	151,130	515,404	193,248		
Plant/Outstations Projects (WQI)																
City Wide	5161468422	Randle Reef Sediment Remediation (CASH FLOWED)	5,100	1,550	550	550	500	500	0	0	0	0	6,150	2,600	2014	2021
			5,100	1,550	550	550	500	500	0	0	0	0	6,150	2,600		
Plant/Outstations Projects (WINS)																

**CITY OF HAMILTON
WASTEWATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Plant/Outstations Projects (WINS)																
City Wide	5160866801	Woodward WWTP - Clean Harbour (CASH FLOWED)	216,743	3,266	100,631	17,679	69,363	29,793	25,186	22,155	0	0	411,923	72,893	2008	2022
City Wide	5160966910	Woodward WWTP - Biosolids Management Facility	10,470	630	28,030	0	2,770	2,240	2,770	2,240	19,390	15,680	63,430	20,790	2009	2051
City Wide	5162069075	City Environmental Lab Improvements Program	0	0	150	150	200	200	340	340	530	530	1,220	1,220	2020	Ongoing
			227,213	3,896	128,811	17,829	72,333	32,233	28,296	24,735	19,920	16,210	476,573	94,903		
Master Plan - Horizontal Assets																
5, 9	5161695747	Battlefield Trunk Sewer Twinning (WW-33) (CASH FLOWED)	12,150	0	0	0	10,500	0	0	0	0	0	22,650	0	2016	2021
11	5161696452	Airport Lands Dickenson Rd Trunk Sewer (WW-27, WW-26, WW-28) (CASH FLOWED)	4,400	0	26,800	0	20,300	0	20,300	0	11,300	0	83,100	0	2016	2018
1	5161996954	Aberdeen at Hillside Neighbourhood Sewer Separation	450	0	0	0	0	0	2,230	2,230	990	990	3,670	3,220	2019	2025
			17,000	0	26,800	0	30,800	0	22,530	2,230	12,290	990	109,420	3,220		
Master Plan - Vertical Assets																
City Wide	5161555264	City-Wide Wastewater Master Plan	650	0	300	30	0	0	0	0	60	6	1,010	36	2015	2021
15	5161796786	First Street (Waterdown Sanitary) PS Upgrade DC014	4,930	1,345	1,050	410	0	0	0	0	0	0	5,980	1,755	2017	2019
City Wide	5162055010	Wastewater Systems Planning Program	0	0	380	380	380	380	380	380	3,080	3,080	4,220	4,220	2020	Ongoing
City Wide	5162055050	Municipal Class EA Studies	0	0	400	400	0	0	0	0	0	0	400	400	2020	2020
City Wide	5162095800	Flooding & Drainage Master Plan Capital Improvements	0	0	880	880	880	880	0	0	0	0	1,760	1,760	2020	2023
			5,580	1,345	3,010	2,100	1,260	1,260	380	380	3,140	3,086	13,370	8,171		
Development/Extension Projects																
9	5162080089	Rymal - Fletcher to Upper Centennial	0	0	5,330	0	0	0	0	0	0	0	5,330	0	2020	2020
6, 11	5162080584	RHBP - Nebo - Rymal to Twenty	0	0	0	0	750	0	0	0	0	0	750	0	2020	2021
4	5162080961	Roxborough Park Intensification	0	0	1,500	0	0	0	0	0	0	0	1,500	0	2020	2020
City Wide	5162096011	Intensification Infrastructure Upgrades Program - Wastewater	0	0	0	0	400	200	0	0	1,600	800	2,000	1,000	2020	Ongoing

**CITY OF HAMILTON
WASTEWATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Development/Extension Projects																
7	5162180281	Rymal - 150m e/o Massina to 140m easterly	0	0	0	0	30	30	0	0	0	0	30	30	2021	2021
			0	0	6,830	0	1,180	230	0	0	1,600	800	9,610	1,030		
Coordinated Projects																
City Wide	5161855777	Wastewater infrastructure Analysis - Growth and Economic Opportunities	570	220	0	0	350	150	0	0	0	0	920	370	2018	2020
			570	220	0	0	350	150	0	0	0	0	920	370		
Demolition																
1	5161767772	Decommissioning Aberdeen Sewage Pumping Station	60	0	0	0	0	0	110	110	1,190	1,190	1,360	1,300	2019	2023
			60	0	0	0	0	0	110	110	1,190	1,190	1,360	1,300		
Energy Management																
City Wide	5162241350	Pilot solar power installation at a Class B Hamilton Water facility	0	0	0	0	0	0	150	150	600	600	750	750	2022	2023
			0	0	0	0	0	0	150	150	600	600	750	750		
Equipment Replacement																
City Wide	5161966151	SCADA servers and network	1,500	0	0	0	250	250	250	250	5,500	5,500	7,500	6,000	2019	2019
			1,500	0	0	0	250	250	250	250	5,500	5,500	7,500	6,000		
Maintenance Projects																
5, 6	5161968920	Fennell/Greenhill Drop Shaft	180	0	500	500	350	350	0	0	15,000	15,000	16,030	15,850	2019	2026
4	5162068851	Pier 25 Dredging - Windermere Basin	170	170	0	0	0	0	13,500	13,500	0	0	13,670	13,670	2018	2021
4	5162161142	Eastern Sanitary Interceptor (ESI) at Battlefield Creek Trunk	0	0	0	0	260	260	0	0	0	0	260	260	2021	2021
			350	170	500	500	610	610	13,500	13,500	15,000	15,000	29,960	29,780		
Plans/Studies																
City Wide	5162055801	Woodward WWTP Facility Plan	0	0	350	350	0	0	0	0	0	0	350	350	2020	2020

**CITY OF HAMILTON
WASTEWATER SYSTEM
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Plans/Studies																
City Wide	5162062543	CSO Characterization Program	0	0	450	450	0	0	0	0	450	450	900	900	2020	2020
			0	0	800	800	0	0	0	0	450	450	1,250	1,250		
Total Wastewater System			285,388	12,299	222,606	69,573	157,808	83,757	108,361	81,749	737,709	432,210	1,511,872	679,588		

2020
Capital Project
Detail Sheets

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: State of the Infrastructure - Asset Management

Project ID: 4032055522

Category: Technical Services Projects
Ward(s): City Wide

Objective:

For the ongoing condition assessment, needs analysis and capital prioritization and reporting of right of way assets necessary to maintain such reports as the State of the Infrastructure, Service Level Delivery, etc. This is to include the ongoing development and monitoring of the Provincially required Asset Management Plan.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	2,260		100	90	90	90	90	90	90	90	90	90	1,350
Total: Expenses	2,260		100	90	90	90	90	90	90	90	90	90	1,350

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From WIP Transfers	100		100										
Total: Revenues	100		100										

Net Cost	2,160	0	0	90	90	90	90	90	90	90	90	90	1,350
Funding Required	2,160	0	0	90	90	90	90	90	90	90	90	90	1,350

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded **Project ID:** 4032055588
Project Name: O.Reg. 588/17 Compliance - Asset Management Plan Development

Category: Technical Services Projects
Ward(s): City Wide

Objective:
 To develop and deliver a provincially mandated Asset Management Plan in compliance with O.Reg 588/17 – Infrastructure for Jobs & Prosperity Act.

Start Date: 2020
Completion Date: 2023
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Technical Studies &

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	300		75	75	75	75							
Total: Expenses	300		75	75	75	75							

Net Cost	300	0	75	75	75	75	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	75		75										
Total: Financing Sources	75		75										

Funding Required	225	0	0	75	75	75	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Consultation and Accommodation

Project ID: 4032058001

Category: Annual Projects
Ward(s): City Wide

Objective:
Site-specific project requirements for appropriate and thorough project consultation solutions.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Other

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Other Capital Expenditures	750		30	30	30	30	30	30	30	30	30	30	450
Total: Expenses	750		30	30	30	30	30	30	30	30	30	30	450
Net Cost	750	0	30	30	30	30	30	30	30	30	30	30	450
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	30		30										
Total: Financing Sources	30		30										
Funding Required	720	0	0	30	30	30	30	30	30	30	30	30	450

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded **Project ID:** 5160866801 **Category:** Plant - Wastewater Investment Needs
Project Name: Woodward WWTP - Clean Harbour (CASH FLOWED) **Ward(s):** City Wide

Objective:
The Woodward Wastewater Treatment Plant Clean Harbour project is Federally and Provincially funded through the Green Infrastructure Fund (GIF). By Improving water quality, the City will meet the Hamilton Harbour Remedial Action Plan (HHRAP) guidelines for delisting Hamilton Harbour as an Area of Concern with the International Joint Commission. Tenders will be awarded in full and the expenditures are projected on a cash flow basis to accommodate the recommended financing strategy. Council Report #12-021 approved August 13, 2012. Green Infrastructure Fund Application – Water Quality Upgrade to Woodward Avenue Wastewater Treatment Plant (PW12060/ FCS12064).

Start Date: 2008
Completion Date: 2022
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2008
Program Type: Plant (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	346,947	168,556	94,105	61,890	22,396								
Design	58,181	44,183	5,335	6,673	1,990								
Internal Resources/Staffing	6,795	4,004	1,191	800	800								
Total: Expenses	411,923	216,743	100,631	69,363	25,186								

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Non Res DEBT	6,182	1,190	1,870	2,006	1,116								
Dev Charges - Non-Res-TCA	4,483	4,483											
Dev Charges - Res DEBT	10,902	2,309	3,226	3,452	1,915								
Dev Charges - Res-TCA	8,703	8,703											
Federal Grants/Subsidies	100,000	56,186	32,868	10,946									
From Program Reserves	45,000	34,324	5,000	5,676									
From Reserves	24,664	11,000	7,120	6,544									
From WIP Reserves	4,845	4,845											
Provincial Grant from Reserve	56,186	56,186											
Provincial Grants/Subsidies	43,814		32,868	10,946									
Total: Revenues	304,779	179,226	82,952	39,570	3,031								

Net Cost	107,144	37,517	17,679	29,793	22,155	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Debt Borrowings	36,884	21,784	15,100										
From Operating Fund	15,046	12,467	2,579										
Total: Financing Sources	51,930	34,251	17,679										

Funding Required	55,214	3,266	0	29,793	22,155	0	0	0	0	0	0	0	0
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**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

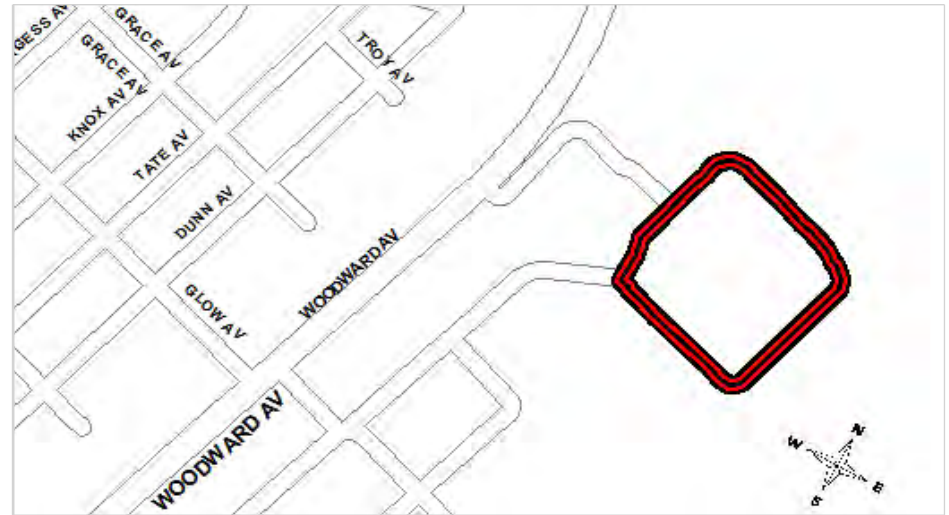
Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Woodward WWTP - Clean Harbour (CASH FLOWED)

Project ID: 5160866801

Category: Plant - Wastewater Investment Needs
Ward(s): City Wide

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)	2,500.0	2,500.0	
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded **Project ID:** 5160966910 **Category:** Plant - Wastewater Investment Needs
Project Name: Woodward WWTP - Biosolids Management Facility **Ward(s):** City Wide

Objective:
 To implement the recommendations of the Biosolids Master Plan to upgrade the processes and to be able to accommodate increased volume of biosolids due to growth following PPP Canada funding approach of a 30-year DBFOM (Design-Build-Finance-Operate-Maintain) Contract.

Start Date: 2009
Completion Date: 2051
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2009
Program Type: Plant (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	91,200	5,680	27,880	2,620	2,620	2,620	2,620	2,620	2,620	2,620	2,620	2,620	34,060
Consultant	3,590	3,590											
Internal Resources/Staffing	4,650	1,200	150	150	150	150	150	150	150	150	150	150	1,950
Total: Expenses	99,440	10,470	28,030	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	2,770	36,010

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Non Res DEBT	4,860	20	880	180	180	180	180	180	180	180	180	180	2,340
Dev Charges - Non-Res-TCA	662	662											
Dev Charges - Res DEBT	9,450	40	1,710	350	350	350	350	350	350	350	350	350	4,550
Dev Charges - Res-TCA	1,275	1,275											
Federal Grants/Subsidies	14,300		14,300										
From Program Reserves	15,470	4,330	11,140										
From WIP Reserves	2,652	2,652											
Total: Revenues	48,668	8,978	28,030	530	530	530	530	530	530	530	530	530	6,890

Net Cost	50,772	1,492	0	2,240	2,240	2,240	2,240	2,240	2,240	2,240	2,240	2,240	29,120
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	862	862											
Total: Financing Sources	862	862											

Funding Required	49,910	630	0	2,240	2,240	2,240	2,240	2,240	2,240	2,240	2,240	2,240	29,120
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**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

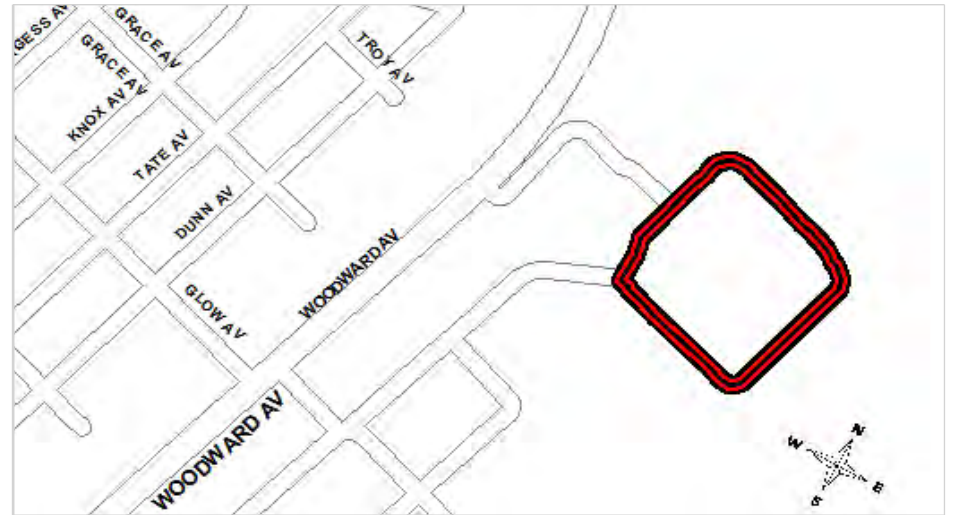
Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Woodward WWTP - Biosolids Management Facility

Project ID: 5160966910

Category: Plant - Wastewater Investment Needs
Ward(s): City Wide

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Ancaster Wastewater Outstations Upgrades

Project ID: 5161267270

Category: Outstations-Sustainable Asset Mgt (SAM)
Ward(s): 12

Objective:
Civil, Structural, Architectural, Mechanical, Process and Electrical upgrades required to improve operational efficiency and prolong the useful life of Wastewater Outstations Orchard (HC009), Cavendish (HC013) & Old Dundas Rd (HC005) as per recommendations of the Sustainable Plant Asset Management program.

