#### **TABLE OF CONTENTS**

### **2018 BUSINESS PLANS & BUDGETS**

### **CONSOLIDATED BUDGETS FOR**

# WATER SUPPLY SYSTEM AND SANITARY SEWERAGE SYSTEM

NOTE: On this page, just click on the particular Section and you will be linked to the corresponding page

	Page Numbe	
REPORT 2017-COW-284	. 2	
WORKS – WATER SUPPLY SYSTEM	. 12	
WORKS – SANITARY SEWERAGE SYSTEM	. 188	
UTILITY FINANCE	. 332	
REGIONAL CORPORATE COSTS FOR WATER & SEWER	346	

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## The Regional Municipality of Durham Report

To: The Committee of the Whole From: Commissioner of Finance

Report: #2017-COW-284 Date: December 6, 2017

### Subject:

2018 Current and Capital Business Plans and Budgets and Nine Year Forecasts for the Water Supply and Sanitary Sewerage Systems

#### **Recommendations:**

That the Committee of the Whole recommends to Regional Council:

A) That the 2018 Current and Capital Business Plans and Budgets for the Water Supply System, with a total gross expenditure of \$182.58 million (net user rate supported expenditure of \$106.39 million) and related financing as set out below, be approved:

	2017 Gross Budget (\$ 000's)	2018 Gross Budget (\$ 000's)	Variance Incr/(Decr) (\$ 000's)
EXPENDITURES			
Operations:			
Watermain Cleaning and Repair	6,081	3,649	(2,432)
Valves and Hydrants	2,915	3,208	293
Water Connections	3,957	4,217	260
Water Meters	734	755	21
Depot Operations	5,580	5,724	144
Plants East	2,908	2,780	(128)
Plants Central	14,814	13,118	(1,696)
Plants North	2,900	2,879	(21)
Sun Valley	28	28	-
Engineering and Staff Support	6,483	6,676	193
Facilities Management	6,381	6,532	151
Administration	297	304	7
Headquarters Shared Costs	1,029	1,050	21
Utility Finance	3,062	3,440	378
Share of Regional Corporate Costs	5,982	6,347	365
Contribution to Asset Management Reserve Fund	4,509	4,985	476
Subtotal Operations	67,660	65,692	(1,968)
Capital:			
TCA Capital	2,638	2,359	(279)
TCA Construction	64,328	114,533	50,205
Subtotal Capital	66,966	116,892	49,926
TOTAL EXPENDITURES	134,626	182,584	47,958
<u>FINANCING</u>			
Contributions from Reserve Funds:	0.403	27.245	40.762
Residential Development Charges - Growth Related Capital	8,482	27,245	18,763
Commercial Development Charges - Growth Related Capital	248	2,417	2,169
Industrial Development Charges - Growth Related Capital	4 202	1,400	1,400
Asset Management Reserve Fund	4,293	4,509	216
Fees and Service Charges	2,426	2,708	282
Financing from others:	15 046		(15.046)
Clean Water and Wastewater Fund	15,846	-	(15,846)
Federal Government's Small Communities Fund	630	1 550	(630)
Region of York - TCA Construction	100	1,550	1,450
Oversizing Costs Related to Seaton/Federal Lands	1,100	18,785	17,685
Debenture Proceeds:		17 500	17 500
Newcastle Water Supply Plant, Clarington	22 125	17,580	17,580
Financing from non-user revenue sources User Revenue Financing	33,125	76,194	43,069
TOTAL FINANCING	101,501	106,390	4,889
TOTAL FINANCING	134,626	182,584	47,958

- B) That the Nine Year Capital Expenditure Forecast for 2019 to 2027 inclusive, in the amount of \$1.1 billion as detailed in the Water Supply System Capital Budget, be received for information;
- C) That the 2018 Current and Capital Business Plans and Budgets for the Sanitary Sewerage System with a total gross expenditure of \$176.44 million (net user rate supported expenditure of \$99.32 million) and related financing as set out below, be approved:

