

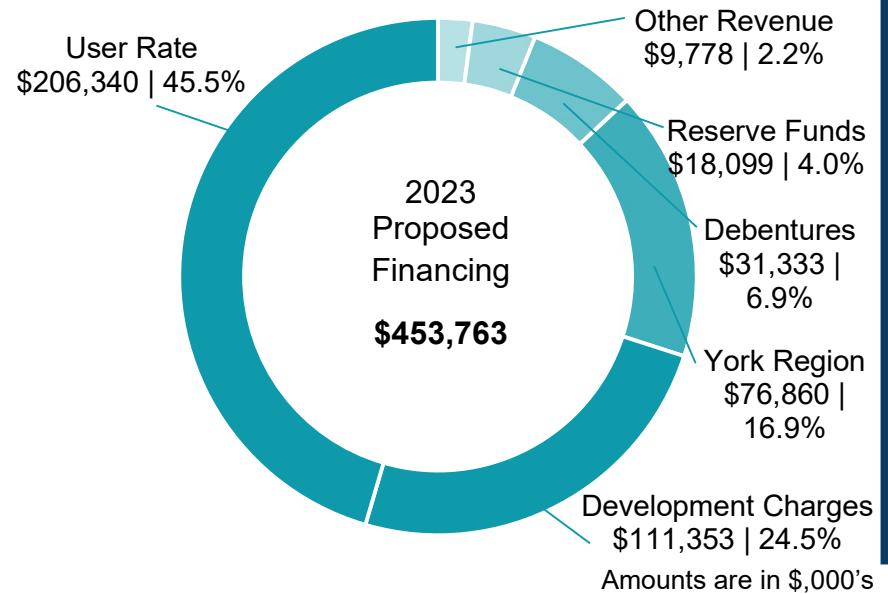
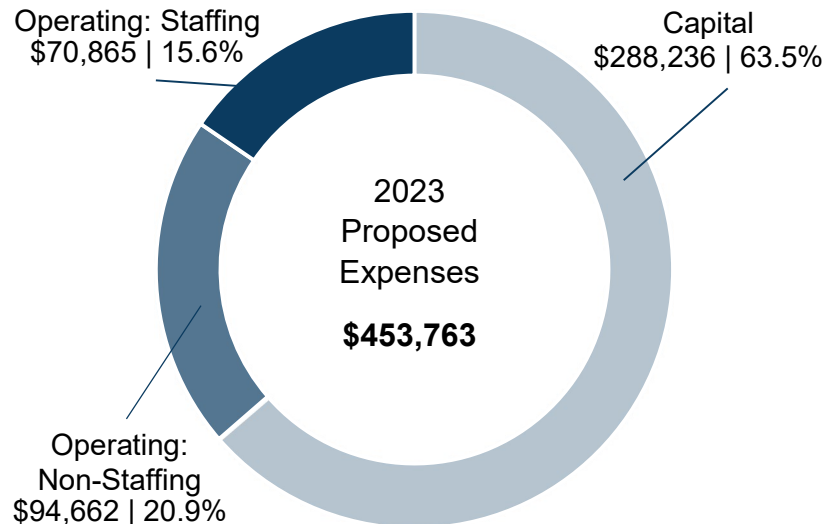


**Durham**  
**Budget**

**2023**

# WORKS DEPARTMENT WATER SUPPLY & SANITARY SEWERAGE

Plans, designs, constructs, operates, and maintains Regional infrastructure related to the supply of drinking water and the protection of the water environment through the collection and treatment of sanitary sewage.





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# Major Programs and Services

## Water Supply System

### **Watermain Cleaning and Repairs**

Maintain and operate the Region's water distribution system by flushing watermain, cleaning through foam swabbing, repairing breaks, administering leak detection surveys, and preventing corrosion of infrastructure through cathodic protection.

### **Valves and Hydrants**

Maintain the Region's water valves and hydrants ensuring all are in good working condition.

### **Water Connections**

Maintain the Region's water connection inventory to provide potable water for domestic use and fire protection.

### **Water Meter Repairs and Testing**

Maintain the Region's water meter inventory to accurately measure the consumption of water by replacing meters based on age. Other work includes the calibration, testing, repair, and replacement of large meters as required.

### **Depot Operations**

Support the delivery of water infrastructure maintenance activities including watermain repairs, valve and hydrant operations and water meter repair, calibration, and replacement.

### **Water Supply Plants – Plants East**

Serve Bowmanville, Newcastle, Orono and Blackstock (comprised of two surface water plants, six storage facilities, three municipal groundwater wells and three water pumping stations) by providing potable water which meets all quality requirements prescribed by the Ministry of the Environment, Conservation and Parks' (MECP) legislation and regulations, accomplished through continuous monitoring of water quality and flows.

### **Water Supply Plants – Plants Central**

Serve Pickering, Ajax, Whitby, Oshawa and Courtice (Clarington) (comprised of three surface water plants, 13 water pumping stations and 11 storage facilities) by providing safe, potable water which meets all quality requirements prescribed by the MECP's legislation and regulations, accomplished through continuous monitoring of water quality and flows.

### **Water Supply Plants – Plants North**

Serve the Townships of Brock, Scugog and Uxbridge (comprised of one surface water plant, 20 municipal groundwater wells, seven storage facilities and one water pumping station) by providing safe, potable water which meets all quality requirements prescribed by the MECP's legislation and regulations, accomplished through continuous monitoring of water quality and flows.



## Major Programs and Services *Continued*

### **Sun Valley Co-Operative Water System**

A private water system operated by the Region on behalf of the Sun Valley Co-operative comprised of 17 properties in the City of Oshawa to supply safe, potable water which meets all quality requirements prescribed by MECP's legislation and regulations accomplished through continuous monitoring of water quality and flows.

### **SCADA Systems**

The centralized SCADA (Supervisory Control and Data Acquisition) Systems Group based at the Oshawa Water Supply Plant monitors, gathers and processes real time data to control plant processes, directly interacting with sensors, valves, pumps, and motors while logging events for regulatory reporting requirements.

### **Engineering and Staff Support**

Support the delivery of capital projects and initiatives through planning, design and construction activities, including advancing the servicing of key Regional employment lands, providing real estate services for infrastructure projects including well head protection land acquisitions, maintaining linear infrastructure data within GIS systems, coordinating development applications with impacts to Regional services, providing technical support including water conservation programming, energy management guidance, oversight to the Region's Source Water Protection programs and supplying financial and administrative support services to all divisions within the Works Department.

### **Facilities Management**

Provide overall lifecycle management of all Regional facilities. Services include the design and construction of Regional facilities, delivery of major repair and renovation projects, lifecycle maintenance and replacement strategies, delivering corporate security services, and the ongoing and preventative maintenance and overall operation of Regional facilities, properties, and grounds.

### **Administration**

Provide the overall strategic planning and direction to all programs within the Works Department.

### **Headquarters Shared Costs – Works - Water Supply System Portion**

The allocated share of costs attributable to the Works Department – Water Supply System for the operation of Regional Headquarters facility.

### **Construction of Municipal Services**

Plan, design, and construction of the water supply system major capital program.



## Major Programs and Services *Continued*

### **Sanitary Sewerage System**

#### **Cleaning, Repairs and Maintenance Holes**

Maintain and operate the Region's sanitary sewerage collection system efficiently and effectively, undertaking spot repairs of damaged sanitary sewers, and scheduled cleaning of sanitary sewers and syphons.

#### **Sewer Connections**

Maintain the Region's sanitary sewer connection inventory efficiently and effectively, safeguarding the public and environment from any public health hazards and ensuring continuity of service.

#### **Depot Operations**

Support the delivery of sanitary sewerage infrastructure maintenance activities which include the maintenance, cleaning and repairs of sanitary sewers, maintenance holes and sewer connections.

#### **Water Pollution Control Plants and Pumping Stations**

The water pollution control plants and sanitary sewerage pumping stations treat and convey sanitary sewerage, ensuring it meets the discharge requirements prescribed by the MECP. The system is comprised of 11 treatment plants and 51 pumping stations spread across the Region.

#### **Duffin Creek Water Pollution Control Plant**

Operation of the plant, co-owned by the Regions of Durham and York, to treat sanitary sewage, ensuring it meets the discharge requirements prescribed by the MECP. The Duffin Creek Water Pollution Control Plant is one the largest water pollution control plants in Ontario.

#### **Regional Environmental Laboratory**

Operation of a certified laboratory, co-owned by the Regions of Durham and York, which provides testing services for water and wastewater monitoring for the Regions of Durham and York, local municipalities, and private clients. Services are provided in accordance with the MECP License and laboratory accreditation for drinking water and wastewater requirements.

#### **Engineering and Staff Support**

Support the delivery of capital projects and initiatives through planning, design and construction activities, including advancing the servicing of key Regional employment lands, providing real estate services for infrastructure projects including well head protection land acquisitions, maintaining linear infrastructure data within GIS systems, coordinating development applications with impacts to Regional services, providing technical support including water conservation programming, energy management guidance, oversight to the Region's Source Water Protection programs and supplying financial and administrative support services to all divisions within the Works Department.



## Major Programs and Services *Continued*

### **Facilities Management**

Provide overall lifecycle management of all Regional facilities. Services include the design and construction of Regional facilities, delivery of major repair and renovation projects, lifecycle maintenance and replacement strategies, delivering corporate security services, and the ongoing and preventative maintenance and overall operation of Regional facilities, properties, and grounds.

### **Administration**

The overall strategic planning and direction to all programs within the Works Department.

### **Headquarters Shared Costs – Works - Sanitary Sewerage System Portion**

The allocated share of costs attributable to Works Department – Sanitary Sewerage System for the operation of Regional Headquarters for the operation of Regional Headquarters facility.

### **Construction of Municipal Services**

Plan, design, and construction of the sanitary sewerage system major capital program.



# Strategic Priorities

For 2023 some of the key priorities and planned actions focus on:



## Environmental Sustainability



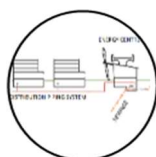
Accelerate the adoption of green technologies and clean energy solutions through strategic partnerships and investment with internal and external partners and academic institutions. In 2023, work towards the implementation of an Energy Data Management Platform will continue, providing consolidated energy data for analysis and project planning.



Protect, preserve, and restore the natural environment including greenspaces, waterways, parks, trails, and farmlands by planning and implementing critical sanitary sewerage infrastructure identified through asset management planning.



Demonstrate leadership in sustainability and climate change action by mitigating the environmental impacts of projects and incorporating strategies in the construction and rehabilitation of Regional infrastructure and facilities by incorporating climate-friendly strategies.



Continued progress on a comprehensive water and wastewater GHG emissions management strategy including an assessment of the overall heat recovery potential from the Region's wastewater system. This study will inform on areas of the system which may yield the greatest degree of energy exchange potential, both for private sector participants wishing to utilize wastewater energy to displace traditional fossil fuel energy requirements for their respective developments, as well as for potential Regional opportunities.



## Community Vitality



Review and expand system capacity to facilitate balanced growth to provide an adequate mix of attainable housing for residents at all ages and stages of life. Through revitalized infrastructure, the Region will ensure traditional neighbourhoods remain great places to live and work, and build complete communities that are walkable, well-connected, and adequately served by nearby amenities.



Revitalize existing neighbourhoods and build complete communities that are walkable, well-connected, and have a mix of attainable housing through monitoring and assessing excess capacity available in existing sanitary sewer and water distribution systems.



## Strategic Priorities *Continued*



### Economic Prosperity



Streamlining review and payment processes; planning for growth; and positioning Durham Region as the location of choice for business by servicing strategic employment lands. Detailed design work overseen by the Region is ongoing for 3 projects identified in Report #2020-COW-23 - Regional Pre-servicing of Designated Employment Areas. Class EA work commenced for 2 projects in 2022, and 3 projects are being led by developers and are at various stages of design.



Provide a supportive environment for agriculture and agri-food industries by maintaining beneficial re-use of treated municipal wastewater solids (biosolids) on agricultural lands; and working collaboratively with industry to promote growth while maintaining a sewer-use program. In 2022, the Region and Durham College partnered to create a temporary urban farm on a future water supply infrastructure site. Construction of the farm will be completed in 2023 and cultivation will begin on site.



### Service Excellence



Optimize resources and partnerships to deliver exceptional quality services and value by continuing a “customer first” focus. To expedite ON1Call locate requests, additional resources are being proposed in the 2023 budget to address the demands for service resulting from increasing development activity across the Region.



Collaborate for a seamless service experience by seeking new partnerships with local municipalities. As part of the water meter renewal program, radio frequency remote meter reading technology is being installed to minimize manual meter readings.



Demonstrate commitment to continuous quality improvement and transparency through public engagement on all major public works initiatives in real time. Consultation for the Environmental Assessment to expand the sanitary sewerage capacity in Cannington will wrap up in 2023, with the commencement of detailed design to follow.



## Strategic Priorities *Continued*



Drive innovation through the continued evolution of the Region's Enterprise Maintenance Management System to increase efficiency in maintenance operations while collecting accurate and timely life cycle costs for analysis and planning; ongoing modernization of the review and approval of development engineering submissions through the PlanIT platform to expedite application reviews while ensuring requirements are met; and ongoing data management modernization and automation within the water supply and water pollution control plants to streamline reporting and increase operational efficiency.



Implement the recommendations of the Depot Modernization and Rationalization Study. The study's purpose was to assess the current depot network and recommend the most effective and efficient means of operation and site utilization strategies in response to the immediate, medium, and long-term needs of the Works Depots to meet growth across the Region. The implementation work will commence with the expansion of the Ajax Depot at its current location, and the relocation of the Oshawa/Whitby Depot, and will include energy efficient, low carbon measures while modernizing the function and layout of this critical infrastructure.



# Key Targets for 2023

## Water Supply System

- Maintain and operate 2,669 kilometres of watermains – 1.3% system growth over 2022
- Maintain and operate 29,232 valves – 1.5% growth over 2022
- Inspect and maintain 17,288 fire hydrants – 1.5% increase over 2022 inventory
- Maintain 186,359 water supply connections – 1.1% system growth over 2022
- Treat 68,866 megalitres of water – 0.7% increase over projections for 2022


## Sanitary Sewerage System

- 2,323 kilometres of gravity, forcemains, and siphons of sanitary sewer maintained and operated – 1.2% system growth over 2022
- 182,623 sanitary sewer connections maintained – 1.1% system growth over 2022
- Treat a total of 174,543 megalitres of sanitary sewerage, a 1.2% increase from 2022, with 124,754 megalitres flowing through Duffin Creek Water Pollution Control Plant
- Analyze 60,000 samples for 200,000 tests at the Regional Environmental Laboratory - consistent with 2022 volumes



## Financial Details: Summary by Account (\$,000's)


Provides the gross expenditures and revenues - including both operating and capital - and the resulting net user rate requirement

		2022 Estimated Actuals	2022 Restated Budget	2023 Proposed Budget	Variance	
					\$	%
<b>Expenses</b>						
<b>Operating Expenses</b>						
Personnel Expenses	61,840	67,870	70,865			
Personnel Related	1,877	2,193	2,269			
Communications	1,086	1,093	1,130			
Supplies	7,622	8,041	7,699			
Utilities	20,158	20,155	23,503			
Chemicals	10,285	8,747	14,549			
Computer Maintenance & Operations	967	901	877			
Materials & Services	11,154	8,538	8,802			
Buildings & Grounds Operations	5,162	4,822	4,923			
Equipment Maintenance & Repairs	3,574	3,762	3,814			
Vehicle Operations	3,895	4,177	4,027			
Professional Services	1,841	2,240	2,197			
Contracted Services	4,252	4,274	4,773			
Leased Facilities Expenses	60	43	43			
Financial Expenses	2,901	2,887	3,133			
Property Taxes	5,263	5,341	5,415			
Minor Assets & Equipment	353	441	192			
Major Repairs & Renovations	656	788	920			
Contribution to Reserves / Reserve Funds	264	264	275			
Headquarters Shared Costs	2,306	2,306	2,406			
<b>Operating Expenses Subtotal</b>	<b>145,516</b>	<b>148,883</b>	<b>161,812</b>	<b>12,929</b>	<b>8.7%</b>	



## Financial Details: Summary by Account (\$,000's)


Provides the gross expenditures and revenues - including both operating and capital - and the resulting net user rate requirement

 <b>Durham Budget</b> <b>2023</b>		2022 Estimated Actuals	2022 Restated Budget	2023 Proposed Budget	Variance	
					\$	%
<b>Internal Transfers &amp; Recoveries</b>						
NextGen Fees	46	46	45			
Communications Charge	362	362	365			
Corporate IT Charge	321	321	358			
Corporate HR Charge	160	160	160			
Works - General Administration Charge	3,138	3,138	3,261			
Recovery - Ajax WSP - Labour	(4)	(4)	(43)			
Recovery - Works - General Tax	(338)	(338)	(338)			
Recovery - Regional Environmental Lab	(93)	(93)	(93)			
<b>Internal Transfers &amp; Recoveries Subtotal</b>	<b>3,592</b>	<b>3,592</b>	<b>3,715</b>	<b>123</b>	<b>3.4%</b>	
<b>Gross Operating Expenses</b>	<b>149,108</b>	<b>152,475</b>	<b>165,527</b>	<b>13,052</b>	<b>8.6%</b>	
<b>Capital Expenses</b>						
New	3,111	3,111	33,950			
Replacement	9,184	9,184	7,098			
Major Capital	258,764	258,764	247,188			
<b>Capital Expenses Subtotal</b>	<b>271,059</b>	<b>271,059</b>	<b>288,236</b>	<b>17,177</b>	<b>6.3%</b>	
<b>Total Expenses</b>	<b>420,167</b>	<b>423,534</b>	<b>453,763</b>	<b>30,229</b>	<b>7.1%</b>	
<b>Revenues and Financing</b>						
<b>Operating Revenue</b>						
Fees & Service Charges	(6,810)	(6,053)	(6,875)			
Sale of Publications	(10)	(19)	(16)			
Rents	(29)	(48)	(49)			
Sundry Revenue	(1,203)	(1,274)	(1,176)			
Revenue from Municipalities	(31,734)	(31,445)	(37,825)			
Revenue from Related Entities	(6)	(6)	(6)			
<b>Operating Revenue Subtotal</b>	<b>(39,792)</b>	<b>(38,845)</b>	<b>(45,947)</b>	<b>(7,102)</b>	<b>(18.3%)</b>	



## Financial Details: Summary by Account (\$,000's)

Provides the gross expenditures and revenues - including both operating and capital - and the resulting net user rate requirement

	2022 Estimated Actuals	2022 Restated Budget	2023 Proposed Budget	Variance	
				\$	%
<b>Capital Financing</b>					
Sewer Residential DC	(25,703)	(25,703)	(36,203)		
Sewer Commercial DC	(2,341)	(2,341)	(2,609)		
Sewer Industrial DC	(192)	(192)	(1,874)		
Water Residential DC	(63,793)	(63,793)	(68,205)		
Water Commercial DC	(2,420)	(2,420)	(2,462)		
Water Industrial DC	(1,607)	(1,607)	-		
Servicing Employment Lands Water RF	(684)	(684)	-		
Servicing Employment Lands Sewer RF	(509)	(509)	-		
Sewer Asset Management RF	(9,275)	(9,275)	(11,107)		
Water Asset Management RF	(5,623)	(5,623)	(5,764)		
Recovery from York	(63,388)	(63,388)	(40,691)		
Federal Grant	(93)	(93)	-		
Recovery from Reserve Funds - Capital	(797)	(797)	(475)		
Sewer Rate Stabilization Reserve Fund	(9,826)	(9,825)	(442)		
Water Rate Stabilization Reserve Fund	(2,549)	(2,549)	(311)		
Debentures	-	-	(31,333)		
<b>Capital Financing Subtotal</b>	<b>(188,800)</b>	<b>(188,799)</b>	<b>(201,476)</b>	<b>(12,677)</b>	<b>(6.7%)</b>
<b>Total Revenues and Financing</b>	<b>(228,592)</b>	<b>(227,644)</b>	<b>(247,423)</b>	<b>(19,779)</b>	<b>(8.7%)</b>
<b>User Rate Requirement</b>					
Works Department - Water Supply System and Sanitary Sewerage System Total	191,575	195,890	206,340	10,450	5.3%



# Financial Details: Summary by Program (\$,000's)

Provides the total operating expense, capital expense, subsidy, other revenue and the resulting user rate requirement for each major program and service

<div><div><div><div></div><div>DURHAM REGION</div></div><div><div>Durham</div><div>Budget</div></div></div><div>2023</div></div>		2022 Estimated Actuals	2022 Approved Budgets					2023 Proposed Budgets					Variance	
		Operating Expenses	Gross Capital	Subsidy Funding	Other Funding	Approved Budget	Operating Expenses	Gross Capital	Subsidy Funding	Other Funding	Proposed Budget	\$	%	
Works Department - Water Supply System														
1	Watermain Cleaning and Repairs	3,812	3,545	-	-	-	3,545	3,481	-	-	-	3,481	(64)	
2	Valves and Hydrants	2,261	3,255	-	-	(853)	2,402	3,128	-	-	(838)	2,290	(112)	
3	Water Connections	4,228	4,725	-	-	(497)	4,228	4,405	-	-	(510)	3,895	(333)	
4	Water Meter Repairs and Testing	517	594	-	-	(133)	461	590	-	-	(136)	454	(7)	
5	Depot Operations	6,608	6,220	331	-	(136)	6,415	7,181	1,270	-	(148)	8,303	1,888	
6	Water Supply Plants - Plants East	3,338	3,332	235	-	(89)	3,478	3,498	110	-	(140)	3,468	(10)	
7	Water Supply Plants - Plants Central	14,063	14,602	435	-	(103)	14,934	15,492	580	-	(253)	15,819	885	
8	Water Supply Plants - Plants North	2,820	3,011	30	-	(30)	3,011	3,316	-	-	(30)	3,286	275	
9	Sun Valley Co-Operative Water System	-	30	-	-	(30)	-	30	-	-	(30)	-	-	
10	SCADA Systems	-	-	-	-	-	-	-	-	-	-	-	-	
11	Engineering and Staff Support	6,772	8,293	433	-	(666)	8,060	8,804	210	-	(732)	8,282	222	
12	Facilities Management	8,747	8,184	1,971	(67)	(977)	9,111	8,535	17,736	-	(15,989)	10,282	1,171	
13	Administration	319	342	-	-	-	342	370	-	-	-	370	28	
14	Headquarters Shared Cost - Works - Water Supply System Portion	1,153	1,153	-	-	-	1,153	1,203	-	-	-	1,203	50	
15	Construction of Municipal Services	44,361	-	120,104	-	(75,743)	44,361	-	120,878	-	(76,430)	44,448	87	
Works Department - Water Supply System Subtotal		98,999	57,286	123,539	(67)	(79,257)	101,501	60,033	140,784	-	(95,236)	105,581	4,080 4.0%	
Works Department - Sanitary Sewerage System														
1	Cleaning, Repairs and Maintenance Holes	2,421	2,188	-	-	-	2,188	2,208	-	-	-	2,208	20	
2	Sewer Connections	2,450	3,567	-	-	(1,011)	2,556	3,389	-	-	(1,014)	2,375	(181)	
3	Depot Operations	3,975	3,492	331	-	(29)	3,794	3,612	416	-	(34)	3,994	200	
4	WPCPs and Pumping Stations	26,625	25,240	2,196	-	(214)	27,222	26,393	308	-	(284)	26,417	(805)	
5	Duffin Creek WPCP													
	(a) Management Committee	1,007	2,836	-	-	(1,771)	1,065	2,918	-	-	(1,820)	1,098	33	
	(b) Duffin Creek Plant	5,740	30,313	2,494	-	(27,171)	5,636	38,371	570	-	(32,366)	6,575	939	
	(c) Duffin Creek Tech Support	43	231	-	-	(189)	42	234	-	-	(192)	42	-	
	(d) Duffin Creek Administration	547	3,019	-	-	(2,472)	547	3,147	-	-	(2,572)	575	28	
	(e) Duffin Creek Facility	762	2,000	550	-	(2,067)	483	1,910	1,437	-	(2,681)	666	183	
	Total Duffin Creek WPCP	8,099	38,399	3,044	-	(33,670)	7,773	46,580	2,007	-	(39,631)	8,956	1,183	



# Financial Details: Summary by Program (\$,000's)


Provides the total operating expense, capital expense, subsidy, other revenue and the resulting user rate requirement for each major program and service

<div><div><div><div><div></div><div>DURHAM REGION</div></div><div>Durham Budget</div></div></div><div>2023</div></div>		2022 Estimated Actuals	2022 Approved Budgets					2023 Proposed Budgets					Variance	
		Operating Expenses	Gross Capital	Subsidy Funding	Other Funding	Approved Budget	Operating Expenses	Gross Capital	Subsidy Funding	Other Funding	Proposed Budget	\$	%	
6	Regional Environmental Laboratory	760	3,213	1,057	-	(3,660)	610	3,053	703	-	(3,294)	462	(148)	
7	Engineering and Staff Support	6,096	8,076	197	-	(962)	7,311	8,440	326	-	(1,023)	7,743	432	
8	Facilities Management	9,774	9,516	2,035	(26)	(952)	10,573	10,243	17,382	-	(16,115)	11,510	937	
9	Administration	359	345	-	-	-	345	373	-	-	-	373	28	
10	Headquarters Shared Cost - Works - Sanitary Sewerage System Portion	1,153	1,153	-	-	-	1,153	1,203	-	-	-	1,203	50	
11	Construction of Municipal Services	30,864	-	138,660	-	(107,796)	30,864	-	126,310	-	(90,792)	35,518	4,654	
Works Department - Sanitary Sewerage System Subtotal		92,576	95,189	147,520	(26)	(148,294)	94,389	105,494	147,452	-	(152,187)	100,759	6,370	6.7%
User Rate Requirement														
Works Department - Water Supply System and Sanitary Sewerage System		191,575	152,475	271,059	(93)	(227,551)	195,890	165,527	288,236	-	(247,423)	206,340	10,450	5.3%



## Financial Details: Summary of Capital (\$,000's)


Provides a summary of the current year capital budget, nine-year capital forecast and proposed financing summarized by asset type. See Appendices for specific capital projects

 2023	2022 Approved Budget	2023 Proposed Budget	Forecast					Forecast Total
			2024	2025	2026	2027	2028-2032	
Water Supply System								
Capital Expenditures								
Linear Infrastructure	45,468	64,491	134,883	74,439	84,315	59,235	233,521	586,393
Building & Structures	64,013	67,294	72,540	224,197	242,814	243,667	257,035	1,040,253
Machinery & Equipment	8,163	3,565	9,167	10,599	7,105	8,771	39,524	75,166
Information Technology Infrastructure	1,278	182	10,128	3,367	5,904	508	1,303	21,210
Vehicles	304	1,245	509	28	153	56	217	963
Furniture & Fixtures	88	10	208	18	12	11	24	273
Allowances & Other Provisions	4,225	3,997	4,832	4,450	4,536	6,442	26,241	46,501
Capital Expenditure Subtotal	123,539	140,784	232,267	317,098	344,839	318,690	557,865	1,770,759
Capital Financing								
Water Residential DC	63,793	68,205	80,643	86,118	38,763	42,419	88,338	336,281
Water Commercial DC	2,420	2,462	3,632	4,872	8,815	3,488	7,825	28,632
Water Industrial DC	1,607	-	8,072	8,618	3,091	13,066	17,688	50,535
Reserve Fund - Asset Management	5,623	5,764	13,507	6,155	6,206	6,362	34,913	67,143
Reserve Fund - Water Rate Stabilization	2,548	311	9,125	20,002	70,727	29,025	16,396	145,275
Equipment Replacement Reserve	33	-	-	-	-	-	-	-
Reserve Fund - Servicing of Employment	684	-	2,450	1,408	-	-	-	3,858
Lands Developer Contributions	-	-	7,000	314	-	81,826	-	89,140
Subsidy / Grant	67	-	-	-	-	-	-	-
Debentures - DC Funded	-	-	23,652	56,019	156,739	32,570	25,054	294,034
Debentures - User Rate Funded	-	15,666	11,667	73,272	-	45,705	17,300	147,944
User Rate	46,764	48,376	72,519	60,320	60,498	64,229	350,351	607,917
Capital Financing Subtotal	123,539	140,784	232,267	317,098	344,839	318,690	557,865	1,770,759
Total Capital Water Supply System	123,539	140,784	232,267	317,098	344,839	318,690	557,865	1,770,759



## Financial Details: Summary of Capital (\$,000's)


Provides a summary of the current year capital budget, nine-year capital forecast and proposed financing summarized by asset type. See Appendices for specific capital projects

	2022 Approved Budget	2023 Proposed Budget	Forecast					Forecast Total
	2024	2025	2026	2027	2028-2032			
Sanitary Sewerage System								
Capital Expenditures								
Linear Infrastructure	28,499	46,615	189,710	52,978	135,408	82,729	414,584	875,409
Building & Structures	20,715	32,325	77,110	199,213	46,429	42,965	502,641	868,358
Machinery & Equipment	91,956	61,829	70,076	43,577	61,263	80,977	213,243	469,136
Information Technology Infrastructure	3,008	963	450	1,800	1,846	483	1,706	6,285
Vehicles	379	395	509	28	153	56	217	963
Furniture & Fixtures	88	10	202	11	12	11	24	260
Allowances and Other Provisions	2,875	5,315	5,865	4,415	4,765	4,665	23,075	42,785
Capital Expenditure Subtotal	147,520	147,452	343,922	302,022	249,876	211,886	1,155,490	2,263,196
Capital Financing								
Sewer Residential DC	25,703	36,203	46,450	44,240	38,173	48,023	91,901	268,787
Sewer Commercial DC	2,341	2,609	9,621	7,107	6,962	3,754	11,788	39,232
Sewer Industrial DC	192	1,874	28,554	6,369	2,982	8,000	12,174	58,079
Reserve Fund - Environmental Lab	750	475	575	125	400	325	915	2,340
Reserve Fund - Sewer Rate Stabilization	9,825	442	86,151	36,989	13,100	18,340	55,284	209,864
Reserve Fund - Servicing of Employment Lands	509	-	1,653	-	580	1,066	-	3,299
Equipment Replacement Reserve	14	-	-	-	-	-	-	-
Reserve Fund - Asset Management	9,275	11,107	21,352	11,108	15,238	10,494	56,539	114,731
Recovery From York	63,388	40,691	51,670	27,882	54,980	58,199	404,296	597,027



## Financial Details: Summary of Capital (\$,000's)

Provides a summary of the current year capital budget, nine-year capital forecast and proposed financing summarized by asset type. See Appendices for specific capital projects

 <b>Durham</b> <b>Budget</b>	2023		Forecast					
	2022 Approved Budget	2023 Proposed Budget	2024	2025	2026	2027	2028-2032	Forecast Total
Subsidy / Grant	26	-	-	-	-	-	-	-
Debentures - DC Funded	-	-	38,893	52,177	69,297	12,000	106,140	278,507
Debentures - User Rate Funded	-	15,667	11,667	69,000	-	-	101,550	182,217
User Rate	35,497	38,384	47,336	47,025	48,164	51,685	314,903	509,113
<b>Capital Financing Subtotal</b>	<b>147,520</b>	<b>147,452</b>	<b>343,922</b>	<b>302,022</b>	<b>249,876</b>	<b>211,886</b>	<b>1,155,490</b>	<b>2,263,196</b>
<b>Total Capital Sanitary Sewerage System</b>	<b>147,520</b>	<b>147,452</b>	<b>343,922</b>	<b>302,022</b>	<b>249,876</b>	<b>211,886</b>	<b>1,155,490</b>	<b>2,263,196</b>
<b>Total Capital</b>								
Works Department - Water Supply System and Sanitary Sewerage System	271,059	288,236	576,189	619,120	594,715	530,576	1,713,355	4,033,955