Start Date: 2012
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2012
Program Type: Outstation (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	5,820	5,820											
Design	1,590	1,490	100										
Internal Resources/Staffing	1,020	1,010	10										
Total: Expenses	8,430	8,320	110										

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From WIP Transfers	950	950											
Total: Revenues	950	950											

Net Cost	7,480	7,370	110	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	7,480	7,370	110										
Total: Financing Sources	7,480	7,370	110										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

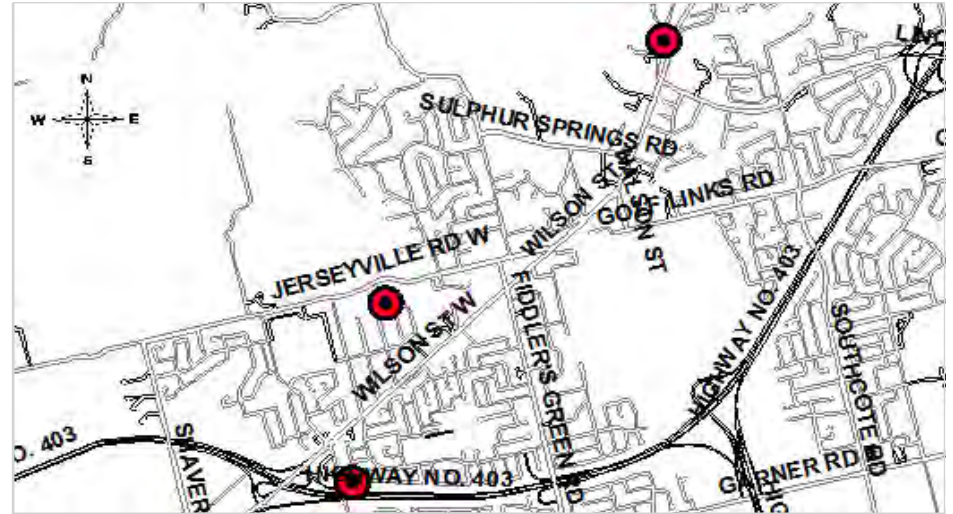
Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Ancaster Wastewater Outstations Upgrades

Project ID: 5161267270

Category: Outstations-Sustainable Asset Mgt (SAM)
Ward(s): 12

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded

Project ID: 5161267273

Category: Outstations-Sustainable Asset Mgt (SAM)

Project Name: Dundas Wastewater Outstations Upgrades

Ward(s): 13

Objective:

Civil, Structural, Architectural, Mechanical, Process and Electrical upgrades required to improve operational efficiency and prolong the useful life of Wastewater Outstations DC005, DC006 and DC010 as per recommendations of the Sustainable Plant Asset Management program.

Tender Packages:

1. DC005 Turnbull, DC006 Hillside : Mechanical, process and electrical/instrumentation upgrades.
2. DC010 Bridlewood: works include: decommission existing control/generator building and replace with a new control building; new PLC panel to meet SCADA standards, standby power, new wetwell structure, process pumping equipment and site fencing.

Start Date: 2012

Completion Date: 2020

Status: Recommended (funded)

Tangible Capital Asset: Yes

Capital Budget Initiation: 2012

Program Type: Outstation (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	3,990	1,840		2,150									
Design	870	770		100									
Internal Resources/Staffing	760	120	600	40									
Total: Expenses	5,620	2,730	600	2,290									

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From WIP Transfers	320	320											
Total: Revenues	320	320											

Net Cost	5,300	2,410	600	2,290	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	2,730	2,130	600										
Total: Financing Sources	2,730	2,130	600										

Funding Required	2,570	280	0	2,290	0	0	0	0	0	0	0	0	0
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**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

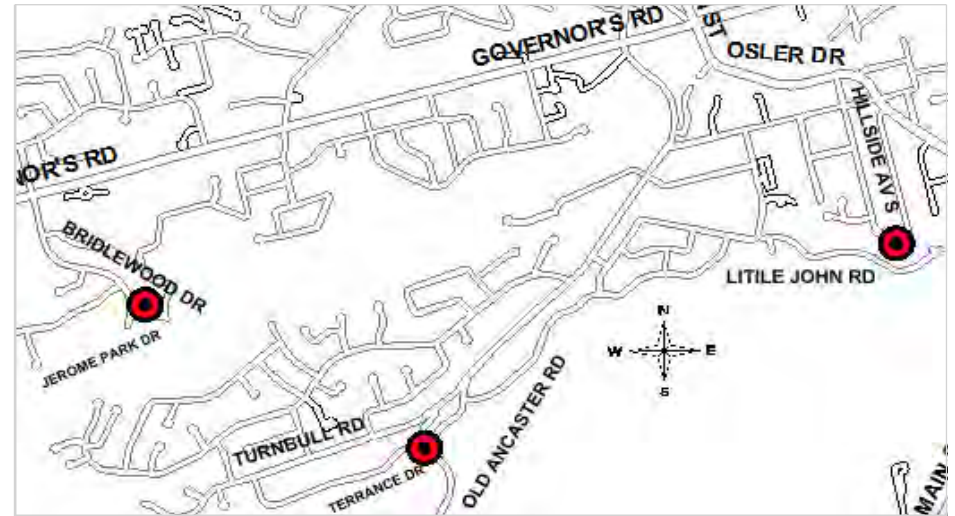
Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Dundas Wastewater Outstations Upgrades

Project ID: 5161267273

Category: Outstations-Sustainable Asset Mgt (SAM)
Ward(s): 13

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Randle Reef Sediment Remediation (CASH FLOWED)

Project ID: 5161468422

Category: Water Quality Initiatives (WQI)

Ward(s): City Wide

Objective:
To provide funding support for the implementation of the Randle Reef Sediment Remediation Project for the purpose of delisting Hamilton Harbour as an Area of Concern under the Great Lakes Water Quality Agreement. Implementation of a preferred Cap and Contain solution is lead by Environment Canada. The City of Hamilton is in partnership with MOE, EC, HPA, US Steel, Burlington, Halton to support this program. Council Report #12-021 approved August 13, 2012 - Randle Reef Sediment Remediation (PW10042(a)). Tender for construction will be awarded in full and the expenditures are projected on a cash flow basis to accommodate the recommended financing strategy.

Start Date: 2014
Completion Date: 2021
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2012
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	6,150	5,100	550	500									
Total: Expenses	6,150	5,100	550	500									

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From WIP Transfers	1,000	1,000											
Total: Revenues	1,000	1,000											

Net Cost	5,150	4,100	550	500	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	3,100	2,550	550										
Total: Financing Sources	3,100	2,550	550										

Funding Required	2,050	1,550	0	500	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: City-Wide Wastewater Master Plan

Project ID: 5161555264

Category: Master Plan
Ward(s): City Wide

Objective:
10 year window on the Master Plan is expiring. Wastewater Systems Master Planning study to determine system needs for growth and performance. Coordinated with GRIDS 2.

Start Date: 2015
Completion Date: 2021
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2015
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	800	500	250								50		
Internal Resources/Staffing	210	150	50								10		
Total: Expenses	1,010	650	300								60		

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Non Res DEBT	28	28											
Dev Charges - Non Res-NCA	120		100								20		
Dev Charges - Res DEBT	62	62											
Dev Charges - Res-NCA	204		170								34		
Total: Revenues	414	90	270								54		

Net Cost	596	560	30	0	0	0	0	0	0	0	6	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	590	560	30										
Total: Financing Sources	590	560	30										

Funding Required	6	0	0	0	0	0	0	0	0	0	6	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: New Haulage Receiving Station

Project ID: 5161667421

Category: Building - New Construction
Ward(s): City Wide

Objective:

Provision of a backup station to receive septic waste from haulers should Eastport Drive Pumping Station (HC017) haulage receiving station not be in service. The scope includes locating an appropriate site through an environmental assessment, followed by design and construction of the haulage receiving station.

Start Date: 2016
Completion Date: 2022
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2016
Program Type: Outstation (Water)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	8,000			4,000	4,000								
Design	850	350	500										
Environmental Assesments	200	200											
Internal Resources/Staffing	690	140	50	250	250								
Land/Property	1,000	1,000											
Total: Expenses	10,740	1,690	550	4,250	4,250								

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From WIP Debt	192	192											
From WIP Transfers	748	748											
Total: Revenues	940	940											

Net Cost	9,800	750	550	4,250	4,250	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	1,300	750	550										
Total: Financing Sources	1,300	750	550										

Funding Required	8,500	0	0	4,250	4,250	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded **Project ID:** 5161667622 **Category:** Outstations-Sustainable Asset Mgt (SAM)
Project Name: FC001, DC009 & HC011 Wastewater Pumping Stations Upgrades **Ward(s):** 12, 13, 15

Objective:
 Civil, Structural, Architectural, Mechanical, Process and Electrical upgrades required to improve operational efficiency and prolong the useful life of Wastewater Outstations FC001 (Elgin & Churchill, Waterdown), DC009 (Turnbull & Rhodes, Dundas) & HC011 (Calvin St., Ancaster) as per recommendations of the Sustainable Plant Asset Management program. This project is Federally and Provincially funded through the Clean Water and Wastewater Fund (CWWF).

Start Date: 2016
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2015
Program Type: Outstation (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	4,900	3,900	1,000										
Design	1,300	950	350										
Internal Resources/Staffing	490	340	150										
Total: Expenses	6,690	5,190	1,500										

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Federal Grants/Subsidies	215	215											
From WIP Debt	76	76											
From WIP Transfers	94	94											
Provincial Grants/Subsidies	108	108											
Total: Revenues	493	493											

Net Cost	6,198	4,698	1,500	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	4,760	3,260	1,500										
Total: Financing Sources	4,760	3,260	1,500										

Funding Required	1,438	1,438	0	0	0	0	0	0	0	0	0	0	0
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**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

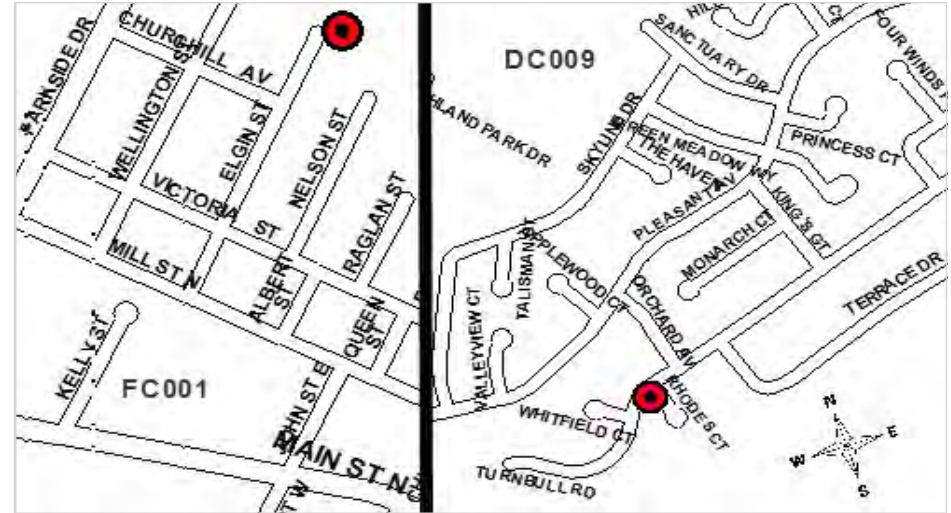
Division/Department: Wastewater System - Public Works Rate Funded
Project Name: FC001, DC009 & HC011 Wastewater Pumping Stations Upgrades

Project ID: 5161667622

Category: Outstations-Sustainable Asset Mgt (SAM)
Ward(s): 12, 13, 15

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded **Project ID:** 5161696452
Project Name: Airport Lands Dickenson Rd Trunk Sewer (WW-27, WW-26, WW-28) (CASH FLOWED)

Category: Master Plan - Horizontal Assets
Ward(s): 11

Objective:
 To provide external servicing to the airport lands as per Citywide Water/Wastewater Master Plan. 1200mm Gravity Sewer on Dickenson from Hwy 6 to Trinity Church and 1200mm Gravity Sewer on Golf Club Rd from Trinity Church to Upper Centennial Pkwy Rd (DC Study Projects IDs # HM20-S-14, HM21-S-14, HM22-S-14 & HM26-S-14). Tenders will be awarded in full and the expenditures are projected on a cash flow basis to accommodate the recommended financing strategy.

Start Date: 2016
Completion Date: 2018
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2007
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	76,000		25,000	20,000	20,000	11,000							
Design	5,500	4,000	1,500										
Internal Resources/Staffing	1,600	400	300	300	300	300							
Total: Expenses	83,100	4,400	26,800	20,300	20,300	11,300							

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Non Res DEBT	29,680	561	9,916	7,511	7,511	4,181							
Dev Charges - Non-Res-TCA	935	935											
Dev Charges - Res DEBT	50,670	1,089	16,884	12,789	12,789	7,119							
Dev Charges - Res-TCA	1,815	1,815											
Total: Revenues	83,100	4,400	26,800	20,300	20,300	11,300							

Net Cost	0	0	0	0	0	0	0	0	0	0	0	0	0
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Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			21.6
Staffing Impacts (F.T.E)			1.38

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded **Project ID:** 5161767420 **Category:** Outstations-Sustainable Asset Mgt (SAM)
Project Name: Parkdale Avenue HC001 Wastewater Pumping Station Upgrades **Ward(s):** 4

Objective:
 Civil, Structural, Mechanical, Process and Electrical upgrades required to improve operational efficiency and prolong the useful life of Wastewater Outstation HC001 (Parkdale Ave) as per recommendations of the Sustainable Plant Asset Management Program. The upgrades will include the immediate, short term, medium term and long term periods for upgrades and rehabilitation works required to maintain existing levels of service.

Start Date: 2017
Completion Date: 2019
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2017
Program Type: Outstation (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	2,600				2,600								
Design	850	600		250									
Internal Resources/Staffing	320	50	10		260								
Utilities Co-ordination	10	10											
Total: Expenses	3,780	660	10	250	2,860								

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From WIP Debt	550	550											
Total: Revenues	550	550											

Net Cost	3,230	110	10	250	2,860	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	10		10										
Total: Financing Sources	10		10										

Funding Required	3,220	110	0	250	2,860	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: First Street (Waterdown Sanitary) PS Upgrade DC014

Project ID: 5161796786

Category: Master Plan - Vertical Assets
Ward(s): 15

Objective:

Increase sanitary servicing to growth areas. Install third pump as per Citywide Water/Wastewater Master Plan (200L/s). To service OPA 28 lands. Existing pump capacity & Wet Well Upgrade at 1st St./Hwy 5 (DC Study Project ID #W6-S-14). For the new pumping requirements, electrical, mechanical, instrumentation, structural and miscellaneous ancillary requirements will be addressed.

