

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

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			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Year	Year
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

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			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

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			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		

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			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

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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

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<i>Plans/Studies</i>																
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		
<i>Total Wastewater System</i>			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		