## Details of Budget Changes

<b>Strategic Investments: Water Supply System</b>	<b>2023 Impact (\$ 000's)</b>
New positions not captured below – details of the 3.026 FTEs are provided in Staffing Details. 2024 incremental impact of \$210k	183
Expansion and modernization of Maintenance Depots to accommodate increased service demand due to population growth including land acquisition for the Sunderland Depot (\$1,333k), the Whitby/Oshawa Depot (\$12,667k) and design of the expansion to the Ajax Depot (\$1,667k). These projects are fully funded by debenture proceeds. Annual debt service costs of \$1.02 million will be required in 2024. A portion of the debt servicing costs may be eligible to be financed from development charges	-
New position (1.0 FTE), additional staffing resources (equivalent of 10 positions being allocated from Works General Tax) and overhead for locates program to ensure compliance with <i>Ontario Underground Infrastructure Notification System Act, 2012</i> (\$861k in capital). 2024 incremental impact of \$602k	1,488
Increase in stand-by and overtime pay to support response to the increased frequency of severe weather events	113
New position (0.280 FTE) and other support costs to maintain the new Enterprise Maintenance Management System (EMMS) – to allow staff to manage activities, capture life-cycle cost data and provide real-time maintenance information. 2024 incremental impact of \$36k	189
Integrated security capital project to replace the security control panels and programming at all regional facilities to meet the new facility standard	310
Additional financing for the energy retrofit and modernization (\$311k) of 101 Consumers Drive, Whitby to optimize space, reduce greenhouse gas emissions and provide energy efficient lighting. This additional financing is provided from the Water Rate Stabilization Reserve Fund	-
Net increase in the user rate funded portion of capital investment not captured above – see detailed project listing in Appendix B	441
<b>Strategic Investments: Water Supply System Subtotal</b>	<b>2,724</b>

<b>Base Adjustments: Water Supply System</b>	<b>2023 Impact (\$ 000's)</b>
Economic increases	335
Annualization of 9.01 FTEs approved in the 2022 budget	514
Various revenue adjustments to align with actuals	(274)



## Details of Budget Changes *Continued*

Inflationary increases including chemicals (\$1,064k) and utilities (\$241k)	1,333
Line-by-line review savings	(598)
Increase in Water Supply System's share of costs for the operation and maintenance of Regional Headquarters	46
<b>Base Adjustments: Water Supply System Subtotal</b>	<b>1,356</b>
<b>Net Changes: Water Supply System Subtotal</b>	<b>4,080</b>



## Details of Budget Changes *Continued*

<b>Strategic Investments: Sanitary Sewerage System</b>	<b>2023 Impact (\$ 000's)</b>
New positions not captured below – details of the 2.773 FTEs are provided in Staffing Details. 2024 annualized impact of \$195k	162
Expansion and modernization of Maintenance Depots to accommodate increased service demand due to population growth including land acquisition for the Sunderland Depot (\$1,333k), the Whitby/Oshawa Depot (\$12,667k) and design of the expansion to the Ajax Depot (\$1,667k). These projects are fully funded by debenture proceeds. Annual debt service costs of \$1.02 million will be required in 2024. A portion of the debt servicing costs may be eligible to be financed from development charges	-
New position (0.310 FTE) and other support costs to maintain the new Enterprise Maintenance Management System (EMMS) – to allow staff to manage activities, capture life-cycle cost data and provide real-time maintenance information. 2024 annualized impact of \$40k	168
Integrated security capital project to replace the security control panels and programming at all regional facilities to meet the new facility standard	336
Additional financing for the energy retrofit and modernization (\$311k) of 101 Consumers Drive, Whitby to optimize space, reduce greenhouse gas emissions and provide energy efficient lighting. This additional financing is provided by the Sewer Rate Stabilization Reserve Fund	-
Net increase in the user rate funded portion of capital investment not captured above – see detailed project listing in Appendix D	2,540
<b>Strategic Investments: Sanitary Sewerage System Subtotal</b>	<b>3,206</b>

<b>Base Adjustments: Sanitary Sewerage System</b>	<b>2023 Impact (\$ 000's)</b>
Economic increases	408
Annualization of 7.519 FTEs approved in the 2022 budget	417
Various revenue adjustments to align with actuals	(110)
Inflationary increases including chemicals (\$1,857k) and utilities (\$760k)	2,923
Line-by-line review savings	(520)



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## Details of Budget Changes *Continued*

Increase in Sanitary Sewerage System's share of costs for the operation and maintenance of Regional Headquarters	46
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<b>Base Adjustments:</b> Sanitary Sewerage System Subtotal	<b>3,164</b>
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<b>Net Changes:</b> Sanitary Sewerage System Subtotal	<b>6,370</b>
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<b>Net Changes:</b> Works Department - Water Supply System and Sanitary Sewerage System	<b>10,450</b>
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\*Note that impacts are net of recoveries



## Staffing Details

### Water Supply System

Full Time Equivalents  
(FTE's)

2022 Approved Complement (Restated)

204.048

### Proposed New Positions

Supervisor - to monitor, develop, schedule and manage the various positions pertaining to the development of the Regions centralized Utility Locate program.	1.000
Supervisor DCAM - to support increase in project delivery for depots, sewage treatment plants and water pumping stations, and major capital projects supporting corporate priorities (Note: this position is shared with Sanitary Sewerage, Works General Tax and Waste Management)	0.271
Emergency Management Coordinator - to support emergency management programs and initiatives corporately and departmentally as a dedicated liaison with Durham Emergency Management (Note: this position is shared with Sanitary Sewerage, Works General Tax and Waste Management)	0.250
Business Analyst - to provide business support for the Enterprise Maintenance Management System (Note: this position is shared with Sanitary Sewerage and Works General Tax)	0.280
Junior Project Engineer (2 positions) - to support the vertical group in the delivery of capital projects (Note: these two positions are shared with Sanitary Sewerage)	1.060
Works Technician 2 - to provide CAD support to the vertical and linear project teams (Note: this position is shared with Sanitary Sewerage)	0.530
Works Technician 5 - to support the vertical group in the delivery of capital projects (Note: this position is shared with Sanitary Sewerage)	0.530
Inspector 3 - to support the projects in the Construction Division and reduce reliance on consulting services and temporary staff (Note: this position is shared with Sanitary Sewerage and Works General Tax)	0.385

**Total Proposed New Positions**

4.306

**Water Supply System Subtotal**

**208.354**



## Staffing Details *Continued*

### Sanitary Sewerage System

**Full Time Equivalents  
(FTE's)**

**2022 Approved Complement (Restated)**

**278.793**

### Proposed New Positions

Supervisor DCAM - to support increase in project delivery for depots, sewage treatment plants and water pumping stations, and major capital projects supporting corporate priorities (Note: this position is shared with Water Supply, Works General Tax and Waste Management)	0.386
Emergency Management Coordinator - To support emergency management programs and initiatives corporately and departmentally as a dedicated liaison with Durham Emergency Management (Note: this position is shared with Water Supply, Works General Tax and Waste)	0.250
Business Analyst - to provide business support for the Enterprise Maintenance Management System (Note: this position is shared with Water Supply and Works General Tax)	0.310
Junior Project Engineer (2 positions) - to support the vertical group in the delivery of capital projects (Note: these two positions are shared with Water Supply)	0.940
Works Technician 2 - to provide CAD support to the vertical and linear project teams (Note: this position is shared with Water Supply)	0.470
Works Technician 5 - To support the vertical group in the delivery of capital projects (Note: this position is shared with Water Supply)	0.470
Inspector 3 - to support the projects in the Construction Division and reduce reliance on consulting services and temporary staff (Note: this position is shared with Water Supply and Works General Tax)	0.257

**Total Proposed New Positions**

**3.083**

**Sanitary Sewerage System Subtotal**

**281.876**

**Total Complement: Works Department - Water Supply System and Sanitary Sewerage System**

**490.230**



## Looking Forward

Water supply and sanitary sewerage systems support residents, businesses, and institutions by providing public infrastructure, reliable service, and expertise so that healthy and sustainable communities thrive. To support these commitments the Region continues to modernize operations through a variety of initiatives including:

- the implementation of the Enterprise Maintenance Management System has moved maintenance operations from paper-based information processing to a comprehensive work management system, providing real time maintenance activities and information;
- the utilization of technology such as drones, sonar and submersible cameras for inspections and assessments; and innovative mapping technology;
- continued shift to digitized public facing services to enhance the experience of residents and business that access services provided by the Works Department, such as continued enhancements to the online permitting system including adding additional permits to the system;
- refinement of design standards for Regional construction projects to further protect the natural environment and incorporate compliance measures related to the Excess Soil Management Regulation;
- implementing climate mitigation and GHG reduction strategies and measures, including conversion of the Region's fleet of vehicles and equipment to lower carbon options and development of a GHG Emissions Management Strategy for Water Supply and Sanitary Sewerage facilities;
- presentation and implementation of the Durham Building Standard, providing guidelines related to energy efficiency, greenhouse gas emissions and reductions, and incorporation of amenities that support diversity and inclusion in the workplace for all projects related to the construction or renovation/retrofit of Regional facilities;
- future implementation of recommendations from Integrated Resource Recovery Studies for Water Pollution Control Plants; and
- continued advancement of the water meter retrofit initiative, installing radio frequency remote reading devices (RF) to eliminate manual meter readings. This is a significant enhancement from a customer service perspective and has been much anticipated as the follow up step to the MyDurhamWater project.



## Looking Forward *Continued*

The Region will continue to leverage long-term financial planning to chart a response to some of the significant challenges ahead which include leading infrastructure renewal (in alignment with the Region's Asset Management Plan and prudent asset management practices), preparing for projected Regional growth and new development which will increase demands for Regional services, and major plant expansions and infrastructure construction projects (including the continued servicing of employment lands and infrastructure constructed to service developments in Seaton in Pickering, West Whitby, Courtice and Newcastle in Clarington, and in North Oshawa).

As part of these long-term financial planning efforts the Region continues to monitor its SCADA WAN which provides wireless communication to approximately 75 water sites. The existing 3,650-3,700Mhz frequency band used is regulated by Innovation, Science and Economic Development Canada (ISED). ISED has planned to terminate all radio licenses in the Region's current band to reallocate for 5G cellular communications and provisioning of frequencies to lesser served areas. Also, ISED has allocated a new frequency band for users displaced by this decision, which means that the Region must discontinue use of the current frequency band by March 31, 2025. The Works Department is expecting this frequency band reallocation decision will result in the replacement of radio units, antennas, routers, cabling, and communication panel modifications. The Region has included \$3 million in the capital budget and forecast to help address these challenges, and the WAN assessment and pre-design work has commenced.

Further, in alignment with Regional Council's commitment to confront climate change, a core element in the design and construction of Regional infrastructure is sustainability - using best practices and innovations developed through in-house research and partnerships with academia. In particular, the Region's wastewater assets have the potential to contribute to both corporate and Region-wide GHG reduction targets by transferring thermal energy (e.g., heating and cooling) between trunk sanitary sewer collection systems and adjacent buildings and facilities displacing energy consumption that might otherwise come from fossil fuel energy sources. Such projects, referred to as wastewater energy transfer (WET) projects, can reduce GHGs from the building sector which is the second largest source of community-wide emissions. Discussions are ongoing regarding the implementation of the first WET project in the Region.

The *Supporting Growth and Housing in York and Durham Region Act, 2022* (Bill 23) suddenly received Royal Assent on November 28, 2022 in the provincial legislature. This legislation will impact the amount of development charges available to fund new and expanded infrastructure to service growth. Schedule 10 within Bill 23 provides the provincial direction for the wastewater servicing for the Upper York Sewage Solution which includes the Lake Ontario option of conveying wastewater south to the York Durham Sewerage System. A detailed review of the proposed servicing option will need to be conducted in consultation with the Region of York to determine infrastructure planning impacts.



Appendix A: 2023 Water Supply System Capital Projects (\$,000's)

Provides financing details for capital projects proposed in 2023. See Appendix B for the comprehensive 2023 capital budget and 2024-2032 forecast

<div><div><div><div><div></div><div>DURHAM REGION</div></div><div>Durham Budget</div></div></div><div>2023</div></div>		Quantity	New / Replacement	2023 Proposed Financing								2023 Proposed Budget	Proposed Funding Prior to 2023	Forecast 2024-2032	Total Project to 2032	
Water Supply System																
Linear Infrastructure																
1	R.R. 2A (Centre St.) from Athol St. to Adelaide Ave., Oshawa	-	-	-	-	-	-	-	-	-	-	250	250	1,860	-	2,110
2	R.R. 14 (Liberty St.) from Baseline Rd. to King St., Bowmanville	-	-	-	-	-	-	-	-	-	-	100	100	200	3,100	3,400
6	R.R. 22 (Bloor St.) from east of Harmony Rd. to Grandview St., Oshawa	-	-	-	-	-	-	-	-	-	-	100	100	50	1,350	1,500
7	R.R. 22 (Victoria St.) from Thickson Rd. to South Blair St.	-	-	-	-	-	-	-	-	-	-	80	80	550	-	630
20	R.R. 56 (Farewell St.) from Harbour Rd. to Bloor St., Oshawa	-	-	-	-	-	-	-	-	-	-	800	800	200	-	1,000
21	Replacement of watermain on R.R. 56 (Farewell St.) from Canadian National Railway to Bloor St., Oshawa	-	-	-	-	-	-	-	-	-	-	385	385	830	-	1,215
31	Area Municipality Road Program - Replacement of deficient watermain and/or construction of required works in conjunction with the City of Oshawa Road Program	-	-	-	-	-	-	-	-	-	-	900	900	450	9,900	11,250
32	Area Municipality Road Program - Replacement of deficient watermain and/or construction of required works in conjunction with the Municipality of Clarington Road Program	-	-	-	-	-	-	-	-	-	-	1,385	1,385	-	3,330	4,715
33	Area Municipality Road Program - Replacement of deficient watermain and/or construction of required works in conjunction with the Township of Scugog Road Program	-	-	-	-	-	-	-	-	-	-	200	200	525	1,768	2,493



Appendix A: 2023 Water Supply System Capital Projects (\$,000's)

Provides financing details for capital projects proposed in 2023. See Appendix B for the comprehensive 2023 capital budget and 2024-2032 forecast

<div><div><div><div><div></div><div>DURHAM REGION</div></div><div><div>Durham</div><div>Budget</div></div></div><div>2023</div></div></div>		Quantity	New / Replacement	2023 Proposed Financing								2023 Proposed Budget	Proposed Funding Prior to 2023	Forecast 2024-2032	Total Project to 2032
		Other	Reserve/ Reserve Funds	Industrial DCs	Institutional DCs	Commercial DCs	Residential DCs	Subsidy /Grant	Debenture	User Rate					
36	Allowance for unknown requirements in conjunction with area municipality road programs	-	-	-	-	-	-	-	-	200	200	-	1,800	2,000	
39	Watermain replacement on Park Rd. S. and Cubert St., in conjunction with the MTO, Oshawa	-	-	-	-	-	-	-	-	300	300	-	-	300	
41	Water works to rectify identified system deficiencies independent of road programs in various locations	-	-	-	-	-	-	-	-	400	400	-	7,800	8,200	
42	Rehabilitation of existing watermain in various locations	-	-	-	-	-	-	-	-	2,400	2,400	3,000	37,000	42,400	
44	Replacement of a watermain on Kingston Rd. (Hwy No. 2) from Steeple Hill to Merritton Rd., Pickering	-	-	-	-	-	-	-	-	2,200	2,200	2,090	-	4,290	
45	Replacement of a watermain on Kingston Rd. (Hwy No. 2) from Dixie Rd. to Bainbridge Dr., Pickering	-	-	-	-	-	-	-	-	2,500	2,500	1,200	-	3,700	
53	Achilles Rd. from Salem Rd. to 100 m west of Salem Rd., Ajax	-	-	-	-	-	-	-	-	80	80	210	-	290	
54	Replacement of a watermain on Pickering Beach Rd. from Foord Rd. to Hewitt Cres., Ajax	-	-	-	-	-	-	-	-	360	360	840	-	1,200	
58	Replacement of watermain and valves on Harwood Ave. from Clements Rd. to Falby Crt., Ajax	-	-	-	-	-	-	-	-	250	250	-	750	1,000	
68	Erosion protection Crystal Beach Boulevard watermain, Whitby	-	-	-	-	-	-	-	-	500	500	544	5,000	6,044	
69	Replacement of watermain on High St. from Mary St. to Walnut St., Whitby	-	-	-	-	-	-	-	-	260	260	465	-	725	



Appendix A: 2023 Water Supply System Capital Projects (\$,000's)


Provides financing details for capital projects proposed in 2023. See Appendix B for the comprehensive 2023 capital budget and 2024-2032 forecast

<div><div><div><div><div></div><div>DURHAM REGION</div></div><div><div>Durham</div><div>Budget</div></div></div><div>2023</div></div></div>		Quantity	New / Replacement	2023 Proposed Financing								2023 Proposed Budget	Proposed Funding Prior to 2023	Forecast 2024-2032	Total Project to 2032
		Other	Reserve/ Reserve Funds	Industrial DCs	Institutional DCs	Commercial DCs	Residential DCs	Subsidy /Grant	Debenture	User Rate					
71	Replacement of watermain on Belton Crt. from Michael Blvd. to S/L, Whitby	-	-	-	-	-	-	-	-	1,000	1,000	90	-	1,090	
73	Replacement of watermain on Mary St. from Rossland Rd. to Robert St., Oshawa	-	-	-	2,335	-	-	-	-	-	2,335	40	-	2,375	
74	Replacement of watermain on Simcoe St. from Metcalf St. to Quebec St., Oshawa	-	-	-	1,300	-	-	-	-	-	1,300	691	-	1,991	
78	Replacement of a watermain on Simcoe St. South and easement from Erie St. to Albert St., Oshawa	-	-	-	135	-	-	-	-	-	135	565	-	700	
79	Replacement of a watermain on Olive Ave. from Simcoe St. to Drew St., Oshawa	-	-	-	-	-	-	-	-	385	385	2,150	-	2,535	
82	Replacement of watermain on Highway No. 2 (King St. W.) from Midtown Dr. to Queen St., Oshawa	-	-	-	-	-	-	-	-	100	100	-	400	500	
89	Replacement of a watermain on Ritson Rd. from Annis St. to Conant St., Oshawa	-	-	-	-	-	-	-	-	290	290	100	-	390	
90	Replacement of a watermain on Douglas St. from Conant St. to Wolfe St., Oshawa	-	-	-	-	-	-	-	-	340	340	100	-	440	
91	Replacement of watermain on Conant St. from Myers Rd. to Nelson St., Oshawa	-	-	-	-	-	-	-	-	100	100	-	390	490	
103	Replacement of watermain on Bigelow St. from 140 m north of Kellett St. to Kellett St., Kellett St. from Bigelow St. to Simcoe St., Beech St from Simcoe St. to 60 m east of Kent St., and Kent St. from Beech St. to 100 m north of Beech St., Port Perry	-	-	-	440	-	-	-	-	-	440	300	-	740	



Appendix A: 2023 Water Supply System Capital Projects (\$,000's)

Provides financing details for capital projects proposed in 2023. See Appendix B for the comprehensive 2023 capital budget and 2024-2032 forecast

 <b>Durham</b> <b>Budget</b> <span>2023</span>		Quantity	New / Replacement	2023 Proposed Financing								2023 Proposed Budget	Proposed Funding Prior to 2023	Forecast 2024-2032	Total Project to 2032	
				Other	Reserve/ Reserve Funds	Industrial DCs	Institutional DCs	Commercial DCs	Residential DCs	Subsidy /Grant	Debenture	User Rate				
109	Replacement of watermain on Jane St. from Ida St. to 220 m north of Ida St., Sunderland	-	-	-	775	-	-	-	-	-	-	-	775	200	-	975
110	Replacement of watermain on Maple St. from River St. to dead-end, Sunderland	-	-	-	146	-	-	-	-	-	-	-	146	135	-	281
113	Replacement of watermain on Centre St. from Mara Rd. to James St., Beaverton	-	-	-	50	-	-	-	-	-	-	-	50	100	650	800
119	Allowance for the evaluation of feeder mains/water mains at creek crossings	-	-	-	-	-	-	-	-	-	-	75	75	-	300	375
123	Zone 2 feeder main on William Jackson Dr. & Taunton Rd. from Earl Grey Ave. to Ravenscroft Rd., Pickering/ Ajax	-	-	-	-	-	-	174	6,920	-	-	806	7,900	900	-	8,800
124	Zone 2 feeder main on Church St. from south side of the hydro right of way to Taunton Rd., Ajax	-	-	-	-	-	-	92	3,679	-	-	429	4,200	-	-	4,200
131	Zone 3 feeder main on Conlin Rd. from Anderson St. to Thickson Rd., Whitby (Region's share only)	-	-	-	-	-	-	22	876	-	-	102	1,000	3,135	-	4,135
132	Zone 3 feeder main on Mid-Block Arterial from Lynde Creek to Ashburn Rd., Whitby (West Loop) (Region's share only)	-	-	-	-	-	-	123	4,906	-	-	571	5,600	5,400	-	11,000
140	Watermain on Britannia Ave. from Thornton Rd. to Windfields Farm Dr., Oshawa	-	-	-	-	-	-	17	657	-	-	77	751	340	1,250	2,341
143	Watermain on Thornton Rd. from 100 m North of Conlin Rd. within the Northwood Employment Area, Oshawa	-	-	-	-	-	-	3	131	-	-	16	150	2,122	-	2,272
154	Zone 1 feeder main on Lambs Rd. from Hwy No. 2 (King St.) to Zone 1 Liberty Street Reservoir, Bowmanville	-	-	-	-	-	-	394	15,680	-	-	1,826	17,900	16,000	27,000	60,900



Appendix A: 2023 Water Supply System Capital Projects (\$,000's)

Provides financing details for capital projects proposed in 2023. See Appendix B for the comprehensive 2023 capital budget and 2024-2032 forecast

<div><div><div><div><div></div><div>DURHAM REGION</div></div><div><div>Durham</div><div>Budget</div></div></div><div>2023</div></div></div>	Quantity	New / Replacement	2023 Proposed Financing									2023 Proposed Budget	Proposed Funding Prior to 2023	Forecast 2024-2032	Total Project to 2032
			Other	Reserve/ Reserve Funds	Industrial DCs	Institutional DCs	Commercial DCs	Residential DCs	Subsidy /Grant	Debenture	User Rate				
Zone 2 feedermain on Liberty St. from 158 Concession Rd. 3 and Concession Rd. 4 to Zone 2 Reservoir, Bowmanville	-	-	-	-	-	-	26	1,051	-	-	122	1,199	-	8,300	9,499
Zone 1 feedermain on Highway No. 2 (King Ave.) from Rudell Rd. to 200 m west of North St., Newcastle	-	-	-	-	-	-	3	105	-	-	12	120	200	2,120	2,440
164 Water Meter installation and replacement	-	-	-	-	-	-	-	-	-	-	3,000	3,000	2,000	47,414	52,414
165 Depots - Replacement of polybutylene service connections in various locations	-	-	-	-	-	-	-	-	-	-	50	50	-	50	100
166 Replacement of lead service connection in various locations	-	-	-	-	-	-	-	-	-	-	450	450	-	29,000	29,450
167 Replacement of valves	-	-	-	-	-	-	-	-	-	-	400	400	-	6,400	6,800
168 Valve Chamber Condition Assessment and inspections	-	-	-	-	-	-	-	-	-	-	450	450	-	1,350	1,800
169 Replacement of hydrants	-	-	-	-	-	-	-	-	-	-	200	200	-	3,650	3,850
Linear Infrastructure Subtotal			-	5,181	-	-	854	34,005	-	-	24,451	64,491	47,582	200,072	312,145
Building and Structures															
172 Expansion of the Whitby Water Supply Plant from 109 MLD to 218 MLD, Whitby	-		-	-	-	-	814	8,101	-	-	4,585	13,500	27,850	234,300	275,650
175 Garrard Rd. Zone 3 Water Pumping Station - upgrades, Whitby	-		-	-	-	-	38	1,524	-	-	177	1,739	410	-	2,149



Appendix A: 2023 Water Supply System Capital Projects (\$,000's)

Provides financing details for capital projects proposed in 2023. See Appendix B for the comprehensive 2023 capital budget and 2024-2032 forecast

<div><div><div><div><div></div></div><div>DURHAM REGION</div></div><div><div>Durham</div><div>Budget</div></div></div><div>2023</div></div>		Quantity	New / Replacement	2023 Proposed Financing								2023 Proposed Budget	Proposed Funding Prior to 2023	Forecast 2024-2032	Total Project to 2032
		Other	Reserve/ Reserve Funds	Industrial DCs	Institutional DCs	Commercial DCs	Residential DCs	Subsidy /Grant	Debenture	User Rate					
179	Proposed Whitby Zone 4 & 5 Pumping Station at Duffs Rd. Reservoir and feedermain, Whitby	-	-	-	-	51	2,015	-	-	235	2,301	-	12,000	14,301	
187	Proposed Zone 5 Pumping Station at Harmony Rd. Reservoir and feedermain, Oshawa	-	-	-	-	22	876	-	-	102	1,000	1,000	10,200	12,200	
190	Proposed Liberty Street Zone 1 Reservoir 11 ML and demolition of the existing elevated tank	-	-	-	-	286	11,472	-	-	5,442	17,200	22,100	1,500	40,800	
191	Proposed Zone 2 Pumping Station at the Zone 1 Reservoir - Bowmanville	-	-	-	-	130	5,188	-	-	982	6,300	8,800	-	15,100	
193	Newcastle Water Supply Plant - demolition of plant No. 1	-	-	-	-	42	417	-	-	541	1,000	300	3,400	4,700	
198	Scugog Water Supply System - Alternative Water Supply Source	-	-	-	-	127	1,267	-	-	1,606	3,000	4,530	27,900	35,430	
200	Blackstock Water Supply System - upgrades to Municipal Well No. 7	-	-	-	-	-	-	-	-	350	350	2,200	-	2,550	
201	Greenbank Water Supply System - Replacement of Municipal Well 1 and 6 with rehabilitation work at the pumphouse	-	-	-	-	-	-	-	-	1,000	1,000	-	4,000	5,000	
202	Uxbridge Water Supply System - New Well and Pumphouse	-	-	-	-	32	319	-	-	150	501	1,500	4,220	6,221	
203	Uxbridge Water Supply System - Municipal Well No. 7 Replacement	-	-	-	-	-	-	-	-	500	500	-	6,000	6,500	
211	Beaverton - additional Water Storage from 2 ML to 4.8 ML	-	-	-	-	5	212	-	-	283	500	-	9,000	9,500	




Appendix A: 2023 Water Supply System Capital Projects (\$,000's)

Provides financing details for capital projects proposed in 2023. See Appendix B for the comprehensive 2023 capital budget and 2024-2032 forecast

<div><div><div><div><div></div><div>DURHAM REGION</div></div><div><div>Durham</div><div>Budget</div></div></div><div>2023</div></div></div>		Quantity	New / Replacement	2023 Proposed Financing								2023 Proposed Budget	Proposed Funding Prior to 2023	Forecast 2024-2032	Total Project to 2032
213	Reservoir inspections, condition assessment and minor rehabilitation works	-		-	300	-	-	-	-	-	-	300	-	2,400	2,700
214	Wellhead protection at Regional well sites	-		-	-	-	-	-	-	-	800	800	800	7,200	8,800
217	Replace Fire Panel and Smoke Detector - Ajax WSP	-	Replacement	-	-	-	-	-	-	-	141	141	-	-	141
220	Access Ladder Repair/Replacement Project - Various Locations	2	Replacement	-	-	-	-	-	-	-	15	15	-	-	15
223	Replacement of Fire System - Oshawa/Whitby Depot	-	Replacement	-	-	-	-	-	-	-	67	67	-	-	67
227	Widening of Existing Canopy Entrance - Sunderland Depot	-	Replacement	-	-	-	-	-	-	-	8	8	-	-	8
229	Roof Replacement on Vehicle Storage Bays - Orono Depot	-	Replacement	-	-	-	-	-	-	-	27	27	-	-	27
231	Metering Chamber Drainage - Oshawa WSP	-	Replacement	-	-	-	-	-	-	-	595	595	-	-	595
236	RTU's 1 2 3 4 Replacement - Oshawa WSP	1	Replacement	-	-	-	-	-	-	-	457	457	-	-	457
239	Renovation & Optimization - 101 Consumers	-	Replacement	-	310	-	-	-	-	-	-	310	-	-	310
240	Depot Rationalization - Ajax Depot Expansion	-	New	-	-	-	-	-	-	1,667	-	1,667	-	-	1,667



**Appendix A: 2023 Water Supply System Capital Projects (\$,000's)**  
Provides financing details for capital projects proposed in 2023. See Appendix B for the comprehensive 2023 capital budget and 2024-2032 forecast

		Quantity	New / Replacement	2023 Proposed Financing								2023 Proposed Budget	Proposed Funding Prior to 2023	Forecast 2024-2032	Total Project to 2032	
				Other	Reserve/ Reserve Funds	Industrial DCs	Institutional DCs	Commercial DCs	Residential DCs	Subsidy /Grant	Debenture					User Rate
244	Depot Rationalization - New Oshawa/Whitby Depot	-	New	-	-	-	-	-	-	-	12,667	-	12,667	-	-	12,667
248	Depot Rationalization - New Sunderland Depot	-	New	-	-	-	-	-	-	-	1,333	-	1,333	-	-	1,333
249	Repairs and Epoxy Coat Fleet Bay Concrete Floors & Repairs to Floor Drains in Fleet Bays - Scugog Depot	-	Replacement	-	-	-	-	-	-	-	-	16	16	-	-	16
Buildings & Structures Subtotal				-	610	-	-	1,547	31,391	-	15,667	18,079	67,294	69,490	322,120	458,904
Machinery & Equipment																
251	Ajax Water Supply Plant - pump replacement with variable frequency drive	-		-	-	-	-	-	-	-	-	100	100	-	500	600
252	Ajax Water Supply Plant - hyochlorite feed and control system upgrades	-		-	-	-	-	-	-	-	-	600	600	100	-	700
254	Cherrywood Water Pumping Station upgrades - pumps and feedermain, Pickering	-		-	-	-	-	-	-	-	-	250	250	500	1,800	2,550
261	Oshawa Water Supply Plant - Replacement/rehabilitation of the sedimentation tanks, Header & Backwash valves, and piping	-		-	-	-	-	-	-	-	-	300	300	550	2,900	3,750
266	Taunton Rd. Water Pumping Station and Reservoir - station improvements and replacement	-		-	-	-	-	-	-	-	-	500	500	200	2,300	3,000
277	Beaverton Water Supply Plant - upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch, Standby power, uninterrupted power supply (UPS) and Ultraviolet disinfection system	-		-	-	-	-	-	-	-	-	250	250	750	2,600	3,600
281	Emergency Generator Fuel Tank Compliance upgrades Phase 3 and Phase 4	-		-	-	-	-	-	-	-	-	400	400	17,996	-	18,396



Appendix A: 2023 Water Supply System Capital Projects (\$,000's)

Provides financing details for capital projects proposed in 2023. See Appendix B for the comprehensive 2023 capital budget and 2024-2032 forecast

<div><div><div><div><div></div><div>DURHAM REGION</div></div><div>Durham Budget</div><div>2023</div></div></div></div>		Quantity	New / Replacement	2023 Proposed Financing								2023 Proposed Budget	Proposed Funding Prior to 2023	Forecast 2024-2032	Total Project to 2032	
				Other	Reserve/ Reserve Funds	Industrial DCs	Institutional DCs	Commercial DCs	Residential DCs	Subsidy /Grant	Debenture	User Rate				
282	Replace Uninterrupted Power Supply (UPS) Batteries - Ajax WSP	1	Replacement	-	-	-	-	-	-	-	-	50	50	-	-	50
283	Sulphuric Acid Pump Replacement - Ajax WSP	1	Replacement	-	-	-	-	-	-	-	-	240	240	-	-	240
284	Sump Pump Systems - Ajax WSP	-	Replacement	-	-	-	-	-	-	-	-	122	122	-	-	122
287	Integrated Control Technology - Security Project - Various Locations	-	New	-	-	-	-	-	-	-	-	306	306	-	-	306
297	Pump / Motor / Mixer Repair / Replacement - Plants East	-	Replacement	-	-	-	-	-	-	-	-	80	80	-	-	80
298	Regulatory Instrumentation Replacement and Maintenance - Various Locations	-	Replacement	-	-	-	-	-	-	-	-	30	30	-	-	30
302	Bar Pullout Tester - Construction	1	New	-	-	-	-	-	-	-	-	4	4	-	-	4
303	Bench Oven - Construction	1	New	-	-	-	-	-	-	-	-	5	5	-	-	5
304	Concrete End Grinder - Construction	1	New	-	-	-	-	-	-	-	-	9	9	-	-	9
307	Gyratory Compactor/Molds/Equipment - Construction	1	New	-	-	-	-	-	-	-	-	23	23	-	-	23
309	Nuclear Densometer - Construction	1	Replacement	-	-	-	-	-	-	-	-	3	3	-	-	3