Start Date: 2017
Completion Date: 2019
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2007
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	4,550	3,800	750										
Design	880	680	200										
Internal Resources/Staffing	550	450	100										
Total: Expenses	5,980	4,930	1,050										

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Non Res DEBT	307	307											
Dev Charges - Non-Res-TCA	953	716	237										
Dev Charges - Res DEBT	596	596											
Dev Charges - Res-TCA	1,792	1,389	403										
Total: Revenues	3,648	3,008	640										

Net Cost	2,332	1,922	410	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	987	577	410										
Total: Financing Sources	987	577	410										

Funding Required	1,345	1,345	0	0	0	0	0	0	0	0	0	0	0
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**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

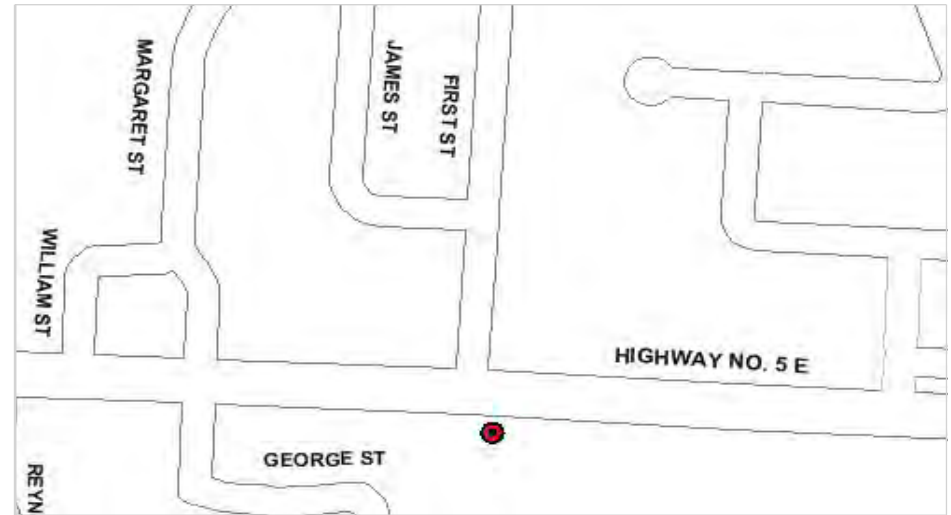
Division/Department: Wastewater System - Public Works Rate Funded
Project Name: First Street (Waterdown Sanitary) PS Upgrade DC014

Project ID: 5161796786

Category: Master Plan - Vertical Assets
Ward(s): 15

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Ancaster Sewage Works Pipeline CIPP Rehab - CASH FLOW

Project ID: 5161960942

Category: Rehabilitation Project
Ward(s): 12

Objective:

The existing sanitary trunk sewer has become structurally deficient. Rehabilitation is intended to decrease infiltration, improve hydraulics and restore structural integrity while reducing the risk and liability associated with sewer collapse and backup issues. Approximately 2,500m (Wilson - Fiddler's Green to Cayuga Avenue) of CIPP rehabilitation in order to address H2S corrosion structural issues.

Start Date: 2019
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2019
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	6,290	5,790	500										
Internal Resources/Staffing	770	770											
Total: Expenses	7,060	6,560	500										

Net Cost	7,060	6,560	500	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	7,060	6,560	500										
Total: Financing Sources	7,060	6,560	500										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Woodward WWTP - Expansion (CASH FLOWED)

Project ID: 5161966102

Category: Plant - Sustainable Asset Mgt (SAM)
Ward(s): City Wide

Objective:

As a result of the Water and Wastewater Master Plan, the Woodward Wastewater Treatment Plant Expansion is required to accommodate future growth demands. Tender for construction will be awarded in full and the expenditures are projected on a cash flow basis to accommodate the recommended financing strategy.

Start Date: 2019
Completion Date: 2028
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2013
Program Type: Plant (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	268,074								89,358	89,358	89,358		
Design	26,800		1,750	1,750	2,500	2,500	3,150	3,150	5,000	3,500	3,500		
Environmental Assesments	1,500	1,500											
Total: Expenses	296,374	1,500	1,750	1,750	2,500	2,500	3,150	3,150	94,358	92,858	92,858		

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Non Res DEBT	109,610	510	647	647	925	925	1,165	1,165	34,912	34,357	34,357		
Dev Charges - Res DEBT	186,764	990	1,103	1,103	1,575	1,575	1,985	1,985	59,446	58,501	58,501		
Total: Revenues	296,374	1,500	1,750	1,750	2,500	2,500	3,150	3,150	94,358	92,858	92,858		

Net Cost	0	0	0	0	0	0	0	0	0	0	0	0	0
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Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Woodward WWTP - Digester #5 (CASH FLOWED)

Project ID: 5161966511

Category: Plant - Sustainable Asset Mgt (SAM)
Ward(s): City Wide

Objective:
 HSDIG Digester #5 Cleanout, Valve and Mixer Replacement.

Start Date: 2018
Completion Date: 2021
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2018
Program Type: Plant (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	5,250	250	2,500	2,500									
Consultant	100	100											
Design	150	150											
Total: Expenses	5,500	500	2,500	2,500									

Net Cost	5,500	500	2,500	2,500	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	3,000	500	2,500										
Total: Financing Sources	3,000	500	2,500										

Funding Required	2,500	0	0	2,500	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded **Project ID:** 5161967123 **Category:** Outstations-Sustainable Asset Mgt (SAM)
Project Name: AEGD Infrastructure Growth Initiative (English Church Road Area) **Ward(s):** 11

Objective:
To address capacity issues at the AEGD

Start Date: 2019
Completion Date: 2019
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2018
Program Type: Pumping Station

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	15,000	11,000	4,000										
Total: Expenses	15,000	11,000	4,000										

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Non-Res-TCA	5,550	4,070	1,480										
Dev Charges - Res-TCA	9,450	6,930	2,520										
Total: Revenues	15,000	11,000	4,000										

Net Cost	0	0	0	0	0	0	0	0	0	0	0	0	0
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Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Fennell/Greenhill Drop Shaft

Project ID: 5161968920

Category: Maintenance Projects
Ward(s): 5, 6

Objective:

Assessment of available inspection technologies, temporary by-pass options, feasibility of construction of a new parallel drop structure, and emergency overflow mitigation measures of the drop structure connecting the Fennell Av trunk combined sewer to the Greehill trunk sewer. This drop shaft conveys a significant proportion of sewage flows from the mountain with no alternate route in the event of a failure of the drop shaft. Determining the condition of the drop shaft is critical given that it has not been inspected or maintained since it was constructed approximately 70 years ago.

Start Date: 2019
Completion Date: 2026
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2019
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	15,000									11,710	3,290		
Consultant	150	150											
Design	350			350									
Internal Resources/Staffing	30	30											
Other Capital Expenditures	500		500										
Total: Expenses	16,030	180	500	350						11,710	3,290		

Net Cost	16,030	180	500	350	0	0	0	0	0	11,710	3,290	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	680	180	500										
Total: Financing Sources	680	180	500										

Funding Required	15,350	0	0	350	0	0	0	0	0	11,710	3,290	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Engineering Services Staffing Costs - Wastewater

Project ID: 5162001099

Category: Annual Projects
Ward(s): City Wide

Objective:

To fund Engineering Services staffing costs through capital for work on wastewater related capital projects, both in-year and future. In the past, these charges were built into in-year approved capital projects on a pro-rated basis. In order to provide more transparency and capture staffing costs for future works in a more accurate way, these staffing costs are now reflected in this project and removed from all other individual Engineering Services projects.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Other

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Internal Resources/Staffing	117,500		4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	70,500
Total: Expenses	117,500		4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	70,500
Net Cost	117,500	0	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	70,500
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	4,700		4,700										
Total: Financing Sources	4,700		4,700										
Funding Required	112,800	0	0	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	70,500

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded

Project ID: 5162011101

Category: Restorations

Project Name: Road Restoration Program

Ward(s): City Wide

Objective:

Complete final restoration on public right-of-way due to damage caused by the repair or replacement of sewer assets (eg, sewermain break repair, manhole repair, sewer lateral replacement, etc)

Start Date: 2020

Completion Date: Ongoing

Status: Recommended (funded)

Tangible Capital Asset: No

Capital Budget Initiation: 2020

Program Type: Replacement Program

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	39,600		1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	21,600
Total: Expenses	39,600		1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	21,600

Net Cost	39,600	0	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	21,600
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	1,800		1,800										
Total: Financing Sources	1,800		1,800										

Funding Required	37,800	0	0	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	21,600
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: QA-QC Service Contract Program

Project ID: 5162049555

Category: Technical Services Projects
Ward(s): City Wide

Objective:
Allocated funding to provide quality assurance and control for existing road rehabilitation and replacement contracts. Includes but not limited to: coupon testing, CCTV, soil resistivity and compaction.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	3,500		140	140	140	140	140	140	140	140	140	140	2,100
Total: Expenses	3,500		140	140	140	140	140	140	140	140	140	140	2,100
Net Cost	3,500	0	140	140	140	140	140	140	140	140	140	140	2,100
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	140		140										
Total: Financing Sources	140		140										
Funding Required	3,360	0	0	140	140	140	140	140	140	140	140	140	2,100

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded **Project ID:** 5162055010 **Category:** Master Plan
Project Name: Wastewater Systems Planning Program **Ward(s):** City Wide

Objective:
 Master Plans, Servicing Studies and Environmental Assessments. On an as required basis along GRIDS identified Nodes and Corridors, and using City data/models, analyse wastewater system servicing capability (local street and district wide) for individual intensification development proposals and recommend upgrades required to accommodate. Undertake conceptual design for Master Plan projects. Service planning for new subdivisions, intensification areas and system performance. Source water protection planning. Includes field data systems. Annual CSO Reporting to the MOECC.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	9,850		350	350	350	400	400	400	400	400	400	400	6,000
Internal Resources/Staffing	970		30	30	30	40	40	40	40	40	40	40	600
Total: Expenses	10,820		380	380	380	440	440	440	440	440	440	440	6,600

Net Cost	10,820	0	380	380	380	440	440	440	440	440	440	440	6,600
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	380		380										
Total: Financing Sources	380		380										

Funding Required	10,440	0	0	380	380	440	440	440	440	440	440	440	6,600
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Engineering Consultant Sewermain Projects

Project ID: 5162055022

Category: Technical Services Projects
Ward(s): City Wide

Objective:
Various subsurface infrastructure condition assessment and trenchless rehabilitation engineering consulting services. Work includes but not limited to; Design of various infrastructure renewal and rehabilitation applications, technology and industry reviews of assessment and rehabilitation technologies, project management of subsurface projects, and development and application of technical review and audit of QA/QC procedures.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	7,500		300	300	300	300	300	300	300	300	300	300	4,500
Total: Expenses	7,500		300	300	300	300	300	300	300	300	300	300	4,500
Net Cost	7,500	0	300	300	300	300	300	300	300	300	300	300	4,500
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	300		300										
Total: Financing Sources	300		300										
Funding Required	7,200	0	0	300	300	300	300	300	300	300	300	300	4,500

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Municipal Class EA Studies

Project ID: 5162055050

Category: Master Plan - Vertical Assets
Ward(s): City Wide

Objective:
To undertake municipal class environmental assessment (EA) studies for project's urgent in nature and requiring immediate execution of an EA study in the year that the project is identified.

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Plans/Studies

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	400		400										
Total: Expenses	400		400										

Net Cost	400	0	400	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	400		400										
Total: Financing Sources	400		400										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Mapping Update Program

Project ID: 5162055556

Category: Technical Services Projects
Ward(s): City Wide

Objective:

Acquire updated air photos, update the City's Digital Terrain Model (DEM) and mapping of road edges, sidewalks, building footprints etc. This supports the study of Storm water issues, supports operating and capital programs, assists in land development reviews. Develop and Maintain Horizontal (Lat / Long) and Vertical (Elevation) control networks across the City to allow correct data integration and alignment of ground based surveys with the City's mapping program.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	1,000		40	40	40	40	40	40	40	40	40	40	600
Total: Expenses	1,000		40	40	40	40	40	40	40	40	40	40	600
Net Cost	1,000	0	40	40	40	40	40	40	40	40	40	40	600
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	40		40										
Total: Financing Sources	40		40										
Funding Required	960	0	0	40	40	40	40	40	40	40	40	40	600

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Sewer Outfall Monitoring Study

Project ID: 5162055800

Category: Waterfront Initiatives
Ward(s): City Wide

Objective:

To undertake an assessment of existing combined and sanitary sewer outfalls located within the City and recommend suitable equipment necessary at each outfall for the purpose of continuous flow monitoring. Study scope will include recommended methodology for field data collection, data storage and data reporting.

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Plans/Studies

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	150		150										
Total: Expenses	150		150										

Net Cost	150	0	150	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	150		150										
Total: Financing Sources	150		150										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Woodward WWTP Facility Plan

Project ID: 5162055801

Category: Plans/Studies
Ward(s): City Wide

Objective:
Review of previous facility plans, current plant performance, current plant capacity, recent upgrades to the Woodward WWTP, site limitations, existing treatment options, new treatment technologies, required treatment redundancies to create a long-term strategy for the future of the Wastewater Treatment Plant.

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Plant (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	300		300										
Internal Resources/Staffing	50		50										
Total: Expenses	350		350										

Net Cost	350	0	350	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	350		350										
Total: Financing Sources	350		350										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Forcemain Condition Assessment Program

Project ID: 5162055878

Category: Technical Services Projects
Ward(s): City Wide

Objective:

Detailed inspection of forcemain sewers to determine remaining life of the pipes. This will dictate management strategies, future needs, will help reduce the risk associated with major ruptures, and service outages. This project involves data collection through various technologies such as non-destructive acoustical testing, pipe sample laboratory testing, and project assignments to engineering consulting firms.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	6,210		270	270	270	270	270	270	270	270	270	270	3,510
Total: Expenses	6,210		270	270	270	270	270	270	270	270	270	270	3,510
Net Cost	6,210	0	270	270	270	270	270	270	270	270	270	270	3,510
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	270		270										
Total: Financing Sources	270		270										
Funding Required	5,940	0	0	270	270	270	270	270	270	270	270	270	3,510

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Inflow & Infiltration Studies and Flow Monitoring Program

Project ID: 5162055880

Category: Technical Services Projects
Ward(s): City Wide

Objective: Wastewater system flow and hydrometeorological monitoring to assess capacity and wet weather performance. Study being undertaken to know various flow characteristics to calibrate the Sanitary Sewer Model to assist the Master Planning Study (DC Study Project ID # CW1-S-19 & CW2-S-19).

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2019
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	3,690		450	450	450	270	270	270	150	150	150	90	990
Internal Resources/Staffing	420		50	50	50	30	30	30	20	20	20	10	110
Total: Expenses	4,110		500	500	500	300	300	300	170	170	170	100	1,100

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Non-Res-TCA	747		93	93	93	56	56	56	32	32	32	17	187
Dev Charges - Res-TCA	1,317		158	158	158	95	95	95	54	54	54	33	363
Total: Revenues	2,064		251	251	251	151	151	151	86	86	86	50	550

Net Cost	2,046	0	249	249	249	149	149	149	84	84	84	50	550
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	249		249										
Total: Financing Sources	249		249										

Funding Required	1,797	0	0	249	249	149	149	149	84	84	84	50	550
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Wastewater Computer Model Update & Maintenance

Project ID: 5162057545

Category: Computer Software Purchases
Ward(s): City Wide

Objective:
Development and refinement of wastewater systems computer model including scenario build, analysis, calibration, platform review and migration

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	5,950		600	600	250	250	250	250	250	250	250	250	2,750
Internal Resources/Staffing	810		60	60	30	30	30	30	30	30	30	30	450
Total: Expenses	6,760		660	660	280	280	280	280	280	280	280	280	3,200

Net Cost	6,760	0	660	660	280	280	280	280	280	280	280	280	3,200
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	660		660										
Total: Financing Sources	660		660										

Funding Required	6,100	0	0	660	280	280	280	280	280	280	280	280	3,200
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Battlefield Creek Major Trunk Cleaning & Condition Assessment

Project ID: 5162060044

Category: Rehabilitation Project
Ward(s): 5

Objective:
 Debris accumulations inside the existing sanitary sewers have been found to negatively impact the intended hydraulic capacity. Removal of debris will aid in the CCTV inspection of the trunk sewer for the purposes of proper condition assessment and future rehab planning.