Appendix A: 2023 Water Supply System Capital Projects (\$,000's)

Provides financing details for capital projects proposed in 2023. See Appendix B for the comprehensive 2023 capital budget and 2024-2032 forecast

<div><div><div><div><div></div><div>DURHAM REGION</div></div><div><div>Durham</div><div>Budget</div></div></div><div>2023</div></div></div>	Quantity	New / Replacement	2023 Proposed Financing									2023 Proposed Budget	Proposed Funding Prior to 2023	Forecast 2024-2032	Total Project to 2032
			Other	Reserve/ Reserve Funds	Industrial DCs	Institutional DCs	Commercial DCs	Residential DCs	Subsidy /Grant	Debenture	User Rate				
313 Chlorine Analyzers - Plants Central	3	Replacement	-	-	-	-	-	-	-	-	30	30	-	-	30
314 UPS Battery Replacements and Testing - Plants Central	40	Replacement	-	-	-	-	-	-	-	-	40	40	-	-	40
317 WSP Post Chlorinator Replacement - Oshawa WSP	1	Replacement	-	-	-	-	-	-	-	-	25	25	-	-	25
318 Replace Weigh Scale - Various Locations	4	Replacement	-	-	-	-	-	-	-	-	35	35	-	-	35
319 Tank Liners - Whitby WSP	2	Replacement	-	-	-	-	-	-	-	-	30	30	-	-	30
320 Flow Meter Replacements - WSP Pumping Stations	4	Replacement	-	-	-	-	-	-	-	-	80	80	-	-	80
321 Install Isolation Valve - Taunton Rd. Pumping Station	1	Replacement	-	-	-	-	-	-	-	-	50	50	-	-	50
323 Integrated Control Technology - Security Project - Various Locations	3	New	-	-	-	-	-	-	-	-	3	3	-	-	3
Machinery & Equipment Subtotal			-	-	-	-	-	-	-	-	3,565	3,565	20,096	10,100	33,761
Information Technology Infrastructure															
329 Standard Laptop	2	New	-	-	-	-	-	-	-	-	1	1	-	-	1
332 GIS Hardware (Monitors, Backup Devices and Other) - Data System Management	1	Replacement	-	-	-	-	-	-	-	-	5	5	-	-	5



Appendix A: 2023 Water Supply System Capital Projects (\$,000's)

Provides financing details for capital projects proposed in 2023. See Appendix B for the comprehensive 2023 capital budget and 2024-2032 forecast

<div><div><div><div><div></div><div>DURHAM REGION</div></div><div><div>Durham Budget</div></div></div><div>2023</div></div></div>	Quantity	New / Replacement	2023 Proposed Financing									2023 Proposed Budget	Proposed Funding Prior to 2023	Forecast 2024-2032	Total Project to 2032
			Other	Reserve/ Reserve Funds	Industrial DCs	Institutional DCs	Commercial DCs	Residential DCs	Subsidy /Grant	Debenture	User Rate				
333 Power Laptop	13	New	-	-	-	-	-	-	-	-	16	16	-	-	16
334 Computers & Monitors Refresh - Financial Services	-	Replacement	-	-	-	-	-	-	-	-	149	149	-	-	149
338 Power Laptop (with Monitor)	3	New	-	-	-	-	-	-	-	-	5	5	-	-	5
340 Tablet	1	New	-	-	-	-	-	-	-	-	2	2	-	-	2
340 Tablet	1	Replacement	-	-	-	-	-	-	-	-	4	4	-	-	4
Information Technology Infrastructure Subtotal			-	-	-	-	-	-	-	-	182	182	-	-	182
Vehicles															
349 Hybrid PHEV SUV - Oshawa/Whitby Depot	10	New	-	-	-	-	-	-	-	-	850	850	-	-	850
356 Vactor 2100 - Oshawa/Whitby Depot	1	New	-	-	-	-	-	-	-	-	395	395	-	-	395
Vehicles Subtotal			-	-	-	-	-	-	-	-	1,245	1,245	-	-	1,245
Furniture & Fixtures															
364 A/V Equipment and Technology Upgrades - Various Locations	1	New	-	-	-	-	-	-	-	-	10	10	-	-	10
Furniture & Fixtures Subtotal			-	-	-	-	-	-	-	-	10	10	-	-	10



Appendix A: 2023 Water Supply System Capital Projects (\$,000's)


Provides financing details for capital projects proposed in 2023. See Appendix B for the comprehensive 2023 capital budget and 2024-2032 forecast

 <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div>		Quantity	New / Replacement	2023 Proposed Financing								2023 Proposed Budget	Proposed Funding Prior to 2023	Forecast 2024-2032	Total Project to 2032	
Allowances & Other Provisions																
365	Regional Water Supply Master Planning Study for the Regional Official Plan Review	-		-	-	-	-	6	219	-	-	25	250	900	800	1,950
367	Asset Condition Assessments - Reports for Vertical Assets	-		-	100	-	-	-	-	-	-	-	100	1,063	2,086	3,249
368	Asset Condition Assessment/ investigation for transmission pipes	-		-	182	-	-	-	-	-	-	-	182	1,037	1,780	2,999
370	Allowance for acquisition of easements	-		-	-	-	-	-	-	-	-	100	100	150	900	1,150
371	Allowance for engineering studies	-		-	-	-	-	-	-	-	-	150	150	-	1,950	2,100
375	Preliminary engineering	-		-	-	-	-	-	-	-	-	100	100	-	900	1,000
376	Allowance for sundry extensions as per Council policy - Various	-		-	-	-	-	-	-	-	-	15	15	-	135	150
377	Allowance for unknown requirements	-		-	-	-	-	-	-	-	-	100	100	-	900	1,000
378	Allowance for land severance review and drawing requirements	-		-	-	-	-	-	-	-	-	100	100	-	900	1,000
379	Allowance for Regional share for works in conjunction with residential subdivision development	-		-	-	-	-	44	1,752	-	-	204	2,000	-	18,000	20,000



Appendix A: 2023 Water Supply System Capital Projects (\$,000's)

Provides financing details for capital projects proposed in 2023. See Appendix B for the comprehensive 2023 capital budget and 2024-2032 forecast

		Quantity	New / Replacement	2023 Proposed Financing								2023 Proposed Budget	Proposed Funding Prior to 2023	Forecast 2024-2032	Total Project to 2032	
				Other	Reserve/ Reserve Funds	Industrial DCs	Institutional DCs	Commercial DCs	Residential DCs	Subsidy /Grant	Debenture					User Rate
380	Allowance for Regional share for works in conjunction with non-residential development	-		-	-	-	-	11	438	-	-	51	500	-	4,500	5,000
381	Well interference works	-		-	-	-	-	-	400	-	-	-	400	-	7,200	7,600
Allowances & Other Provisions Subtotal				-	282	-	-	61	2,809	-	-	845	3,997	3,150	40,051	47,198
Water Supply System Subtotal				-	6,075	-	-	2,462	68,205	-	15,666	48,376	140,784	140,318	572,343	853,445
Total Water Supply System				-	6,075	-	-	2,462	68,205	-	15,666	48,376	140,784	140,318	572,343	853,445

\* Rows and columns may not add due to rounding

\*\* Appendix A includes Reserve financing as follows:

	2023
<u>Reserve Fund</u>	
Asset Management Reserve Fund - Water	5,764
Rate Stabilization Reserve Fund - Water	311
Pre-Servicing of Employment Lands Reserve Fund - Water	-
Total Reserve/Reserve Fund Financing	<u>6,075</u>


\*\*\* Appendix A includes financing of the following development charge shortfalls as follows:

	2023
<u>DC Shortfall</u>	
Residential DC Shortfall	-
Commercial DC Shortfall	-
Institutional DC Shortfall	130
Industrial DC Shortfall	11,327
Total DC Shortfall	<u>11,457</u>
<u>Shortfall Financing Source</u>	
Rate Stabilization Reserve Fund - Water	-
Debenture - DC Funded	-
User Rate	11,457
Total Funding	<u>11,457</u>



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)


Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix A for financing details for capital projects proposed in 2023.

<div><div>Durham Budget</div><div>2023</div></div>			Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
Water Supply										
Linear Infrastructure										
1	R.R. 2A (Centre St) from Athol St. to Adelaide Ave., Oshawa	Pre-Construction	-	-	-	-	-	-	-	
		Construction	250	-	-	-	-	-	-	
		Total	250	-	-	-	-	-	-	
2	R.R. 14 (Liberty St.) from Baseline Rd. to King St., Bowmanville	Pre-Construction	100	-	-	-	-	-	-	
		Construction	-	-	-	3,100	-	-	3,100	
		Total	100	-	-	3,100	-	-	3,100	
3	R.R. 16 (Ritson Rd.) from Taunton Rd. to Conlin Rd., Oshawa	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	-	1,100	-	-	-	1,100	
		Total	-	-	1,100	-	-	-	1,100	
4	R.R. 17 (Main St.) from Station St. to Winter Rd., Clarington	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	-	760	-	-	-	760	
		Total	-	-	760	-	-	-	760	
5	R.R. 22 (Bayly St.) from Westney Rd. to Harwood Ave., Ajax	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	-	-	-	1,900	-	1,900	
		Total	-	-	-	-	1,900	-	1,900	
6	R.R. 22 (Bloor St.) from east of Harmony Rd. to Grandview St., Oshawa	Pre-Construction	100	-	-	-	-	-	-	
		Construction	-	-	1,350	-	-	-	1,350	
		Total	100	-	1,350	-	-	-	1,350	
7	R.R. 22 (Victoria St.) from Thickson Rd. to South Blair St., Whitby	Pre-Construction	-	-	-	-	-	-	-	
		Construction	80	-	-	-	-	-	-	
		Total	80	-	-	-	-	-	-	
8	R.R. 26 (Thickson Rd.) from Consumers Dr. to Dundas St., Whitby	Pre-Construction	-	-	-	500	-	-	500	
		Construction	-	-	-	-	-	2,900	2,900	
		Total	-	-	-	500	-	2,900	3,400	



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)

Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix A for financing details for capital projects proposed in 2023.

<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>			Forecast						
Expenditure Category			2023 Proposed Budget	2024	2025	2026	2027	2028-2032	Forecast Total
9	R.R. 26 (Thickson Rd.)/Wentworth St. Culvert rehabilitation, Whitby	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	850	-	-	-	-	850
		Total	-	850	-	-	-	-	850
10	R.R. 28 (Rossland Rd.) from Park Rd. to Simcoe St., Oshawa	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	-	-	1,100	-	-	1,100
		Total	-	-	-	1,100	-	-	1,100
11	R.R. 28 (Rossland Rd.) from Ritson Rd. to Harmony Rd., Oshawa	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	-	2,380	-	-	-	2,380
		Total	-	-	2,380	-	-	-	2,380
12	R.R. 29 (Liverpool Rd.) from Highway 401 to Kingston Rd. (Highway No. 2), Pickering	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	-	-	-	-	250	250
		Total	-	-	-	-	-	250	250
13	R.R. 31 (Westney Rd.) from Finley Ave. to Harwood Ave., Ajax	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	-	-	-	-	1,230	1,230
		Total	-	-	-	-	-	1,230	1,230
14	R.R. 36 (Hopkins St.) from Consumers Dr. to Dundas St., Whitby	Pre-Construction	-	270	-	-	-	-	270
		Construction	-	-	-	150	-	500	650
		Total	-	270	-	150	-	500	920
15	R.R. 37 (Finch Ave.) from Altona Rd. to Brock Rd., Pickering	Pre-Construction	-	-	-	-	500	-	500
		Construction	-	-	-	-	-	6,000	6,000
		Total	-	-	-	-	500	6,000	6,500
16	R.R. 38 (Whites Rd.) from Kingston Rd. Highway 2 to Finch Ave., Pickering	Pre-Construction	-	-	-	-	-	500	500
		Construction	-	-	-	-	-	2,300	2,300
		Total	-	-	-	-	-	2,800	2,800
17	R.R. 52 (Thornton Rd.) from King St. to Stellar Dr., Whitby/Oshawa	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	-	1,330	-	-	-	1,330
		Total	-	-	1,330	-	-	-	1,330



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)


Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix A for financing details for capital projects proposed in 2023.

<div><div><div><div><div><div></div></div></div><div><div></div></div></div><div>Durham Budget</div></div><div>2023</div></div>			Expenditure Category	2023 Proposed Budget	Forecast					
2024	2025	2026			2027	2028-2032	Forecast Total			
18	R.R. 53 (Stevenson Rd.) from Highway 401 to Bond St., Oshawa	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	-	-	-	1,430	-	1,430	
		Total	-	-	-	-	1,430	-	1,430	
19	R.R. 53 (Stevenson Rd.) from Bond St. to Rossland Rd., Oshawa	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	-	-	-	-	3,800	3,800	
		Total	-	-	-	-	-	3,800	3,800	
20	R.R. 56 (Farewell St.) from Harbour Rd. to Bloor St., Oshawa	Pre-Construction	-	-	-	-	-	-	-	
		Construction	800	-	-	-	-	-	-	
		Total	800	-	-	-	-	-	-	
21	Replacement of watermain on R.R. 56 (Farewell St.) from Canadian National Railway to Bloor St., Oshawa	Pre-Construction	-	-	-	-	-	-	-	
		Construction	385	-	-	-	-	-	-	
		Total	385	-	-	-	-	-	-	
22	R.R. 57 (Bowmanville Ave.) from Baseline Rd. to Highway No. 2, Bowmanville	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	500	-	-	-	-	500	
		Total	-	500	-	-	-	-	500	
23	R.R. 58 (Manning Rd.) /Adelaide Ave. interconnection from Garrard Rd. to Thornton Rd., Whitby and Oshawa	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	-	-	980	-	-	980	
		Total	-	-	-	980	-	-	980	
24	R.R. 59 (Gibb St.) from Stevenson Rd. to Simcoe St., Oshawa	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	-	-	-	-	2,100	2,100	
		Total	-	-	-	-	-	2,100	2,100	
25	R.R. 59 (Gibb St.)/Olive Ave. Extension from Drew St. to Ritson Rd., Oshawa	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	-	-	-	-	430	430	
		Total	-	-	-	-	-	430	430	
26	R.R. 60 (Wentworth St.) from Simcoe St. to Farewell St., Oshawa	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	665	-	-	-	-	665	
		Total	-	665	-	-	-	-	665	



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)


Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix A for financing details for capital projects proposed in 2023.

<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>			Forecast					
Expenditure Category		2023 Proposed Budget	2024	2025	2026	2027	2028-2032	Forecast Total
27	Allowance for watermain							
	in conjunction with the Regional Road Program							
28	Area Municipality Road Program - Replacement of deficient watermain							
	and/or construction of required works in conjunction with the City of Pickering Road Program							
29	Area Municipality Road Program - Replacement of deficient watermain							
	and/or construction of required works in conjunction with the Town of Ajax Road Program							
30	Area Municipality Road Program - Replacement of deficient watermain							
	and/or construction of required works in conjunction with the Town of Whitby Road Program							
31	Area Municipality Road Program - Replacement of deficient watermain							
	and/or construction of required works in conjunction with the City of Oshawa Road Program							
32	Area Municipality Road Program - Replacement of deficient watermain							
	and/or construction of required works in conjunction with the Municipality of Clarington Road Program							
33	Area Municipality Road Program - Replacement of deficient watermain							
	and/or construction of required works in conjunction with the Township of Scugog Road Program							



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)

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 <b>Durham Budget</b> <b>2023</b>		Expenditure Category	2023 Proposed Budget	Forecast					
				2024	2025	2026	2027	2028-2032	Forecast Total
34	Area Municipality Road Program - Replacement of deficient watermain and/or construction of required works in conjunction with the Township of Uxbridge Road Program	Pre-Construction	-	270	270	270	270	1,350	2,430
		Construction	-	-	-	-	-	-	-
		Total	-	270	270	270	270	1,350	2,430
35	Area Municipality Road Program - Replacement of deficient watermain and/or construction of required works in conjunction with the Township of Brock Road Program	Pre-Construction	-	250	250	250	250	1,250	2,250
		Construction	-	-	-	-	-	-	-
		Total	-	250	250	250	250	1,250	2,250
36	Allowance for unknown requirements in conjunction with area municipality road programs	Pre-Construction	200	200	200	200	200	1,000	1,800
		Construction	-	-	-	-	-	-	-
		Total	200	200	200	200	200	1,000	1,800
37	Watermain replacement at Highway 401 and Wilson Rd., in conjunction with the MTO, Oshawa	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	3,000	-	-	-	-	3,000
		Total	-	3,000	-	-	-	-	3,000
38	Watermain replacement in conjunction with the Metrolinx Toronto East Rail Corridor expansion to Bowmanville	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	-	-	3,340	-	-	3,340
		Total	-	-	-	3,340	-	-	3,340
39	Watermain replacement on Park Rd. S. and Cubert St., in conjunction with the MTO, Oshawa	Pre-Construction	300	-	-	-	-	-	-
		Construction	-	-	-	-	-	-	-
		Total	300	-	-	-	-	-	-
40	Allowance for watermain in conjunction with the MTO & Go Transit projects	Pre-Construction	-	-	200	-	250	1,950	2,400
		Construction	-	-	-	-	-	-	-
		Total	-	-	200	-	250	1,950	2,400
41	Water works to rectify identified system deficiencies independent of road programs in various locations	Pre-Construction	-	-	-	-	-	-	-
		Construction	400	800	800	800	900	4,500	7,800
		Total	400	800	800	800	900	4,500	7,800



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)


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<div><div><div><div></div></div><div>Durham Budget</div></div><div>2023</div></div>			Forecast						
Expenditure Category			2023 Proposed Budget	2024	2025	2026	2027	2028-2032	Forecast Total
42	Rehabilitation of existing watermains in various locations.	Pre-Construction	-	-	-	-	-	-	-
		Construction	2,400	3,000	3,000	3,500	4,000	23,500	37,000
		Total	2,400	3,000	3,000	3,500	4,000	23,500	37,000
43	Replacement of the watermain on Kingston Rd. (Hwy No. 2) from Altona Rd. to Steeple Hill and Rougemount Dr. from Hwy No. 2 to 100 m south, Pickering	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	-	-	-	3,000	-	3,000
		Total	-	-	-	-	3,000	-	3,000
44	Replacement of a watermain on Kingston Rd. (Hwy No. 2) from Steeple Hill to Merriton Rd., Pickering	Pre-Construction	-	-	-	-	-	-	-
		Construction	2,200	-	-	-	-	-	-
		Total	2,200	-	-	-	-	-	-
45	Replacement of a watermain on Kingston Rd. (Hwy No. 2) from Dixie Rd. to Bainbridge Dr., Pickering	Pre-Construction	-	-	-	-	-	-	-
		Construction	2,500	-	-	-	-	-	-
		Total	2,500	-	-	-	-	-	-
46	Replacement of watermain on Sandy Beach Rd. from 300 m north of Alyssum St. to 210 m south of Alyssum St., Pickering	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	300	-	-	-	-	300
		Total	-	300	-	-	-	-	300
47	Replacement of a watermain on Bayly St. from Westshore Blvd. to Mattins Rd., Pickering	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	-	-	2,800	-	-	2,800
		Total	-	-	-	2,800	-	-	2,800
48	Watermain and valve improvements at Brock Rd. and Montgomery Park Rd., Pickering	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	300	-	-	-	-	300
		Total	-	300	-	-	-	-	300
49	Replacement of a watermain on Brock Rd. from Feldspar Crt. to Clements Rd., Pickering	Pre-Construction	-	-	-	-	-	100	100
		Construction	-	-	-	-	-	480	480
		Total	-	-	-	-	-	580	580
50	Replacement of a watermain on Notion Rd. from Kingston Rd. to approx. 230 m South, Pickering	Pre-Construction	-	-	-	-	-	100	100
		Construction	-	-	-	-	-	250	250
		Total	-	-	-	-	-	350	350



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 <b>Durham Budget</b> <b>2023</b>			Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
		2024			2025	2026	2027	2028-2032		
51	Replacement of a watermain on Alliance Rd. from 20 m North of Bayly St. S. to dead-end, Pickering	Pre-Construction	-	-	-	-	150	-	150	
		Construction	-	-	-	-	-	400	400	
		Total	-	-	-	-	150	400	550	
52	Replacement of watermain on Krosno Blvd. from Liverpool Rd. E. to Fanshaw Place, Pickering	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	400	-	-	-	-	400	
		Total	-	400	-	-	-	-	400	
53	Replacement of watermain on Achilles Rd. from Salem Rd. to 100 m west of Salem Rd., Ajax	Pre-Construction	-	-	-	-	-	-	-	
		Construction	80	-	-	-	-	-	-	
		Total	80	-	-	-	-	-	-	
54	Replacement of a watermain on Pickering Beach Rd. from Foord Rd. to Hewitt Cres., Ajax	Pre-Construction	-	-	-	-	-	-	-	
		Construction	360	-	-	-	-	-	-	
		Total	360	-	-	-	-	-	-	
55	Replacement of a watermain on Cedar St. from Tudor Ave. W. to Beatty Rd., Ajax	Pre-Construction	-	-	-	-	130	-	130	
		Construction	-	-	-	-	400	-	400	
		Total	-	-	-	-	530	-	530	
56	Replacement of a watermain on Clements Rd. E. from Burcher Rd. E. to Dryer Dr., Ajax	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	1,450	-	-	-	-	1,450	
		Total	-	1,450	-	-	-	-	1,450	
57	Replacement of a watermain on Thorncroft Cres. from Billingsgate Cres. to Billingsgate Cres., Ajax	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	750	-	-	-	-	750	
		Total	-	750	-	-	-	-	750	
58	Replacement of watermain and valves on Harwood Ave. from Clements Rd. to Falby Crt., Ajax	Pre-Construction	250	-	-	-	-	-	-	
		Construction	-	-	750	-	-	-	750	
		Total	250	-	750	-	-	-	750	
59	Replacement of watermain on Water St. from the Whitby WSP to Breakwater SSPS, Whitby	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	750	-	-	-	-	750	
		Total	-	750	-	-	-	-	750	



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 <b>Durham Budget</b> <b>2023</b>			Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
		2024			2025	2026	2027	2028-2032		
60	Replacement of watermain on Dundas St. (Hwy No. 2) from Lakeridge Rd. to McQuay Blvd., Whitby	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	400	-	-	-	-	400	
		Total	-	400	-	-	-	-	400	
61	Replacement of watermain on Consumers Dr. from 140 m west of Thicksn Rd. S to 110 m east of Sunray St., Whitby	Pre-Construction	-	-	-	-	200	-	200	
		Construction	-	-	-	-	-	590	590	
		Total	-	-	-	-	200	590	790	
62	Replacement of watermain on Palmerston Ave. from Centre St. to Walton Blvd., Whitby	Pre-Construction	-	-	-	200	-	-	200	
		Construction	-	-	-	-	480	-	480	
		Total	-	-	-	200	480	-	680	
63	Replacement of watermain on Centre St. N. from Willis Ave. to Rossland Rd. W., Whitby	Pre-Construction	-	-	-	200	-	-	200	
		Construction	-	-	-	-	950	-	950	
		Total	-	-	-	200	950	-	1,150	
64	Replacement of a watermain on Orchard Crt. from St. Lawrence St. to Orchard Crt., Whitby	Pre-Construction	-	-	-	-	-	100	100	
		Construction	-	-	-	-	-	270	270	
		Total	-	-	-	-	-	370	370	
65	Replacement of watermain on Athol St. from St. Lawrence St. to Clemence St., Whitby	Pre-Construction	-	140	-	-	-	-	140	
		Construction	-	-	-	300	-	-	300	
		Total	-	140	-	300	-	-	440	
66	Replacement of watermain on St. Lawrence St. from Brock St. to Athol St., Whitby	Pre-Construction	-	100	-	-	-	-	100	
		Construction	-	-	-	130	-	-	130	
		Total	-	100	-	130	-	-	230	
67	Replacement of watermain on Byron St. North from Willis Ave. to Starr Ave., Whitby	Pre-Construction	-	-	-	-	-	100	100	
		Construction	-	-	-	-	-	260	260	
		Total	-	-	-	-	-	360	360	
68	Erosion protection Crystal Beach Boulevard watermain, Whitby	Pre-Construction	500	-	-	-	-	-	-	
		Construction	-	5,000	-	-	-	-	5,000	
		Total	500	5,000	-	-	-	-	5,000	



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 <b>Durham</b> <b>Budget</b> <span>2023</span>		Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
				2024	2025	2026	2027	2028-2032	
69	Replacement of watermain on High St. from Mary St. to Walnut St., Whitby	Pre-Construction	-	-	-	-	-	-	-
		Construction	260	-	-	-	-	-	-
		Total	260	-	-	-	-	-	-
70	Replacement of watermain on Cochrane St. from Ferguson St. to 125 m north of Beech St. W., Whitby	Pre-Construction	-	300	-	-	-	-	300
		Construction	-	-	-	-	1,130	-	1,130
		Total	-	300	-	-	1,130	-	1,430
71	Replacement of watermain on Belton Court from Michael Blvd to S/L, Whitby	Pre-Construction	-	-	-	-	-	-	-
		Construction	1,000	-	-	-	-	-	-
		Total	1,000	-	-	-	-	-	-
72	Replacement of watermain on Harbour St. from Watson Rd. to dead-end, Whitby	Pre-Construction	-	-	-	-	-	100	100
		Construction	-	-	-	-	-	1,000	1,000
		Total	-	-	-	-	-	1,100	1,100
73	Replacement of watermain on Mary St. from Rossland Rd. to Robert St., Oshawa	Pre-Construction	140	-	-	-	-	-	-
		Construction	2,195	-	-	-	-	-	-
		Total	2,335	-	-	-	-	-	-
74	Replacement of watermain on Simcoe St. from Metcalf St. to Quebec St., Oshawa	Pre-Construction	-	-	-	-	-	-	-
		Construction	1,300	-	-	-	-	-	-
		Total	1,300	-	-	-	-	-	-
75	Replacement of feedermain on Simcoe St. from Albert St. to Bloor St. and Bloor St. from Simcoe St. to Albert St., Oshawa	Pre-Construction	-	500	-	-	-	-	500
		Construction	-	-	-	4,900	-	-	4,900
		Total	-	500	-	4,900	-	-	5,400
76	Replacement of a feedermain on R.R. 22 (Bloor St.) from Cubert St. to Oxford St., Oshawa	Pre-Construction	-	-	-	-	-	60	60
		Construction	-	-	-	-	-	240	240
		Total	-	-	-	-	-	300	300
77	Replacement of a feedermain on R.R. 22 (Bloor St.) from Wilson Rd. to Holland St., Oshawa	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	100	-	-	-	-	100
		Total	-	100	-	-	-	-	100



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 <b>Durham Budget</b> <b>2023</b>			Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
		2024			2025	2026	2027	2028-2032		
78	Replacement of a watermain on Simcoe St. South and easement from Erie St. to Albert St., Oshawa	Pre-Construction	-	-	-	-	-	-	-	
		Construction	135	-	-	-	-	-	-	
		Total	135	-	-	-	-	-	-	
79	Replacement of a watermain on Olive Ave from Simcoe St. to Drew St., Oshawa	Pre-Construction	-	-	-	-	-	-	-	
		Construction	385	-	-	-	-	-	-	
		Total	385	-	-	-	-	-	-	
80	Replacement of watermain on R.R. 52 (Thornton Rd.) from South of Bloor St. under the Canadian National Railway, Oshawa	Pre-Construction	-	-	-	200	-	-	200	
		Construction	-	-	-	-	200	2,300	2,500	
		Total	-	-	-	200	200	2,300	2,700	
81	Replacement of watermain on Highway No. 2 (King St. W.) from Garrard Rd. to Thornton Rd., Oshawa	Pre-Construction	-	-	-	83	-	-	83	
		Construction	-	-	-	100	-	-	100	
		Total	-	-	-	183	-	-	183	
82	Replacement of watermain on Highway No. 2 (King St. W.) from Midtown Dr. to Queen St., Oshawa	Pre-Construction	100	-	-	-	-	-	-	
		Construction	-	400	-	-	-	-	400	
		Total	100	400	-	-	-	-	400	
83	Replacement of watermain on Highway No. 2 (King St. E.) from Wilson Rd. to 30 m east of Harmony Creek, Oshawa	Pre-Construction	-	-	-	232	-	-	232	
		Construction	-	-	-	-	765	-	765	
		Total	-	-	-	232	765	-	997	
84	Replacement of watermain on Highway No. 2 (King St. E.) from Harmony Rd. to Kingsway College, Oshawa	Pre-Construction	-	-	-	500	-	-	500	
		Construction	-	-	-	-	-	1,900	1,900	
		Total	-	-	-	500	-	1,900	2,400	
85	Replacement of feedermain on Ritson Rd. from Oshawa Water Supply Plant Valve Chamber to Kawartha Ave., Oshawa	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	7,600	-	-	-	-	7,600	
		Total	-	7,600	-	-	-	-	7,600	
86	Replacement of a watermain on Ritson Rd. S. from Kawartha Ave. to Simcoe St. S., Oshawa	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	-	-	2,800	-	-	2,800	
		Total	-	-	-	2,800	-	-	2,800	



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<div>Durham Budget</div> <div>2023</div>			Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
				2024	2025	2026	2027	2028-2032		
87	Replacement of a watermain on Thornton Rd. from Adelaide Ave. to Tatra Dr., Oshawa	Pre-Construction	-	-	-	160	-	-	160	
		Construction	-	-	-	-	-	550	550	
		Total	-	-	-	160	-	550	710	
88	Replacement of a watermain on Adelaide Ave. from Kaiser Cres. to Simcoe St., Oshawa	Pre-Construction	-	-	-	-	-	100	100	
		Construction	-	-	-	-	-	220	220	
		Total	-	-	-	-	-	320	320	
89	Replacement of a watermain on Ritson Rd. from Annis St. to Conant St., Oshawa	Pre-Construction	-	-	-	-	-	-	-	
		Construction	290	-	-	-	-	-	-	
		Total	290	-	-	-	-	-	-	
90	Replacement of a watermain on Douglas St. from Conant St. to Wolfe St., Oshawa	Pre-Construction	-	-	-	-	-	-	-	
		Construction	340	-	-	-	-	-	-	
		Total	340	-	-	-	-	-	-	
91	Replacement of watermain on Conant St. from Myers Rd. to Nelson St., Oshawa	Pre-Construction	100	-	-	-	-	-	-	
		Construction	-	-	390	-	-	-	390	
		Total	100	-	390	-	-	-	390	
92	Replacement of a watermain on Oxford St. from Malaga Rd. to Porter St. and Porter St. from Oxford St. to Glen St., Oshawa	Pre-Construction	-	-	340	-	-	-	340	
		Construction	-	-	-	-	1,150	-	1,150	
		Total	-	-	340	-	1,150	-	1,490	
93	Replacement of watermain on Valencia Rd. from Oxford St. to dead-end, Oshawa	Pre-Construction	-	-	100	-	300	-	400	
		Construction	-	-	-	-	-	-	-	
		Total	-	-	100	-	300	-	400	
94	Replacement of a watermain on Ansley Crt. from Rossland Rd. to dead-end, Oshawa	Pre-Construction	-	-	-	-	-	100	100	
		Construction	-	-	-	-	-	280	280	
		Total	-	-	-	-	-	380	380	
95	Replacement of a watermain on Wilson Rd. from Raleigh Ave. to Wentworth St., Oshawa	Pre-Construction	-	-	-	-	-	100	100	
		Construction	-	-	-	-	-	425	425	
		Total	-	-	-	-	-	525	525	



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<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>			Forecast						
Expenditure Category			2023 Proposed Budget	2024	2025	2026	2027	2028-2032	Forecast Total
96	Replacement of watermain on East Shore Dr./Port Darlington Rd. from Lake Rd. to Bowmanville Water Supply Plant, Bowmanville		Pre-Construction	-	-	-	-	-	-
			Construction	-	-	1,150	-	-	1,150
			Total	-	-	1,150	-	-	1,150
97	Replacement of watermain on Baseline Rd. East from Liberty St. to Mearns Ave., Bowmanville		Pre-Construction	-	-	150	-	-	150
			Construction	-	-	1,300	1,300	-	2,600
			Total	-	-	1,450	1,300	-	2,750
98	Replacement of watermain on North St. from Wilmot St. to Concession Rd. 3, Newcastle		Pre-Construction	-	-	-	-	-	-
			Construction	-	1,750	-	-	-	1,750
			Total	-	1,750	-	-	-	1,750
99	Replacement of watermain on Amos St. from Toronto St. to Highway 401, Newcastle		Pre-Construction	-	-	-	-	100	100
			Construction	-	-	-	-	210	210
			Total	-	-	-	-	310	310
100	Replacement of watermain on First Ave. from Brock St. to Dominion St., Uxbridge		Pre-Construction	-	-	-	-	-	-
			Construction	-	280	-	-	-	280
			Total	-	280	-	-	-	280
101	Cemetery Rd. from Toronto St to 600 m northerly - required to loop the watermain and system security		Pre-Construction	-	-	-	-	-	-
			Construction	-	180	-	-	-	180
			Total	-	180	-	-	-	180
102	Replacement of watermain on Caleb St. from Clarke St. to Queen St., Port Perry		Pre-Construction	-	-	-	-	-	-
			Construction	-	350	-	-	-	350
			Total	-	350	-	-	-	350
103	Replacement of watermain on Bigelow St. from 140 m north of Kellett St. to Kellett St., Kellett St. from Bigelow St. to Simcoe St., Beech St from Simcoe St. to 60 m east of Kent St., and Kent St. from Beech St. to 100 m north of Beech St., Port Perry		Pre-Construction	-	-	-	-	-	-
			Construction	440	-	-	-	-	-
			Total	440	-	-	-	-	-



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)


Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix A for financing details for capital projects proposed in 2023.

<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>			Forecast						
Expenditure Category			2023 Proposed Budget	2024	2025	2026	2027	2028-2032	Forecast Total
104	Replacement of watermain on Rosa St. from Paxton St. to dead-end, Port Perry		Pre-Construction	-	-	-	-	-	-
			Construction	-	-	1,250	-	-	1,250
			Total	-	-	1,250	-	-	1,250
105	Replacement of watermain on Ottawa St. from Queen St. to MacDonald St., Port Perry		Pre-Construction	-	-	-	150	-	150
			Construction	-	-	-	730	-	730
			Total	-	-	-	880	-	880
106	Replacement of watermain on Bay St. from Old Simcoe St. to Bigelow St., Port Perry		Pre-Construction	-	-	-	-	-	-
			Construction	-	-	960	-	-	960
			Total	-	-	960	-	-	960
107	Replacement of watermain on Kent St. from 85 m north of Beech St. to Lakeshore Rd., Port Perry		Pre-Construction	-	-	100	-	-	100
			Construction	-	-	-	-	600	600
			Total	-	-	100	-	600	700
108	Replacement of watermain on Perry St. from North St. to Paxton St., Port Perry		Pre-Construction	-	-	-	-	-	75
			Construction	-	-	-	-	-	180
			Total	-	-	-	-	-	255
109	Replacement of watermain on Jane St. from Ida St. to 220 m north of Ida St., Sunderland		Pre-Construction	-	-	-	-	-	-
			Construction	775	-	-	-	-	-
			Total	775	-	-	-	-	-
110	Replacement of watermain on Maple St. from River St. to dead-end, Sunderland		Pre-Construction	-	-	-	-	-	-
			Construction	146	-	-	-	-	-
			Total	146	-	-	-	-	-
111	Replacement of watermain on Cameron St. from 215 m east of McRae St. to 750 m west of R.R. 2 Simcoe St., Cannington		Pre-Construction	-	-	-	-	-	-
			Construction	-	1,650	-	-	-	1,650
			Total	-	1,650	-	-	-	1,650
112	Replacement of watermain on Laidlaw St. from Cameron St. to Park St., Cannington		Pre-Construction	-	-	-	-	-	100
			Construction	-	-	-	-	-	450
			Total	-	-	-	-	-	550



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)

Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix A for financing details for capital projects proposed in 2023.

<div>Durham Budget</div> <div>2023</div>			Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
		2024	2025	2026	2027	2028-2032				
113	Replacement of watermain on Centre St. from Mara Rd. to James St., Beaverton	Pre-Construction	50	-	-	-	-	-		
		Construction	-	-	650	-	-	-	650	
		Total	50	-	650	-	-	-	650	
114	Replacement of watermain on Simcoe St. from Canadian National Railway to John St., Beaverton	Pre-Construction	-	-	-	-	-	-		
		Construction	-	1,340	-	-	-	-	1,340	
		Total	-	1,340	-	-	-	-	1,340	
115	Replacement of watermain on Simcoe St. from Beaverton Water Supply Plant to 60 m west of Canadian National Railway, Beaverton	Pre-Construction	-	-	-	-	-	-		
		Construction	-	-	1,340	-	-	-	1,340	
		Total	-	-	1,340	-	-	-	1,340	
116	Replacement of watermain on James St. from Main St. to Centre St./Highland Crt., Beaverton	Pre-Construction	-	-	-	-	-	-		
		Construction	-	580	-	-	-	-	580	
		Total	-	580	-	-	-	-	580	
117	Replacement of watermain on King St. from Mara Rd. to dead-end, Beaverton	Pre-Construction	-	-	-	200	-	-	200	
		Construction	-	-	-	1,100	-	-	1,100	
		Total	-	-	-	1,300	-	-	1,300	
118	Allowance for replacement of watermains in various locations	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	-	-	-	-	18,966	18,966	
		Total	-	-	-	-	-	18,966	18,966	
119	Allowance for the evaluation of feeder mains/water mains at creek crossings	Pre-Construction	-	-	-	-	-	-	-	
		Construction	75	75	75	75	75	-	300	
		Total	75	75	75	75	75	-	300	
120	Allowance for construction of services in unserved areas in response to requests or petitions	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	200	200	200	200	1,000	1,800	
		Total	-	200	200	200	200	1,000	1,800	
121	Zone 1 feeder main on Bayly St. from Toy Ave. to Pickering Beach Rd., Pickering/Ajax	Pre-Construction	-	-	1,500	-	-	-	1,500	
		Construction	-	-	-	-	20,400	-	20,400	
		Total	-	-	1,500	-	20,400	-	21,900	



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)


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<div>Durham Budget</div> <div>2023</div>		Expenditure Category	2023 Proposed Budget	Forecast					
	2024			2025	2026	2027	2028-2032	Forecast Total	
122	Zone 2 feedermain on Taunton Rd. from Westney Rd. to 200 m west of Harwood Ave., Ajax	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	3,000	-	-	-	-	3,000
		Total	-	3,000	-	-	-	-	3,000
123	Zone 2 feedermain on William Jackson Dr. & Taunton Rd. from Earl Grey Ave. to Ravenscroft Rd., Pickering/ Ajax	Pre-Construction	-	-	-	-	-	-	-
		Construction	7,900	-	-	-	-	-	-
		Total	7,900	-	-	-	-	-	-
124	Zone 2 feedermain on Church St. from south side of the hydro right of way to Taunton Rd., Ajax	Pre-Construction	800	-	-	-	-	-	-
		Construction	3,400	-	-	-	-	-	-
		Total	4,200	-	-	-	-	-	-
125	Watermain on Hunt St. from Westney Rd. to Harwood Ave., Ajax	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	-	1,600	-	-	-	1,600
		Total	-	-	1,600	-	-	-	1,600
126	Zone 1 feedermain from Whitby Water Supply Plant to Thornton Rd., Whitby/Oshawa	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	9,000	7,000	7,000	-	-	23,000
		Total	-	9,000	7,000	7,000	-	-	23,000
127	Zone 1 feedermain on Manning Rd. from Anderson St. to Hydro corridor., Whitby	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	1,840	-	-	-	-	1,840
		Total	-	1,840	-	-	-	-	1,840
128	Zone 1 West Whitby feedermain on Brock St./Victoria St. to Rossland Rd., Whitby	Pre-Construction	-	-	-	-	600	650	1,250
		Construction	-	-	-	-	-	-	-
		Total	-	-	-	-	600	650	1,250
129	Zone 3 feedermain on Garrard Rd. from north of the Mid-Block Arterial to Winchester Rd., Whitby (East Loop)	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	6,400	-	-	-	-	6,400
		Total	-	6,400	-	-	-	-	6,400
130	Zone 3 feedermain on Winchester Rd. from Cachet Blvd. to Garrard Rd., Whitby (East Loop)	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	1,100	-	-	-	-	1,100
		Total	-	1,100	-	-	-	-	1,100



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)


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<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>			Forecast						
Expenditure Category			2023 Proposed Budget	2024	2025	2026	2027	2028-2032	Forecast Total
131	Zone 3 feedermain on Conlin Rd. from Anderson St. to Thickson Rd., Whitby (Region's share only)	Pre-Construction	-	-	-	-	-	-	-
		Construction	1,000	-	-	-	-	-	-
		Total	1,000	-	-	-	-	-	-
132	Zone 3 feedermain on Mid-Block Arterial from Lynde Creek to Ashburn Rd., Whitby (West Loop) (Region's share only)	Pre-Construction	-	-	-	-	-	-	-
		Construction	5,600	-	-	-	-	-	-
		Total	5,600	-	-	-	-	-	-
133	Zone 3 feedermain on Ashburn Rd. from Amanda Ave. to Columbus Rd., Whitby (West Loop) (Region's share only)	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	5,950	-	-	-	-	5,950
		Total	-	5,950	-	-	-	-	5,950
134	Zone 3 feedermain on Columbus Rd. from Ashburn Rd. to 360 m east of Ashburn Rd., Whitby (West Loop) (Region's share only)	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	1,260	-	-	-	-	1,260
		Total	-	1,260	-	-	-	-	1,260
135	Zone 3 feedermain on Columbus Rd. from Ashburn Rd. to Country Lane, Whitby (West Loop) (Region's Share only)	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	-	-	-	5,850	-	5,850
		Total	-	-	-	-	5,850	-	5,850
136	Zone 4 feedermain from Thickson Rd. Zone 4 water pumping station to Zone 4 Reservoir, Whitby	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	-	-	-	-	28,600	28,600
		Total	-	-	-	-	-	28,600	28,600
137	Zone 4 feedermain on Brawley Rd. from Ashburn Rd. to Duffs Rd., Whitby	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	6,475	-	-	-	-	6,475
		Total	-	6,475	-	-	-	-	6,475
138	Zone 4 feedermain on Ashburn Rd. from Brawley Rd. to Mid-block., Whitby	Pre-Construction	-	700	-	-	-	-	700
		Construction	-	-	-	-	-	8,100	8,100
		Total	-	700	-	-	-	8,100	8,800
139	Zone 4 feedermain on Columbus Rd. from Thickson Rd. to Ritson Rd., Whitby/Oshawa	Pre-Construction	-	1,500	-	-	-	-	1,500
		Construction	-	-	-	17,900	-	-	17,900
		Total	-	1,500	-	17,900	-	-	19,400



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)


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<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>			Expenditure Category		2023 Proposed Budget	Forecast					Forecast Total
140	Watermain on Britannia Ave. from Thornton Rd. to Windfields Farm Dr., Oshawa		Pre-Construction		750	2024	2025	2026	2027	2028-2032	-
			Construction		-	-	1,250	-	-	-	1,250
			Total		750	-	1,250	-	-	-	1,250
141	Watermain on local road from Windfields Farm Dr. to Winchester Rd., Oshawa		Pre-Construction		-	-	150	-	-	-	150
			Construction		-	-	-	1,100	-	-	1,100
			Total		-	-	150	1,100	-	-	1,250
142	Watermain on Stevenson Rd. from Taunton Rd. to Conlin Rd., Oshawa		Pre-Construction		-	300	-	-	-	-	300
			Construction		-	-	2,200	-	-	-	2,200
			Total		-	300	2,200	-	-	-	2,500
143	Watermain on Thornton Rd. from 100 m North of Conlin Rd. within the Northwood Employment Area, Oshawa		Pre-Construction		-	-	-	-	-	-	-
			Construction		150	-	-	-	-	-	-
			Total		150	-	-	-	-	-	-
144	Watermain modifications in conjunction with the twinning of northwest branch of Harmony Creek sub-trunk sanitary sewer from 200 m south of Beatrice St. to Ritson Rd., Oshawa		Pre-Construction		-	40	-	-	-	-	40
			Construction		-	135	-	-	-	-	135
			Total		-	175	-	-	-	-	175
145	Zone 3 feedermain on Conlin Rd. from Garrard Rd. to Ritson Rd.,Oshawa		Pre-Construction		-	-	-	-	-	-	-
			Construction		-	7,525	-	9,500	-	-	17,025
			Total		-	7,525	-	9,500	-	-	17,025
146	Zone 3 feedermain on Conlin Rd. from Ritson Rd. to Wilson Rd., Oshawa		Pre-Construction		-	-	-	-	-	-	-
			Construction		-	-	4,000	-	-	-	4,000
			Total		-	-	4,000	-	-	-	4,000
147	Zone 4 feedermain from Proposed Zone 4 Water Pumping Station at Harmony Reservoir to Proposed Windchester Zone 4 Reservoir, Oshawa		Pre-Construction		-	-	-	-	-	-	-
			Construction		-	-	17,000	-	-	-	17,000
			Total		-	-	17,000	-	-	-	17,000



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<div><div>Durham Budget</div><div>2023</div></div>			Expenditure Category	2023 Proposed Budget	Forecast					
				2024	2025	2026	2027	2028-2032	Forecast Total	
148	Zone 4 feedermain on Ritson Rd. from Columbus Rd. to Winchester Rd., Oshawa	Pre-Construction	-	600	-	-	-	-	600	
		Construction	-	-	-	-	-	7,200	7,200	
		Total	-	600	-	-	-	7,200	7,800	
149	Zone 4 feedermain on Winchester Rd. from Ritson Rd. to Harmony Rd., Oshawa	Pre-Construction	-	600	-	-	-	-	600	
		Construction	-	-	-	-	-	6,750	6,750	
		Total	-	600	-	-	-	6,750	7,350	
150	Zone 1 feedermain on Baseline Rd. from Prestonvale Rd. to Trulls Rd., Courtice	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	-	3,650	-	-	-	3,650	
		Total	-	-	3,650	-	-	-	3,650	
151	Zone 1 feedermain on Prestonvale Rd. from Baseline Rd. to 950 m north of Baseline Rd., Courtice	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	-	1,850	-	-	-	1,850	
		Total	-	-	1,850	-	-	-	1,850	
152	Zone 1 feedermain on easement from Townline Rd. to Prestonvale Rd., Courtice	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	-	3,000	-	-	-	3,000	
		Total	-	-	3,000	-	-	-	3,000	
153	Zone 2 feedermain on Bloor St. from Townline Rd. to Trulls Rd., Courtice	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	-	-	-	-	350	350	
		Total	-	-	-	-	-	350	350	
154	Zone 1 feedermain on Lambs Rd. from Hwy No. 2 (King St.) to Zone 1 Liberty Street Reservoir, Bowmanville	Pre-Construction	-	-	-	-	-	-	-	
		Construction	17,900	27,000	-	-	-	-	27,000	
		Total	17,900	27,000	-	-	-	-	27,000	
155	Zone 1 feedermain on Baseline Rd. from Bowmanville Ave. to Liberty St., Bowmanville	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	2,400	2,400	-	3,000	-	7,800	
		Total	-	2,400	2,400	-	3,000	-	7,800	
156	Zone 1 feedermain from Bowmanville Water Supply Plant to Baseline Rd., Bowmanville	Pre-Construction	-	500	-	500	-	-	1,000	
		Construction	-	-	-	-	-	10,600	10,600	
		Total	-	500	-	500	-	10,600	11,600	



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)


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 <b>Durham Budget</b> <b>2023</b>		Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
				2024	2025	2026	2027	2028-2032	
157	Zone 1 feedermain on Baseline Rd. from Liberty St. to Mearns Ave., Bowmanville	Pre-Construction	-	-	-	520	-	540	1,060
		Construction	-	-	-	-	-	2,500	2,500
		Total	-	-	-	520	-	3,040	3,560
158	Zone 2 feedermain on Liberty St. from Concession Rd. 3 and Concession Rd. 4 to Zone 2 Reservoir, Bowmanville	Pre-Construction	1,200	-	-	-	-	-	-
		Construction	-	-	-	8,300	-	-	8,300
		Total	1,200	-	-	8,300	-	-	8,300
159	Zone 1 feedermain from Arthur Street reservoir to future Zone 1 water storage facility, Newcastle	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	3,200	-	-	-	-	3,200
		Total	-	3,200	-	-	-	-	3,200
160	Zone 1 feedermain on Highway No. 2 (King Ave.) from Rudell Rd. to 200 m west of North St., Newcastle	Pre-Construction	120	-	-	-	-	-	-
		Construction	-	2,120	-	-	-	-	2,120
		Total	120	2,120	-	-	-	-	2,120
161	Zone 2 feedermain on Arthur St. from the Zone 2 pumping station to existing Andrew St. pumping station, Newcastle	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	4,800	-	-	-	-	4,800
		Total	-	4,800	-	-	-	-	4,800
162	Watermain on Grady Dr. from Whitehand Cres. to North St., Newcastle	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	850	-	-	-	-	850
		Total	-	850	-	-	-	-	850
163	Watermain on Concession Rd. 5 to service the westerly portion of the Beaverton Avenue Employment Area A, Brock	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	2,450	-	-	-	-	2,450
		Total	-	2,450	-	-	-	-	2,450
164	Water Meter installation and replacement	Pre-Construction	-	-	-	-	-	-	-
		Construction	3,000	2,814	3,100	4,000	5,000	32,500	47,414
		Total	3,000	2,814	3,100	4,000	5,000	32,500	47,414
165	Depots - Replacement of polybutylene service connections in various locations	Pre-Construction	-	-	-	-	-	-	-
		Construction	50	50	-	-	-	-	50
		Total	50	50	-	-	-	-	50




# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)

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<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>			Forecast					
Expenditure Category		2023 Proposed Budget	2024	2025	2026	2027	2028-2032	Forecast Total
166	Replacement of lead service connection in various locations	Pre-Construction	-	-	-	-	-	-
		Construction	450	1,000	1,000	1,000	1,000	25,000
		Total	450	1,000	1,000	1,000	1,000	25,000
167	Replacement of valves	Pre-Construction	-	-	-	-	-	-
		Construction	400	450	450	500	600	4,400
		Total	400	450	450	500	600	4,400
168	Valve Chamber Condition Assessment and inspections	Pre-Construction	-	-	-	-	-	-
		Construction	450	450	450	450	-	1,350
		Total	450	450	450	450	-	1,350
169	Replacement of hydrants	Pre-Construction	-	-	-	-	-	-
		Construction	200	250	250	300	350	2,500
		Total	200	250	250	300	350	2,500
Linear Infrastructure Subtotal		64,491	134,883	74,439	84,315	59,235	233,521	586,393
Buildings and Structures								
170	Expansion of the Ajax Water Supply Plant from 163.6 MLD to 327 MLD, Ajax	Pre-Construction	-	12,500	-	-	-	12,500
		Construction	-	-	-	-	138,500	-
		Total	-	12,500	-	-	138,500	-
171	Proposed Ajax Zone 1 Water Storage facility - 11 ML, Ajax	Pre-Construction	-	1,200	-	-	-	1,200
		Construction	-	-	-	12,700	-	-
		Total	-	1,200	-	12,700	-	-
172	Expansion of the Whitby Water Supply Plant from 109 MLD to 218 MLD, Whitby	Pre-Construction	-	-	-	-	-	-
		Construction	13,500	15,500	-	218,800	-	-
		Total	13,500	15,500	-	218,800	-	-
173	Whitby Water Supply Plant - Plant 1 Upgrades and Rehabilitation Works proposed works to include but not limited to building envelope improvements, filter treatment process upgrades, rehabilitation works for electrical, mechanical and process systems	Pre-Construction	-	-	-	-	2,500	-
		Construction	-	-	-	-	-	17,300
		Total	-	-	-	-	2,500	17,300




Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)
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 <b>Durham Budget</b> <b>2023</b>		Expenditure Category	2023 Proposed Budget	Forecast					
				2024	2025	2026	2027	2028-2032	Forecast Total
174	Garrard Rd. Zone 1 Reservoir Expansion from 31 ML to 50 ML and Zone 2 pumping station expansion, Whitby	Pre-Construction	-	-	2,000	-	-	-	2,000
		Construction	-	-	-	-	-	17,200	17,200
		Total	-	-	2,000	-	-	17,200	19,200
175	Garrard Rd. Zone 3 Water Pumping Station - upgrades, Whitby	Pre-Construction	-	-	-	-	-	-	-
		Construction	1,740	-	-	-	-	-	-
		Total	1,740	-	-	-	-	-	-
176	Thickson Rd. Zone 3 Water Pumping Station Expansion to 22.7 MLD, Whitby	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	11,800	-	-	-	-	11,800
		Total	-	11,800	-	-	-	-	11,800
177	Proposed Zone 4 Pumping Station at the Thickson Rd. Reservoir, Whitby	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	-	1,000	-	-	-	1,000
		Total	-	-	1,000	-	-	-	1,000
178	Proposed Whitby Zone 4 Storage Facility - 13 ML, Whitby	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	-	35,600	-	-	-	35,600
		Total	-	-	35,600	-	-	-	35,600
179	Proposed Whitby Zone 4 & 5 Pumping Station at Duffs Rd. Reservoir and feedermain, Whitby	Pre-Construction	2,300	-	-	-	-	-	-
		Construction	-	-	-	-	12,000	-	12,000
		Total	2,300	-	-	-	12,000	-	12,000
180	Oshawa Water Supply Plant - break wall modifications	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	1,120	-	-	-	-	1,120
		Total	-	1,120	-	-	-	-	1,120
181	Taunton Rd. Zone 2 Reservoir Expansion from 13 ML to 27 ML, Oshawa	Pre-Construction	-	-	2,000	-	-	-	2,000
		Construction	-	-	-	-	17,000	-	17,000
		Total	-	-	2,000	-	17,000	-	19,000
182	Grandview Zone 2 Pumping Station Expansion, Oshawa	Pre-Construction	-	-	2,000	-	-	-	2,000
		Construction	-	-	-	-	8,000	-	8,000
		Total	-	-	2,000	-	8,000	-	10,000



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)

Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix A for financing details for capital projects proposed in 2023.

<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>			Forecast					
Expenditure Category		2023 Proposed Budget	2024	2025	2026	2027	2028-2032	Forecast Total
183	Taunton Rd. Zone 3 Water Pumping Station Expansion from 27 ML to 75 ML, Oshawa	Pre-Construction	-	1,000	-	4,000	-	5,000
		Construction	-	-	-	-	20,000	20,000
		Total	-	1,000	-	4,000	20,000	25,000
184	Harmony Rd. Zone 3 Reservoir Expansion, Oshawa	Pre-Construction	-	600	-	1,500	-	2,100
		Construction	-	-	-	-	6,000	6,000
		Total	-	600	-	1,500	6,000	8,100
185	Proposed Zone 4 Pumping Station at the Harmony Rd. Reservoir, Oshawa	Pre-Construction	-	-	-	-	-	-
		Construction	-	8,000	-	-	-	8,000
		Total	-	8,000	-	-	-	8,000
186	Proposed Oshawa Zone 4 Water Storage Facility - 16 ML, Oshawa	Pre-Construction	-	-	-	-	-	-
		Construction	-	-	-	44,800	-	44,800
		Total	-	-	-	44,800	-	44,800
187	Proposed Zone 5 Pumping Station at Harmony Rd. Reservoir and feedermain, Oshawa	Pre-Construction	1,000	-	-	-	-	-
		Construction	-	10,200	-	-	-	10,200
		Total	1,000	10,200	-	-	-	10,200
188	Hortop Water Pumping Station - pumping station replacement, Oshawa	Pre-Construction	-	-	-	-	-	-
		Construction	-	10,600	-	-	-	10,600
		Total	-	10,600	-	-	-	10,600
189	Bowmanville Water Supply Plant Expansion from 36 MLD to 55 MLD	Pre-Construction	-	4,000	-	-	-	4,000
		Construction	-	-	-	-	55,000	55,000
		Total	-	4,000	-	-	55,000	59,000
190	Proposed Liberty Street Zone 1 Reservoir 11 ML and demolition of the existing elevated tank	Pre-Construction	-	-	-	-	-	-
		Construction	17,200	-	1,500	-	-	1,500
		Total	17,200	-	1,500	-	-	1,500
191	Proposed Zone 2 Pumping Station at the Zone 1 Reservoir - Bowmanville	Pre-Construction	-	-	-	-	-	-
		Construction	6,300	-	-	-	-	-
		Total	6,300	-	-	-	-	-



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)


Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix A for financing details for capital projects proposed in 2023.

<div><div><div><div>DURHAM REGION</div></div><div><div>Durham Budget</div></div></div><div>2023</div></div>			Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
	2024	2025			2026	2027	2028-2032			
192	Bowmanville Zone 2 reservoir expansion	Pre-Construction	-	600	-	1,325	-	-	1,925	
		Construction	-	-	-	-	-	7,700	7,700	
		Total	-	600	-	1,325	-	7,700	9,625	
193	Newcastle Water Supply Plant - demolition of plant No.1	Pre-Construction	1,000	-	-	-	-	-	-	
		Construction	-	3,400	-	-	-	-	3,400	
		Total	1,000	3,400	-	-	-	-	3,400	
194	Proposed Zone 1 Newcastle Reservoir 11 ML	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	-	16,500	-	-	-	16,500	
		Total	-	-	16,500	-	-	-	16,500	
195	Proposed Zone 2 Newcastle Water Pumping Station	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	-	11,200	-	-	-	11,200	
		Total	-	-	11,200	-	-	-	11,200	
196	Proposed Zone 2 Newcastle Reservoir	Pre-Construction	-	-	-	500	-	1,600	2,100	
		Construction	-	-	-	-	-	6,350	6,350	
		Total	-	-	-	500	-	7,950	8,450	
197	Proposed Zone 1 Orono Storage Facility 1 ML	Pre-Construction	-	-	-	-	-	1,500	1,500	
		Construction	-	-	-	-	-	-	-	
		Total	-	-	-	-	-	1,500	1,500	
198	Scugog Water Supply System - Alternative Water Supply Source	Pre-Construction	2,000	-	-	-	-	-	-	
		Construction	1,000	-	27,900	-	-	-	27,900	
		Total	3,000	-	27,900	-	-	-	27,900	
199	Port Perry Water Storage Facility - additional capacity 2.8 ML and watermain	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	-	16,200	-	-	-	16,200	
		Total	-	-	16,200	-	-	-	16,200	
200	Blackstock Water Supply System - upgrades to Municipal Well No. 7	Pre-Construction	-	-	-	-	-	-	-	
		Construction	350	-	-	-	-	-	-	
		Total	350	-	-	-	-	-	-	



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)


Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix A for financing details for capital projects proposed in 2023.

 <b>Durham</b> <b>Budget</b> <span>2023</span>		Expenditure Category	2023 Proposed Budget	Forecast					
				2024	2025	2026	2027	2028-2032	Forecast Total
201	Greenbank Water Supply System - Replacement of Municipal Well 1 and 6 with rehabilitation work at the pumphouse	Pre-Construction	1,000	-	-	-	-	-	-
		Construction	-	-	-	-	4,000	4,000	
		Total	1,000	-	-	-	4,000	4,000	
202	Uxbridge Water Supply System - New Well and Pumphouse	Pre-Construction	500	-	-	-	-	-	-
		Construction	-	-	4,220	-	-	-	4,220
		Total	500	-	4,220	-	-	-	4,220
203	Uxbridge Water Supply System - Municipal Well No. 7 Replacement	Pre-Construction	500	-	1,000	-	-	-	1,000
		Construction	-	-	-	-	-	5,000	5,000
		Total	500	-	1,000	-	-	5,000	6,000
204	Expansion of Quaker Hill Reservoir from 2.8 ML to 5.2 ML, Uxbridge	Pre-Construction	-	1,200	-	-	-	-	1,200
		Construction	-	-	-	-	6,800	-	6,800
		Total	-	1,200	-	-	6,800	-	8,000
205	Sunderland Water Supply System - New Well and Pumphouse with standby power (DC602)	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	5,000	-	-	-	-	5,000
		Total	-	5,000	-	-	-	-	5,000
206	Sunderland Water Supply System - New Well and Pumphouse with standby power (DC603)	Pre-Construction	-	-	-	-	-	7,000	7,000
		Construction	-	-	-	-	-	-	-
		Total	-	-	-	-	-	7,000	7,000
207	Sunderland Water Supply System - Elevated Water Storage Tank (2.2 ML) and removal of the existing standpipe	Pre-Construction	-	-	-	-	-	1,000	1,000
		Construction	-	-	-	-	-	8,000	8,000
		Total	-	-	-	-	-	9,000	9,000
208	Cannington Water Supply System - New Well and Pumphouse with standby power (DC601)	Pre-Construction	-	-	-	-	1,000	1,500	2,500
		Construction	-	-	-	-	-	6,000	6,000
		Total	-	-	-	-	1,000	7,500	8,500
209	Cannington Water Supply System - Additional Water Storage from 1.4 ML to 3.0 ML	Pre-Construction	-	-	-	-	1,000	1,200	2,200
		Construction	-	-	-	-	-	8,000	8,000
		Total	-	-	-	-	1,000	9,200	10,200



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)


Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix A for financing details for capital projects proposed in 2023.

<div>Durham Budget</div> <div>2023</div>			Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
				2024	2025	2026	2027	2028-2032		
210	Beaverton Water Supply Plant Expansion	Pre-Construction	-	-	-	1,000	-	2,400	3,400	
		Construction	-	-	-	-	-	30,000	30,000	
		Total	-	-	-	1,000	-	32,400	33,400	
211	Beaverton - additional Water Storage from 2 ML to 4.8 ML	Pre-Construction	500	-	1,000	-	-	-	1,000	
		Construction	-	-	-	-	8,000	-	8,000	
		Total	500	-	1,000	-	8,000	-	9,000	
212	Water Tower inspections, condition assessment and rehabilitation works	Pre-Construction	-	100	-	-	100	300	500	
		Construction	-	400	-	-	400	1,200	2,000	
		Total	-	500	-	-	500	1,500	2,500	
213	Reservoir inspections, condition assessment and minor rehabilitation works	Pre-Construction	-	-	-	-	-	-	-	
		Construction	300	-	300	300	300	1,500	2,400	
		Total	300	-	300	300	300	1,500	2,400	
214	Wellhead protection at Regional well sites	Pre-Construction	-	-	-	-	-	-	-	
		Construction	800	800	800	800	800	4,000	7,200	
		Total	800	800	800	800	800	4,000	7,200	
215	Water Supply Plants - Asset Management Remediation and Rehabilitation works	Pre-Construction	-	-	-	-	-	8,000	8,000	
		Construction	-	-	-	-	-	32,500	32,500	
		Total	-	-	-	-	-	40,500	40,500	
216	New Concrete Floor in Sign Shed - Ajax Depot	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	58	-	-	-	-	58	
		Total	-	58	-	-	-	-	58	
217	Replace Fire Panel and Smoke Detector - Ajax WSP	Pre-Construction	142	-	-	-	-	-	-	
		Construction	-	285	-	-	-	-	285	
		Total	142	285	-	-	-	-	285	
218	Roof Replacement - Ajax WSP	Pre-Construction	-	160	-	-	-	-	160	
		Construction	-	-	560	-	-	-	560	
		Total	-	160	560	-	-	-	720	



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)


Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix A for financing details for capital projects proposed in 2023.