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	250		250										
Total: Expenses	250		250										

Net Cost	250	0	250	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	250		250										
Total: Financing Sources	250		250										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Emergency Repairs - Cross Connections Program

Project ID: 5162060302

Category: Rehabilitation Project
Ward(s): City Wide

Objective:

To repair sewer cross connections existing in the sewage collection system and that result in the discharge of sanitary waste into storm sewer systems. Cross connections exist as a result of improper sewer service connections to homes, illegal plumbing alterations in homes or through leakage through cracks and joints in sewers and sewer laterals. The repairs contemplated under this Cross Connection Program is the repair of improper sewer service connections to homes.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	3,450		700	700	500	400	400	400	350				
Total: Expenses	3,450		700	700	500	400	400	400	350				

Net Cost	3,450	0	700	700	500	400	400	400	350	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	700		700										
Total: Financing Sources	700		700										

Funding Required	2,750	0	0	700	500	400	400	400	350	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Wastewater System Lining Program

Project ID: 5162060390

Category: Rehabilitation Project
Ward(s): City Wide

Objective:
The existing combined and/or sanitary sewers have become structurally and service deficient. Rehabilitation is intended to decrease infiltration, improve hydraulics and restore structural integrity while reducing the risk and liability associated with sewer collapse and backup issues.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	89,100		4,050	4,050	4,050	4,050	4,050	4,050	4,050	4,050	4,050	4,050	48,600
Total: Expenses	89,100		4,050	4,050	4,050	4,050	4,050	4,050	4,050	4,050	4,050	4,050	48,600
Net Cost	89,100	0	4,050	4,050	4,050	4,050	4,050	4,050	4,050	4,050	4,050	4,050	48,600
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	4,050		4,050										
Total: Financing Sources	4,050		4,050										
Funding Required	85,050	0	0	4,050	4,050	4,050	4,050	4,050	4,050	4,050	4,050	4,050	48,600

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Sewer Lateral Management Program (WWC)

Project ID: 5162060522

Category: Rehabilitation Project
Ward(s): City Wide

Objective:

To repair and rehabilitate sewer laterals in the road right of way as per the "Sewer Lateral Management Program" Approximately 420 public portion sewer laterals are replaced annually under the Sewer Lateral Management Program. This capital budget is for the full replacement of these public portion sewer laterals.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	82,500		4,250	4,250	4,000	3,500	3,500	3,500	3,500	3,500	3,500	3,500	45,500
Total: Expenses	82,500		4,250	4,250	4,000	3,500	3,500	3,500	3,500	3,500	3,500	3,500	45,500
Net Cost	82,500	0	4,250	4,250	4,000	3,500	3,500	3,500	3,500	3,500	3,500	3,500	45,500
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	4,250		4,250										
Total: Financing Sources	4,250		4,250										
Funding Required	78,250	0	0	4,250	4,000	3,500	3,500	3,500	3,500	3,500	3,500	3,500	45,500

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Trenchless Manhole Rehabilitation

Project ID: 5162060533

Category: Rehabilitation Project
Ward(s): City Wide

Objective:
Trenchless manhole rehabilitation coordinated with mainline CIPP (Cured in Place Pipe) rehabilitation program. Manhole rehabilitation is intended to reduce the risks associated with manhole collapse and manhole infiltration issues.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	1,470		70	70	70	70	70	70	70	70	70	70	770
Total: Expenses	1,470		70	70	70	70	70	70	70	70	70	70	770
Net Cost	1,470	0	70	70	70	70	70	70	70	70	70	70	770
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	70		70										
Total: Financing Sources	70		70										
Funding Required	1,400	0	0	70	70	70	70	70	70	70	70	70	770

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Pre-Construction Mainline Condition Assessment

Project ID: 5162060574

Category: Rehabilitation Project
Ward(s): City Wide

Objective:
Condition assessment of mainline sewers to identify structural and service related issues (cross-connections, debris, blockages, etc.) prior to capital construction activities. Inspection of approx. 150,000 m of mainline sewers annually.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	11,500		500	500	500	500	500	500	500	500	500	500	6,500
Total: Expenses	11,500		500	500	500	500	500	500	500	500	500	500	6,500

Net Cost	11,500	0	500	500	500	500	500	500	500	500	500	500	6,500
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	500		500										
Total: Financing Sources	500		500										

Funding Required	11,000	0	0	500	500	500	500	500	500	500	500	500	6,500
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded

Project ID: 5162060575

Category: Rehabilitation Project

Project Name: Mainline Sewer Condition Assessment Program

Ward(s): City Wide

Objective:

Inspection and analysis of approximately 90,000 m of large and small diameter sewer mains throughout the city using various inspection methods. Work is prioritized by asset criticality, diameter, functionality and other service level identifiers. Co-ordinated with the capital roads program to provide structural and service conditions and to identify capital rehabilitation and replacement priorities. Assignments to engineering consulting firms and small urgent mainline repairs are also funded from this program.

Start Date: 2020

Completion Date: Ongoing

Status: Recommended (funded)

Tangible Capital Asset: No

Capital Budget Initiation: 2020

Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	23,500		940	940	940	940	940	940	940	940	940	940	14,100
Consultant	5,100		700	200	200	200	200	200	200	200	200	200	2,600
Total: Expenses	28,600		1,640	1,140	1,140	1,140	1,140	1,140	1,140	1,140	1,140	1,140	16,700

Net Cost	28,600	0	1,640	1,140	1,140	1,140	1,140	1,140	1,140	1,140	1,140	1,140	16,700
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	1,640		1,640										
Total: Financing Sources	1,640		1,640										

Funding Required	26,960	0	0	1,140	1,140	1,140	1,140	1,140	1,140	1,140	1,140	1,140	16,700
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Sewer Lateral Condition Assessment Program

Project ID: 5162060576

Category: Rehabilitation Project
Ward(s): City Wide

Objective:
Inspection and analysis approximately 100,000 m of sewer service lines by CCTV-from-mainline inspection method. Co-ordinated with the capital roads program to provide structural and service conditions and to identify capital rehabilitation and replacement priorities.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	11,880		540	540	540	540	540	540	540	540	540	540	6,480
Total: Expenses	11,880		540	540	540	540	540	540	540	540	540	540	6,480
Net Cost	11,880	0	540	540	540	540	540	540	540	540	540	540	6,480
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	540		540										
Total: Financing Sources	540		540										
Funding Required	11,340	0	0	540	540	540	540	540	540	540	540	540	6,480

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded **Project ID:** 5162060577 **Category:** Rehabilitation Project
Project Name: Mainline Sewer Condition Assessment for Compliance & Regulations **Ward(s):** City Wide

Objective: Inspection, cleaning, and condition assessment of mainline sewers to support the Sewer Use By-law Compliance and Regulation Review and Approval process. CCTV inspection of various locations across the City as requested by Compliance and Regulations.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	2,300		100	100	100	100	100	100	100	100	100	100	1,300
Total: Expenses	2,300		100	100	100	100	100	100	100	100	100	100	1,300

Net Cost	2,300	0	100	100	100	100	100	100	100	100	100	100	1,300
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	100		100										
Total: Financing Sources	100		100										

Funding Required	2,200	0	0	100	100	100	100	100	100	100	100	100	1,300
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded **Project ID:** 5162060711
Project Name: PW Capital Water Consumption Program

Category: Annual Projects
Ward(s): City Wide

Objective:
Water consumption used for sewer relocation works on City contracts, during constructions i.e. flushing sewer lines, etc.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	2,580		180	180	180	180	180	180	100	100	100	100	1,100
Total: Expenses	2,580		180	180	180	180	180	180	100	100	100	100	1,100
Net Cost	2,580	0	180	180	180	180	180	180	100	100	100	100	1,100
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	180		180										
Total: Financing Sources	180		180										
Funding Required	2,400	0	0	180	180	180	180	180	100	100	100	100	1,100

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded **Project ID:** 5162060820
Project Name: Open Cut Repairs for CIPP Program

Category: Repairs
Ward(s): City Wide

Objective:
 To open-cut repair sections of sewer in urgent need of repair in order to facilitate full-length CIPP sewer rehabilitation.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	11,500		500	500	500	500	500	500	500	500	500	500	6,500
Total: Expenses	11,500		500	500	500	500	500	500	500	500	500	500	6,500

Net Cost	11,500	0	500	500	500	500	500	500	500	500	500	500	6,500
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	500		500										
Total: Financing Sources	500		500										

Funding Required	11,000	0	0	500	500	500	500	500	500	500	500	500	6,500
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Inverness Ave E - Combined Major Trunk Rehabilitation

Project ID: 5162061006

Category: Annual Projects

Ward(s): 8

Objective:

The existing combined major trunk sewer has become structurally deficient. Rehabilitation is intended to restore structural integrity while reducing the risk and liability associated with sewer collapse. Shotcrete lining including reinforcement of select damaged sections of the major trunk sewer along Inverness Ave E, works to include traffic control and flow diversion if necessary. Includes consulting services for tender development and construction/contract administration and site inspection.

Start Date: 2020
Completion Date: 2021
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	700			700									
Consultant	270		200	70									
Total: Expenses	970		200	770									

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From WIP Transfers	200		200										
Total: Revenues	200		200										

Net Cost	770	0	0	770	0	0	0	0	0	0	0	0	0
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Funding Required	770	0	0	770	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Satellite City Trunk Sewer Rehabilitation

Project ID: 5162061051

Category: Rehabilitation Project
Ward(s): 5, 9

Objective:
The existing storm sewer has become structurally deficient. Rehabilitation is intended to decrease infiltration, improve hydraulics and restore structural integrity while reducing the risk and liability associated with sewer collapse and backup issues.

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2019
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	8,750		8,750										
Total: Expenses	8,750		8,750										

Net Cost	8,750	0	8,750	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Debt Borrowings	1,800		1,800										
From Operating Fund	6,950		6,950										
Total: Financing Sources	8,750		8,750										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

Comments:

CIPP rehabilitation of the Satellite City Trunk Sewer:
900mm pipe from Marston St to Greenhill Ave; through environmentally sensitive areas crossing the escarpment, including manhole rehabilitation.

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Sewer Lateral Replace/Rehab Program

Project ID: 5162061444

Category: Replacement Project
Ward(s): City Wide

Objective:
Co-ordination of lateral rehabilitation and inspection in the public road allowance for laterals that are deteriorating and causing back-ups in homes. Rehabilitation through trenchless technologies of deteriorated laterals, reducing back-ups and extending the useful life.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	79,200		3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	43,200
Total: Expenses	79,200		3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	43,200
Net Cost	79,200	0	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	43,200
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	3,600		3,600										
Total: Financing Sources	3,600		3,600										
Funding Required	75,600	0	0	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	43,200

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded **Project ID:** 5162061740
Project Name: Unscheduled Manhole and Sewermain Replacement Program

Category: Replacement Project
Ward(s): City Wide

Objective:
 For the replacement of manholes and sewer mains as a result of failures in the system.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	9,050		500	400	400	400	350	350	350	350	350	350	5,250
Total: Expenses	9,050		500	400	400	400	350	350	350	350	350	350	5,250

Net Cost	9,050	0	500	400	400	400	350	350	350	350	350	350	5,250
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	500		500										
Total: Financing Sources	500		500										

Funding Required	8,550	0	0	400	400	400	350	350	350	350	350	350	5,250
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Field Data Systems Program

Project ID: 5162062073

Category: Upgrade Projects
Ward(s): City Wide

Objective:
To maintain, upgrade and acquire data and information for various asset management systems involved with the overall management of the wastewater collection network. (IPS; IRISS; ESRI and Bentley Suite Software)

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Other Capital Expenditures	2,750		110	110	110	110	110	110	110	110	110	110	1,650
Total: Expenses	2,750		110	110	110	110	110	110	110	110	110	110	1,650

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From WIP Transfers	60		60										
Total: Revenues	60		60										

Net Cost	2,690	0	50	110	110	110	110	110	110	110	110	110	1,650
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	50		50										
Total: Financing Sources	50		50										

Funding Required	2,640	0	0	110	110	110	110	110	110	110	110	110	1,650
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: CSO Characterization Program

Project ID: 5162062543

Category: Plans/Studies
Ward(s): City Wide

Objective:
5 year rotating CSO flow and quality characterization program.

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Reservoir

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	800		400					400					
Internal Resources/Staffing	100		50					50					
Total: Expenses	900		450					450					

Net Cost	900	0	450	0	0	0	0	450	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	450		450										
Total: Financing Sources	450		450										

Funding Required	450	0	0	0	0	0	0	450	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Woodward WWTP - Digester #3 (CASH FLOWED)

Project ID: 5162066311

Category: Plant - Sustainable Asset Mgt (SAM)
Ward(s): City Wide

Objective:
HSDIG Digester #3 Cleanout, Valve and Mixer Replacement.

Start Date: 2020
Completion Date: 2022
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2018
Program Type: Plant (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	5,000			2,500	2,500								
Design	250		250										
Total: Expenses	5,250		250	2,500	2,500								

Net Cost	5,250	0	250	2,500	2,500	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	250		250										
Total: Financing Sources	250		250										

Funding Required	5,000	0	0	2,500	2,500	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded **Project ID:** 5162066813 **Category:** Plant - Sustainable Asset Mgt (SAM)
Project Name: Dundas WWTP - Health & Safety Immediate Needs **Ward(s):** City Wide

Objective:
Miscellaneous Health and Safety improvements to repair aging infrastructure including process tank railings, concrete spalling, process weirs, gas monitors, heat and smoke detectors, ferric sulphate system and other miscellaneous immediate needs.

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Plant (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	3,950		3,950										
Consultant	200		200										
Design	500		500										
Internal Resources/Staffing	250		250										
Total: Expenses	4,900		4,900										

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From WIP Transfers	1,150		1,150										
Total: Revenues	1,150		1,150										

Net Cost	3,750	0	3,750	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	3,750		3,750										
Total: Financing Sources	3,750		3,750										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Eastport Drive SPS (HC017) Upgrades

Project ID: 5162067065

Category: Outstations-Sustainable Asset Mgt (SAM)
Ward(s): 5

Objective:
Multi-discipline upgrades required to improve operational efficiency and prolong the useful life of Eastport Drive Sewage Pumping Station (HC017) as per recommendations of the Sustainable Asset Management program.

Start Date: 2020
Completion Date: 2022
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Outstation (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	1,200			1,200									
Design	350		350										
Internal Resources/Staffing	160		40	120									
Total: Expenses	1,710		390	1,320									

Net Cost	1,710	0	390	1,320	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	390		390										
Total: Financing Sources	390		390										

Funding Required	1,320	0	0	1,320	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: FC001 Elgin Street Sewage Pumping Station

Project ID: 5162067275

Category: Outstations-Sustainable Asset Mgt (SAM)
Ward(s): 15

Objective:
The existing wet well is approaching the end of its useful life and requires replacement. Works include civil, structural, mechanical, process, instrumentation and electrical upgrades.

Start Date: 2020
Completion Date: 2021
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Outstation (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	1,700			1,700									
Design	550		550										
Total: Expenses	2,250		550	1,700									

Net Cost	2,250	0	550	1,700	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	550		550										
Total: Financing Sources	550		550										

Funding Required	1,700	0	0	1,700	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded

Project ID: 5162067375

Category: Outstations-Sustainable Asset Mgt (SAM)

Project Name: Minor Upgrades to SPS Outstations

Ward(s): 4, 12, 15

Objective:

Miscellaneous Civil, Structural, Architectural, Mechanical, Process and Electrical upgrades required to improve operational efficiency and prolong the useful life of Wastewater Outstations DC013 (Mill), HC001 (Parkdale), HC005 (Old Dundas) and HC013 (Cavendish) as per recommendations of the Sustainable Asset Management program.

Start Date: 2020

Completion Date: 2021

Status: Recommended (funded)

Tangible Capital Asset: Yes

Capital Budget Initiation: 2020

Program Type: Outstation (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	900			900									
Design	150		150										
Internal Resources/Staffing	110		20	90									
Total: Expenses	1,160		170	990									

Net Cost	1,160	0	170	990	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	170		170										
Total: Financing Sources	170		170										

Funding Required	990	0	0	990	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Main & King CSO Rehabilitation

Project ID: 5162067420

Category: Plant - Sustainable Asset Mgt (SAM)
Ward(s): City Wide

Objective:
Combined Sewer Overflow tank cleaning and capital upgrades.

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2018
Program Type: Plant (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	350		350										
Total: Expenses	350		350										

Net Cost	350	0	350	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	350		350										
Total: Financing Sources	350		350										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded

Project ID: 5162067425

Category: Outstations-Sustainable Asset Mgt (SAM)

Project Name: Hillside SPS (DC006) Upgrades

Ward(s): 12

Objective:

Civil and Electrical upgrades required to improve operational efficiency and prolong the useful life of Wastewater Outstation at Hillside & Turnbull (DC006) as per recommendations of the Sustainable Asset Management program.