<div>Durham Budget</div> <div>2023</div>			Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
			2024	2025	2026	2027	2028-2032			
220	Access Ladder Repair/Replacement Project - Various Locations	Pre-Construction	-	-	-	-	-	-		
		Construction	15	-	-	-	-	-		
		Total	15	-	-	-	-	-		
221	Construction of Mezzanine in Fleet Bay 1 - Orono Depot	Pre-Construction	-	-	-	-	-	-		
		Construction	-	67	-	-	-	67		
		Total	-	67	-	-	-	67		
222	Thermal Glass Panels for Rollup Doors and Door Operators - Orono Depot	Pre-Construction	-	-	-	-	-	-		
		Construction	-	66	-	-	-	66		
		Total	-	66	-	-	-	66		
223	Replacement of Fire System - Oshawa/Whitby Depot	Pre-Construction	-	-	-	-	-	-		
		Construction	67	-	-	-	-	-		
		Total	67	-	-	-	-	-		
225	Repairs and Epoxy Coat Fleet Bay Concrete Floors & Repairs to Floor Drains in Fleet Bays - Scugog Depot	Pre-Construction	-	-	-	-	-	-		
		Construction	-	69	-	-	-	69		
		Total	-	69	-	-	-	69		
226	Replace Existing Asphalt in Various Location - Scugog Depot	Pre-Construction	-	-	10	-	-	10		
		Construction	-	-	-	123	-	123		
		Total	-	-	10	123	-	133		
227	Widening of Existing Canopy Entrance - Sunderland Depot	Pre-Construction	8	-	-	-	-	-		
		Construction	-	42	-	-	-	42		
		Total	8	42	-	-	-	42		



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)


Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix A for financing details for capital projects proposed in 2023.

<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>			Forecast						
Expenditure Category		2023 Proposed Budget	2024	2025	2026	2027	2028-2032	Forecast Total	
228	Paving of Rear Yard and Site Repairs - Orono Depot	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	-	-	-	122	122	122
		Total	-	-	-	-	122	122	122
229	Roof Replacement on Vehicle Storage Bays - Orono Depot	Pre-Construction	27	-	-	-	-	-	-
		Construction	-	173	-	-	-	173	173
		Total	27	173	-	-	-	173	173
230	Front Entrance Automatic Gate - Oshawa WSP	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	175	-	-	-	175	175
		Total	-	175	-	-	-	175	175
231	Metering Chamber Drainage - Oshawa WSP	Pre-Construction	-	-	-	-	-	-	-
		Construction	595	-	-	-	-	-	-
		Total	595	-	-	-	-	-	-
232	Rectification of Drainage Problem near Metering Chamber - Oshawa WSP	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	-	-	-	231	231	231
		Total	-	-	-	-	231	231	231
233	Repairs to Building Envelope - Oshawa WSP	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	135	-	-	-	135	135
		Total	-	135	-	-	-	135	135
234	Replace Floor Access Panels and Sleeves - Oshawa WSP	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	150	-	-	-	150	150
		Total	-	150	-	-	-	150	150
235	RTU's 1 2 3 4 Replacement - Oshawa WSP	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	1,094	-	-	-	1,094	1,094
		Total	-	1,094	-	-	-	1,094	1,094
236	RTU's 1 2 3 4 Replacement - Oshawa WSP	Pre-Construction	457	-	-	-	-	-	-
		Construction	-	-	-	-	-	-	-
		Total	457	-	-	-	-	-	-



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)


Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix A for financing details for capital projects proposed in 2023.

<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>			Forecast					
Expenditure Category		2023 Proposed Budget	2024	2025	2026	2027	2028-2032	Forecast Total
237	Water Damage on Window System - Oshawa WSP	Pre-Construction	-	49	-	-	-	49
		Construction	-	107	-	-	-	107
		Total	-	107	-	-	-	156
238	Front Foyer Concrete Wall/Floor Repair - Bowmanville WSP	Pre-Construction	-	65	-	-	-	65
		Construction	-	-	-	-	-	-
		Total	-	65	-	-	-	65
239	Renovation & Optimization - 101 Consumers	Pre-Construction	-	-	-	-	-	-
		Construction	310	-	-	-	-	-
		Total	310	-	-	-	-	-
240	Depot Rationalization - Ajax Depot Expansion	Pre-Construction	1,667	-	-	-	-	-
		Construction	-	11,667	-	-	-	11,667
		Total	1,667	11,667	-	-	-	11,667
241	Installation of Fencing - Plants North - Blackstock Well #6	Pre-Construction	-	-	-	-	-	-
		Construction	-	65	-	-	-	65
		Total	-	65	-	-	-	65
242	20 Bay Cold Vehicle Storage - Orono Depot Expansion	Pre-Construction	-	-	-	-	73	73
		Construction	-	-	-	-	1,192	1,192
		Total	-	-	-	-	1,265	1,265
243	Salt and Brine Storage Building - Orono Depot Expansion	Pre-Construction	-	-	-	-	117	117
		Construction	-	-	-	-	1,050	1,050
		Total	-	-	-	-	1,167	1,167
244	Depot Rationalization - New Oshawa/Whitby Depot	Pre-Construction	12,667	1,667	-	-	-	1,667
		Construction	-	55,000	-	-	-	55,000
		Total	12,667	56,667	-	-	-	56,667
245	New 16 Bay Cold Vehicle Storage - Scugog Depot Expansion	Pre-Construction	-	-	73	-	-	73
		Construction	-	-	-	993	-	993
		Total	-	-	73	993	-	1,066



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)


Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix A for financing details for capital projects proposed in 2023.

 <b>Durham Budget</b> <span>2023</span>		Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
				2024	2025	2026	2027	2028-2032	
246	New Salt and Brine Storage Facility - Scugog Depot Expansion	Pre-Construction	-	-	-	100	-	-	100
		Construction	-	-	-	-	1,067	-	1,067
		Total	-	-	-	100	1,067	-	1,167
247	Additional Office Space - Scugog Depot	Pre-Construction	-	-	-	93	-	-	93
		Construction	-	-	-	-	407	-	407
		Total	-	-	-	93	407	-	500
248	Depot Rationalization - New Sunderland Depot	Pre-Construction	1,333	1,333	-	-	-	-	1,333
		Construction	-	-	14,000	-	-	-	14,000
		Total	1,333	1,333	14,000	-	-	-	15,333
249	Repairs and Epoxy Coat Fleet Bay Concrete Floors & Repairs to Floor Drains in Fleet Bays - Scugog Depot	Pre-Construction	-	-	-	-	-	-	-
		Construction	16	-	-	-	-	-	-
		Total	16	-	-	-	-	-	-
<b>Buildings and Structures Subtotal</b>			<b>67,294</b>	<b>72,540</b>	<b>224,197</b>	<b>242,814</b>	<b>243,667</b>	<b>257,035</b>	<b>1,040,253</b>
<b>Machinery &amp; Equipment</b>									
250	Ajax Water Supply Plant - Chlorine line replacement	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	750	-	-	-	-	750
		Total	-	750	-	-	-	-	750
251	Ajax Water Supply Plant - pump replacement with variable frequency drive	Pre-Construction	100	-	-	-	-	-	-
		Construction	-	500	-	-	-	-	500
		Total	100	500	-	-	-	-	500
252	Ajax Water Supply Plant - hyochlorite feed and control system upgrades	Pre-Construction	100	-	-	-	-	-	-
		Construction	500	-	-	-	-	-	-
		Total	600	-	-	-	-	-	-
253	Rosebank Rd. Water Pumping Station - Station upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch and Standby power	Pre-Construction	-	-	-	-	-	600	600
		Construction	-	-	-	-	-	2,100	2,100
		Total	-	-	-	-	-	2,700	2,700



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)


Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix A for financing details for capital projects proposed in 2023.

<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>			Expenditure Category		2023 Proposed Budget	Forecast					Forecast Total
						2024	2025	2026	2027	2028-2032	
254	Cherrywood Water Pumping Station upgrades - pumps and feedermain, Pickering	Pre-Construction			250	-	-	-	-	-	-
		Construction			-	1,800	-	-	-	-	1,800
		Total			250	1,800	-	-	-	-	1,800
255	Cherrywood Water Pumping Station - Station upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch and Standby power	Pre-Construction			-	-	-	600	-	-	600
		Construction			-	-	-	-	2,100	-	2,100
		Total			-	-	-	600	2,100	-	2,700
256	Finch Ave. Elevated Water Storage Tank - Recoating	Pre-Construction			-	-	-	-	-	-	-
		Construction			-	65	-	-	-	-	65
		Total			-	65	-	-	-	-	65
257	Whitby Water Supply Plant - Valve Chamber upgrades	Pre-Construction			-	-	-	-	-	-	-
		Construction			-	1,100	-	-	-	-	1,100
		Total			-	1,100	-	-	-	-	1,100
258	Grandview Water Pumping Station - Station upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch, Standby power and Variable-frequency drive (VFD)	Pre-Construction			-	-	-	-	-	-	-
		Construction			-	2,500	-	-	-	-	2,500
		Total			-	2,500	-	-	-	-	2,500
259	Thickson Rd. Water Pumping Station - replacement of the motor control centre (MCC)	Pre-Construction			-	-	-	-	-	-	-
		Construction			-	50	-	-	-	-	50
		Total			-	50	-	-	-	-	50
260	Oshawa Water Supply Plant - Valve Chamber Upgrades	Pre-Construction			-	-	-	-	-	-	-
		Construction			-	-	-	-	-	1,150	1,150
		Total			-	-	-	-	-	1,150	1,150
261	Oshawa Water Supply Plant - Replacement/rehabilitation of the sedimentation tanks, Header & Backwash valves, and piping	Pre-Construction			300	-	-	-	-	-	-
		Construction			-	-	-	-	-	2,900	2,900
		Total			300	-	-	-	-	2,900	2,900



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)


Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix A for financing details for capital projects proposed in 2023.

 <b>Durham Budget</b> <b>2023</b>			Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
					2024	2025	2026	2027	2028-2032	
262	Oshawa Water Supply Plant - Replacement of the Motor Control Centre	Pre-Construction	-	-	-	-	-	-	500	500
		Construction	-	-	-	-	-	-	1,000	1,000
		Total	-	-	-	-	-	-	1,500	1,500
263	Oshawa Water Supply Plant - upgrading the uninterrupted power supply UPS	Pre-Construction	-	-	-	-	-	-	-	-
		Construction	-	-	900	-	-	-	-	900
		Total	-	-	900	-	-	-	-	900
264	Oshawa Water Supply Plant - Rehabilitation of the filters 1 to 6	Pre-Construction	-	-	-	1,200	-	-	-	1,200
		Construction	-	-	-	3,000	-	8,400	11,400	
		Total	-	-	-	4,200	-	8,400	12,600	
265	Waverly Rd. Water Pumping Station - Station upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch and Standby power	Pre-Construction	-	-	-	-	-	-	-	-
		Construction	-	-	2,450	-	-	-	2,450	
		Total	-	-	2,450	-	-	-	2,450	
266	Taunton Rd. Water Pumping Station and Reservoir - station improvements and replacement	Pre-Construction	500	-	-	-	-	-	-	-
		Construction	-	-	2,300	-	-	-	2,300	
		Total	500	-	2,300	-	-	-	2,300	
267	Bowmanville Water Supply Plant - Emergency Backwash piping and Filter bypass piping upgrades	Pre-Construction	-	-	-	-	-	-	-	-
		Construction	-	-	200	-	-	-	200	
		Total	-	-	200	-	-	-	200	
268	Bowmanville Water Supply Plant - Filter Replacement	Pre-Construction	-	-	-	-	-	-	-	-
		Construction	-	-	1,000	-	-	-	1,000	
		Total	-	-	1,000	-	-	-	1,000	
269	Bowmanville Zone 2 Reservoir - standby power with transfer switch	Pre-Construction	-	-	-	-	-	-	-	-
		Construction	-	750	-	-	-	-	750	
		Total	-	750	-	-	-	-	750	
270	Bowmanville Water Supply Plant - header and pump replacement with associated piping rehabilitation/replacement	Pre-Construction	-	-	-	-	-	-	-	-
		Construction	-	-	1,500	-	-	-	1,500	
		Total	-	-	1,500	-	-	-	1,500	



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)


Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix A for financing details for capital projects proposed in 2023.

 <b>Durham Budget</b> <b>2023</b>			Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
			2024	2025	2026	2027	2028-2032			
271	Bowmanville Water Supply Plant - Chlorine line replacement	Pre-Construction	-	-	-	-	-	200	200	
		Construction	-	-	-	-	-	1,400	1,400	
		Total	-	-	-	-	-	1,600	1,600	
272	Newcastle Water Supply Plant - Chlorine line replacement	Pre-Construction	-	-	-	-	-	200	200	
		Construction	-	-	-	-	-	1,400	1,400	
		Total	-	-	-	-	-	1,600	1,600	
273	Newtonville Water Pumping Station - Station upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch and Standby power	Pre-Construction	-	-	-	-	-	600	600	
		Construction	-	-	-	-	-	2,000	2,000	
		Total	-	-	-	-	-	2,600	2,600	
274	Orono Water Supply System - upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch, Standby power and uninterrupted power supply UPS	Pre-Construction	-	-	-	-	-	700	700	
		Construction	-	-	-	-	-	2,200	2,200	
		Total	-	-	-	-	-	2,900	2,900	
275	Mill St. Water Pumping Station - Station upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch and Standby power	Pre-Construction	-	600	-	-	-	-	600	
		Construction	-	-	-	-	-	2,000	2,000	
		Total	-	600	-	-	-	2,000	2,600	
276	Sunderland Standpipe Water Storage Tank - Recoating	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	-	800	-	-	-	800	
		Total	-	-	800	-	-	-	800	
277	Beaverton Water Supply Plant - upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch, Standby power, uninterrupted power supply (UPS) and Ultraviolet disinfection system	Pre-Construction	250	-	-	-	-	-	-	
		Construction	-	-	-	-	2,600	-	2,600	
		Total	250	-	-	-	2,600	-	2,600	



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)


Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix A for financing details for capital projects proposed in 2023.

<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>			Expenditure Category		2023 Proposed Budget	Forecast					Forecast Total
278	Beaverton Water Supply Plant - Chlorine Solution line replacement	Pre-Construction	-	-	-	-	-	-	-	-	-
		Construction	-	-	1,000	-	-	-	-	-	1,000
		Total	-	-	1,000	-	-	-	-	-	1,000
279	Beaverton Water Supply Plant - Filter modifications	Pre-Construction	-	-	-	-	-	-	2,000	-	2,000
		Construction	-	-	-	-	-	-	5,000	-	5,000
		Total	-	-	-	-	-	-	7,000	-	7,000
280	Automatic Bulk Water Dispensing System - Various	Pre-Construction	-	-	-	-	-	-	-	-	-
		Construction	-	-	-	2,000	3,700	-	4,100	-	9,800
		Total	-	-	-	2,000	3,700	-	4,100	-	9,800
281	Emergency Generator Fuel Tank Compliance upgrades Phase 3 and Phase 4	Pre-Construction	-	-	-	-	-	-	-	-	-
		Construction	400	-	-	-	-	-	-	-	-
		Total	400	-	-	-	-	-	-	-	-
282	Replace Uninterrupted Power Supply (UPS) Batteries - Ajax WSP		50	-	-	-	-	-	-	-	-
283	Sulphuric Acid Pump Replacement - Ajax WSP		240	-	-	-	-	-	-	-	-
284	Sump Pump Systems - Ajax WSP		123	230	-	-	-	-	-	-	230
287	Integrated Control Technology - Security Project - Various Locations		307	-	-	-	-	-	-	-	-
288	48" Round Shoring - Sunderland Depot		-	3	-	-	-	-	3	-	6
290	Pipe Locator - Sunderland Depot		-	3	-	-	-	-	3	-	6
291	Pressure Washer - Sunderland Depot		-	3	3	-	-	-	-	-	6
292	Snow Fence Replacement - Sunderland Depot		-	-	-	-	-	-	6	-	6



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)

Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix A for financing details for capital projects proposed in 2023.

<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>		Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
2024	2025	2026	2027	2028-2032					
293	Temporary Traffic Control Sign replacement - Sunderland Depot		-	2	2	-	2	4	10
294	Trench box replacement - Sunderland Depot		-	-	-	-	-	5	5
295	Chlorine Analyzers - Plants East		-	-	-	30	-	30	60
296	Lab/Process Equipment - Plants East		-	-	11	-	-	-	11
297	Pump / Motor / Mixer Repair / Replacement - Plants East		80	50	50	-	-	-	100
298	Regulatory Instrumentation Replacement and Maintenance - Various Locations		30	95	145	40	120	125	525
299	SCADA / Communications / UPS - Plants East		-	25	-	-	-	-	25
300	SCADA Services - Maintenance - Plants East		-	305	175	190	205	705	1,580
301	Asphalt Content Ignition Furnace - Construction		-	-	-	-	-	7	7
302	Bar Pullout Tester - Construction		4	-	-	-	-	-	-
303	Bench Oven - Construction		5	-	-	-	-	-	-
304	Concrete End Grinder - Construction		8	-	-	-	-	-	-
305	Concrete Testing Equipment - Construction		-	-	-	-	-	8	8
306	Electronic Scale - Construction		-	-	-	-	-	3	3



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)

Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix A for financing details for capital projects proposed in 2023.

 <b>Durham</b> <b>Budget</b>				Forecast					
		Expenditure Category	2023 Proposed Budget	2024	2025	2026	2027	2028-2032	Forecast Total
307	Gyratory Compactor/Molds/Equipment - Construction		22	-	-	-	-	-	-
308	Lab Oven - Construction		-	-	-	-	-	4	4
309	Nuclear Densometer - Construction		3	-	5	-	-	-	5
310	Survey GPS Instrument - Construction		-	10	10	10	10	52	92
311	Survey Total Station Replacement - Construction		-	-	-	-	-	39	39
312	SCADA / Electrical / Communications / UPS - Plants North		-	30	-	-	-	-	30
313	Chlorine Analyzers - Plants Central		30	30	30	30	29	60	179
314	UPS Battery Replacements and Testing - Plants Central		40	-	-	-	-	-	-
315	Motor Control Centre - Plants Central - Harwood		-	250	-	-	-	-	250
316	SCADA Spare Parts/Lab Work Area - Oshawa WSP		-	11	13	-	-	-	24
317	WSP Post Chlorinator Replacement - Oshawa WSP		25	-	-	-	-	-	-
318	Replace Weigh Scale - Various Locations		35	-	-	-	-	-	-
319	Tank Liners - Whitby WSP		30	-	-	-	-	-	-
320	Flow Meter Replacements - WSP Pumping Stations		80	-	-	-	-	-	-



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)


Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix A for financing details for capital projects proposed in 2023.

<div><div><div><div></div><div>DURHAM REGION</div></div><div><div>Durham</div><div>Budget</div></div></div><div>2023</div></div>			Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
			2024	2025	2026	2027	2028-2032			
321	Install Isolation Valve - Taunton Rd. Pumping Station	50	-	-	-	-	-	-		
322	Teleloggers - Environmental Services Design	-	5	5	5	5	20	40		
323	Integrated Control Technology - Security Project - Various Locations	3	-	-	-	-	-	-		
Machinery and Equipment Subtotal		3,565	9,167	10,599	7,105	8,771	39,524	75,166		
Information Technology										
324	Replacement of wireless WAN frequency Replacement	-	3,000	-	-	-	-	3,000		
325	Supervisory Control and Data Acquisition (SCADA) Plant North Improvements	-	-	-	5,500	-	-	5,500		
326	Supervisory Control and Data Acquisition (SCADA) Plant South Improvements	-	5,800	-	-	-	-	5,800		
327	Supervisory Control and Data Acquisition (SCADA) Plant East Improvements	-	-	2,800	-	-	-	2,800		
328	Fuel Management System & Infrastructure Replacement - Various Locations	-	-	216	-	-	-	216		
329	Standard Laptop	-	2	-	-	-	-	2		
330	PLC & Computer Scada Upgrades - Ajax WSP	-	100	-	-	-	-	100		
331	Water SCADA - Hardware, Software and Communications - Various Locations	-	935	161	100	273	272	1,741		
332	GIS Hardware (Monitors, backup devices and other) - Data System Management	5	-	-	-	-	-	-		
333	Power Laptop	15	22	2	6	6	7	43		



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)

Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix A for financing details for capital projects proposed in 2023.

<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>			Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
2024	2025	2026	2027	2028-2032						
334	Computers & Monitors Refresh - Financial Services	149	228	175	272	225	1,004	1,904		
335	Scanner and Wide Format Black & White Printer - Construction	-	-	-	22	-	-	22		
336	SCADA Computers - Plants Central	-	10	-	-	-	-	10		
337	SCADA Workstation - Plants Central	-	20	10	-	-	-	30		
338	Power Laptop (with Monitor)	5	7	-	-	-	-	7		
339	Tablet - Environmental Services Design	-	4	3	4	4	20	35		
340	Tablet	6	-	-	-	-	-	-		
341	Standard Laptop	1	-	-	-	-	-	-		
342	Power Laptop	1	-	-	-	-	-	-		
Information Technology Subtotal		182	10,128	3,367	5,904	508	1,303	21,210		



Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)


Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix A for financing details for capital projects proposed in 2023.

<div><div><div><div><div><div></div></div></div><div><div><div></div></div></div><div><div><div></div></div></div></div><div><div><div></div></div></div><div><div><div></div></div></div></div><div>Durham Budget</div></div> <div>2023</div>	Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
Vehicles			2024	2025	2026	2027	2028-2032	
343	1/2 Ton Pick-up Truck - Various Locations	-	134	28	28	56	84	330
344	1 Ton High Roof Van - Ajax Depot	-	42	-	-	-	-	42
345	Forklift - Various Locations	-	25	-	-	-	-	25
346	Tractor - Ajax Depot	-	100	-	-	-	-	100
347	Rubber tire roller compaction unit - Orono Depot	-	20	-	-	-	-	20
348	Asphalt Grinder Attachement (Skid Steer Loader) - Oshawa/Whitby Depot	-	-	-	8	-	-	8
349	Hybrid PHEV SUV - Oshawa/Whitby Depot	850	-	-	-	-	-	-
350	Hybrid Van - Oshawa/Whitby Depot	-	17	-	-	-	-	17
351	Sidewalk Plow/Snowblower - Oshawa/Whitby Depot	-	-	-	-	-	50	50
352	Snow Blower for skid steer loader - Oshawa/Whitby Depot	-	10	-	-	-	-	10
353	Street Flusher - Oshawa/Whitby Depot	-	-	-	117	-	-	117
354	Street Sweeper attachment for Roadside Mower/Tractor - Oshawa/Whitby Depot	-	8	-	-	-	-	8
355	Tandem Axle Truck - Oshawa/Whitby Depot	-	-	-	-	-	83	83
356	Vactor 2100 - Oshawa/Whitby Depot	395	-	-	-	-	-	-



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)


Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix A for financing details for capital projects proposed in 2023.

 <b>Durham Budget</b> <span>2023</span>		Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
				2024	2025	2026	2027	2028-2032	
357	3/4 Ton Pick Up - Scugog Depot		-	28	-	-	-	-	28
358	Backhoe with Breaker Attachment - Sunderland Depot		-	125	-	-	-	-	125
<b>Vehicles Subtotal</b>			<b>1,245</b>	<b>509</b>	<b>28</b>	<b>153</b>	<b>56</b>	<b>217</b>	<b>963</b>
<b>Furniture and Fixtures</b>									
359	Office Furniture - Various Locations		-	8	7	1	-	-	16
360	Parts Cabinets - Ajax Depot		-	16	-	-	-	-	16
361	Heavy Duty Steel Racking for Materials Storage Building - Orono Depot		-	65	-	-	-	-	65
362	Parts Cabinets - Oshawa/Whitby Depot		-	108	-	-	-	-	108
363	Office Chairs - Financial Services		-	1	1	1	1	4	8
364	A/V Equipment and Technology Upgrades - Various Locations		10	10	10	10	10	20	60
<b>Furniture and Fixtures Subtotal</b>			<b>10</b>	<b>208</b>	<b>18</b>	<b>12</b>	<b>11</b>	<b>24</b>	<b>273</b>



# Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)

Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix A for financing details for capital projects proposed in 2023.

<div>  </div>		Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
Allowances & Other Provisions				2024	2025	2026	2027	2028-2032	
365	Regional Water Supply Master Planning Study for the Regional Official Plan Review		250	-	-	-	-	800	800
366	Emergency Planning Updating Requirements		-	100	-	-	-	-	100
367	Asset Condition Assessments - Reports for Vertical Assets		100	-	290	100	300	1,396	2,086
368	Asset Condition Assessment/ investigation for transmission pipes		182	67	245	221	227	1,020	1,780
369	Master planning energy management		-	200	-	-	200	200	600
370	Allowance for acquisition of easements		100	100	100	100	100	500	900
371	Allowance for engineering studies		150	150	300	150	300	1,050	1,950
372	Climate Change Strategy Allowance		-	150	-	-	-	-	150
373	Allowance for Vulnerability Assessments for Water Supply Plants		-	350	-	350	-	-	700
374	Allowance for CTC Source Water Protection Plan related to the Lake Ontario Collaborative		-	500	300	400	1,500	2,200	4,900
375	Preliminary engineering		100	100	100	100	100	500	900
376	Allowance for sundry extensions as per Council policy - Various		15	15	15	15	15	75	135
377	Allowance for unknown requirements		100	100	100	100	100	500	900
378	Allowance for land severance review and drawing requirements		100	100	100	100	100	500	900



Appendix B: 2023-2032 Water Supply System Capital Forecast (\$,000's)

Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix A for financing details for capital projects proposed in 2023.

<div><div><div><div><div></div><div>DURHAM REGION</div></div><div>Durham Budget</div><div>2023</div></div></div></div>		Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
				2024	2025	2026	2027	2028-2032	
379	Allowance for Regional share for works in conjunction with residential subdivision development		2,000	2,000	2,000	2,000	2,000	10,000	18,000
380	Allowance for Regional share for works in conjunction with non-residential development		500	500	500	500	500	2,500	4,500
381	Well interference works		400	400	400	400	1,000	5,000	7,200
Allowances & Other Provisions Subtotal			3,997	4,832	4,450	4,536	6,442	26,241	46,501
Water Supply System Subtotal			140,784	232,267	317,098	344,839	318,690	557,865	1,770,759
Total Water Supply System			140,784	232,267	317,098	344,839	318,690	557,865	1,770,759

\* Rows and columns may not add due to rounding

\*\* Pre-construction capital financing includes expenditures for land purchases, utility relocates, preliminary studies, design, etc.

\*\*\* Projects with regularly recurring expenditures include allowances, machinery and equipment, information technology, vehicles and furniture and fixtures, etc. do not include separate pre-construction and contruction capital financing

\*\*\*\* Appendix B includes financing of the following development charge shortfalls as follows:

	2023	2024	2025	2026	2027	2028 - 2032	Grand Total
DC Shortfall							
Residential DC Shortfall	-	23,652	56,018	152,739	67,608	86,065	386,082
Commercial DC Shortfall	-	-	-	6,000	-	-	6,000
Institutional DC Shortfall	130	186	250	898	176	418	2,058
Industrial DC Shortfall	11,327	8,636	13,802	65,173	2,998	18,365	120,301
Total DC Shortfall	11,457	32,474	70,070	224,810	70,782	104,848	514,441



Appendix C: 2023 Sanitary Sewerage System Capital Projects (\$,000's)

Provides financing details for capital projects proposed in 2023. See Appendix D for the comprehensive 2023 capital budget and 2024-2032 forecast

<div><div><div><div><div></div><div>DURHAM REGION</div></div><div>Durham Budget</div></div><div>2023</div></div></div>		Quantity	New / Replacement	2023 Proposed Financing									2023 Proposed Budget	Proposed Funding Prior to 2023	Forecast 2024-2032	Total Project to 2032
		Other	Reserve/ Reserve Funds	Industrial DCs	Institutional DCs	Commercial DCs	Residential DCs	Subsidy /Grant	Debenture	User Rate						
Sanitary Sewer																
Linear Infrastructure																
1	R.R. 2A (Centre St). from King St. to Brock St. West, Oshawa	-	-	-	-	-	-	-	-	-	400	400	1,485	-	1,885	
3	R.R. 16 ( Ritson Rd.) from Taunton Rd. to Conlin Rd., Oshawa	-	-	-	-	-	-	-	-	-	225	225	200	1,450	1,875	
16	City of Oshawa Road Program	-	-	-	-	-	-	-	-	-	570	570	-	9,900	10,470	
17	Municipality of Clarington Road Program	-	-	-	-	-	-	-	-	-	275	275	25	2,700	3,000	
18	Township of Scugog Road Program	-	-	-	-	-	-	-	-	-	200	200	-	675	875	
19	Township of Uxbridge Road Program	-	-	-	-	-	-	-	-	-	225	225	-	3,060	3,285	
21	Allowance for unknown sanitary sewerage requirements in conjunction with area municipality road programs in various locations	-	-	-	-	-	-	-	-	-	200	200	-	1,800	2,000	
24	Sanitary sewerage works to rectify identified system deficiencies independent of road programs in various locations	-	-	-	-	-	-	-	-	-	400	400	-	5,850	6,250	
25	Rehabilitation of existing sanitary sewers in various locations	-	-	-	457	-	-	-	-	-	-	457	-	7,828	8,285	
27	Trunk Sanitary Sewer Rehabilitation from Lord Elgin Park to Kingston Rd. (Highway No. 2), Ajax	-	-	-	-	-	-	-	-	-	250	250	-	11,000	11,250	



Appendix C: 2023 Sanitary Sewerage System Capital Projects (\$,000's)

Provides financing details for capital projects proposed in 2023. See Appendix D for the comprehensive 2023 capital budget and 2024-2032 forecast

<div><div><div><div><div></div><div>DURHAM REGION</div></div><div>Durham Budget</div><div>2023</div></div></div></div>		Quantity	New / Replacement	2023 Proposed Financing									2023 Proposed Budget	Proposed Funding Prior to 2023	Forecast 2024-2032	Total Project to 2032
28	Replacement of the trunk sanitary sewer from Harwood Ave. South and Edward St. through Lord Elgin Park to the intersection of Chadwick Dr. and Adams Dr., Ajax	-	-	-	1,600	-	-	-	-	-	-	-	1,600	1,705	-	3,305
29	Replacement of sanitary sewer between Birch Court and Glynn Rd., Ajax	-	-	-	-	-	-	-	-	-	-	150	150	-	500	650
30	Replacement of the sanitary sewer on High St. from Mary St. to Walnut St., Whitby	-	-	-	-	-	-	-	-	-	-	175	175	460	-	635
31	Replacement of sanitary sewer on Donovan Cres. from Walton Blvd. to 30 m east of Walton Blvd., Whitby	-	-	-	-	-	-	-	-	-	-	215	215	-	430	645
38	Replacement of sanitary sewer on Olive Ave from Simcoe St. to Drew St., Oshawa	-	-	-	-	-	-	-	-	-	-	260	260	1,605	-	1,865
41	Replacement of sanitary sewer on Conant St. from Myers Rd. to Nelson St., Oshawa	-	-	-	150	-	-	-	-	-	-	-	150	-	390	540
44	Replacement of sanitary sewer on Simcoe St. from Metcalf St. to Quebec St., Oshawa	-	-	-	150	-	-	-	-	-	-	-	150	925	-	1,075
46	Replacement of sanitary sewer on Mary St. from Rossland Rd. to Robert St., Oshawa	-	-	-	2,150	-	-	-	-	-	-	-	2,150	-	-	2,150
47	Replacement of forcemain on Wilmot Creek easement from Cobblelick Rd. to Toronto St., Newcastle	-	-	-	1,300	-	-	-	-	-	-	-	1,300	1,406	-	2,706
48	Replacement of sanitary sewer on First Ave. from Brock St. to Dominion St., Uxbridge	-	-	-	150	-	-	-	-	-	-	-	150	100	330	580
49	Evaluation of trunk sanitary sewers/gravity sewers at creek crossings	-	-	-	-	-	-	-	-	-	-	75	75	75	225	375
52	Sanitary Sewer on Meadow St. from Avalon St. to Manor Dr., Oshawa	-	-	-	-	-	-	-	-	-	-	100	100	-	260	360



Appendix C: 2023 Sanitary Sewerage System Capital Projects (\$,000's)

Provides financing details for capital projects proposed in 2023. See Appendix D for the comprehensive 2023 capital budget and 2024-2032 forecast