Start Date: 2020

Completion Date: 2021

Status: Recommended (funded)

Tangible Capital Asset: Yes

Capital Budget Initiation: 2020

Program Type: Outstation (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	1,000			1,000									
Design	250		250										
Internal Resources/Staffing	130		30	100									
Total: Expenses	1,380		280	1,100									

Net Cost	1,380	0	280	1,100	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	280		280										
Total: Financing Sources	280		280										

Funding Required	1,100	0	0	1,100	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded **Project ID:** 5162067752 **Category:** Outstations-Sustainable Asset Mgt (SAM)
Project Name: Wastewater Outstation Inspections - Asset Management Program **Ward(s):** City Wide

Objective:
 Condition Assessment of sequenced facilities on an annual basis as per recommendations of the Sustainable Asset Management Program to ensure sustainable operations.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Outstation (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Design	5,800		400	400	400	400	400	400	400	400	200	200	2,200
Internal Resources/Staffing	1,220		120	120	120	120	120	120	120	120	20	20	220
Total: Expenses	7,020		520	520	520	520	520	520	520	520	220	220	2,420

Net Cost	7,020	0	520	520	520	520	520	520	520	520	220	220	2,420
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	520		520										
Total: Financing Sources	520		520										

Funding Required	6,500	0	0	520	520	520	520	520	520	520	220	220	2,420
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: City Environmental Lab Improvements Program

Project ID: 5162069075

Category: Plant - Wastewater Investment Needs
Ward(s): City Wide

Objective:
To upgrade / automate instrumentation required for monitoring and compliance testing of the City's drinking water.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Plant (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	1,970		150	200	340	190	90	50	50	50	50	50	750
Total: Expenses	1,970		150	200	340	190	90	50	50	50	50	50	750

Net Cost	1,970	0	150	200	340	190	90	50	50	50	50	50	750
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	150		150										
Total: Financing Sources	150		150										

Funding Required	1,820	0	0	200	340	190	90	50	50	50	50	50	750
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Hillcrest - Chedoke to end

Project ID: 5162071006

Category: Coordinated - Replacement Projects
Ward(s): 1

Objective:
The existing sanitary sewer has become structurally deficient. Replacement to the sanitary sewer including required manholes, and connections are required to reduce the risk and liability associated with sewer collapse and backup issues. Replace existing sanitary sewer and manholes from upstream MH HE13E003 to downstream MH HE13E004 with new 250mm PVC, and replace all existing laterals to property line (full reconstruction limits). This project is to be coordinated with road reconstruction and watermain replacement.

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	60		60										
Total: Expenses	60		60										

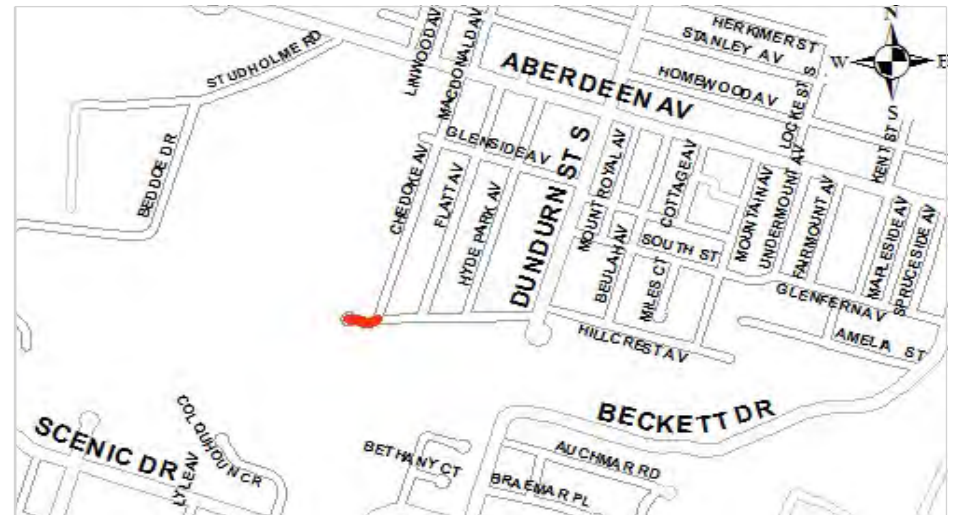
Net Cost	60	0	60	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	60		60										
Total: Financing Sources	60		60										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Sewer Lateral Replacement for Co-ordinated Projects

Project ID: 5162071015

Category: Replacement Project
Ward(s): City Wide

Objective:
Replacement of sewer Laterals (private drains) from the mainline sewer to property line for co-ordinated capital road reconstruction projects.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	8,370		270	270	270	270	270	270	450	450	450	450	4,950
Total: Expenses	8,370		270	270	270	270	270	270	450	450	450	450	4,950
Net Cost	8,370	0	270	270	270	270	270	270	450	450	450	450	4,950
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	270		270										
Total: Financing Sources	270		270										
Funding Required	8,100	0	0	270	270	270	270	270	450	450	450	450	4,950

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Contingency for Unscheduled Works Program

Project ID: 5162071074

Category: Replacement Project
Ward(s): City Wide

Objective:
To allow for unscheduled works to be undertaken, minor improvements, land acquisition, capital system upgrades and emergency works.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Contractual Services (Operational)	900		180		180		180		180		180		
Total: Expenses	900		180		180		180		180		180		

Net Cost	900	0	180	0	180	0	180	0	180	0	180	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	180		180										
Total: Financing Sources	180		180										

Funding Required	720	0	0	0	180	0	180	0	180	0	180	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Main - Queenston Traffic Circle to Delena & Rosewood

Project ID: 5162071315

Category: Coordinated - Upgrade Projects
Ward(s): 4

Objective:
 The existing combined sewer has become deficient in capacity. Upgrades to the combined sewer including required manholes, catch basins and connections are required to reduce the risk and liability associated with backup issues. This project is to be coordinated with road reconstruction and watermain replacement.

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	1,160		1,160										
Total: Expenses	1,160		1,160										
Net Cost	1,160	0	1,160	0	0	0	0	0	0	0	0	0	0
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	1,160		1,160										
Total: Financing Sources	1,160		1,160										
Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Main - Queenston Traffic Circle to Delena & Rosewood

Project ID: 5162071315

Category: Coordinated - Upgrade Projects

Ward(s): 4

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



Comments:

Scope of Work:

1. Replace the existing and construct 82 meters of 600mm diameter combined sewer pipe on Main St E in between Isabel Av and Jefferson Av from HO09E052 to HO09E053
2. Replace the existing and construct 82 meters of 900mm diameter combined sewer pipe on Main St E in between Jefferson Ave and Walter Ave S from HO09E053 to HO09E045
3. Abandon the existing storm relief sewer from HO09B078 to HO09B077 & HO09B077 to HO09E045 MH HO09B078 can also be removed / relocated if necessary
4. Replace the existing and construct 79 meters of 900mm diameter combined sewer pipe on Main St E in between Walter Ave S and Craigroyston Rd from HO09E045 to HO09E039
5. Replace the existing and construct 84 meters of 900mm diameter combined sewer pipe on Main St E in between Craigroyston Rd and Rosewood Rd from HO09E039 to HO09E033
6. To enable watermain installation from Parkdale to Delena, replace and lower the existing combined sewers (approx. 210m). Upgrade the sewer from Parkdale to Glassco HP09E019 to HP09E020 from 300mm to 375mm

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Rymal - Fletcher to Upper Centennial

Project ID: 5162080089

Category: Coordinated - Network Extension Projects
Ward(s): 9

Objective:
Construction of sanitary sewers. This project is to be coordinated with storm sewer installation and road urbanization.

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2013
Program Type: Development

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	4,800		4,800										
Internal Resources/Staffing	530		530										
Total: Expenses	5,330		5,330										

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Non Res DEBT	1,972		1,972										
Dev Charges - Res DEBT	3,358		3,358										
Total: Revenues	5,330		5,330										

Net Cost	0	0	0	0	0	0	0	0	0	0	0	0	0
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Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Roxborough Park Intensification

Project ID: 5162080961

Category: Development Projects
Ward(s): 4

Objective:
Sewer separation to support planned intensification in the Roxborough Park area. Project CW6-S-19

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Collection (W/W)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	1,300		1,300										
Consultant	200		200										
Total: Expenses	1,500		1,500										

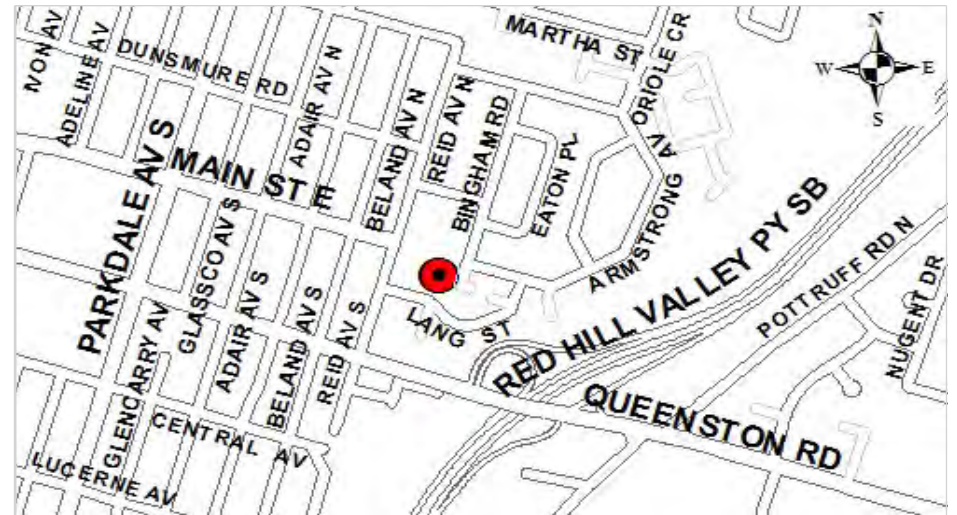
Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Non-Res-TCA	555		555										
Dev Charges - Res-TCA	945		945										
Total: Revenues	1,500		1,500										

Net Cost	0	0	0	0	0	0	0	0	0	0	0	0	0
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Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Wastewater System - Public Works Rate Funded
Project Name: Flooding & Drainage Master Plan Capital Improvements

Project ID: 5162095800

Category: Master Plan - Vertical Assets
Ward(s): City Wide

Objective:
 Implementation of capital works and/or further analysis based on the recommendations in the City Wide Flooding and Drainage Master Plan.

Start Date: 2020
Completion Date: 2023
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (Waste)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	1,000		500	500									
Consultant	500		250	250									
Design	100		50	50									
Internal Resources/Staffing	160		80	80									
Total: Expenses	1,760		880	880									

Net Cost	1,760	0	880	880	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	880		880										
Total: Financing Sources	880		880										

Funding Required	880	0	0	880	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

Stormwater Services

CITY OF HAMILTON
2020 RATE SUPPORTED CAPITAL AND OPERATING BUDGET BOOK
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2020 Funding By Source

City of Hamilton
Storm Water Management
2020 Capital Budget Project List
(000's)

City Ward	Project Number	Project Description	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
												From Operating	Debt
Annual Projects													
City Wide	4032058001	Consultation and Accommodation	30	-	-	-	-	-	-	-	30	30	-
City Wide	5182001099	Engineering Services Staffing Costs - Storm	1,100	-	-	-	-	-	-	-	1,100	1,100	-
<i>Sub-Total Annual Projects</i>			1,130	-	-	-	-	-	-	-	1,130	1,130	-
Building - New Construction													
5	5182067875	Beach Strip Stormwater Pumping Stations (CASH FLOWED)	300	-	-	-	-	-	-	-	300	300	-
<i>Sub-Total Building - New Construction</i>			300	-	-	-	-	-	-	-	300	300	-
Coordinated - Network Extension Projects													
9	5182080089	Rymal - Fletcher to Upper Centennial	1,100	-	-	935	-	-	-	-	165	165	-
<i>Sub-Total Coordinated - Network Extension Projects</i>			1,100	-	-	935	-	-	-	-	165	165	-
Coordinated - Replacement Projects													
13, 14	5182070001	Highway 8 - Woodleys Lane to Hillcrest - Road Restoration	920	-	-	-	-	-	-	-	920	920	-
13	5182070002	Highway 8 - Hillcrest to Park - Road Restoration	660	-	-	-	-	-	-	-	660	660	-
13	5182072293	Highway 8 - Hillcrest to Park	300	-	-	-	-	-	-	-	300	300	-
13, 14	5182072295	Highway 8 - Woodleys Lane to Hillcrest	1,590	-	-	-	-	-	530	-	1,060	1,060	-
<i>Sub-Total Coordinated - Replacement Projects</i>			3,470	-	-	-	-	-	530	-	2,940	2,940	-
Coordinated - Upgrade Projects													
15	5182072092	Cedar / Fern / Braeheid	100	-	-	-	-	-	-	-	100	100	-
<i>Sub-Total Coordinated - Upgrade Projects</i>			100	-	-	-	-	-	-	-	100	100	-
Development Projects													
8	5181480486	SWMP - St. Elizabeth Ponds	200	-	-	200	-	-	-	-	-	-	-
15	5182080082	SWMP - W19 (Parkside Hills Phase 2)	3,740	-	-	3,740	-	-	-	-	-	-	-
9	5182080086	SWMP - SM2 (Red Hill Phase 3/4)	4,120	-	-	4,120	-	-	-	-	-	-	-
11	5182080087	SWMP - B-10 (Lancaster Subdivision)	9,960	-	-	9,960	-	-	-	-	-	-	-
City Wide	5182080090	Storm Water Management Program	4,000	-	-	4,000	-	-	-	-	-	-	-
<i>Sub-Total Development Projects</i>			22,020	-	-	22,020	-	-	-	-	-	-	-
Maintenance Projects													
15	5182074950	Watercourse and Drainage Channel Maintenance	810	-	-	-	-	-	-	-	810	810	-
City Wide	5182074951	Shoreline Protection Program	400	-	-	-	-	-	-	-	400	400	-

City of Hamilton
Storm Water Management
2020 Capital Budget Project List
(000's)

City Ward	Project Number	Project Description	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
												From Operating	Debt
<i>Sub-Total Maintenance Projects</i>			1,210	-	-	-	-	-	-	-	1,210	1,210	-
Master Plan - Vertical Assets													
City Wide	5182095800	Flooding & Drainage Master Plan Capital Improvements	880	-	-	-	-	-	-	-	880	880	-
<i>Sub-Total Master Plan - Vertical Assets</i>			880	-	-	-	-	-	-	-	880	880	-
Operations & Maintenance													
15	5181972940	Evans Road Culvert Twinning	540	-	-	-	-	-	-	-	540	540	-
15	5182017040	Highway 97 - Culvert Improvement Project	180	-	-	-	-	-	-	-	180	180	-
City Wide	5182060622	SWM Facility Maintenance Program	1,700	-	-	-	-	-	-	-	1,700	1,700	-
10, 11, 12, 13, 14, 15	5182060722	Municipal Drain Program	610	-	370	-	-	-	-	-	240	240	-
<i>Sub-Total Operations & Maintenance</i>			3,030	-	370	-	-	-	-	-	2,660	2,660	-
Programs & Contracts T.O.M.													
City Wide	5182017152	Right of Way Drainage Program	1,400	-	-	-	-	-	-	-	1,400	1,400	-
City Wide	5182017458	Catch Basin Replacement/Rehabilitation Program	500	-	-	-	-	-	-	-	500	500	-
<i>Sub-Total Programs & Contracts T.O.M.</i>			1,900	-	-	-	-	-	-	-	1,900	1,900	-
Rehabilitation Project													
City Wide	5182060533	Trenchless Manhole Rehabilitation	70	-	-	-	-	-	-	-	70	70	-
13	5182061046	Osler Dr Outfall @ Grant Blvd	100	-	-	-	-	-	-	-	100	100	-
<i>Sub-Total Rehabilitation Project</i>			170	-	-	-	-	-	-	-	170	170	-
Replacement Project													
City Wide	5181767723	Pumping Stations	600	-	-	-	-	-	-	-	600	600	-
City Wide	5182017549	Concrete Box Culvert Rehab/Repair - T.O.M.	250	-	-	-	-	-	-	-	250	250	-
City Wide	5182017550	Concrete Box Culvert Rehab/Repair - Engineering Services	250	-	-	-	-	-	-	-	250	250	-
City Wide	5182061740	Unscheduled Manhole and Sewermain Replacement Program	50	-	-	-	-	-	-	-	50	50	-
<i>Sub-Total Replacement Project</i>			1,150	-	-	-	-	-	-	-	1,150	1,150	-
SERG													
13	5181823155	South St E and East St S in Dundas Drainage Improvement - SERG	110	-	-	-	-	-	-	-	110	110	-
11	5181872295	SERG - Winona Area Drainage Improvements	100	-	-	-	-	-	-	-	100	100	-
City Wide	5182055421	Stormwater System Planning Program	380	-	-	-	-	-	-	-	380	380	-
5	5182155101	SERG - Stoney Creek & Battlefield Creek Flood and Erosion Control	250	-	-	-	-	-	-	-	250	250	-

City of Hamilton
Storm Water Management
2020 Capital Budget Project List
(000's)

City Ward	Project Number	Project Description	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
												From Operating	Debt
<i>Sub-Total SERG</i>			840	-	-	-	-	-	-	-	840	840	-
Technical Services Projects													
City Wide	4032055522	State of the Infrastructure - Asset Management	100	-	-	-	-	-	100	-	-	-	-
City Wide	4032055588	O.Reg. 588/17 Compliance - Asset Management Plan Development	50	-	-	-	-	-	-	-	50	50	-
City Wide	5181555422	City Wide GRIDS II Stormwater Master Plan	300	-	-	240	-	-	-	-	60	60	-
City Wide	5182049555	QA-QC Service Contract Program	140	-	-	-	-	-	-	-	140	140	-
City Wide	5182055556	Mapping Update Program	40	-	-	-	-	-	-	-	40	40	-
City Wide	5182057545	Stormwater Computer Model	1,080	-	-	-	-	-	-	-	1,080	1,080	-
<i>Sub-Total Technical Services Projects</i>			1,710	-	-	240	-	-	100	-	1,370	1,370	-
Upgrade Projects													
City Wide	5182055825	Stormwater Drainage Analysis and Conceptual Design for Road Corridor Upgrades	760	-	-	-	-	-	-	-	760	760	-
City Wide	5182062073	Field Data Systems Program	110	-	-	-	-	-	-	-	110	110	-
<i>Sub-Total Upgrade Projects</i>			870	-	-	-	-	-	-	-	870	870	-
Total All Projects			39,880	-	370	23,195	-	-	630	-	15,685	15,685	-

2020-2029 Capital Budget List

CITY OF HAMILTON
STORM WATER MANAGEMENT
2020 - 2029 CAPITAL BUDGET LIST (000's)

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Rehabilitation, Replacement, & Upgrade Programs (SAM)																
City Wide	4032014405	Contaminated Soil & Rock Disposal Program	0	0	0	0	220	220	0	0	440	440	660	660	2020	Ongoing
City Wide	4032055522	State of the Infrastructure - Asset Management	0	0	100	0	90	90	90	90	630	630	910	810	2020	Ongoing
City Wide	4032055588	O.Reg. 588/17 Compliance - Asset Management Plan Development	0	0	50	50	50	50	50	50	50	50	200	200	2020	2023
City Wide	4032058001	Consultation and Accommodation	0	0	30	30	30	30	30	30	210	210	300	300	2020	Ongoing
City Wide	5181555422	City Wide GRIDS II Stormwater Master Plan	650	0	300	60	0	0	0	0	60	0	1,010	60	2015	2020
9, 11, 12, 15	5181562590	SWMP Retrofits	720	500	0	0	0	0	0	0	220	220	940	720	2015	2023
City Wide	5181767723	Pumping Stations	100	100	600	600	0	0	100	100	50	50	850	850	2017	2026
15	5181972940	Evans Road Culvert Twinning	170	0	540	540	0	0	0	0	0	0	710	540	2019	2020
City Wide	5182001099	Engineering Services Staffing Costs - Storm	0	0	1,100	1,100	1,100	1,100	1,100	1,100	7,700	7,700	11,000	11,000	2020	Ongoing
15	5182017040	Highway 97 - Culvert Improvement Project	0	0	180	180	580	580	0	0	0	0	760	760	2020	2021
City Wide	5182017549	Concrete Box Culvert Rehab/Repair - T.O.M.	0	0	250	250	250	250	250	250	1,750	1,750	2,500	2,500	2020	Ongoing
City Wide	5182017550	Concrete Box Culvert Rehab/Repair - Engineering Services	0	0	250	250	250	250	250	250	1,750	1,750	2,500	2,500	2020	Ongoing
City Wide	5182049555	QA-QC Service Contract Program	0	0	140	140	140	140	140	140	980	980	1,400	1,400	2020	Ongoing
City Wide	5182055556	Mapping Update Program	0	0	40	40	40	40	0	0	160	160	240	240	2020	Ongoing
City Wide	5182055825	Stormwater Drainage Analysis and Conceptual Design for Road Corridor Upgrades	0	0	760	760	0	0	0	0	0	0	760	760	2020	2020
City Wide	5182057545	Stormwater Computer Model	0	0	1,080	1,080	0	0	1,080	1,080	2,200	2,200	4,360	4,360	2020	Ongoing
City Wide	5182060533	Trenchless Manhole Rehabilitation	0	0	70	70	70	70	70	70	490	490	700	700	2020	Ongoing
City Wide	5182060622	SWM Facility Maintenance Program	0	0	1,700	1,700	1,500	1,500	1,500	1,500	8,400	8,400	13,100	13,100	2020	Ongoing
10, 11, 12, 13, 14, 15	5182060722	Municipal Drain Program	0	0	610	240	700	227	100	25	700	175	2,110	667	2020	Ongoing
13	5182061046	Osler Dr Outfall @ Grant Blvd	0	0	100	100	380	380	0	0	0	0	480	480	2020	2021
City Wide	5182061740	Unscheduled Manhole and Sewermain Replacement Program	0	0	50	50	50	50	50	50	350	350	500	500	2020	Ongoing
City Wide	5182062073	Field Data Systems Program	0	0	110	110	110	110	110	110	770	770	1,100	1,100	2020	Ongoing

CITY OF HAMILTON
STORM WATER MANAGEMENT
2020 - 2029 CAPITAL BUDGET LIST (000's)

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Rehabilitation, Replacement, & Upgrade Programs (SAM)																
5	5182067875	Beach Strip Stormwater Pumping Stations (CASH FLOWED)	0	0	300	300	1,295	1,295	7,100	7,100	7,075	7,075	15,770	15,770	2020	2023
City Wide	5182072074	Contingency for Unscheduled Works Program	0	0	0	0	180	180	0	0	720	720	900	900	2020	Ongoing
			1,640	600	8,360	7,650	7,035	6,562	12,020	11,945	34,705	34,120	63,760	60,877		
Projects Coordinated with Roads Program																
13, 14	5182070001	Highway 8 - Woodleys Lane to Hillcrest - Road Restoration	0	0	920	920	0	0	0	0	0	0	920	920	2020	2020
13	5182070002	Highway 8 - Hillcrest to Park - Road Restoration	0	0	660	660	0	0	0	0	0	0	660	660	2020	2020
15	5182072092	Cedar / Fern / Braeheid	0	0	100	100	0	0	0	0	0	0	100	100	2020	2020
13	5182072293	Highway 8 - Hillcrest to Park	0	0	300	300	0	0	0	0	0	0	300	300	2020	2020
13, 14	5182072295	Highway 8 - Woodleys Lane to Hillcrest	0	0	1,590	1,060	0	0	0	0	0	0	1,590	1,060	2020	2020
4	5182172295	Barton - Parkdale to Talbot	0	0	0	0	1,530	1,530	0	0	0	0	1,530	1,530	2021	2021
1	5182372290	Jones / Oxford / Tecumseh (Strathcona Neighbourhood)	0	0	0	0	0	0	0	0	125	125	125	125	2023	2023
3	5182672290	Industrial - Ottawa to Gage / Gage / Depew	0	0	0	0	0	0	0	0	390	390	390	390	2026	2026
3, 4	5182772290	Burlington & Industrial - Ottawa to Kenilworth	0	0	0	0	0	0	0	0	675	675	675	675	2027	2027
3	5182972290	Stipeley Neighbourhood (South) - Connaught / Balasm / Dunsmure	0	0	0	0	0	0	0	0	850	850	850	850	2029	2029
			0	0	3,570	3,040	1,530	1,530	0	0	2,040	2,040	7,140	6,610		
SERG Projects																
1	5181260214	SERG - Parkside and Kipling Flood Solutions	1,890	170	0	0	1,000	1,000	0	0	0	0	2,890	1,170	2012	2027
6	5181372295	SERG - Mount Albion Stormwater Management Facility Rehabilitation	670	0	0	0	0	0	330	330	0	0	1,000	330	2013	2022
13	5181823155	South St E and East St S in Dundas Drainage Improvement - SERG	120	60	110	110	0	0	0	0	220	220	450	390	2018	2023
11	5181872295	SERG - Winona Area Drainage Improvements	500	330	100	100	440	440	170	170	1,100	1,100	2,310	2,140	2018	2025
City Wide	5181955347	SERG - Watercourse Erosion Assessment	0	0	0	0	770	770	130	130	1,100	1,100	2,000	2,000	2019	2024

**CITY OF HAMILTON
STORM WATER MANAGEMENT
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
SERG Projects																
City Wide	5182055421	Stormwater System Planning Program	0	0	380	380	380	380	380	380	2,660	2,660	3,800	3,800	2020	Ongoing
5	5182155101	SERG - Stoney Creek & Battlefield Creek Flood and Erosion Control	150	0	250	250	0	0	0	0	0	0	400	250	2019	2020
5	5182323875	Beach Strip Stormwater Collection System Improvements	0	0	0	0	0	0	150	150	2,850	2,850	3,000	3,000	2023	2024
City Wide	5182355075	SERG - Watershed Project Coordination and Stewardship Action Plans	0	0	0	0	0	0	0	0	2,000	2,000	2,000	2,000	2023	2029
1	5182460214	SERG - Parkside & Kipling Stormwater Facility	0	0	0	0	0	0	0	0	12,610	12,610	12,610	12,610	2024	2028
3	5182472295	Main - Prospect to Gage - SERG B-3	0	0	0	0	0	0	0	0	1,580	1,580	1,580	1,580	2024	2024
City Wide	5182674850	Stormwater Management Program	0	0	0	0	0	0	0	0	20,000	20,000	20,000	20,000	2026	2029
City Wide	5182696475	Flooding & Drainage Master Plan Capital Forecast	0	0	0	0	0	0	0	0	67,500	67,500	67,500	67,500	2026	2029
			3,330	560	840	840	2,590	2,590	1,160	1,160	111,620	111,620	119,540	116,770		
Master Plan - Vertical Assets																
City Wide	5182095800	Flooding & Drainage Master Plan Capital Improvements	0	0	880	880	880	880	0	0	0	0	1,760	1,760	2020	2023
			0	0	880	880	880	880	0	0	0	0	1,760	1,760		
Development/Extension Projects																
8	5181480486	SWMP - St. Elizabeth Ponds	360	0	200	0	0	0	0	0	0	0	560	0	2014	2020
15	5182080082	SWMP - W19 (Parkside Hills Phase 2)	0	0	3,740	0	0	0	0	0	0	0	3,740	0	2020	2020
9	5182080086	SWMP - SM2 (Red Hill Phase 3/4)	0	0	4,120	0	0	0	0	0	0	0	4,120	0	2020	2020
11	5182080087	SWMP - B-10 (Lancaster Subdivision)	0	0	9,960	0	0	0	0	0	0	0	9,960	0	2020	2020
9	5182080089	Rymal - Fletcher to Upper Centennial	0	0	1,100	165	0	0	0	0	0	0	1,100	165	2020	2020
City Wide	5182080090	Storm Water Management Program	0	0	4,000	0	4,000	0	4,000	0	28,000	0	40,000	0	2020	Ongoing
6, 11	5182080584	RHBP - Nebo - Rymal to Twenty	0	0	0	0	2,000	0	0	0	0	0	2,000	0	2020	2021
11	5182180280	Airport Road Storm Sewer - Homestead to Mountaingate	0	0	0	0	1,360	0	0	0	0	0	1,360	0	2021	2021

**CITY OF HAMILTON
STORM WATER MANAGEMENT
2020 - 2029 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2020		2020		2021		2022		2023-2029		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Development/Extension Projects																
7	5182180281	Rymal - 150m e/o Massina to 140m easterly	0	0	0	0	70	70	0	0	0	0	70	70	2021	2021
			360	0	23,120	165	7,430	70	4,000	0	28,000	0	62,910	235		
Maintenance Projects																
15	5182074950	Watercourse and Drainage Channel Maintenance	0	0	810	810	90	90	580	580	3,870	3,870	5,350	5,350	2020	Ongoing
City Wide	5182074951	Shoreline Protection Program	0	0	400	400	750	750	170	170	3,040	3,040	4,360	4,360	2020	Ongoing
			0	0	1,210	1,210	840	840	750	750	6,910	6,910	9,710	9,710		
Programs & Contracts T.O.M.																
City Wide	5182017152	Right of Way Drainage Program	0	0	1,400	1,400	1,410	1,410	1,420	1,420	10,220	10,220	14,450	14,450	2020	Ongoing
City Wide	5182017458	Catch Basin Replacement/Rehabilitation Program	0	0	500	500	500	500	500	500	3,500	3,500	5,000	5,000	2020	Ongoing
			0	0	1,900	1,900	1,910	1,910	1,920	1,920	13,720	13,720	19,450	19,450		
Total Storm Water Management			5,330	1,160	39,880	15,685	22,215	14,382	19,850	15,775	196,995	168,410	284,270	215,412		

2020
Capital Project
Detail Sheets

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 4032055522
Project Name: State of the Infrastructure - Asset Management

Category: Technical Services Projects
Ward(s): City Wide

Objective:
 For the ongoing condition assessment, needs analysis and capital prioritization and reporting of right of way assets necessary to maintain such reports as the State of the Infrastructure, Service Level Delivery, etc. This is to include the ongoing development and monitoring of the Provincially required Asset Management Plan.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	2,260		100	90	90	90	90	90	90	90	90	90	1,350
Total: Expenses	2,260		100	90	90	90	90	90	90	90	90	90	1,350

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From WIP Transfers	100		100										
Total: Revenues	100		100										

Net Cost	2,160	0	0	90	90	90	90	90	90	90	90	90	1,350
Funding Required	2,160	0	0	90	90	90	90	90	90	90	90	90	1,350

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 4032055588
Project Name: O.Reg. 588/17 Compliance - Asset Management Plan Development

Category: Technical Services Projects
Ward(s): City Wide

Objective:
 To develop and deliver a provincially mandated Asset Management Plan in compliance with O.Reg 588/17 – Infrastructure for Jobs & Prosperity Act.

Start Date: 2020
Completion Date: 2023
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Technical Studies &

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	200		50	50	50	50							
Total: Expenses	200		50	50	50	50							

Net Cost	200	0	50	50	50	50	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	50		50										
Total: Financing Sources	50		50										

Funding Required	150	0	0	50	50	50	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 4032058001
Project Name: Consultation and Accommodation

Category: Annual Projects
Ward(s): City Wide

Objective:
 Site-specific project requirements for appropriate and thorough project consultation solutions.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Other

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Other Capital Expenditures	750		30	30	30	30	30	30	30	30	30	30	450
Total: Expenses	750		30	30	30	30	30	30	30	30	30	30	450
Net Cost	750	0	30	30	30	30	30	30	30	30	30	30	450
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	30		30										
Total: Financing Sources	30		30										
Funding Required	720	0	0	30	30	30	30	30	30	30	30	30	450

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5181480486
Project Name: SWMP - St. Elizabeth Ponds

Category: Development Projects
Ward(s): 8

Objective:
 Implementation of recommendations of the SWMP Assessment Study.