<div><div><div><div><div></div><div>DURHAM REGION</div></div><div>Durham Budget</div><div>2023</div></div></div></div>	Quantity	New / Replacement	2023 Proposed Financing									2023 Proposed Budget	Proposed Funding Prior to 2023	Forecast 2024-2032	Total Project to 2032
			Other	Reserve/ Reserve Funds	Industrial DCs	Institutional DCs	Commercial DCs	Residential DCs	Subsidy /Grant	Debenture	User Rate				
57	Trunk Sanitary Sewer on Kingston Rd. (Highway No. 2) from east of Harwood Ave. to east of Galea Dr., Ajax	-	-	-	-	-	522	8,376	-	-	2,452	11,350	350	-	11,700
59	Thickson Rd. Sub-Trunk sanitary sewer from Glengowan St. to Conlin Rd., Whitby (Region's share only)	-	-	-	-	-	126	2,021	-	-	591	2,738	762	-	3,500
62	West Brooklin Trunk Sanitary Sewer from west of Cochrane St. to east of Highway No. 12, Whitby (Region's share only)	-	-	-	-	-	184	2,952	-	-	864	4,000	9,945	6,600	20,545
70	Sanitary Sewer on Thornton Rd. from Conlin Rd. within the Northwood Employment Area, Oshawa	-	-	-	-	-	74	1,181	-	-	346	1,601	2,450	-	4,051
74	Twinning of northwest branch of Harmony Creek Sub-Trunk Sanitary Sewer from Central Park Blvd. N. & Hillcroft St. to Beatrice St., Oshawa	-	-	-	-	-	-	-	-	-	150	150	-	2,520	2,670
81	Courtice Trunk Sanitary Sewer - Trulls Rd. from Bloor St. to future Adelaide Ave., Courtice	-	-	-	-	-	138	2,214	-	-	648	3,000	-	52,700	55,700
82	Courtice Trunk Sanitary Sewer - Adelaide Ave. from Trulls Rd. to Townline Rd., Courtice	-	-	-	-	1,874	405	6,494	-	-	26	8,799	-	53,400	62,199
85	Southeast Courtice Sub-Trunk Sanitary Sewer on future mid-block road from Trulls Rd. to Courtice Rd. & Courtice Rd. from mid-block to Bloor St., Courtice	-	-	-	-	-	244	3,911	-	-	1,145	5,300	-	-	5,300
Linear Infrastructure Subtotal			-	5,957	1,874	-	1,693	27,149	-	-	9,942	46,615	21,493	161,618	229,726



Appendix C: 2023 Sanitary Sewerage System Capital Projects (\$,000's)

Provides financing details for capital projects proposed in 2023. See Appendix D for the comprehensive 2023 capital budget and 2024-2032 forecast

<div><div><div><div><div></div><div>DURHAM REGION</div></div><div>Durham Budget</div></div></div><div>2023</div></div>		Quantity	New / Replacement	2023 Proposed Financing								2023 Proposed Budget	Proposed Funding Prior to 2023	Forecast 2024-2032	Total Project to 2032	
Building and Structures																
101	Harmony Creek Sanitary Sewage Pumping Station - expansion and forcemain twinning, Oshawa	-		-	-	-	-	28	443	-	-	130	601	-	48,100	48,701
102	Expansion of the Conlin Rd. Sanitary Sewage Pumping Station and twinning of the forcemain, Oshawa	-		-	-	-	-	115	1,845	-	-	540	2,500	2,802	70,700	76,002
106	Expansion of Courtice Water Pollution Control Plant from 68 MLD to 136 MLD	-		-	-	-	-	26	168	-	-	806	1,000	-	153,400	154,400
109	Newcastle Water Pollution Control Plant - Capacity Re-rating from 4 MLD to 7 MLD	-		-	-	-	-	300	1,913	-	-	1,416	3,629	19,154	-	22,783
115	Sunderland Water Pollution Control Plant - Lagoon System, Brock	-		-	-	-	-	83	527	-	-	1,390	2,000	1,000	11,000	14,000
116	River St. Sanitary Sewage Pumping Station expansion, Brock	-		-	-	-	-	50	316	-	-	834	1,200	-	4,600	5,800
117	Cannington Water Pollution Control Plant - Lagoon System, Brock	-		-	-	-	-	83	527	-	-	1,390	2,000	1,074	11,500	14,574
118	Laidlaw St. Sanitary Sewage Pumping Station expansion, Brock	-		-	-	-	-	42	264	-	-	695	1,001	-	5,200	6,201
125	Depot Rationalization - Ajax Depot Expansion	-	New	-	-	-	-	-	-	-	1,667	-	1,667	-	-	1,667
126	Building J Roof Replacement - Corbett Creek WPCP	-	Replacement	-	-	-	-	-	-	-	-	82	82	-	-	82
128	Access Ladder Repair/Replacement Project - Various Locations	-	Replacement	-	-	-	-	-	-	-	-	641	641	-	-	641
129	Replacement Fire System - Vesda - Duffin Creek WPCP	-	Replacement	623	-	-	-	-	-	-	-	177	800	-	-	800



Appendix C: 2023 Sanitary Sewerage System Capital Projects (\$,000's)


Provides financing details for capital projects proposed in 2023. See Appendix D for the comprehensive 2023 capital budget and 2024-2032 forecast

<div><div><div><div><div></div><div>DURHAM REGION</div></div><div>Durham Budget</div><div>2023</div></div></div></div>		Quantity	New / Replacement	2023 Proposed Financing								2023 Proposed Budget	Proposed Funding Prior to 2023	Forecast 2024-2032	Total Project to 2032	
				Other	Reserve/ Reserve Funds	Industrial DCs	Institutional DCs	Commercial DCs	Residential DCs	Subsidy /Grant	Debenture	User Rate				
130	New Furniture in Office and Lab - Expansion - Environmental Lab	-	Replacement	11	-	-	-	-	-	-	-	11	22	-	-	22
136	Roof Replacement on Vehicle Storage Bays - Orono Depot	-	Replacement	-	-	-	-	-	-	-	-	27	27	-	-	27
139	Replacement of Fire System - Oshawa/Whitby Depot	-	Replacement	-	-	-	-	-	-	-	-	67	67	-	-	67
141	Depot Rationalization - New Oshawa/Whitby Depot	-	New	-	-	-	-	-	-	-	12,667	-	12,667	-	-	12,667
143	Repairs and Epoxy Coat Fleet Bay Concrete Floors & Repairs to Floor Drains in Fleet Bays - Scugog Depot	-	Replacement	-	-	-	-	-	-	-	-	7	7	-	-	7
148	Widening of Existing Canopy Entrance - Sunderland Depot	-	Replacement	-	-	-	-	-	-	-	-	8	8	-	-	8
149	Install Perimeter Fence - Pumping Stations Central - Cochrane St. SPS	-	Replacement	-	-	-	-	-	-	-	-	50	50	-	-	50
150	Renovation & Optimization - 101 Consumers	-	Replacement	-	442	-	-	-	-	-	-	-	442	-	-	442
151	Access Ladder Repair/Replacement Project - Duffin Creek WPCP	-	Replacement	454	-	-	-	-	-	-	-	128	582	-	-	582
152	Depot Rationalization - New Sunderland Depot	-	New	-	-	-	-	-	-	-	1,333	-	1,333	-	-	1,333
Buildings & Structures Subtotal				1,088	442	-	-	727	6,003	-	15,667	8,399	32,325	24,030	304,500	360,856



Appendix C: 2023 Sanitary Sewerage System Capital Projects (\$,000's)

Provides financing details for capital projects proposed in 2023. See Appendix D for the comprehensive 2023 capital budget and 2024-2032 forecast

 <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div>		Quantity	New / Replacement	2023 Proposed Financing								2023 Proposed Budget	Proposed Funding Prior to 2023	Forecast 2024-2032	Total Project to 2032	
Machinery & Equipment				Other	Reserve/ Reserve Funds	Industrial DCs	Institutional DCs	Commercial DCs	Residential DCs	Subsidy /Grant	Debenture	User Rate				
	Central Duffin Creek Metering Building at 153 Valleyfarm Road and Finch Avenue meter replacement, Pickering	-		-	-	-	-	-	-	-	-	100	100	-	560	660
	Duffin Creek Water Pollution Control Plant - 154 Digester mixing improvements and Motor Control Centre Replacement, Pickering	-		15,830	-	-	-	-	-	-	-	5,620	21,450	19,400	23,850	64,700
	Duffin Creek Water Pollution Control Plant - 156 Remedial works and improvements in various locations throughout the plant	-		22,000	-	-	-	-	-	-	-	5,500	27,500	16,500	-	44,000
	Duffin Creek Water Pollution Control Plant - 157 Ammonia-based aeration control (ABAC) for Stage 1, 2 and 3	-		800	200	-	-	-	-	-	-	-	1,000	-	5,000	6,000
	Michael Blvd. Sanitary Sewerage Pumping Station - replacement of the Motor Control Centre (MCC) and pump, Whitby	-		-	200	-	-	-	-	-	-	-	200	400	2,000	2,600
	Hanover Sanitary Sewage Pumping Station - 165 the replacement of pumps and forcemain, Whitby	-		-	100	-	-	-	-	-	-	-	100	700	-	800
	167 Simcoe St. Sanitary Sewerage Pumping Station - Chemical Pump addition, Oshawa	-		-	-	-	-	-	-	-	-	250	250	-	575	825
	173 Lake Simcoe Water Pollution Control Plant - Diffused Air System replacement and associated system upgrades	-		-	3,750	-	-	-	-	-	-	3,300	7,050	8,150	-	15,200
	174 Lake Simcoe Water Pollution Control Plant - Replacement of Clarifier mechanisms	-		-	100	-	-	-	-	-	-	-	100	420	-	520
	176 Lake Simcoe Water Pollution Control Plant and associated sanitary sewerage pumping stations - PLC and SCADA system upgrades	-		-	500	-	-	-	-	-	-	-	500	600	6,000	7,100



Appendix C: 2023 Sanitary Sewerage System Capital Projects (\$,000's)

Provides financing details for capital projects proposed in 2023. See Appendix D for the comprehensive 2023 capital budget and 2024-2032 forecast

<div><div><div><div><div></div><div>DURHAM REGION</div></div><div>Durham Budget</div><div>2023</div></div></div></div>		Quantity	New / Replacement	2023 Proposed Financing								2023 Proposed Budget	Proposed Funding Prior to 2023	Forecast 2024-2032	Total Project to 2032	
				Other	Reserve/ Reserve Funds	Industrial DCs	Institutional DCs	Commercial DCs	Residential DCs	Subsidy /Grant	Debenture	User Rate				
179	Emergency Generator Fuel Tank Compliance upgrades Phase 3 and 5	-		-	-	-	-	-	-	-	-	1,700	1,700	3,364	-	5,064
181	Bar Pullout Tester - Construction	1	New	-	-	-	-	-	-	-	-	4	4	-	-	4
182	Bench Oven - Construction	1	New	-	-	-	-	-	-	-	-	5	5	-	-	5
183	Concrete End Grinder - Construction	1	New	-	-	-	-	-	-	-	-	8	8	-	-	8
186	Gyratory Compactor/Molds/Equipment - Construction	1	New	-	-	-	-	-	-	-	-	22	22	-	-	22
188	Nuclear Densometer - Construction	1	Replacement	-	-	-	-	-	-	-	-	3	3	-	-	3
195	Chemical Pump Replacement - Various Locations	2	Replacement	-	-	-	-	-	-	-	-	18	18	-	-	18
199	Grit Blower Rebuild - Courtice WPCP	1	Replacement	-	-	-	-	-	-	-	-	10	10	-	-	10
203	Analytical Balance Bench Scale - Duffin Creek WPCP	1	New	12	-	-	-	-	-	-	-	3	15	-	-	15
204	Auto Sampler Replacement - Duffin Creek WPCP	1	Replacement	20	-	-	-	-	-	-	-	5	25	-	-	25
206	BAS Server Replacement - Duffin Creek WPCP	1	Replacement	58	-	-	-	-	-	-	-	17	75	-	-	75
211	Chain and Flyght Replacement - Stage 3 Secondary Clarifier - Duffin Creek WPCP	1	Replacement	81	-	-	-	-	-	-	-	19	100	-	-	100
215	Dock Leveler Replacement - Duffin Creek WPCP	1	Replacement	23	-	-	-	-	-	-	-	7	30	-	-	30



Appendix C: 2023 Sanitary Sewerage System Capital Projects (\$,000's)

Provides financing details for capital projects proposed in 2023. See Appendix D for the comprehensive 2023 capital budget and 2024-2032 forecast

<div><div><div><div><div></div><div>DURHAM REGION</div></div><div><div>Durham</div><div>Budget</div></div></div><div>2023</div></div></div>		Quantity	New / Replacement	2023 Proposed Financing									2023 Proposed Budget	Proposed Funding Prior to 2023	Forecast 2024-2032	Total Project to 2032
217	DR3900 Spectrophotometer - Duffin Creek WPCP	1	New	12	-	-	-	-	-	-	-	3	15	-	-	15
224	Integrated Control Technology - Security Project - Various Locations	6	New	-	-	-	-	-	-	-	-	311	311	-	-	311
230	Polymer Building PRAP Network Upgrades - Duffin Creek WPCP	1	Replacement	31	-	-	-	-	-	-	-	9	40	-	-	40
251	Secondary Clarifier (Circular) Gearbox - Duffin Creek WPCP	2	Replacement	195	-	-	-	-	-	-	-	45	240	-	-	240
263	Biochemical Oxygen Demand (BOD) Incubators - Environmental Lab	2	Replacement	20	-	-	-	-	-	-	-	20	40	-	-	40
264	Biological Oxygen Demand Analyzer - Environmental Lab	1	Replacement	6	-	-	-	-	-	-	-	5	11	-	-	11
267	Centrifuge (Inorganics) - Environmental Lab	1	Replacement	6	-	-	-	-	-	-	-	6	12	-	-	12
269	Digestion Block with Controllers - Environmental Lab	4	Replacement	40	-	-	-	-	-	-	-	40	80	-	-	80
270	Dishwasher - Environmental Lab	1	Replacement	5	-	-	-	-	-	-	-	5	10	-	-	10
274	Gas Chromatograph / Mass Spectrometer / MS (Extractables) - Environmental Lab	1	Replacement	-	300	-	-	-	-	-	-	-	300	-	-	300
282	Microscope - Environmental Lab	1	Replacement	-	75	-	-	-	-	-	-	-	75	-	-	75
290	Solids Manifold - Environmental Lab	2	Replacement	10	-	-	-	-	-	-	-	10	20	-	-	20
295	Water Purification System - Environmental Lab	1	Replacement	13	-	-	-	-	-	-	-	12	25	-	-	25



Appendix C: 2023 Sanitary Sewerage System Capital Projects (\$,000's)

Provides financing details for capital projects proposed in 2023. See Appendix D for the comprehensive 2023 capital budget and 2024-2032 forecast

<div><div><div><div><div></div><div>DURHAM REGION</div></div><div>Durham Budget</div><div>2023</div></div></div></div>	Quantity	New / Replacement	2023 Proposed Financing									2023 Proposed Budget	Proposed Funding Prior to 2023	Forecast 2024-2032	Total Project to 2032
			Other	Reserve/ Reserve Funds	Industrial DCs	Institutional DCs	Commercial DCs	Residential DCs	Subsidy /Grant	Debenture	User Rate				
298 RAS Piping - Nonquon WPCP	1	New	-	-	-	-	-	-	-	-	95	95	-	-	95
302 Backflow Preventer Device Replacement - Port Darlington WPCP	1	Replacement	-	-	-	-	-	-	-	-	29	29	-	-	29
309 Sodium Bisulfite HVAC - Port Darlington WPCP	1	Replacement	-	-	-	-	-	-	-	-	135	135	-	-	135
318 Install AC for Blower Room - Uxbridge Brook WPCP	1	New	-	-	-	-	-	-	-	-	50	50	-	-	50
321 Electrical Equipment Replacements - WPCP Pumping Stations	1	Replacement	-	-	-	-	-	-	-	-	50	50	-	-	50
324 Integrated Control Technology - Security Project - Duffin Creek WPCP	1	New	19	-	-	-	-	-	-	-	6	25	-	-	25
Machinery & Equipment Subtotal			39,181	5,225	-	-	-	-	-	-	17,422	61,829	49,534	37,985	149,347
Information Technology Infrastructure															
325 SCADA System Master Plan for the sanitary sewage pumping stations and implementation requirements	-		-	-	-	-	8	136	-	-	356	500	-	2,800	3,300
326 Standard Laptop	2	New	-	-	-	-	-	-	-	-	1	1	-	-	1
327 Power Laptop	12	New	-	-	-	-	-	-	-	-	13	13	-	-	13
330 GIS Hardware (Monitors, Backup Devices and Other) - Data System Management	1	Replacement	-	-	-	-	-	-	-	-	5	5	-	-	5
331 Tablet	1	New	-	-	-	-	-	-	-	-	2	2	-	-	2
331 Tablet	1	Replacement	-	-	-	-	-	-	-	-	4	4	-	-	4



Appendix C: 2023 Sanitary Sewerage System Capital Projects (\$,000's)


Provides financing details for capital projects proposed in 2023. See Appendix D for the comprehensive 2023 capital budget and 2024-2032 forecast

 <b>Durham Budget</b> <b>2023</b>		Quantity	New / Replacement	2023 Proposed Financing									2023 Proposed Budget	Proposed Funding Prior to 2023	Forecast 2024-2032	Total Project to 2032
				Other	Reserve/ Reserve Funds	Industrial DCs	Institutional DCs	Commercial DCs	Residential DCs	Subsidy /Grant	Debenture	User Rate				
333	SCADA Programming Software Upgrade (ifix) - Duffin Creek WPCP	1	Replacement	39	-	-	-	-	-	-	-	11	50	-	-	50
334	SCADA Workstations (Desktops) - Duffin Creek WPCP	1	New	8	-	-	-	-	-	-	-	2	10	-	-	10
335	Barcode Printers - Environmental Lab	4	Replacement	4	-	-	-	-	-	-	-	4	8	-	-	8
337	LIMS Computer System - Environmental Lab	1	Replacement	-	100	-	-	-	-	-	-	-	100	-	-	100
339	Power Laptop (with Monitor) - Various Locations	3	New	-	-	-	-	-	-	-	-	5	5	-	-	5
341	Computers & Monitors Refresh - Financial Services	1	Replacement	-	-	-	-	-	-	-	-	265	265	-	-	265
<b>Information Technology Infrastructure Subtotal</b>				<b>51</b>	<b>100</b>	<b>-</b>	<b>-</b>	<b>8</b>	<b>136</b>	<b>-</b>	<b>-</b>	<b>668</b>	<b>963</b>	<b>-</b>	<b>2,800</b>	<b>3,763</b>
<b>Vehicles</b>																
357	Vactor 2100 - Oshawa/Whitby Depot	1	New	-	-	-	-	-	-	-	-	395	395	-	-	395
<b>Vehicles Subtotal</b>				<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>395</b>	<b>395</b>	<b>-</b>	<b>-</b>	<b>395</b>
<b>Furniture &amp; Fixtures</b>																
360	A/V Equipment and Technology Upgrades - Various Locations	1	New	-	-	-	-	-	-	-	-	10	10	-	-	10
<b>Furniture &amp; Fixtures Subtotal</b>				<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>10</b>	<b>10</b>	<b>-</b>	<b>-</b>	<b>10</b>



Appendix C: 2023 Sanitary Sewerage System Capital Projects (\$,000's)

Provides financing details for capital projects proposed in 2023. See Appendix D for the comprehensive 2023 capital budget and 2024-2032 forecast

 <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div>		Quantity	New / Replacement	2023 Proposed Financing							2023 Proposed Budget	Proposed Funding Prior to 2023	Forecast 2024-2032	Total Project to 2032		
Allowances & Other Provisions																
366	Regional Sewage Master Planning Study for the Regional Official Plan Review	-		-	-	-	-	27	443	-	-	130	600	800	800	2,200
367	Biosolids Master Plan	-		-	-	-	-	23	369	-	-	108	500	-	500	1,000
368	York Durham Sanitary Sewerage Master Plan	-		369	-	-	-	-	-	-	-	131	500	-	500	1,000
371	Asset Condition Assessments - Reports for the Vertical Assets	-		-	300	-	-	-	-	-	-	-	300	1,503	2,400	4,203
375	Allowance for acquisition of easements	-		-	-	-	-	-	-	-	-	100	100	-	900	1,000
376	Allowance for engineering studies	-		-	-	-	-	-	-	-	-	150	150	-	1,350	1,500
378	Preliminary engineering	-		-	-	-	-	-	-	-	-	100	100	-	900	1,000
379	Allowance for sundry extensions as per Council policy	-		-	-	-	-	-	-	-	-	15	15	-	135	150
380	Allowance for unknown requirements	-		-	-	-	-	-	-	-	-	100	100	-	900	1,000
381	Allowance for land severance review and drawing requirements	-		-	-	-	-	-	-	-	-	100	100	-	900	1,000
382	Allowance for Regional share for works in conjunction with residential subdivision development	-		-	-	-	-	92	1,476	-	-	432	2,000	-	18,000	20,000



Appendix C: 2023 Sanitary Sewerage System Capital Projects (\$,000's)

Provides financing details for capital projects proposed in 2023. See Appendix D for the comprehensive 2023 capital budget and 2024-2032 forecast

<div><div><div><div><div></div><div>DURHAM REGION</div></div><div><div>Durham</div><div>Budget</div></div></div><div>2023</div></div></div>		Quantity	New / Replacement	2023 Proposed Financing							2023 Proposed Budget	Proposed Funding Prior to 2023	Forecast 2024-2032	Total Project to 2032		
			Other	Reserve/ Reserve Funds	Industrial DCs	Institutional DCs	Commercial DCs	Residential DCs	Subsidy /Grant	Debenture	User Rate					
383	Allowance for Regional share for works in conjunction with non-residential development	-	-	-	-	-	23	369	-	-	108	500	-	4,500	5,000	
384	Allowance for intensification	-	-	-	-	-	16	258	-	-	76	350	-	3,150	3,500	
Allowances & Other Provisions Subtotal				369	300	-	-	181	2,915	-	-	1,550	5,315	2,303	34,935	42,553
Sanitary Sewer System Subtotal				40,691	12,024	1,874	-	2,609	36,203	-	15,667	38,384	147,452	97,360	541,838	786,650
Total Sanitary Sewerage System				40,691	12,024	1,874	-	2,609	36,203	-	15,667	38,384	147,452	97,360	541,838	786,650

\* Rows and columns may not add due to rounding

\*\* Appendix C includes Other financing from York Recovery as follows:

2023	
Other	
Recovery From York	40,691
Total Other Financing	40,691

\*\*\* Appendix C includes Reserve financing as follows:

Reserve Fund	2023
Asset Management Reserve Fund - Sewer	11,107
Rate Stabilization Reserve Fund - Sewer	442
Pre-Servicing of Employment Lands Reserve Fund - Sewer	-
Reserve Fund - Environmental Lab	475
Equipment Replacement Reserve	-
Total Reserve/Reserve Fund Financing	12,024

\*\*\*\* Appendix C includes financing of the following development charge shortfalls as follows:

2023	
DC Shortfall	
Residential DC Shortfall	0
Commercial DC Shortfall	0
Institutional DC Shortfall	169
Industrial DC Shortfall	10,215
Total DC Shortfall	10,384
Shortfall Funding Source	
Rate Stabilization Reserve Fund_Sewer	-
Debenture - DC Funded	-
User Rate	10,384
Total Funding	10,384



# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)


Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix C for financing details for capital projects proposed in 2023.

<div><div><div><div><div></div></div></div><div>Durham Budget</div></div><div>2023</div></div> <th>Expenditure Category</th> <th>2023 Proposed Budget</th> <th colspan="6">Forecast</th>			Expenditure Category	2023 Proposed Budget	Forecast					
			2024	2025	2026	2027	2028-2032	Forecast Total		
Sanitary Sewerage System										
Linear Infrastructure										
1	R.R. 2A (Centre St). from King St. to Brock St. West, Oshawa	Pre-Construction	-	-	-	-	-	-		
		Construction	400	-	-	-	-	-		
		Total	400	-	-	-	-	-		
2	R.R. 14 (Liberty St.) from Baseline Rd. to King St., Bowmanville	Pre-Construction	-	-	-	-	-	-		
		Construction	-	-	-	-	6,400	-	6,400	
		Total	-	-	-	-	6,400	-	6,400	
3	R.R. 16 ( Ritson Rd.) from Taunton Rd. to Conlin Rd., Oshawa	Pre-Construction	225	-	-	-	-	-		
		Construction	-	-	1,450	-	-	-	1,450	
		Total	225	-	1,450	-	-	-	1,450	
4	R.R. 22 (Bayly St.) from Westney Rd. to Harwood Ave., Ajax	Pre-Construction	-	-	-	-	-	-		
		Construction	-	-	-	-	2,300	-	2,300	
		Total	-	-	-	-	2,300	-	2,300	
5	R.R. 36 (Hopkins St.) from Consumers Dr. to Dundas St., Whitby	Pre-Construction	-	220	-	-	-	-	220	
		Construction	-	-	-	-	-	1,450	1,450	
		Total	-	220	-	-	-	1,450	1,670	
6	R.R. 37 (Finch Ave.) from Altona Rd. to Brock Rd., Pickering	Pre-Construction	-	-	-	70	-	-	70	
		Construction	-	-	-	-	-	120	120	
		Total	-	-	-	70	-	120	190	
7	R.R. 52 (Thornton Rd.) from King St. to Stellar Dr., Oshawa	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	-	170	-	-	-	170	
		Total	-	-	170	-	-	-	170	



# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)

Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix C for financing details for capital projects proposed in 2023.

 <b>Durham Budget</b> <b>2023</b>			Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
			2024	2025	2026	2027	2028-2032			
8	R.R. 53 (Stevenson Rd.) from Highway 401 to Bond St., Oshawa	Pre-Construction	-	-	-	-	-	-		
		Construction	-	-	870	-	-	-	870	
		Total	-	-	870	-	-	-	870	
9	R.R. 57 (Bowmanville Ave.) from Stevens Rd. to Nash Rd., Bowmanville	Pre-Construction	-	150	-	-	-	-	150	
		Construction	-	-	-	-	-	1,100	1,100	
		Total	-	150	-	-	-	1,100	1,250	
10	R.R. 59 (Gibb St.) from Stevenson Rd. to Simcoe St., Oshawa	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	-	-	-	450	-	450	
		Total	-	-	-	-	450	-	450	
11	R.R. 59 (Gibb St.)/Olive Ave. Extension from Drew St. to Ritson Rd., Oshawa	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	-	-	570	-	-	570	
		Total	-	-	-	570	-	-	570	
12	Allowance for sanitary sewers in conjunction with the Regional Road Program	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	-	-	300	-	8,600	8,900	
		Total	-	-	-	300	-	8,600	8,900	
13	City of Pickering Road Program	Pre-Construction	-	35	35	35	35	175	315	
		Construction	-	200	200	200	200	1,000	1,800	
		Total	-	235	235	235	235	1,175	2,115	
14	Town of Ajax Road Program	Pre-Construction	-	65	65	65	65	325	585	
		Construction	-	300	300	300	300	1,500	2,700	
		Total	-	365	365	365	365	1,825	3,285	
15	Town of Whitby Road Program	Pre-Construction	-	100	100	100	100	500	900	
		Construction	-	500	500	500	500	2,500	4,500	
		Total	-	600	600	600	600	3,000	5,400	



# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)


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<div><div><div><div><div></div><div>DURHAM REGION</div></div></div><div><div>Durham</div><div>Budget</div></div></div><div>2023</div></div> <th>Expenditure Category</th> <th>2023 Proposed Budget</th> <th colspan="7">Forecast</th>			Expenditure Category	2023 Proposed Budget	Forecast						
			2024	2025	2026	2027	2028-2032	Forecast Total			
16	City of Oshawa Road Program	Pre-Construction	170	200	200	200	200	1,000	1,800		
		Construction	400	900	900	900	900	4,500	8,100		
		Total	570	1,100	1,100	1,100	1,100	5,500	9,900		
17	Municipality of Clarington Road Program	Pre-Construction	75	75	75	75	75	375	675		
		Construction	200	225	225	225	225	1,125	2,025		
		Total	275	300	300	300	300	1,500	2,700		
18	Township of Scugog Road Program	Pre-Construction	50	10	10	10	10	50	90		
		Construction	150	65	65	65	65	325	585		
		Total	200	75	75	75	75	375	675		
19	Township of Uxbridge Road Program	Pre-Construction	75	50	50	50	50	250	450		
		Construction	150	290	290	290	290	1,450	2,610		
		Total	225	340	340	340	340	1,700	3,060		
20	Township of Brock Road Program	Pre-Construction	-	30	30	30	30	150	270		
		Construction	-	90	90	90	90	450	810		
		Total	-	120	120	120	120	600	1,080		
21	Allowance for unknown sanitary sewerage requirements in conjunction with area municipality road programs in various locations	Pre-Construction	200	200	200	200	200	1,000	1,800		
		Construction	-	-	-	-	-	-	-		
		Total	200	200	200	200	200	1,000	1,800		
22	Sanitary Sewer replacement in conjunction with the Metrolinx Toronto East Rail Corridor expansion to Bowmanville	Pre-Construction	-	-	-	-	-	-	-		
		Construction	-	3,100	-	-	-	-	3,100		
		Total	-	3,100	-	-	-	-	3,100		
23	Allowance for sanitary sewers in conjunction with the MTO & GO Transit projects	Pre-Construction	-	-	-	-	-	-	-		
		Construction	-	100	100	100	100	500	900		
		Total	-	100	100	100	100	500	900		
24	Sanitary sewerage works to rectify identified system deficiencies independent of road programs in various locations	Pre-Construction	-	-	-	-	-	-	-		
		Construction	400	650	650	650	650	3,250	5,850		
		Total	400	650	650	650	650	3,250	5,850		



# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)

Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix C for financing details for capital projects proposed in 2023.