Start Date: 2014
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2014
Program Type: SWMMP

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	420	220	200										
Consultant	100	100											
Internal Resources/Staffing	40	40											
Total: Expenses	560	360	200										

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Non-Res-TCA	280	180	100										
Dev Charges - Res-TCA	280	180	100										
Total: Revenues	560	360	200										

Net Cost	0	0	0	0	0	0	0	0	0	0	0	0	0
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Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5181555422
Project Name: City Wide GRIDS II Stormwater Master Plan

Category: Technical Services Projects
Ward(s): City Wide

Objective:
 Undertake stormwater Master Plan to support the City's long term planning and growth management initiatives, GRIDS II. Study and review existing storm sewer infrastructure and operating strategies to identify system upgrades. Establish appropriate stormwater management practices to maintain/ enhance the existing stormwater system considering growth scenarios. Develop a recommended implementation program and monitoring plan for the preferred alternatives in the master plan.

Start Date: 2015
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2015
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	800	500	250								50		
Internal Resources/Staffing	210	150	50								10		
Total: Expenses	1,010	650	300								60		

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Non Res-NCA	40	40											
Dev Charges - Non-Res-TCA	94	94											
Dev Charges - Res-NCA	340	40	240								60		
Dev Charges - Res-TCA	182	182											
Total: Revenues	656	356	240								60		

Net Cost	354	294	60	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	354	294	60										
Total: Financing Sources	354	294	60										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5181767723
Project Name: Pumping Stations

Category: Replacement Project
Ward(s): City Wide

Objective:
 To provide effective maintenance of the storm pumping stations including building and system requirements and equipment rehabilitation/replacement.

Start Date: 2017
Completion Date: 2026
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2016
Program Type: Collection (Storm)

2020 Scope to be determined upon completion of consulting assignment

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	850	100	600		100				50				
Total: Expenses	850	100	600		100				50				

Net Cost	850	100	600	0	100	0	0	0	50	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	600		600										
Total: Financing Sources	600		600										

Funding Required	250	100	0	0	100	0	0	0	50	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5181823155
Project Name: South St E and East St S in Dundas Drainage Improvement - SERG

Category: SERG
Ward(s): 13

Objective:

This project will assess the existing drainage conditions at the intersection of South Street East and East Street South due to recurring drainage problems. Options to improve the level of service at this location will be examined. This budget will cover the assessment and development of conceptual alternatives, detailed design, and construction. Depending on the type of solution identified an easement or land acquisition may be required.

Start Date: 2018
Completion Date: 2023
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2017
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	200					200							
Consultant	100	100											
Design	50		50										
Internal Resources/Staffing	50	20	10			20							
Land/Property	50		50										
Total: Expenses	450	120	110			220							

Net Cost	450	120	110	0	0	220	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	170	60	110										
Total: Financing Sources	170	60	110										

Funding Required	280	60	0	0	0	220	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5181872295
Project Name: SERG - Winona Area Drainage Improvements

Category: SERG
Ward(s): 11

Objective:
 Class Environmental Assessment Study determined preferred alternative to resolve existing flood risk issues, acquire land (if needed) and construct new pipes and ditches.

Start Date: 2018
Completion Date: 2025
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2015
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	1,200	200						1,000					
Consultant	240	150	90										
Design	250	100			150								
Internal Resources/Staffing	220	50	10	40	20			100					
Land/Property	400			400									
Total: Expenses	2,310	500	100	440	170			1,100					

Net Cost	2,310	500	100	440	170	0	0	1,100	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	270	170	100										
Total: Financing Sources	270	170	100										

Funding Required	2,040	330	0	440	170	0	0	1,100	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5181972940
Project Name: Evans Road Culvert Twinning

Category: Operations & Maintenance
Ward(s): 15

Objective:
 To increase the hydraulic capacity of culvert asset FLA-1905 on Evans Road in Waterdown. The work includes preparation of an engineered design to twin the existing culvert crossing, and obtaining permits from the regulatory agencies (2019). Construction of the culvert is to follow in 2020. This work will be carried out by Engineering Services Division.

Start Date: 2019
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2019
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	460		460										
Consultant	230	150	80										
Internal Resources/Staffing	20	20											
Total: Expenses	710	170	540										

Net Cost	710	170	540	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	710	170	540										
Total: Financing Sources	710	170	540										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182001099
Project Name: Engineering Services Staffing Costs - Storm

Category: Annual Projects
Ward(s): City Wide

Objective:

To fund Engineering Services staffing costs through capital for work on storm water related capital projects, both in-year and future. In the past, these charges were built into in-year approved capital projects on a pro-rated basis. In order to provide more transparency and capture staffing costs for future works in a more accurate way, these staffing costs are now reflected in this project and removed from all other individual Engineering Services projects.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Other

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Internal Resources/Staffing	27,500		1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	16,500
Total: Expenses	27,500		1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	16,500
Net Cost	27,500	0	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	16,500
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	1,100		1,100										
Total: Financing Sources	1,100		1,100										
Funding Required	26,400	0	0	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	16,500

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182017040
Project Name: Highway 97 - Culvert Improvement Project

Category: Operations & Maintenance
Ward(s): 15

Objective:

To replace the existing grouping of cross culverts (5 barrels) with a single/double span structure, to best match the existing hydraulic performance of the crossing. The grouping of culvert assets is: FLA-433, FLA-441, FLA-442, FLA-467, FLA-539. The work includes preparation of an engineered design to replace the existing five (5) corrugated steel pipe arches with a single/double span structure, performing a hydraulic analysis to evaluate the existing and proposed site condition, carrying out a geotechnical investigation to support the engineered design, and obtaining permits from the regulatory agencies (2020). Construction of the culvert is to follow in 2021. This work will be carried out by Engineering Services Division.

Start Date: 2020
Completion Date: 2021
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2019
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	500			500									
Consultant	260		180	80									
Total: Expenses	760		180	580									

Net Cost	760	0	180	580	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	180		180										
Total: Financing Sources	180		180										

Funding Required	580	0	0	580	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182017152
Project Name: Right of Way Drainage Program

Category: Programs & Contracts T.O.M.
Ward(s): City Wide

Objective:

To provide funding for the rehabilitation and/or replacement of drainage assets within the Right-of-Way. Works will include construction activities related to culvert repair/replacement, ditch maintenance, erosion repair, and roadside drainage system improvements. Works will include various preparation such as permit applications to agency stakeholders, fees, investigation, testing, inspection, construction, administration.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Collection (Storm)

2020 Scope Includes: Schedule cross culvert repair/replacement; Contract administration & Inspection; Urgent/emergency culvert repair/replacement and Culvert asset marker fabrication and installation

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	38,000		1,400	1,410	1,420	1,430	1,440	1,450	1,460	1,470	1,480	1,490	23,550
Total: Expenses	38,000		1,400	1,410	1,420	1,430	1,440	1,450	1,460	1,470	1,480	1,490	23,550
Net Cost	38,000	0	1,400	1,410	1,420	1,430	1,440	1,450	1,460	1,470	1,480	1,490	23,550
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	1,400		1,400										
Total: Financing Sources	1,400		1,400										
Funding Required	36,600	0	0	1,410	1,420	1,430	1,440	1,450	1,460	1,470	1,480	1,490	23,550

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182017458
Project Name: Catch Basin Replacement/Rehabilitation Program

Category: Programs & Contracts T.O.M.
Ward(s): City Wide

Objective:

To provide funding for the replacement and/or rehabilitation of existing catchbasin and leads throughout the City, thus reducing maintenance costs, liability risks, increasing public safety and extending asset life expectancy. 2020 works will be prioritized and scheduled as a result of a condition assessment compiled in conjunction with the production catch basin cleaning contract.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	12,500		500	500	500	500	500	500	500	500	500	500	7,500
Total: Expenses	12,500		500	500	500	500	500	500	500	500	500	500	7,500
Net Cost	12,500	0	500	500	500	500	500	500	500	500	500	500	7,500
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	500		500										
Total: Financing Sources	500		500										
Funding Required	12,000	0	0	500	500	500	500	500	500	500	500	500	7,500

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182017549
Project Name: Concrete Box Culvert Rehab/Repair - T.O.M.

Category: Replacement Project
Ward(s): City Wide

Objective:
 Funding for repair and/or replacement of existing concrete box culverts that have a span of less than 3 meters throughout the City, reducing liability and increasing public safety.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	6,250		250	250	250	250	250	250	250	250	250	250	3,750
Total: Expenses	6,250		250	250	250	250	250	250	250	250	250	250	3,750
Net Cost	6,250	0	250	250	250	250	250	250	250	250	250	250	3,750
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	250		250										
Total: Financing Sources	250		250										
Funding Required	6,000	0	0	250	250	250	250	250	250	250	250	250	3,750

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182017550
Project Name: Concrete Box Culvert Rehab/Repair - Engineering Services

Category: Replacement Project
Ward(s): City Wide

Objective:
 Funding for inventory assessment, prioritization, mapping and additional engineering investigation and evaluation costs of existing concrete box culverts that have a span of less than 3 meters throughout the City, reducing liability and increasing public safety.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	6,250		250	250	250	250	250	250	250	250	250	250	3,750
Total: Expenses	6,250		250	250	250	250	250	250	250	250	250	250	3,750
Net Cost	6,250	0	250	250	250	250	250	250	250	250	250	250	3,750
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	250		250										
Total: Financing Sources	250		250										
Funding Required	6,000	0	0	250	250	250	250	250	250	250	250	250	3,750

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182049555
Project Name: QA-QC Service Contract Program

Category: Technical Services Projects
Ward(s): City Wide

Objective:
 Allocated funding to provide quality assurance and control for existing road rehabilitation and replacement contracts. Includes but not limited to: coupon testing, CCTV, soil resistivity and compaction.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	3,500		140	140	140	140	140	140	140	140	140	140	2,100
Total: Expenses	3,500		140	140	140	140	140	140	140	140	140	140	2,100

Net Cost	3,500	0	140	140	140	140	140	140	140	140	140	140	2,100
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	140		140										
Total: Financing Sources	140		140										

Funding Required	3,360	0	0	140	140	140	140	140	140	140	140	140	2,100
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182055421

Category: SERG

Project Name: Stormwater System Planning Program

Ward(s): City Wide

Objective:

Environmental Assessments, hydraulic analysis and flood risk assessments performed on an as required basis to recommend upgrades and system improvements. Includes analysis related to growth. Intensification related to system capacity. Undertake system analysis, EA's and conceptual design for projects including field data systems, local scoped computer modelling and surveys.

Start Date: 2020

Completion Date: Ongoing

Status: Recommended (funded)

Tangible Capital Asset: No

Capital Budget Initiation: 2020

Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	8,750		350	350	350	350	350	350	350	350	350	350	5,250
Internal Resources/Staffing	750		30	30	30	30	30	30	30	30	30	30	450
Total: Expenses	9,500		380	380	380	380	380	380	380	380	380	380	5,700

Net Cost	9,500	0	380	380	380	380	380	380	380	380	380	380	5,700
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	380		380										
Total: Financing Sources	380		380										

Funding Required	9,120	0	0	380	380	380	380	380	380	380	380	380	5,700
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182055556
Project Name: Mapping Update Program

Category: Technical Services Projects
Ward(s): City Wide

Objective:

Acquire updated air photos, update the City's Digital Terrain Model (DEM) and mapping of road edges, sidewalks, building footprints etc. This supports the study of Storm water issues, supports operating and capital programs, assists in land development reviews. Develop and Maintain Horizontal (Lat / Long) and Vertical (Elevation) control networks across the City to allow correct data integration and alignment of ground based surveys with the City's mapping program.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	520		40	40		40		40		40		40	280
Total: Expenses	520		40	40		40		40		40		40	280

Net Cost	520	0	40	40	0	40	0	40	0	40	0	40	280
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	40		40										
Total: Financing Sources	40		40										

Funding Required	480	0	0	40	0	40	0	40	0	40	0	40	280
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182055825
Project Name: Stormwater Drainage Analysis and Conceptual Design for Road Corridor Upgrades

Category: Upgrade Projects
Ward(s): City Wide

Objective:
 Analyze drainage, model hydrology and pipe hydraulics, develop storm water drainage conceptual design for road corridor urbanization, widening and upgrade projects including Rymal Road East, Mohawk Road Ancaster, Southcote Road, Nebo Road and Trinity Church Road.

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	660		660										
Internal Resources/Staffing	100		100										
Total: Expenses	760		760										

Net Cost	760	0	760	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	760		760										
Total: Financing Sources	760		760										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182057545
Project Name: Stormwater Computer Model

Category: Technical Services Projects
Ward(s): City Wide

Objective:
 City-wide all-pipe Mike Urban model will be built/refined to support all kinds of studies including drainage study, master plans and DA review. Long-term continuous Flow monitoring will be conducted and the data will be used for model calibration and validation and will assist the Master Planning Study, DC Study, as well as the other capacity related studies.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	3,970		990		990	990		250	250	250	250		
Internal Resources/Staffing	390		90		90	90		30	30	30	30		
Total: Expenses	4,360		1,080		1,080	1,080		280	280	280	280		
Net Cost	4,360	0	1,080	0	1,080	1,080	0	280	280	280	280	0	0
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	1,080		1,080										
Total: Financing Sources	1,080		1,080										
Funding Required	3,280	0	0	0	1,080	1,080	0	280	280	280	280	0	0

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182060533
Project Name: Trenchless Manhole Rehabilitation

Category: Rehabilitation Project
Ward(s): City Wide

Objective:
 Trenchless manhole rehabilitation coordinated with mainline CIPP (Cured in Place Pipe) rehabilitation program. Manhole rehabilitation is intended to reduce the risks associated with manhole collapse and manhole infiltration issues.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	1,540		70	70	70	70	70	70	70	70	70	70	840
Total: Expenses	1,540		70	70	70	70	70	70	70	70	70	70	840
Net Cost	1,540	0	70	70	70	70	70	70	70	70	70	70	840
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	70		70										
Total: Financing Sources	70		70										
Funding Required	1,470	0	0	70	70	70	70	70	70	70	70	70	840

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182060622
Project Name: SWM Facility Maintenance Program

Category: Operations & Maintenance
Ward(s): City Wide

Objective:
 Rehabilitate and/or replace various assets within storm water management ponds to sustain functionality and lifecycle expectations. These works will include functional aspects i.e. structure rehab/replacement, vegetation restoration, siltation/debris removal, bank stabilization, etc. but excludes aesthetic.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Stormwater

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	31,100		1,700	1,500	1,500	1,200	1,200	1,200	1,200	1,200	1,200	1,200	18,000
Total: Expenses	31,100		1,700	1,500	1,500	1,200	1,200	1,200	1,200	1,200	1,200	1,200	18,000
Net Cost	31,100	0	1,700	1,500	1,500	1,200	1,200	1,200	1,200	1,200	1,200	1,200	18,000
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	1,700		1,700										
Total: Financing Sources	1,700		1,700										
Funding Required	29,400	0	0	1,500	1,500	1,200	1,200	1,200	1,200	1,200	1,200	1,200	18,000

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

Comments:

2020 Scope includes:

\$1,600K Planned facility maintenance and repair
 \$ 100K Unplanned maintenance and repair

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182060722
Project Name: Municipal Drain Program

Category: Operations & Maintenance
Ward(s): 10, 11, 12, 13, 14, 15

Objective:

To provide the engineering and consulting of municipal drains as required under the Municipal Drainage Act R.S.O. 1990 Chapter D17. A portion of the Maintenance and Repair costs are recoverable from the benefiting land owners. Budget reflects City's cost share for its affected lands. Cost share proportions may vary depending on the type of drainage work undertaken. This program includes drainage works associated with the establishment of new municipal drains, maintenance & repair to repair to existing drains in accordance of said Act.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	3,310		610	700	100	100	100	100	100	100	100	100	1,200
Total: Expenses	3,310		610	700	100	100	100	100	100	100	100	100	1,200

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Other Revenues - External	2,343		370	473	75	75	75	75	75	75	75	75	900
Total: Revenues	2,343		370	473	75	75	75	75	75	75	75	75	900

Net Cost	967	0	240	227	25	25	25	25	25	25	25	25	300
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	240		240										
Total: Financing Sources	240		240										

Funding Required	727	0	0	227	25	25	25	25	25	25	25	25	300
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**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182060722
Project Name: Municipal Drain Program

Category: Operations & Maintenance
Ward(s): 10, 11, 12, 13, 14, 15

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

Comments:

Maintenance and repair activities includes: sediment removal, spot clean-out, culvert replacement, bank repairs, outlet repairs.

This program also includes budget for the updating/developing new assessment schedules, per section 76 of said Act.

2020 Scope:

- \$ 35k - Update Assessment Schedule
- \$475k - Update outdate Engineering Report (\$300k recoverable)
- \$100k - Drain Maintenance (\$70k recoverable)

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182061046
Project Name: Osler Dr Outfall @ Grant Blvd

Category: Rehabilitation Project
Ward(s): 13

Objective:
 The existing storm sewer has become structurally deficient. Rehabilitation is intended to restore structural integrity while reducing the risk and liability associated with sewer collapse. Replace approx. 111m of existing 750mm Corrugated Steel Pipe in ravine.

Start Date: 2020
Completion Date: 2021
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	380			380									
Design	100		100										
Total: Expenses	480		100	380									

Net Cost	480	0	100	380	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	100		100										
Total: Financing Sources	100		100										

Funding Required	380	0	0	380	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182061740
Project Name: Unscheduled Manhole and Sewermain Replacement Program

Category: Replacement Project
Ward(s): City Wide

Objective:
 For the replacement of manholes and sewer mains as a result of failures in the system.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	1,150		50	50	50	50	50	50	50	50	50	50	650
Total: Expenses	1,150		50	50	50	50	50	50	50	50	50	50	650
Net Cost	1,150	0	50	50	50	50	50	50	50	50	50	50	650
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	50		50										
Total: Financing Sources	50		50										
Funding Required	1,100	0	0	50	50	50	50	50	50	50	50	50	650

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182062073
Project Name: Field Data Systems Program

Category: Upgrade Projects
Ward(s): City Wide

Objective:
 To maintain, upgrade and acquire data and information for various asset management systems involved with the overall management of the stormwater collection network. (IPS; IRISS; ESRI and Bentley Suite Software)

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Other Capital Expenditures	2,750		110	110	110	110	110	110	110	110	110	110	1,650
Total: Expenses	2,750		110	110	110	110	110	110	110	110	110	110	1,650
Net Cost	2,750	0	110	110	110	110	110	110	110	110	110	110	1,650
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	110		110										
Total: Financing Sources	110		110										
Funding Required	2,640	0	0	110	110	110	110	110	110	110	110	110	1,650

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182067875
Project Name: Beach Strip Stormwater Pumping Stations (CASH FLOWED)

Category: Building - New Construction
Ward(s): 5

Objective:
 Implementation of recommendations from "Beach Boulevard Community Stormwater Ponding on Right-of-Way Study" to address street flooding. Scope includes Environmental Assessment to confirm proposed infrastructure solutions, design and construction of storm water pumping stations.

Start Date: 2020
Completion Date: 2023
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	12,500				6,250	6,250							
Design	2,350			1,175	600	575							
Environmental Assesments	270		270										
Internal Resources/Staffing	650		30	120	250	250							
Total: Expenses	15,770		300	1,295	7,100	7,075							

Net Cost	15,770	0	300	1,295	7,100	7,075	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	300		300										
Total: Financing Sources	300		300										

Funding Required	15,470	0	0	1,295	7,100	7,075	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182070001
Project Name: Highway 8 - Woodleys Lane to Hillcrest - Road Restoration

Category: Coordinated - Replacement Projects
Ward(s): 13, 14

Objective:
 In accordance with the coordinated infrastructure cost-sharing policy, to reimburse the roads program for the reconstruction of roads being a direct result of coordinated storm sewer replacement works.

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	920		920										
Total: Expenses	920		920										

Net Cost	920	0	920	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	920		920										
Total: Financing Sources	920		920										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182070002
Project Name: Highway 8 - Hillcrest to Park - Road Restoration

Category: Coordinated - Replacement Projects
Ward(s): 13

Objective:
 In accordance with the coordinated infrastructure cost-sharing policy, to reimburse the roads program for the reconstruction of roads being a direct result of coordinated storm sewer replacement works.

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	660		660										
Total: Expenses	660		660										

Net Cost	660	0	660	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	660		660										
Total: Financing Sources	660		660										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182072092
Project Name: Cedar / Fern / Braeheid

Category: Coordinated - Upgrade Projects
Ward(s): 15

Objective:

The existing combined drainage system was found to be deficient in storm flow capacity. Installation of a new storm sewer system, including catch basins and connections, is required to reduce risk and liability associated with sewer backup. Install approx. 75m of 300mm storm sewer including manholes and catchbasins. This project is to be coordinated with road reconstruction.

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	100		100										
Total: Expenses	100		100										

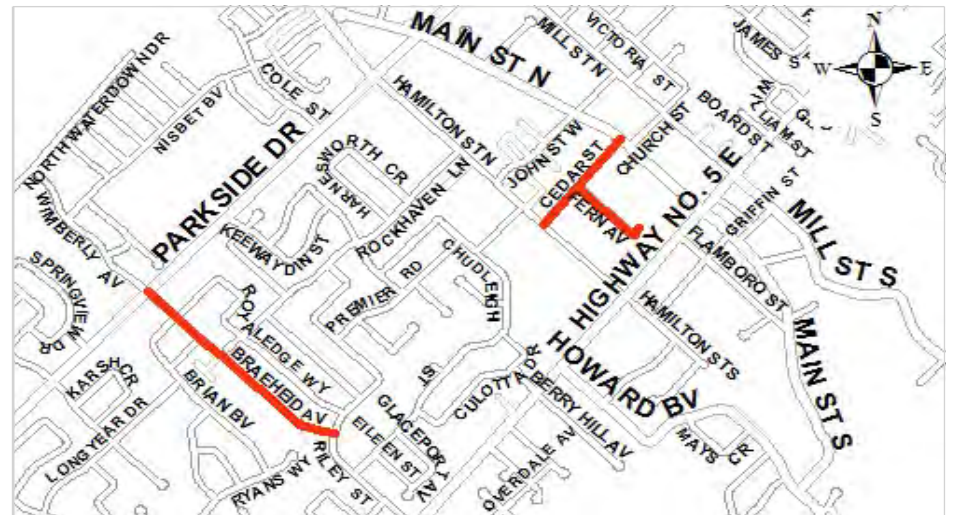
Net Cost	100	0	100	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	100		100										
Total: Financing Sources	100		100										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182072293
Project Name: Highway 8 - Hillcrest to Park

Category: Coordinated - Replacement Projects
Ward(s): 13

Objective:
 The existing drainage system was found to be deficient. Repairs and upgrades to the existing sewer system is required to reduce risk and liability associated with sewer backup. This project is to be coordinated with road reconstruction.

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2016
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	300		300										
Total: Expenses	300		300										

Net Cost	300	0	300	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	300		300										
Total: Financing Sources	300		300										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182072295
Project Name: Highway 8 - Woodleys Lane to Hillcrest

Category: Coordinated - Replacement Projects
Ward(s): 13, 14

Objective:
 The existing drainage system was found to be deficient in storm flow capacity. Installation of a separated storm sewer system, including catch basins and connections, is required to reduce risk and liability associated with sewer backup. This project is to be coordinated with road reconstruction.

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2016
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	1,500		1,500										
Design	90		90										
Total: Expenses	1,590		1,590										

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From WIP Transfers	530		530										
Total: Revenues	530		530										

Net Cost	1,060	0	1,060	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	1,060		1,060										
Total: Financing Sources	1,060		1,060										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182074950

Category: Maintenance Projects

Project Name: Watercourse and Drainage Channel Maintenance

Ward(s): 15

Objective:

Funding required to sustain the functionality and be able to respond to emergency conditions related to the City's surface drainage infrastructure. Activities under this program will include: asset data collection/inspection/condition assessments, environmental assessments, engineered designs, obtaining approval from various regulatory stakeholders, tender preparation, contract administration, and construction activities.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	4,250		500		250			500			500		2,500
Consultant	5,825		250	75	250	250	250	250	250	250	250	250	3,500
Design	300						150			150			
Environmental Assesments	1,050					150			150				750
Internal Resources/Staffing	1,765		60	15	80	60	60	110	60	60	110	60	1,090
Total: Expenses	13,190		810	90	580	460	460	860	460	460	860	310	7,840

Net Cost	13,190	0	810	90	580	460	460	860	460	460	860	310	7,840
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	810		810										
Total: Financing Sources	810		810										

Funding Required	12,380	0	0	90	580	460	460	860	460	460	860	310	7,840
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**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182074950
Project Name: Watercourse and Drainage Channel Maintenance

Category: Maintenance Projects
Ward(s): 15

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

Comments:

The infrastructure includes a combined 191 kilometers of watercourses and overland drainage channels, that are either located on lands owned by the City, or within easements in the City's favour.

2020 Work Plan:

Watercourse 6.1 - Maintenance & Outlet Repair
 Watercourse 7 - Chennel & Outlet Repair

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182074951

Category: Maintenance Projects

Project Name: Shoreline Protection Program

Ward(s): City Wide

Objective:
Funding to sustain the functionality of shoreline protection infrastructure that is located where the road allowance meets a shoreline where there is no storm sewer outlet. Activities under this program will include: asset data collection, asset inspection and condition assessments, engineered designs, obtaining approval from various regulatory stakeholders, tender preparation, contract administration, and construction activities.
2020 Scope: Design work to support future maintenance and repair activities.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	4,000			500			500			500			2,500
Consultant	3,600		150	150	150	150	150	150	150	150	150	150	2,100
Design	1,600		200			200			200			200	800
Internal Resources/Staffing	1,360		50	100	20	50	100	20	50	100	20	50	800
Total: Expenses	10,560		400	750	170	400	750	170	400	750	170	400	6,200

Net Cost	10,560	0	400	750	170	400	750	170	400	750	170	400	6,200
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	400		400										
Total: Financing Sources	400		400										

Funding Required	10,160	0	0	750	170	400	750	170	400	750	170	400	6,200
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182080082
Project Name: SWMP - W19 (Parkside Hills Phase 2)

Category: Development Projects
Ward(s): 15

Objective:
 Stormwater management facility within Parkside Hills Phase 2 subdivision

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2019
Program Type: SWMMP

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	475		475										
Land/Property	3,265		3,265										
Total: Expenses	3,740		3,740										

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Res DEBT	3,740		3,740										
Total: Revenues	3,740		3,740										

Net Cost	0	0	0	0	0	0	0	0	0	0	0	0	0
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Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182080086
Project Name: SWMP - SM2 (Red Hill Phase 3/4)

Category: Development Projects
Ward(s): 9

Objective:
 Stormwater management facility within Red Hill Phase 3/4 subdivision

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2019
Program Type: SWMMP

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	1,440		1,440										
Land/Property	2,680		2,680										
Total: Expenses	4,120		4,120										

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Res DEBT	4,120		4,120										
Total: Revenues	4,120		4,120										

Net Cost	0	0	0	0	0	0	0	0	0	0	0	0	0
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Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182080087
Project Name: SWMP - B-10 (Lancaster Subdivision)

Category: Development Projects
Ward(s): 11

Objective:
 Stormwater management facility within Lancaster subdivision

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2019
Program Type: SWMMP

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	1,650		1,650										
Land/Property	8,310		8,310										
Total: Expenses	9,960		9,960										

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Res DEBT	9,960		9,960										
Total: Revenues	9,960		9,960										

Net Cost	0	0	0	0	0	0	0	0	0	0	0	0	0
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Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182080089
Project Name: Rymal - Fletcher to Upper Centennial

Category: Coordinated - Network Extension Projects
Ward(s): 9

Objective:
 Construct storm sewers from Fletcher to Upper Centennial. This project is to be coordinated with sanitary sewer installation and road urbanization. (2019 DC Background Study 5-74 Project 8b G-56 CAT E #71 - 85% DC)

Start Date: 2020
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2013
Program Type: Development

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	990		990										
Internal Resources/Staffing	110		110										
Total: Expenses	1,100		1,100										

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Non-Res-TCA	524		524										
Dev Charges - Res-TCA	411		411										
Total: Revenues	935		935										

Net Cost	165	0	165	0	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	165		165										
Total: Financing Sources	165		165										

Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0
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**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182080089
Project Name: Rymal - Fletcher to Upper Centennial

Category: Coordinated - Network Extension Projects
Ward(s): 9

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182080090
Project Name: Storm Water Management Program

Category: Development Projects
Ward(s): City Wide

Objective:
Construct Ponds to facilitate development.

Start Date: 2020
Completion Date: Ongoing
Status: Recommended (funded)
Tangible Capital Asset: Yes
Capital Budget Initiation: 2020
Program Type: Stormwater

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	100,000		4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	60,000
Total: Expenses	100,000		4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	60,000

Revenues (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Dev Charges - Res-TCA	100,000		4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	60,000
Total: Revenues	100,000		4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	60,000

Net Cost	0	0	0	0	0	0	0	0	0	0	0	0	0
Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182095800
Project Name: Flooding & Drainage Master Plan Capital Improvements

Category: Master Plan - Vertical Assets
Ward(s): City Wide

Objective:
 Implementation of capital works and/or further analysis based on the recommendations in the City Wide Flooding and Drainage Master Plan.

Start Date: 2020
Completion Date: 2023
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2020
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Construction	1,000		500	500									
Consultant	500		250	250									
Design	100		50	50									
Internal Resources/Staffing	160		80	80									
Total: Expenses	1,760		880	880									

Net Cost	1,760	0	880	880	0	0	0	0	0	0	0	0	0
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Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	880		880										
Total: Financing Sources	880		880										

Funding Required	880	0	0	880	0	0	0	0	0	0	0	0	0
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Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			

**CITY OF HAMILTON
2020-2044 CAPITAL BUDGET PROJECT DETAIL SHEET**

Division/Department: Storm Water Management - Public Works Rate Funded **Project ID:** 5182155101
Project Name: SERG - Stoney Creek & Battlefield Creek Flood and Erosion Control

Category: SERG
Ward(s): 5

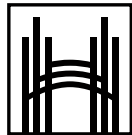
Objective:
 To review and update the erosion and risk flood areas along Stoney Creek and Battlefield Creek. Complete and Environmental Assessment Study if required.

Start Date: 2019
Completion Date: 2020
Status: Recommended (funded)
Tangible Capital Asset: No
Capital Budget Initiation: 2017
Program Type: Collection (Storm)

Expenses (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
Consultant	300	100	200										
Internal Resources/Staffing	100	50	50										
Total: Expenses	400	150	250										
Net Cost	400	150	250	0	0	0	0	0	0	0	0	0	0
Financing Sources (000's)	Total	Pre 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-44
From Operating Fund	400	150	250										
Total: Financing Sources	400	150	250										
Funding Required	0	0	0	0	0	0	0	0	0	0	0	0	0

Operating Budget Impact:	2020	2021	2022 Onward
Costs(Savings) (000's)			
Staffing Impacts (F.T.E)			

Project Rating Attributes	Weight	Rating	Weighted Rank
Contractual/Legislated Obligations	46.00	0-10	
Health and Safety	16.00	0-10	
Operating Budget/Financial Impact	9.00	0-10	
Strategic Direction (Dominant Project Theme)	29.00	0-1	
Total			



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