<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>			Forecast					
Expenditure Category		2023 Proposed Budget	2024	2025	2026	2027	2028-2032	Forecast Total
25	Rehabilitation of existing sanitary sewers in various locations	Pre-Construction	-	-	-	-	-	-
		Construction	457	490	338	1,000	1,000	7,828
		Total	457	490	338	1,000	1,000	7,828
26	Durham York Primary Trunk Sanitary Sewer System - Condition Assessment and Rehabilitation requirements (CCTV inspection, minor repair and rehabilitation works to be completed on Chamber 4 to 7)	Pre-Construction	-	-	3,000	-	-	17,375
		Construction	-	-	-	-	-	52,125
		Total	-	-	3,000	-	-	69,500
27	Trunk Sanitary Sewer Rehabilitation from Lord Elgin Park to Kingston Rd. (Highway No. 2),Ajax	Pre-Construction	250	-	-	-	-	-
		Construction	-	1,000	-	5,000	5,000	11,000
		Total	250	1,000	-	5,000	5,000	11,000
28	Replacement of the trunk sanitary sewer from Harwood Ave. south and Edward St. through Lord Elgin Park to the intersection of Chadwick Dr. and Adams Dr., Ajax	Pre-Construction	-	-	-	-	-	-
		Construction	1,600	-	-	-	-	-
		Total	1,600	-	-	-	-	-
29	Replacement of sanitary sewer between Birch Court and Glynn Road, Ajax	Pre-Construction	150	-	-	-	-	-
		Construction	-	500	-	-	-	500
		Total	150	500	-	-	-	500
30	Replacement of the sanitary sewer on High St. from Mary St. to Walnut St., Whitby	Pre-Construction	-	-	-	-	-	-
		Construction	175	-	-	-	-	-
		Total	175	-	-	-	-	-
31	Replacement of sanitary sewer on Donovan Cres. from Walton Blvd. to 30 m east of Walton Blvd., Whitby	Pre-Construction	215	-	-	-	-	-
		Construction	-	430	-	-	-	430
		Total	215	430	-	-	-	430
32	Replacement of sanitary sewer on Water St. from the Whitby Water Supply Plant to Breakwater Sanitary Sewage Pumping Station, Whitby	Pre-Construction	-	-	-	-	-	-
		Construction	-	920	-	-	-	920
		Total	-	920	-	-	-	920



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<div><div><div><div></div></div><div>DURHAM REGION</div></div><div><div>Durham</div><div>Budget</div></div></div> <div>2023</div>			Expenditure Category	2023 Proposed Budget	Forecast					
2024	2025	2026			2027	2028-2032	Forecast Total			
33	Replacement of sanitary sewer on Hillcrest Dr. from Beech St. W/L to Beech St. E/L, Whitby	Pre-Construction	-	-	-	-	150	-	150	
		Construction	-	-	-	-	840	-	840	
		Total	-	-	-	-	990	-	990	
34	Replacement of sanitary sewer on Athol St. from St. Lawrence St. to Clemence St., Whitby	Pre-Construction	-	130	-	-	-	-	130	
		Construction	-	-	-	300	-	-	300	
		Total	-	130	-	300	-	-	430	
35	Replacement of sanitary sewer on St. Lawrence St. from Brock St. to Athol St., Whitby	Pre-Construction	-	100	-	-	-	-	100	
		Construction	-	-	-	120	-	-	120	
		Total	-	100	-	120	-	-	220	
36	Replacement of sanitary sewer on Cochrane St. from Ferguson St. to 125 m north of Beech St. W., Whitby	Pre-Construction	-	220	-	-	-	-	220	
		Construction	-	-	1,120	-	-	-	1,120	
		Total	-	220	1,120	-	-	-	1,340	
37	Replacement of sanitary sewer on R.R. 22 (Bloor St.) from Wilson Rd. to Holland St., Oshawa	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	330	-	-	-	-	330	
		Total	-	330	-	-	-	-	330	
38	Replacement of sanitary sewer on Olive Ave from Simcoe St. to Drew St., Oshawa	Pre-Construction	-	-	-	-	-	-	-	
		Construction	260	-	-	-	-	-	-	
		Total	260	-	-	-	-	-	-	
39	Replacement of sanitary sewer on RR 22 (Bloor St.) from Cubert St. to Oxford St., Oshawa	Pre-Construction	-	-	-	-	-	100	100	
		Construction	-	-	-	-	-	330	330	
		Total	-	-	-	-	-	430	430	
40	Replacement of a sanitary sewer on Thornton Rd. from Adelaide Ave. to Tatra Dr., Oshawa	Pre-Construction	-	-	-	-	-	500	500	
		Construction	-	-	-	-	-	1,000	1,000	
		Total	-	-	-	-	-	1,500	1,500	
41	Replacement of sanitary sewer on Conant St. from Myers Rd. to Nelson St., Oshawa	Pre-Construction	150	-	-	-	-	-	-	
		Construction	-	-	390	-	-	-	390	
		Total	150	-	390	-	-	-	390	



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<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>			Forecast					
Expenditure Category		2023 Proposed Budget	2024	2025	2026	2027	2028-2032	Forecast Total
42	Replacement of sanitary sewer on Ritson Rd. S. from Kawartha Ave. to Simcoe Street South, Oshawa	Pre-Construction	-	-	-	-	-	-
		Construction	-	675	-	-	-	675
		Total	-	675	-	-	-	675
43	Replacement of sanitary sewer on Ritson Rd. South from Annis St. to Conant St., Oshawa	Pre-Construction	-	-	-	-	-	-
		Construction	-	385	-	-	-	385
		Total	-	385	-	-	-	385
44	Replacement of sanitary sewer on Simcoe St. from Metcalf St to Quebec St., Oshawa	Pre-Construction	-	-	-	-	-	-
		Construction	150	-	-	-	-	-
		Total	150	-	-	-	-	-
45	Replacement sanitary sewer on Jackson Ave from Merritt St. to Ritson Rd., Oshawa	Pre-Construction	-	-	-	-	-	-
		Construction	-	-	300	-	-	300
		Total	-	-	300	-	-	300
46	Replacement of sanitary sewer on Mary St. from Rossland Rd to Robert St., Oshawa	Pre-Construction	150	-	-	-	-	-
		Construction	2,000	-	-	-	-	-
		Total	2,150	-	-	-	-	-
47	Replacement of forcemain on Wilmot Creek easement from Cobbledick Rd. to Toronto St., Newcastle	Pre-Construction	-	-	-	-	-	-
		Construction	1,300	-	-	-	-	-
		Total	1,300	-	-	-	-	-
48	Replacement of sanitary sewer on First Ave. from Brock St. to Dominion St., Uxbridge	Pre-Construction	150	-	-	-	-	-
		Construction	-	330	-	-	-	330
		Total	150	330	-	-	-	330
49	Evaluation of trunk sanitary sewers/gravity sewers at creek crossings	Pre-Construction	-	-	-	-	-	-
		Construction	75	75	75	-	-	225
		Total	75	75	75	-	-	225
50	Replacement of sanitary sewer in various locations	Pre-Construction	-	-	-	-	-	-
		Construction	-	-	1,300	1,818	8,004	58,231
		Total	-	-	1,300	1,818	8,004	58,231



# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)


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<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>			Forecast					
Expenditure Category		2023 Proposed Budget	2024	2025	2026	2027	2028-2032	Forecast Total
51	Allowance for construction of services in unserved areas in response to requests or petitions	Pre-Construction	-	-	-	-	-	-
		Construction	-	200	200	200	1,000	1,800
		Total	-	200	200	200	1,000	1,800
52	Sanitary Sewer on Meadow St. from Avalon St. to Manor Dr., Oshawa	Pre-Construction	100	-	-	-	-	-
		Construction	-	-	260	-	-	260
		Total	100	-	260	-	-	260
53	York/Durham Sewage System - Primary Trunk Sanitary Sewer Twinning, Pickering	Pre-Construction	-	16,000	-	20,000	-	36,000
		Construction	-	-	-	-	217,050	217,050
		Total	-	16,000	-	20,000	217,050	253,050
54	Sanitary sewer on Church St. from Hydro Right of Way to Taunton Rd., Ajax (Region's Share)	Pre-Construction	-	-	-	-	-	-
		Construction	-	3,500	-	-	-	3,500
		Total	-	3,500	-	-	-	3,500
55	Sanitary sewer diversion on Hunt St. from Westney Rd. to Harwood Ave., Ajax	Pre-Construction	-	-	-	-	-	-
		Construction	-	-	5,700	-	-	5,700
		Total	-	-	5,700	-	-	5,700
56	Twinning of Duffin Creek Trunk Sanitary Sewer on easement from Bayly St. Sanitary Sewage Pumping Station to Highway 401, Ajax	Pre-Construction	-	-	-	500	1,000	1,500
		Construction	-	-	-	-	5,700	5,700
		Total	-	-	-	500	6,700	7,200
57	Trunk Sanitary Sewer on Kingston Rd. (Highway No. 2) from east of Harwood Ave. to east of Galea Dr., Ajax	Pre-Construction	-	-	-	-	-	-
		Construction	11,350	-	-	-	-	-
		Total	11,350	-	-	-	-	-
58	Corbett Trunk Sanitary Sewer on easement from Wentworth St. to Corbett Creek Water Pollution Control Plant, Whitby	Pre-Construction	-	1,000	-	-	-	1,000
		Construction	-	-	6,200	-	-	6,200
		Total	-	1,000	6,200	-	-	7,200



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<div>  </div>			Forecast					
	Expenditure Category	2023 Proposed Budget	2024	2025	2026	2027	2028-2032	Forecast Total
59	Thickson Rd. Sub-Trunk sanitary sewer from Glengowan St. to Conlin Rd., Whitby (Region's share only)	Pre-Construction	-	-	-	-	-	-
		Construction	2,738	-	-	-	-	-
		Total	2,738	-	-	-	-	-
60	West Whitby sub trunk on Dundas St. from Des Newman Blvd. to Halls Rd., Whitby	Pre-Construction	-	-	-	-	-	-
		Construction	-	12,400	-	-	-	12,400
		Total	-	12,400	-	-	-	12,400
61	Brooklin Trunk Sanitary Sewer on Mid Block Arterial from Lynde Creek to St. Thomas St. Sanitary Sewage Pumping Station, Whitby	Pre-Construction	-	900	-	-	-	900
		Construction	-	-	-	4,020	-	4,020
		Total	-	900	-	4,020	-	4,920
62	West Brooklin Trunk Sanitary Sewer from west of Cochrane St. to east of Highway No. 12, Whitby (Region's share only)	Pre-Construction	-	-	-	-	-	-
		Construction	4,000	6,600	-	-	-	6,600
		Total	4,000	6,600	-	-	-	6,600
63	Southwest Brooklin Trunk Sanitary Sewer from west of Cochrane St. on New collector road to east of Highway 12, Whitby (Region's share only)	Pre-Construction	-	-	-	-	-	-
		Construction	-	4,700	-	-	-	4,700
		Total	-	4,700	-	-	-	4,700
64	West Central Brooklin Trunk Sanitary Sewer west of Way St., Whitby (Region's share only)	Pre-Construction	-	-	-	-	-	-
		Construction	-	-	1,900	-	-	1,900
		Total	-	-	1,900	-	-	1,900
65	Central Brooklin Trunk Sanitary Sewer, Whitby (Region's share only)	Pre-Construction	-	-	-	-	-	-
		Construction	-	4,800	-	-	-	4,800
		Total	-	4,800	-	-	-	4,800
66	Central East Brooklin Trunk Sanitary Sewer east of Baldwin St., Whitby (Region's share only)	Pre-Construction	-	-	-	-	-	-
		Construction	-	-	1,100	-	-	1,100
		Total	-	-	1,100	-	-	1,100
67	East Brooklin Trunk Sanitary Sewer east of Thickson Rd., Whitby (Region's share only)	Pre-Construction	-	-	-	-	-	-
		Construction	-	3,200	-	-	-	3,200
		Total	-	3,200	-	-	-	3,200



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<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>			Forecast					
	Expenditure Category	2023 Proposed Budget	2024	2025	2026	2027	2028-2032	Forecast Total
68	Sanitary Sewer on local road from Windfields Farm Dr. to Winchester Rd., Oshawa	Pre-Construction	-	120	-	-	-	120
		Construction	-	-	1,000	-	-	1,000
		Total	-	120	1,000	-	-	1,120
69	Sanitary Sewer on Stevenson Rd. from Taunton Rd. to Conlin Rd., Oshawa	Pre-Construction	300	-	-	-	-	300
		Construction	-	2,800	-	-	-	2,800
		Total	300	2,800	-	-	-	3,100
70	Sanitary Sewer on Thornton Rd. from Conlin Rd. within the Northwood Employment Area, Oshawa	Pre-Construction	-	-	-	-	-	-
		Construction	1,600	-	-	-	-	-
		Total	1,600	-	-	-	-	-
71	Ash Creek Trunk Sanitary Sewer from Consumers Dr./Green Rd. to Ash Creek Trunk Sanitary Sewage at the former Pringle Creek Water Pollution Control Plant, Whitby	Pre-Construction	-	1,500	-	-	2,500	4,000
		Construction	-	-	-	-	16,000	16,000
		Total	-	1,500	-	-	18,500	20,000
72	Mid Block Arterial Forcemain from Whitby/ Oshawa Boundary to Durham College easement, Whitby/Oshawa	Pre-Construction	1,300	-	-	-	-	1,300
		Construction	-	-	6,700	-	-	6,700
		Total	1,300	-	6,700	-	-	8,000
73	Farewell Creek Trunk Sanitary Sewer twinning on easement west of Grandview St., Oshawa	Pre-Construction	-	-	800	-	-	800
		Construction	-	-	-	-	2,700	2,700
		Total	-	-	800	-	2,700	3,500
74	Twinning of northwest branch of Harmony Creek Sub-Trunk Sanitary Sewer from Central Park Blvd N. & Hillcroft St. to Beatrice St., Oshawa	Pre-Construction	150	320	-	-	-	320
		Construction	-	2,200	-	-	-	2,200
		Total	150	2,200	-	-	-	2,520
75	North Oshawa Creek (East branch) Trunk Sanitary Sewer on easement from Arctic Red Dr. to Winchester Rd., Oshawa (Region's Share only)	Pre-Construction	-	-	-	-	-	-
		Construction	-	5,000	-	-	-	5,000
		Total	-	5,000	-	-	-	5,000



# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)


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 <b>Durham</b> <b>Budget</b>				Forecast					
		Expenditure Category	2023 Proposed Budget	2024	2025	2026	2027	2028-2032	Forecast Total
76	North Oshawa Creek (East Branch) Trunk Sanitary Sewer on easement from southeast of Thornton Rd. to Simcoe St., Oshawa (Region's share only)	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	-	-	-	-	4,500	4,500
		Total	-	-	-	-	-	4,500	4,500
77	Twinning of Oshawa Creek Trunk Sanitary Sewer from Gibb St. to Greenwood Ave., Oshawa	Pre-Construction	-	-	-	250	-	-	250
		Construction	-	-	-	-	-	1,200	1,200
		Total	-	-	-	250	-	1,200	1,450
78	Forcemain on Conlin Rd. from Ritson Rd. to Harmony Rd., Oshawa	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	-	9,200	-	-	-	9,200
		Total	-	-	9,200	-	-	-	9,200
79	North Oshawa Creek (West Branch) Trunk Sanitary Sewer from Conlin Rd. Sanitary Sewage Pumping Station to Britannia Ave., Oshawa	Pre-Construction	-	1,000	-	-	-	-	1,000
		Construction	-	-	-	4,500	-	-	4,500
		Total	-	1,000	-	4,500	-	-	5,500
80	North Oshawa Creek (West Branch) Trunk Sanitary Sewer from south side of hydro corridor to Columbus Rd., Oshawa	Pre-Construction	-	3,000	-	-	-	-	3,000
		Construction	-	-	-	19,300	-	-	19,300
		Total	-	3,000	-	19,300	-	-	22,300
81	Courtice Trunk Sanitary Sewer - Trulls Rd. from Bloor St. to future Adelaide Ave., Courtice	Pre-Construction	3,000	-	-	-	-	-	-
		Construction	-	52,700	-	-	-	-	52,700
		Total	3,000	52,700	-	-	-	-	52,700
82	Courtice Trunk Sanitary Sewer - Adelaide Ave. from Trulls Rd. to Townline Rd., Courtice	Pre-Construction	1,200	-	-	-	-	-	-
		Construction	7,600	4,300	4,300	44,800	-	-	53,400
		Total	8,800	4,300	4,300	44,800	-	-	53,400
83	Courtice Trunk Sanitary Sewer - Townline Rd. from Adelaide Ave. to Beatrice St., Courtice	Pre-Construction	-	-	1,300	-	-	-	1,300
		Construction	-	-	-	-	52,800	-	52,800
		Total	-	-	1,300	-	52,800	-	54,100



# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)

Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix C for financing details for capital projects proposed in 2023.

 <b>Durham Budget</b> <b>2023</b>			Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
				2024	2025	2026	2027	2028-2032		
84	Southwest Courtice Sub -Trunk Sanitary Sewer on Baseline Rd. from Trulls Rd. to 650 m west of Trulls Rd., Courtice	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	-	4,600	-	-	-	4,600	
		Total	-	-	4,600	-	-	-	4,600	
85	Southeast Courtice Sub-Trunk Sanitary Sewer on future mid-block road from Trulls Rd. to Courtice Rd. & Courtice Rd. from mid-block to Bloor St., Courtice	Pre-Construction	-	-	-	-	-	-	-	
		Construction	5,300	-	-	-	-	-	-	
		Total	5,300	-	-	-	-	-	-	
86	Baseline Rd. Trunk Sanitary Sewer from Simpson Ave. to Bennett Rd., Bowmanville	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	16,900	-	14,000	-	-	30,900	
		Total	-	16,900	-	14,000	-	-	30,900	
87	Bennett Rd. Trunk Sanitary Sewer from Baseline Rd. to Highway No. 2, Bowmanville (Region's share only)	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	-	-	-	-	1,700	1,700	
		Total	-	-	-	-	-	1,700	1,700	
88	Port Darlington Rd. Trunk Sanitary Sewer from Baseline Rd. to existing easement, Bowmanville	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	24,300	-	-	-	-	24,300	
		Total	-	24,300	-	-	-	-	24,300	
89	Twinning of Spry Ave. Trunk Sanitary Sewer from Baseline Rd. to N/L of Spry Ave., Bowmanville	Pre-Construction	-	-	-	-	1,000	1,000	2,000	
		Construction	-	-	-	-	-	5,000	5,000	
		Total	-	-	-	-	1,000	6,000	7,000	
90	Soper Creek Trunk Sanitary Sewer on Mearns Ave. from Freeland Ave. to Concession Rd. 3 and on Concession Rd. 3 from Mearns Ave. to 450 m west of Mearns Ave., Bowmanville	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	1,650	-	-	-	-	1,650	
		Total	-	1,650	-	-	-	-	1,650	
91	Foster Creek Trunk Sanitary Sewer on Sunset Blvd./ Lakeview Rd. from Rudell Rd. to Church St., Newcastle	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	11,000	-	-	-	-	11,000	
		Total	-	11,000	-	-	-	-	11,000	
92	Foster Creek Trunk Sanitary Sewer on North St. from north side of Canadian Pacific Railway to Concession Rd. 3, Newcastle (Region's share only)	Pre-Construction	-	2,900	-	-	-	-	2,900	
		Construction	-	-	-	-	-	-	-	
		Total	-	2,900	-	-	-	-	2,900	



# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)


Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix C for financing details for capital projects proposed in 2023.

<div><div><div><div></div></div><div>Durham Budget</div></div><div>2023</div></div>			Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
			2024	2025	2026	2027	2028-2032			
93	Sanitary Sewer on Concession Rd. 5 to service the westerly portion of the Beaverton Avenue Employment Area A, Brock	Pre-Construction	-	-	-	-	-	-		
		Construction	-	3,600	-	-	-	-		
		Total	-	3,600	-	-	-	-		
Linear Infrastructure Subtotal				46,615	189,710	52,978	135,408	82,729	414,584	875,409
Buildings and Structures										
94	Duffin Creek Water Pollution Control Plant - Chlorine Contact Tank Expansion	Pre-Construction	-	-	-	340	500	-	840	
		Construction	-	-	-	-	-	14,640	14,640	
		Total	-	-	-	340	500	14,640	15,480	
95	Proposed Pickering Parkway Sanitary Sewage Pumping Station and forcemain, Pickering	Pre-Construction	-	1,400	3,000	-	-	-	4,400	
		Construction	-	-	-	-	13,500	-	13,500	
		Total	-	1,400	3,000	-	13,500	-	17,900	
96	Proposed Squires Beach Sanitary Sewage Pumping Station, Pickering	Pre-Construction	-	-	-	-	-	1,749	1,749	
		Construction	-	-	-	-	-	-	-	
		Total	-	-	-	-	-	1,749	1,749	
97	Corbett Creek Water Pollution Control Plant - works to rectify existing deficiencies	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	7,300	-	-	-	-	7,300	
		Total	-	7,300	-	-	-	-	7,300	
98	Expansion of Corbett Creek Water Pollution Control Plant from 84 MLD to 109 MLD	Pre-Construction	-	-	10,000	-	-	-	10,000	
		Construction	-	-	-	-	-	174,000	174,000	
		Total	-	-	10,000	-	-	174,000	184,000	
99	Brooklin Sanitary Diversion Strategy - Proposed Thickson Rd. Sanitary Sewage Pumping Station and forcemain, Whitby	Pre-Construction	-	3,500	-	-	-	-	3,500	
		Construction	-	-	-	29,800	-	-	29,800	
		Total	-	3,500	-	29,800	-	-	33,300	
100	Harmony Creek Water Pollution Control Plant No. 1 demolition, Oshawa	Pre-Construction	-	-	-	-	-	-	-	
		Construction	-	-	2,900	-	-	-	2,900	
		Total	-	-	2,900	-	-	-	2,900	



# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)


Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix C for financing details for capital projects proposed in 2023.

 <b>Durham</b> <b>Budget</b>				Forecast					
		Expenditure Category	2023 Proposed Budget	2024	2025	2026	2027	2028-2032	Forecast Total
101	Harmony Creek Sanitary Sewage Pumping Station - expansion and forcemain twinning, Oshawa	Pre-Construction	600	-	3,000	-	-	-	3,000
		Construction	-	-	-	-	-	45,100	45,100
		Total	600	-	3,000	-	-	45,100	48,100
102	Expansion of the Conlin Rd. Sanitary Sewage Pumping Station and twinning of the forcemain, Oshawa	Pre-Construction	-	-	-	-	-	-	-
		Construction	2,500	-	70,700	-	-	-	70,700
		Total	2,500	-	70,700	-	-	-	70,700
103	Proposed Harbour Rd. South Sanitary Sewage Pumping Station and forcemain, Oshawa	Pre-Construction	-	500	-	1,600	-	-	2,100
		Construction	-	-	-	-	-	7,100	7,100
		Total	-	500	-	1,600	-	7,100	9,200
104	Simcoe St. South Sanitary Sewage Pumping Station and forcemain replacement, Oshawa	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	4,700	-	-	-	-	4,700
		Total	-	4,700	-	-	-	-	4,700
105	Madawaska Sanitary Sewage Pumping Station - pumping station replacement, Oshawa	Pre-Construction	-	-	-	-	1,000	1,200	2,200
		Construction	-	-	-	-	-	7,500	7,500
		Total	-	-	-	-	1,000	8,700	9,700
106	Expansion of Courtice Water Pollution Control Plant from 68 MLD to 136 MLD	Pre-Construction	1,000	-	4,500	-	-	-	4,500
		Construction	-	-	-	-	-	148,900	148,900
		Total	1,000	-	4,500	-	-	148,900	153,400
107	Proposed Baseline Rd. Sanitary Sewage Pumping Station and forcemain, Courtice	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	-	4,000	-	-	-	4,000
		Total	-	-	4,000	-	-	-	4,000
108	Proposed Northeast Sanitary Sewage Pumping Station and forcemain, Bowmanville	Pre-Construction	-	-	-	500	-	1,700	2,200
		Construction	-	-	-	-	-	5,700	5,700
		Total	-	-	-	500	-	7,400	7,900
109	Newcastle Water Pollution Control Plant - Capacity Re-rating 4 MLD to 7 MLD	Pre-Construction	-	-	-	-	-	-	-
		Construction	3,630	-	-	-	-	-	-
		Total	3,630	-	-	-	-	-	-



# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)


Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix C for financing details for capital projects proposed in 2023.

<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>			Forecast					
Expenditure Category		2023 Proposed Budget	2024	2025	2026	2027	2028-2032	Forecast Total
110	Expansion of Newcastle Water Pollution Control Plant from 7 MLD to 16 MLD and outfall	Pre-Construction	-	1,100	-	1,300	-	2,400
		Construction	-	-	-	-	-	-
		Total	-	1,100	-	1,300	-	2,400
111	Sunset Sanitary Sewage Pumping Station - decommissioning, Clarington	Pre-Construction	-	120	-	-	-	120
		Construction	-	600	-	-	-	600
		Total	-	720	-	-	-	720
112	Uxbridge Water Pollution Control Plant - Optimization Study, upgrades and rehabilitation works based on the condition assessment.	Pre-Construction	-	-	-	-	-	-
		Construction	-	4,600	-	-	-	4,600
		Total	-	4,600	-	-	-	4,600
113	Water St. Sanitary Sewage Pumping Station - Expansion/Replacement, Scugog	Pre-Construction	-	-	-	-	-	-
		Construction	-	19,550	3,000	-	-	22,550
		Total	-	19,550	3,000	-	-	22,550
114	Port Perry Industrial Area Sanitary Sewage Pumping Station, forcemain and sanitary sewer, Port Perry	Pre-Construction	-	1,200	-	-	-	1,200
		Construction	-	-	-	14,200	-	14,200
		Total	-	1,200	-	14,200	-	15,400
115	Sunderland Water Pollution Control Plant - Lagoon System, Brock	Pre-Construction	2,000	-	-	-	-	-
		Construction	-	11,000	-	-	-	11,000
		Total	2,000	11,000	-	-	-	11,000
116	River St. Sanitary Sewage Pumping Station expansion, Brock	Pre-Construction	1,200	-	-	-	-	-
		Construction	-	4,600	-	-	-	4,600
		Total	1,200	4,600	-	-	-	4,600
117	Cannington Water Pollution Control Plant - Lagoon System, Brock	Pre-Construction	2,000	-	-	-	-	-
		Construction	-	11,500	-	-	-	11,500
		Total	2,000	11,500	-	-	-	11,500
118	Laidlaw St. Sanitary Sewage Pumping Station expansion, Brock	Pre-Construction	1,000	-	-	-	-	-
		Construction	-	5,200	-	-	-	5,200
		Total	1,000	5,200	-	-	-	5,200



# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)


Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix C for financing details for capital projects proposed in 2023.

 <b>Durham Budget</b> <b>2023</b>		Expenditure Category	2023 Proposed Budget	Forecast					
				2024	2025	2026	2027	2028-2032	Forecast Total
119	Lake Simcoe Water Pollution Control Plant - expansion, Brock	Pre-Construction	-	-	-	-	1,000	2,000	3,000
		Construction	-	-	-	-	-	39,000	39,000
		Total	-	-	-	-	1,000	41,000	42,000
120	Harbour St. Sanitary Sewage Pumping Station expansion, Brock	Pre-Construction	-	-	-	-	1,000	6,500	7,500
		Construction	-	-	-	-	-	-	-
		Total	-	-	-	-	1,000	6,500	7,500
121	Beaverton Employment Lands Area B Sanitary Sewage Pumping Station and sanitary sewer, Brock	Pre-Construction	-	1,000	-	-	-	-	1,000
		Construction	-	-	-	5,800	-	-	5,800
		Total	-	1,000	-	5,800	-	-	6,800
122	Septage receiving stations, various stations	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	1,840	-	-	-	-	1,840
		Total	-	1,840	-	-	-	-	1,840
123	Water Pollution Control Plant - Asset Management Remediation and Rehabilitation works	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	5,000	8,000	5,000	8,000	45,000	71,000
		Total	-	5,000	8,000	5,000	8,000	45,000	71,000
124	New Concrete Floor in Sign Shed - Ajax Depot	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	25	-	-	-	-	25
		Total	-	25	-	-	-	-	25
125	Depot Rationalization - Ajax Depot Expansion	Pre-Construction	1,667	-	-	-	-	-	-
		Construction	-	11,667	-	-	-	-	11,667
		Total	1,667	11,667	-	-	-	-	11,667
126	Building J Roof Replacement - Corbett Creek WPCP	Pre-Construction	82	-	-	-	-	-	-
		Construction	-	153	-	-	-	-	153
		Total	82	153	-	-	-	-	153
127	Digester Cleanout - Various Locations	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	650	250	-	-	-	900
		Total	-	650	250	-	-	-	900



# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)


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<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>			Forecast					
Expenditure Category		2023 Proposed Budget	2024	2025	2026	2027	2028-2032	Forecast Total
128	Access Ladder Repair/Replacement Project - Various Locations	Pre-Construction	-	-	-	-	-	-
		Construction	641	-	-	-	-	-
		Total	641	-	-	-	-	-
129	Replacement Fire System - Vesda - Duffin Creek WPCP	Pre-Construction	-	-	-	-	-	-
		Construction	800	-	-	-	-	-
		Total	800	-	-	-	-	-
130	New Furniture in Office and Lab - Expansion - Environmental Lab	Pre-Construction	-	-	-	-	-	-
		Construction	22	-	-	-	-	-
		Total	22	-	-	-	-	-
131	Re-pave Existing South Driveway - Harmony Creek WPCP	Pre-Construction	-	40	-	-	-	40
		Construction	-	-	143	-	-	143
		Total	-	40	143	-	-	183
132	Install Electric Gates - Lake Simcoe WPCP	Pre-Construction	-	40	-	-	-	40
		Construction	-	-	110	-	-	110
		Total	-	40	110	-	-	150
133	Construction of Mezzanine in Fleet Bay 1 - Orono Depot	Pre-Construction	-	-	-	-	-	-
		Construction	-	67	-	-	-	67
		Total	-	67	-	-	-	67
134	Thermal Glass Panels for Rollup Doors and Door operators - Orono Depot	Pre-Construction	-	-	-	-	-	-
		Construction	-	66	-	-	-	66
		Total	-	66	-	-	-	66
135	Paving of Rear Yard and Site Repairs - Orono Depot	Pre-Construction	-	-	-	-	-	-
		Construction	-	-	-	-	121	121
		Total	-	-	-	-	121	121
136	Roof Replacement on Vehicle Storage Bays - Orono Depot	Pre-Construction	27	-	-	-	-	-
		Construction	-	172	-	-	-	172
		Total	27	172	-	-	-	172



# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)


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<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>			Forecast					
Expenditure Category		2023 Proposed Budget	2024	2025	2026	2027	2028-2032	Forecast Total
137	20 Bay Cold Vehicle Storage - Orono Depot Expansion	Pre-Construction	-	-	-	-	73	73
		Construction	-	-	-	-	1,192	1,192
		Total	-	-	-	-	1,265	1,265
138	Salt and Brine Storage Building - Orono Depot Expansion	Pre-Construction	-	-	-	-	116	116
		Construction	-	-	-	-	1,050	1,050
		Total	-	-	-	-	1,166	1,166
139	Replacement of Fire System - Oshawa/Whitby Depot	Pre-Construction	-	-	-	-	-	-
		Construction	68	-	-	-	-	-
		Total	68	-	-	-	-	-
141	Depot Rationalization - New Oshawa/Whitby Depot	Pre-Construction	12,667	1,667	-	-	-	1,667
		Construction	-	-	55,000	-	-	55,000
		Total	12,667	1,667	55,000	-	-	56,667
142	Driveway Replacement - Plants Central - Zone 2 Reservoir	Pre-Construction	-	-	-	-	-	-
		Construction	-	50	-	-	-	50
		Total	-	50	-	-	-	50
143	Repairs and Epoxy Coat Fleet Bay Concrete Floors & Repairs to Floor Drains in Fleet Bays - Scugog Depot	Pre-Construction	7	-	-	-	-	-
		Construction	-	28	-	-	-	28
		Total	7	28	-	-	-	28
144	Replace Existing Asphalt in Various Location - Scugog Depot	Pre-Construction	-	-	10	-	-	10
		Construction	-	-	-	123	-	123
		Total	-	-	10	123	-	133
145	Additional Office Space - Scugog Depot	Pre-Construction	-	-	-	93	-	93
		Construction	-	-	-	-	406	406
		Total	-	-	-	93	406	499



# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)


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<div><div>Durham Budget</div><div>2023</div></div>		Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
	2024			2025	2026	2027	2028-2032		
146	New 16 Bay Cold Vehicle Storage - Scugog Depot Expansion	Pre-Construction	-	-	-	73	-	-	73
		Construction	-	-	-	-	992	-	992
		Total	-	-	-	73	992	-	1,065
147	New Salt and Brine Storage Facility - Scugog Depot Expansion	Pre-Construction	-	-	-	100	-	-	100
		Construction	-	-	-	-	1,067	-	1,067
		Total	-	-	-	100	1,067	-	1,167
148	Widening of Existing Canopy Entrance - Sunderland Depot	Pre-Construction	8	-	-	-	-	-	-
		Construction	-	42	-	-	-	-	42
		Total	8	42	-	-	-	-	42
149	Install Perimeter Fence - Pumping Stations Central - Cochrane St SPS	Pre-Construction	-	-	-	-	-	-	-
		Construction	50	-	-	-	-	-	-
		Total	50	-	-	-	-	-	-
150	Renovation & Optimization - 101 Consumers	Pre-Construction	-	-	-	-	-	-	-
		Construction	442	-	-	-	-	-	-
		Total	442	-	-	-	-	-	-
151	Access Ladder Repair/Replacement Project - Duffin Creek WPCP	Pre-Construction	-	-	-	-	-	-	-
		Construction	582	-	-	-	-	-	-
		Total	582	-	-	-	-	-	-
152	Depot Rationalization - New Sunderland Depot	Pre-Construction	1,333	1,333	-	-	-	-	1,333
		Construction	-	-	14,000	-	-	-	14,000
		Total	1,333	1,333	14,000	-	-	-	15,333
Buildings and Structures Subtotal			32,325	77,110	199,213	46,429	42,965	502,641	868,358
Machinery & Equipment									
153	Central Duffin Creek Metering Building at Valleyfarm Road and Finch Avenue meter replacement, Pickering	Pre-Construction	100	-	-	-	-	-	-
		Construction	-	560	-	-	-	-	560
		Total	100	560	-	-	-	-	560



# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)


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 <b>Durham Budget</b> <b>2023</b>		Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
				2024	2025	2026	2027	2028-2032	
154	Duffin Creek Water Pollution Control Plant - Digester mixing improvements and Motor Control Centre Replacement, Pickering	Pre-Construction	-	-	-	-	-	-	-
		Construction	21,450	23,850	-	-	-	-	23,850
		Total	21,450	23,850	-	-	-	-	23,850
155	Duffin Creek Water Pollution Control Plant - Replacement of Reactor No. 1 & 2, Pickering	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	25,000	25,000	50,000	70,000	133,500	303,500
		Total	-	25,000	25,000	50,000	70,000	133,500	303,500
156	Duffin Creek Water Pollution Control Plant - Remedial works and improvements in various locations throughout the plant	Pre-Construction	-	-	-	-	-	-	-
		Construction	27,500	-	-	-	-	-	-
		Total	27,500	-	-	-	-	-	-
157	Duffin Creek Water Pollution Control Plant - Ammonia-based aeration control (ABAC) for Stage 1, 2 and 3	Pre-Construction	1,000	-	-	-	-	-	-
		Construction	-	-	5,000	-	-	-	5,000
		Total	1,000	-	5,000	-	-	-	5,000
158	Duffin Creek Water Pollution Control Plant - Ultra Fine Bubble Diffusers conversion (full plant)	Pre-Construction	-	-	-	-	-	3,000	3,000
		Construction	-	-	-	-	-	20,000	20,000
		Total	-	-	-	-	-	23,000	23,000
159	Duffin Creek Water Pollution Control Plant - Biogas Purification to Renewable Natural Gas (RNG)	Pre-Construction	-	-	-	-	5,000	-	5,000
		Construction	-	-	-	-	-	18,400	18,400
		Total	-	-	-	-	5,000	18,400	23,400
160	Duffin Creek Water Pollution Control Plant - Condition Assessment and Asset Plan updating	Pre-Construction	-	-	-	-	-	-	-
		Construction	-	200	300	-	-	500	1,000
		Total	-	200	300	-	-	500	1,000
161	Duffin Creek Water Pollution Control Plant - Asset Management Remediation and rehabilitation works	Pre-Construction	-	100	100	100	100	4,300	4,700
		Construction	-	900	900	900	900	20,700	24,300
		Total	-	1,000	1,000	1,000	1,000	25,000	29,000




# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)

Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix C for financing details for capital projects proposed in 2023.

<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>			Forecast					
	Expenditure Category	2023 Proposed Budget	2024	2025	2026	2027	2028-2032	Forecast Total
162	Liverpool Road Sanitary Sewage Pumping Station - communication, mechanical and process upgrades, Pickering	Pre-Construction	-	-	-	-	-	-
		Construction	-	3,700	-	-	-	3,700
		Total	-	3,700	-	-	-	3,700
163	Carruthers Sanitary Sewage Pumping Station - Standby Power Upgrades	Pre-Construction	-	-	250	-	-	250
		Construction	-	-	-	750	-	750
		Total	-	-	250	750	-	1,000
164	Michael Blvd. Sanitary Sewerage Pumping Station - replacement of the Motor Control Centre (MCC) and pump, Whitby	Pre-Construction	200	-	-	-	-	-
		Construction	-	-	2,000	-	-	2,000
		Total	200	-	2,000	-	-	2,000
165	Hanover Sanitary Sewage Pumping Station - the replacement of pumps and forcemain, Whitby	Pre-Construction	-	-	-	-	-	-
		Construction	100	-	-	-	-	-
		Total	100	-	-	-	-	-
166	Breakwater Saniitary Sewage Pumping Station - station modifications, Whitby	Pre-Construction	-	-	-	-	-	-
		Construction	-	-	960	-	-	960
		Total	-	-	960	-	-	960
167	Simcoe St. Sanitary Sewerage Pumping Station - Chemical Pump addition, Oshawa	Pre-Construction	250	-	-	-	-	-
		Construction	-	-	575	-	-	575
		Total	250	-	575	-	-	575
168	Madawaska Sanitary Sewerage Pumping Station - piping upgrades and flow meter installation, Oshawa	Pre-Construction	-	-	-	-	-	-
		Construction	-	-	460	-	-	460
		Total	-	-	460	-	-	460
169	Courtice Water Pollution Control Plant - remediation work and performance improvements, Courtice	Pre-Construction	-	-	-	-	-	-
		Construction	-	2,900	-	-	-	2,900
		Total	-	2,900	-	-	-	2,900
170	Courtice Water Pollution Control Plant - Digester 1 Refurbishment, Courtice	Pre-Construction	-	-	750	1,600	-	2,350
		Construction	-	-	-	-	4,000	4,000
		Total	-	-	750	1,600	4,000	6,350




Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)
Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix C for financing details for capital projects proposed in 2023.

<div> <div>  <div> Durham Budget 2023 </div> </div> </div>			Forecast					
Expenditure Category		2023 Proposed Budget	2024	2025	2026	2027	2028-2032	Forecast Total
171	Port Darlington Water Pollution Control Plant - Major Maintenance replacement work, Bowmanville	Pre-Construction	-	-	-	-	-	-
		Construction	-	7,100	-	-	-	7,100
		Total	-	7,100	-	-	-	7,100
172	Port Darlington Water Pollution Control Plant - work to recitify deficiencies, Bowmanville	Pre-Construction	-	-	-	-	-	-
		Construction	-	1,400	-	-	-	1,400
		Total	-	1,400	-	-	-	1,400
173	Lake Simcoe Water Pollution Control Plant - Diffused Air System replacement and associated system upgrades	Pre-Construction	-	-	-	-	-	-
		Construction	7,050	-	-	-	-	-
		Total	7,050	-	-	-	-	-
174	Lake Simcoe Water Pollution Control Plant - Replacement of Clarifier mechanisms	Pre-Construction	-	-	-	-	-	-
		Construction	100	-	-	-	-	-
		Total	100	-	-	-	-	-
175	Lake Simcoe Water Pollution Control Plant - tertiary filter replacement	Pre-Construction	-	750	-	-	-	750
		Construction	-	-	-	2,000	-	2,000
		Total	-	750	-	2,000	-	2,750
176	Lake Simcoe Water Pollution Control Plant and associated sanitary sewerage pumping stations - PLC and SCADA system upgrades	Pre-Construction	500	-	-	-	-	-
		Construction	-	-	6,000	-	-	6,000
		Total	500	-	6,000	-	-	6,000
177	Laidlaw, Cedar and Harbour St. Sanitary Sewage Pumping Station - Major Maintenance and replacement work	Pre-Construction	-	-	-	-	-	-
		Construction	-	-	4,000	-	-	4,000
		Total	-	-	4,000	-	-	4,000
178	Sanitary Sewerage Pumping Station - piping upgrades and flow meter installation, at various locations	Pre-Construction	-	-	-	-	-	-
		Construction	-	-	500	500	-	1,000
		Total	-	-	500	500	-	1,000



# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)


Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix C for financing details for capital projects proposed in 2023.

 <b>Durham Budget</b> <b>2023</b>		Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
				2024	2025	2026	2027	2028-2032	
179	Emergency Generator Fuel Tank Compliance upgrades Phase 3 and 5	Pre-Construction	-	-	-	-	-	-	-
		Construction	1,700	-	-	-	-	-	-
		Total	1,700	-	-	-	-	-	-
180	Asphalt Content Ignition Furnace - Construction		-	-	-	-	-	7	7
181	Bar Pullout Tester - Construction		4	-	-	-	-	-	-
182	Bench Oven - Construction		5	-	-	-	-	-	-
183	Concrete End Grinder - Construction		8	-	-	-	-	-	-
184	Concrete Testing Equipment - Construction		-	-	-	-	-	9	9
185	Electronic Scale - Construction		-	-	-	-	-	3	3
186	Gyratory Compactor/Molds/Equipment - Construction		22	-	-	-	-	-	-
187	Lab Oven - Construction		-	-	-	-	-	4	4
188	Nuclear Densometer - Construction		3	-	5	-	-	-	5
189	Survey GPS Instrument - Construction		-	10	10	10	10	54	94
190	Survey Total Station Replacement - Construction		-	-	-	-	-	39	39
191	Valve Actuators - Corbett Creek WPCP		-	25	-	25	-	-	50




# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)

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<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>		Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
2024	2025	2026	2027	2028-2032					
192	WAS Pump Replacement - Corbett Creek WPCP	-	50	-	-	-	-	-	50
193	Aeration Cell Cleanout - Sand - Courtice WPCP	-	200	-	-	-	-	-	200
194	Biosolids Transfer Pumps - Courtice WPCP	-	15	-	-	-	-	-	15
195	Chemical Pump Replacement - Various Locations	18	12	-	30	-	12		54
196	Clarifier Mechanisms - Courtice WPCP	-	32	32	-	-	-		64
197	Digester Mixing Pump Rebuild - Courtice WPCP	-	15	-	15	-	30		60
198	Digester Mixing Pumps - Courtice WPCP	-	-	15	-	15	15		45
199	Grit Blower Rebuild - Courtice WPCP	10	-	10	-	10	-		20
200	Return Pump Rebuild - Courtice WPCP	-	-	-	-	-	30		30
201	Truck Loading Pump Rebuild - Courtice WPCP	-	-	15	-	15	-		30
202	Wasting Pump Rebuild - Courtice WPCP	-	10	-	10	-	20		40
203	Analytical Balance Bench Scale - Duffin Creek WPCP	15	-	-	-	-	-		-
204	Auto Sampler Replacement - Duffin Creek WPCP	25	-	-	-	-	75		75
205	Barscreen Replacement/Major Repair - Duffin Creek WPCP	-	-	-	-	150	150		300




Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)
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 <b>Durham Budget</b> <b>2023</b>		Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
				2024	2025	2026	2027	2028-2032	
206	BAS Server Replacement - Duffin Creek WPCP		75	-	-	-	-	75	75
207	Biofilter Inspection/Media Replacement - Duffin Creek WPCP		-	-	100	100	100	200	500
208	Blower Building Major Repairs - Duffin Creek WPCP		-	-	-	-	-	200	200
209	Bobcat Replacement - Duffin Creek WPCP		-	-	75	-	-	-	75
210	Boiler Building Instrumentation - Duffin Creek WPCP		-	75	75	75	-	-	225
211	Chain and Flyght Replacement - Stage 3 Secondary Clarifier - Duffin Creek WPCP		100	-	-	-	-	-	-
212	Density Meter Replacement - Duffin Creek WPCP		-	-	-	88	-	-	88
213	Dewatered Sludge Conveyor Replacement - Duffin Creek WPCP		-	-	-	125	-	125	250
214	Digester Cleanout/Blend Tank - Duffin Creek WPCP		-	125	-	-	-	1,200	1,325
215	Dock Leveler Replacement - Duffin Creek WPCP		30	50	-	-	-	-	50
216	DPD Analyzer - Duffin Creek WPCP		-	17	-	-	-	-	17
217	DR3900 Spectrophotometer - Duffin Creek WPCP		15	-	-	-	-	-	-
218	ERIS Servers - Duffin Creek WPCP		-	75	-	-	-	75	150
219	Filtrate Station LIT Replacement - Duffin Creek WPCP		-	75	-	-	-	-	75



# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)


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 <b>Durham Budget</b> <b>2023</b>		Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
	2024			2025	2026	2027	2028-2032		
220	Filtrate Station Pump Replacement - Duffin Creek WPCP	-	-	-	-	-	200	200	
221	Forklift Replacement - Duffin Creek WPCP	-	-	-	-	-	140	140	
222	Gator Replacement - Duffin Creek WPCP	-	25	-	-	-	100	125	
223	Grit Conveyor System Replacement - Duffin Creek WPCP	-	-	150	-	-	300	450	
224	Integrated Control Technology - Security Project - Various Locations	311	-	-	-	-	-	-	
225	Laboratory Meter/Scale Replacement - Duffin Creek WPCP	-	-	15	-	-	65	80	
226	Major Centrifuge Component Replacement/Rebuild - Duffin Creek WPCP	-	125	125	125	125	500	1,000	
227	Network Core Switches - Duffin Creek WPCP	-	-	150	-	-	150	300	
228	Network Switches BAS, SCADA - Duffin Creek WPCP	-	-	-	-	300	300	600	
229	OIT Replacements - Duffin Creek WPCP	-	15	15	15	15	75	135	
230	Polymer Building PRAP Network Upgrades - Duffin Creek WPCP	40	-	-	-	-	-	-	
231	Programmable Logic Controllers (PLCs) - Duffin Creek WPCP	-	200	300	-	-	400	900	
232	Radio Network Upgrades - Duffin Creek WPCP	-	-	-	-	-	250	250	
233	Reactor #3 ID Fan Replacement Parts - Duffin Creek WPCP	-	-	-	-	150	-	150	



# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)


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<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>		Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
2024	2025	2026	2027	2028-2032					
234	Reactor #4 ID Fan Replacement Parts - Duffin Creek WPCP	-	-	-	-	-	-	150	150
235	Reactor 1 and/or 2 Major Maintenance - Duffin Creek WPCP	-	100	100	-	-	-	-	200
236	Replace flowmeters and transmitters at Reactor 3 - Duffin Creek WPCP	-	-	-	-	-	-	150	150
237	Replace flowmeters and transmitters at Reactor 4 - Duffin Creek WPCP	-	-	-	-	-	-	150	150
238	Replace chlorine contact chamber 1/2 level sensors at effluent station 1. Replace chlorine injector, level sensors, pH/Temp AIT and TIT, and ORP transmitterat effluent station 2. Replace ORP Analyzer AIT-0113 at chlorine chamber 5-6 - Duffin Creek WPCP	-	105	-	-	-	-	-	105
239	Replace electrical substation TS-102 power supply to H2 sensor, Replace LITs for diesel generator fuel tanks. Replace flowmeters of diesel transfer pumps - Duffin Creek WPCP	-	-	-	-	-	-	190	190
240	Replace Fluke Processmeters and A Chamber LIT-0101 at Admin Building - Duffin Creek WPCP	-	23	-	-	-	-	-	23
241	Replace indicators (PIT, TIT, FIT) and humidification system at the Stage 3 Headwork and Biofilter Areas - Duffin Creek WPCP	-	75	80	-	-	-	-	155
242	Replace LITs of primary scum tanks and raw sludge density trainsmitters DITs at Stage 3 Primary Gallery - Duffin Creek WPCP	-	-	125	-	-	-	125	250



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<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>		Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
2024	2025	2026	2027	2028-2032					
243	Replace LITs of Storage Tank 2,4,3 at Stage 3 Disinfection - Duffin Creek WPCP	-	-	-	-	-		45	45
244	Replace methane sensors, H2S sensors, PITs, TITs, LITs, and FITs at Stage 2 Headworks - Duffin Creek WPCP	-	-	-	150	150	-		300
245	Replace transmitters (PITs, TITs, LITs, and AITs) at Reactor 3 - Duffin Creek WPCP	-	-	-	-	100	100		200
246	Replace transmitters (PITs, TITs, LITs, and AITs) at Reactor 4 - Duffin Creek WPCP	-	-	-	-	-	200		200
247	Replace transmitters (PITs, TITs, LITs, and AITs), process and safety valves at the South Incineration Common Area - Duffin Creek WPCP	-	75	75	-	-	-		150
248	Replace transmitters (PITs, TITs, LITs, Vibration Sensor, and AITs) at the North Incineration Common Area - Duffin Creek WPCP	-	100	-	100	-	100		300
249	Replace Wet Well No.1/No.2 LIT-0101/LIT-0102, strainer No.3 - No.5 differential pressure switches, and main header PIT-0192 at Stage 3 Effluent Pumping Station - Duffin Creek WPCP	-	-	-	-	-	70		70
250	Schwing Sludge Pump Major Component Replacement - Duffin Creek WPCP	-	125	-	125	-	250		500



# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)


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<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>		Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
251	Secondary Clarifier (Circular) Gearbox - Duffin Creek WPCP		240	-	-	-	-	-	-
252	Secondary Clarifier (Circular) Major Repairs - Duffin Creek WPCP		-	150	150	150	-	-	450
253	Secondary Clarifier (Circular) Upgrades - Duffin Creek WPCP		-	200	200	200	-	-	600
254	Secondary Clarifier Chain and Flyght Replacement - Duffin Creek WPCP		-	100	100	100	-	-	300
255	Servers - Duffin Creek WPCP		-	-	100	-	-	100	200
256	Sludge Tank Cleaning - Duffin Creek WPCP		-	-	100	-	-	100	200
257	Uninterruptable Power Supplies (UPS) - Duffin Creek WPCP		-	-	-	-	250	300	550
258	VxRail Replacement Project (Virtual Server) - Duffin Creek WPCP		-	-	175	-	175	420	770
259	Analytical Balance (Inorganics) - Environmental Lab		-	25	-	-	-	-	25
260	Auto Titration System (Inorganic) - Environmental Lab		-	-	-	-	-	100	100
261	Autoclaves - Environmental Lab		-	-	-	-	-	150	150
262	Balances - Environmental Lab		-	-	-	-	-	52	52
263	Biochemical Oxygen Demand (BOD) Incubators - Environmental Lab		40	-	-	-	-	-	-
264	Biological Oxygen Demand Analyzer - Environmental Lab		11	-	-	-	60	-	60



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<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>		Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
2024	2025	2026	2027	2028-2032					
265	Biosafety Cabinet - Environmental Lab	-	-	-	-	-	-	25	25
266	BOD Incubators (Inorganic) - Environmental Lab	-	-	-	40	-	-	-	40
267	Centrifuge (Inorganics) - Environmental Lab	12	-	-	-	-	-	-	-
268	PCR Equipment - Environmental Lab	-	295	-	-	-	-	-	295
269	Digestion Block with Controllers - Environmental Lab	80	-	-	-	-	-	-	-
270	Dishwasher - Environmental Lab	10	-	65	-	-	-	110	175
271	Drying Oven (MB) - Environmental Lab	-	-	-	-	-	-	3	3
272	Freezer - Environmental Lab	-	35	-	-	-	-	4	39
273	Gas Chromatograph / Dual Electron Capture Detector - Environmental Lab	-	-	75	-	-	-	-	75
274	Gas Chromatograph / Mass Spectrometer / MS (Extractables) - Environmental Lab	300	-	-	-	-	-	-	-
275	Incubators (Microbiology) - Environmental Lab	-	-	-	-	-	-	65	65
276	Inductively Coupled Plasma - Optical Emission Spectrometer - Environmental Lab	-	150	-	-	-	-	-	150
277	Ion Chromatograph - Environmental Lab	-	-	-	-	130	-	-	130
278	Lab Oven (Inorgranics) - Environmental Lab	-	-	-	-	-	-	15	15



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<div>Durham Budget</div> <div>2023</div>		Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
				2024	2025	2026	2027	2028-2032	
279	Liquid Chromatograph Mass Spectrometer - Environmental Lab		-	-	-	-	-	400	400
280	Media Preparing Equipment (Microbiology) - Environmental Lab		-	-	-	-	-	65	65
281	Mercury Analyzer (Cold Vapour Fluorescence / Atomic Absorption) - Environmental Lab		-	-	-	-	70	-	70
282	Microscope - Environmental Lab		75	-	-	-	-	30	30
283	Muffle Furnace - Environmental Lab		-	-	-	-	-	20	20
284	Nanodrop - Environmental Lab		-	25	-	-	-	-	25
285	Pharmacy Lab Refrigerator - Environmental Lab		-	-	-	-	-	15	15
286	Powder Containment System (MB) - Environmental Lab		-	-	-	-	-	6	6
287	Skalar Auto Sampler - Environmental Lab		-	-	-	-	25	-	25
288	Skalar Low P Analyzer - Environmental Lab		-	-	-	-	65	-	65
289	Skalar Segmented Flow Analyzer - Environmental Lab		-	130	-	-	-	-	130
290	Solids Manifold - Environmental Lab		20	-	-	-	-	-	-
291	SPME Gas Chromatograph / Mass Spectrometer / Mass Spectrometer - Environmental Lab		-	-	-	310	-	-	310
292	Turbovaps - Environmental Lab		-	36	-	-	-	-	36



# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)


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 <b>Durham Budget</b> <b>2023</b>		Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
	2024			2025	2026	2027	2028-2032		
293	UV Spec. Plate Readers - Environmental Lab	-	30	-	-	-	-	30	
294	Vacusafe (MB) - Environmental Lab	-	-	-	-	-	4	4	
295	Water Purification System - Environmental Lab	25	-	-	-	-	30	30	
296	Teleloggers - Environmental Services Design	-	5	5	5	5	20	40	
297	Mechanical Bar screen Replacement - Lake Simcoe WPCP	-	-	100	-	-	-	100	
298	RAS Piping - Nonquon WPCP	95	-	-	-	-	-	-	
301	RAS Chamber Split - Plants North - Nonquon	-	75	-	-	-	-	75	
302	Backflow Preventer Device Replacement - Port Darlington WPCP	29	-	-	-	-	-	-	
303	Digester Mixing Pump Rebuild/Replacement - Port Darlington WPCP	-	-	-	-	20	20	40	
304	Grit Blower Rebuild/Replacement - Port Darlington WPCP	-	-	-	-	-	20	20	
305	Grit Pump Rebuild/Replacement - Port Darlington WPCP	-	-	10	-	-	10	20	
306	RAS Pump - Port Darlington WPCP	-	-	-	15	-	30	45	
307	Raw Sewage Pump - Port Darlington WPCP	-	-	-	-	50	50	100	
308	Raw Sludge Pump - Port Darlington WPCP	-	-	15	-	15	15	45	



# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)


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 <b>Durham Budget</b> <b>2023</b>		Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
	2024			2025	2026	2027	2028-2032		
309	Sodium Bisulfite HVAC - Port Darlington WPCP		135	-	-	-	-	-	-
310	Wasting Pump Rebuild/Replacement - Port Darlington WPCP		-	-	-	-	10	10	20
311	48" Round Shoring - Sunderland Depot		-	3	-	-	-	3	6
313	Pipe Locator - Sunderland Depot		-	3	-	-	-	3	6
314	Pressure Washer - Sunderland Depot		-	3	3	-	-	-	6
315	Snow Fence Replacement - Sunderland Depot		-	-	-	-	-	6	6
316	Temporary Traffic Control Sign replacement - Sunderland Depot		-	2	2	-	2	4	10
317	Trench box replacement - Sunderland Depot		-	-	-	-	-	5	5
318	Install AC for Blower Room - Uxbridge Brook WPCP		50	205	-	-	-	-	205
319	Mechanical Bar screen Refurbishment - Uxbridge Brook WPCP		-	100	-	-	-	-	100
320	Arc Flash Study Review - Water Pollution Control Plants		-	-	-	200	-	-	200
321	Electrical Equipment Replacements - WPCP Pumping Stations		50	110	110	50	110	100	480
322	Level Sensing Flow Meters - WPCP Pumping Stations - North		-	80	-	-	-	-	80
323	Pump Replacements - WPCP Pumping Stations - South		-	100	100	100	100	200	600



# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)


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 <b>Durham Budget</b> <b>2023</b>		Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
				2024	2025	2026	2027	2028-2032	
324	Integrated Control Technology - Security Project - Duffin Creek WPCP		25	-	-	-	-	-	-
<b>Machinery and Equipment Subtotal</b>			<b>61,829</b>	<b>70,076</b>	<b>43,577</b>	<b>61,263</b>	<b>80,977</b>	<b>213,243</b>	<b>469,136</b>
<b>Information Technology</b>									
325	SCADA System Master Plan for the sanitary sewage pumping stations and implementation requirements		500	-	1,300	1,500	-	-	2,800
326	Standard Laptop		1	2	-	-	-	-	2
327	Power Laptop		13	22	2	6	6	7	43
328	Scanner and Wide Format Black & White Printer - Construction		-	-	-	22	-	-	22
329	UPS/Power PDU - Various Locations		-	-	192	-	-	384	576
330	GIS Hardware (Monitors, backup devices and other) - Data System Management		5	-	-	-	-	-	-
331	Tablet		6	-	-	-	-	-	-
332	Laptops - Duffin Creek WPCP		-	10	-	-	5	15	30
333	SCADA Programming Software Upgrade (ifix) - Duffin Creek WPCP		50	-	-	-	250	250	500
334	SCADA Workstations (Desktops) - Duffin Creek WPCP		10	10	10	10	10	50	90
335	Barcode Printers - Environmental Lab		8	-	-	-	-	-	-
336	LIMS Backup Server - Environmental Lab		-	40	-	-	-	-	40



# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)

Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix C for financing details for capital projects proposed in 2023.

 <b>Durham Budget</b> <b>2023</b>		Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
	2024			2025	2026	2027	2028-2032		
337	LIMS Computer System - Environmental Lab		100	-	-	-	-	120	120
338	LIMS Domain Controllers - Environmental Lab		-	-	-	50	-	-	50
339	Power Laptop (with Monitor)		5	7	-	-	-	-	7
340	Tablet - Environmental Services Design		-	4	4	4	4	20	36
341	Computers & Monitors Refresh - Financial Services		265	205	63	254	208	860	1,590
342	Fuel Management System & Infrastructure Replacement - Various Locations		-	-	217	-	-	-	217
343	Mobile ERIS Equipment - Water Pollution Control Plants		-	-	12	-	-	-	12
344	Server/Communications Equipment - WPCP Pumping Stations		-	150	-	-	-	-	150
<b>Information Technology Subtotal</b>			<b>963</b>	<b>450</b>	<b>1,800</b>	<b>1,846</b>	<b>483</b>	<b>1,706</b>	<b>6,285</b>
<b>Vehicles</b>									
345	1/2 Ton Pick-up Truck - Various Locations		-	134	28	28	56	84	330
346	1 Ton High Roof Van - Ajax Depot		-	42	-	-	-	-	42
347	Forklift - Various Locations		-	25	-	-	-	-	25
348	Tractor - Ajax Depot		-	100	-	-	-	-	100
349	Rubber tire roller compaction unit - Orono Depot		-	20	-	-	-	-	20



Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)


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<div><div><div><div><div><div></div></div><div>DURHAM REGION</div></div><div><div><div></div></div><div>Durham Budget</div></div><div>2023</div></div></div></div>		Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
2024	2025	2026	2027	2028-2032					
350	Asphalt Grinder Attachment (Skid Steer Loader) - Oshawa/Whitby Depot	-	-	-	8	-	-	-	8
351	Hybrid Van - Oshawa/Whitby Depot	-	17	-	-	-	-	-	17
352	Sidewalk Plow/Snowblower - Oshawa/Whitby Depot	-	-	-	-	-	-	50	50
353	Snow Blower for skid steer loader - Oshawa/Whitby Depot	-	10	-	-	-	-	-	10
354	Street Flusher - Oshawa/Whitby Depot	-	-	-	117	-	-	-	117
355	Street Sweeper attachment for Roadside Mower/Tractor - Oshawa/Whitby Depot	-	8	-	-	-	-	-	8
356	Tandem Axle Truck - Oshawa/Whitby Depot	-	-	-	-	-	-	83	83
357	Vactor 2100 - Oshawa/Whitby Depot	395	-	-	-	-	-	-	-
358	3/4 Ton Pick Up - Scugog Depot	-	28	-	-	-	-	-	28
359	Backhoe with Breaker Attachment - Sunderland Depot	-	125	-	-	-	-	-	125
Vehicles Subtotal			395	509	28	153	56	217	963



# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)


Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix C for financing details for capital projects proposed in 2023.

<div><div>Durham Budget</div><div>2023</div></div>			Expenditure Category	2023 Proposed Budget	Forecast					
				2024	2025	2026	2027	2028-2032	Forecast Total	
Furniture and Fixtures										
360	A/V Equipment and Technology Upgrades - Various Locations		10	10	10	10	10	20	60	
361	Parts Cabinets - Ajax Depot		-	16	-	-	-	-	16	
362	Office Chairs - Financial Services		-	1	1	1	1	4	8	
363	Heavy Duty Steel Racking for Materials Storage Building - Orono Depot		-	65	-	-	-	-	65	
364	Office Furniture - Various Locations		-	1	-	1	-	-	2	
365	Parts Cabinets - Oshawa/Whitby Depot		-	109	-	-	-	-	109	
Furniture and Fixtures Subtotal			10	202	11	12	11	24	260	
Allowances & Other Provisions										
366	Regional Sewage Master planning study for the Regional Official Plan Review		600	-	-	-	-	800	800	
367	Biosolids Master Plan		500	500	-	-	-	-	500	
368	York Durham Sanitary Sewerage Master Plan		500	500	-	-	-	-	500	
369	Inflow/infiltration monitoring, studies and required remedial works in various locations		-	500	500	500	500	2,500	4,500	
370	Emergency Planning Updating Requirements		-	100	-	-	-	-	100	
371	Asset Condition Assessments - Reports for the Vertical Assets		300	-	300	300	300	1,500	2,400	



# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)


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<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>		Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
2024	2025	2026	2027	2028-2032					
372	Asset Condition Assessment/ investigation on trunk sanitary sewer/forcemain system	-	200	200	200	200	1,000	1,800	
373	Climate Change Strategy Allowance	-	300	-	-	-	200	500	
374	Allowance for Vulnerability Assessments for Water Pollution Control Plants	-	350	-	350	-	-	700	
375	Allowance for acquisition of easements	100	100	100	100	100	500	900	
376	Allowance for engineering studies	150	150	150	150	150	750	1,350	
377	Phosphorus Reduction Study for Lake Simcoe Water Pollution Control Plants.	-	-	-	-	250	-	250	
378	Preliminary engineering	100	100	100	100	100	500	900	
379	Allowance for sundry extensions as per Council policy	15	15	15	15	15	75	135	
380	Allowance for unknown requirements	100	100	100	100	100	500	900	
381	Allowance for land severance review and drawing requirements	100	100	100	100	100	500	900	
382	Allowance for Regional share for works in conjunction with residential subdivision development	2,000	2,000	2,000	2,000	2,000	10,000	18,000	
383	Allowance for Regional share for works in conjunction with non-residential development	500	500	500	500	500	2,500	4,500	
384	Allowance for intensification	350	350	350	350	350	1,750	3,150	
Allowances & Other Provisions Subtotal		5,315	5,865	4,415	4,765	4,665	23,075	42,785	



# Appendix D: 2023-2032 Sanitary Sewerage System Capital Forecast (\$,000's)

Provides a listing for all projects within the 2023 budget and nine-year capital forecast. See Appendix C for financing details for capital projects proposed in 2023.

<div>  <div> <div>Durham</div> <div>Budget</div> </div> <div>2023</div> </div>	Expenditure Category	2023 Proposed Budget	Forecast					Forecast Total
			2024	2025	2026	2027	2028-2032	
Sanitary Sewerage System Subtotal		147,452	343,922	302,022	249,876	211,886	1,155,490	2,263,196
Total Sanitary Sewerage System		147,452	343,922	302,022	249,876	211,886	1,155,490	2,263,196

\* Rows and columns may not add due to rounding

\*\* Pre-construction capital financing includes expenditures for land purchases, utility relocates, preliminary studies, design, etc.

\*\*\* Projects with regularly recurring expenditures include allowances, machinery and equipment, information technology, vehicles and furniture and fixtures, etc. do not include separate pre-construction and contruction capital financing

\*\*\*\* Appendix D includes financing of the following development charge shortfalls as follows:

	2023	2024	2025	2026	2027	2028 - 2032	Grand Total
<b><u>DC Shortfall</u></b>							
Residential DC Shortfall	-	97,362	59,557	69,298	12,000	146,982	385,199
Commercial DC Shortfall	-	-	-	-	-	14,442	14,442
Institutional DC Shortfall	169	622	461	454	245	1,637	3,588
Industrial DC Shortfall	10,215	16,002	26,555	29,249	9,385	109,392	200,798
<b>Total DC Shortfall</b>	<b>10,384</b>	<b>113,986</b>	<b>86,573</b>	<b>99,001</b>	<b>21,630</b>	<b>272,453</b>	<b>604,027</b>

<b><u>Shortfall Financing Source</u></b>							
Rate Stabilization Reserve Fund - Sewer	-	58,469	22,439	-	-	55,284	136,192
Debenture - DC Funded	-	38,893	52,177	69,298	12,000	106,140	278,508
User Rate	10,384	16,624	11,957	29,703	9,630	111,029	189,327
<b>Total Funding</b>	<b>10,384</b>	<b>113,986</b>	<b>86,573</b>	<b>99,001</b>	<b>21,630</b>	<b>272,453</b>	<b>604,027</b>