EXPENDITURES	2017 Gross Budget (\$ 000's)	2018 Gross Budget (\$ 000's)	Variance Incr/(Decr) (\$ 000's)
Operations:			
Cleaning, Repairs and Maintenance Holes	1,710	2,025	315
Sewer Connections	2,689	2,882	193
Depot Operations	3,072	3,091	19
WPCPs and Pumping Stations	23,951	22,786	(1,165)
Duffin Creek WPCP	37,188	35,353	(1,835)
Regional Environmental Laboratory	2,331	2,413	82
Engineering and Staff Support	6,068	6,261	193
Facilities Management	6,556	6,810	254
Administration	300	307	7
Headquarters Shared Costs	1,029	1,050	21
Utility Finance	3,062	3,440	378
Share of Regional Corporate Costs	5,538	5,894	356
Contribution to Asset Management Reserve Fund	7,842	8,234	392
Subtotal Operations	101,335	100,546	(789)
Capital/Debt Charges:			
Duffin Creek WPCP - TCA Capital	1,905	2,360	455
TCA Capital	1,942	2,582	640
TCA Construction	72,030	49,518	(22,512)
Debt Charges	21,432	21,434	2
Subtotal Capital/Debt Charges	97,308	75,894	(21,414)
TOTAL EXPENDITURES	198,643	176,440	(22,203)
<u>FINANCING</u>			
Contributions from Reserve Funds:			
Residential Development Charges - Growth Related Capital	14,495	8,625	(5,870)
Residential Development Charges - Debt Charges	11,164	11,167	3
Commercial Development Charges - Growth Related Capital	531	737	206
Commercial Development Charges - Debt Charges	1,440	1,440	-
Industrial Development Charges - Growth Related Capital		1,800	1,800
Asset Management Reserve Fund	3,778	6,900	3,122
Sewer Treatment Plant / Rate Stabilization Reserve Fund	3,875	-	(3,875)
Regional Environmental Lab Equipment Replacement Reserve	200	460	260
Fees and Service Charges	5,354	6,066	712
Financing from Others:			
Clean Water and Wastewater Fund	17,213	-	(17,213)
Region of York - TCA	1,323	1,468	145
Region of York - TCA Construction	11,472	11,498	26
Developer Contribution	1,223	-	(1,223)
Region of York - Operating	28,641	26,964	(1,677)
Financing from non-user revenue sources	100,709	77,125	(23,584)
User Revenue Financing	97,934	99,315	1,381
TOTAL FINANCING	198,643	176,440	(22,203)

D) That the Nine Year Capital Expenditure Forecast for 2019 to 2027 inclusive, in the amount of \$1.2 billion as detailed in the Sanitary Sewerage System Capital Budget, be received for information;

- E) That capital project approval be granted for expenditures and financing per the 2018 Capital Project Detail Forms within the 2018 Water Supply and Sanitary Sewerage Systems Business Plans and Budgets where contract awards are consistent with the Regional Budget Management Policy;
- F) That the administration fee quantum and escalation clause for the York Durham Sewage System (YDSS) be removed from the Memorandum of Understanding (MOU) (item #1) as outlined in Confidential Attachment #1 to Report 2017-COW-165, as the fee quantum and escalation has been updated and was approved by the YDSS Management Committee on September 15, 2017;
- G) That staff be authorized to release the administration fee quantum and escalation as outlined in Confidential Attachment #1 to this report once received by York and Durham Regions' Councils; and
- H) That the necessary By-laws with respect to the 2018 Current and Capital Business Plans and Budgets for the Water Supply and Sanitary Sewerage Systems be presented to Council.

### Report:

## Overview of Recommended 2018 Water Supply and Sanitary Sewerage Business Plans and Budgets

The consolidated 2018 Water Supply and Sanitary Sewerage Systems Business Plans and Budgets are included for approval and for recommendation to Regional Council on December 13, 2017. The recommended budgets can be financed from the recommended water and sewer user rate increase of 4.0% overall (5.2% for water and 2.8% for sewer).

The 2018 Current and Capital Budgets and the Nine Year Forecast for the Water Supply and Sanitary Sewerage Systems, as recommended in this report, reflect the financial parameters of the recommended user rate increase (Report #2017-COW-256) as well as the 2018 Water Supply and Sanitary Sewerage Servicing and Financing Study (Report #2017-COW-255).

# 2. Highlights of the 2018 Water Supply and Sanitary Sewerage Business Plans and Budgets

2.1 2018 Water Supply and Sanitary Sewerage Programs

Approximately \$106.4 million and \$99.3 million in user rate funding is required for the 2018 Water Supply and Sanitary Sewerage Programs, respectively.

The 2018 Water Supply and Sanitary Sewerage System Budget increases are mainly due to the following:

- priority staffing of five positions, shared with general tax (3.084 FTEs in water and sewer at \$173k or \$349k annualized) as indicated below:
  - Policy Analyst to develop and analyze long term facility needs, and assist in planning for capital work to sustain Regional facility assets;
  - Project Coordinator to provide updated base building drawings and manage as-built/record drawings for Regional facilities;
  - Inspector 3 in Construction to inspect plant projects to ensure adherence to design, review as-built drawings and to provide quality control;
  - Maintenance Clerk at Orono Depot to provide clerical support to the depot; and
  - Project Manager in Maintenance Operations to assist the Manager in the delivery of services and to ensure compliance with changing standards and regulations.
- annualization of 2.017 FTE from 2017 (\$127k);
- increase in watermain cleaning and repairs, and valves and hydrants maintenance (\$583k), offset by a reduction in the watermain cathodic protection program (\$700k in Regional funding);
- increase in sanitary sewers cleaning and repairs (\$315k);
- decrease in utility costs (\$3.9 million, net of York Region's share);
- annual economic and inflationary increases;
- increase in operating TCA capital from current costs (\$671k), significant capital projects including:
  - renovations required for the relocation of Facility Maintenance staff currently located at Whitby Water Supply Plant (\$2.6 million shared with general tax, \$1.7 million for water and sewer);
  - new tandem combination dump truck/snow plow (\$360K shared with general tax, \$240K for water and sewer);
  - motor control centre room cooling at Ajax Water Supply Plant \$210k;
  - chemical spill containment and administration building improvements at Port Darlington WPCP \$240k; and
  - boiler replacements at Lake Simcoe WPCP \$180k and Newcastle WPCP \$132k;
- construction of municipal services total capital program of \$164.0 million (including a \$5.8 million increase in user revenue financing).

### 2.2 2018 Water Supply and Sewer Capital Program

The 2018 Water Supply Capital Program of \$116.9 million (includes \$114.5 million in construction of municipal services and \$2.4 million for other capital such as vehicles, computer equipment and facility upgrades) reflects the financing required from user rate revenue, development charge revenue, a contribution from the asset management reserve fund, debenture financing and developer contributions.

The 2018 Sanitary Sewerage Capital Program of \$54.5 million (\$49.5 million in construction of municipal services and \$5.0 million other capital assets such as vehicles, computer equipment and facility upgrades) can be funded from user rate revenue, development charge revenue, a contribution from the asset management reserve and \$13.0 million from the Region of York for their share of system improvements and other TCA capital at the Duffin Creek WPCP.

The Region approved the establishment of an Asset Management Reserve Fund in 2004 to provide financing for future high priority replacement and rehabilitation needs to the Water Supply and Sanitary Sewerage systems. The 2018 Water Supply and Sanitary Sewerage Capital Budgets include draws of \$4.5 million for Water Supply and \$6.9 million for Sanitary Sewerage from the Asset Management Reserve Funds.

Some of the major components of the 2018 Water Supply and Sanitary Sewerage Capital Program include:

Table 1
2018 Major Water Supply and Sanitary Sewerage Capital Program

Water Supply	\$million	Sanitary Sewer	\$million
Newcastle Water Supply Plant Expansion and Replacement of existing Plant	\$40.0	Duffin Creek WPCP: - Sludge Blending Tanks Remediation (\$12.0 million, York Share \$9.0	\$3.0
		million) - Regional Environmental Laboratory Upgrades (\$3.1 million, York share - \$1.55 million)	1.55
Seaton Zone 4 Reservoir and Zone 5 Pumping Station, Pickering	18.8	Twinning of forcemain from Liverpool SSPS to Duffin Creek WPCP, Pickering	6.5
Year 7 of the 10-year funding strategy to replace 100% of the polybutylene water service connections by 2021 as approved by Regional Council in 2011	14.7	Harmony Creek WPCP Phase 3 upgrades, Oshawa	3.0
Watermain replacement / rehabilitation to address critical needs	14.4	Sanitary sewer replacement to address critical needs	7.8
New feedermains:		New trunk sanitary sewers:	
- Third Concession, Clarington	3.5	- Church St., Ajax	0.6
- Conlin Rd., Oshawa	1.0	- Foster Creek trunk sanitary sewer,	0.0
- Courtice Zone 1, Courtice	1.0 3.1	Newcastle	2.0 1.0
Replacement of water meters	3.1	Brooklin Sanitary Sewer Diversion Strategy – Thickson Road SSPS and Forcemain - EA	1.0
Alternative Water Supply Source, Scugog	1.5	Port Newcastle SSPS and Forcemain (oversizing)	1.3
Regional Environmental Laboratory Upgrades, Pickering (\$3.1 million, York share - \$1.55 million)	1.55	Sunderland WPCP – retrofit exfiltration lagoon	1.0
Blackstock Water Supply System – Municipal Well #7 Upgrades	1.5	Sunderland and Cannington Lagoon EAs	1.0
Watermain on Concession Rd. 5, Clarington	1.1	Courtice WPCP – Aeration Blower Replacement	0.9
Water filling stations	0.3	Lake Simcoe WPCP – Diffused Air System	1.0

A business case analysis will be completed for the Newcastle Water Supply Plant project to determine whether the expansion should include the replacement of the existing facility (demolish current plant) or to expand and keep the existing plant in service. The financing implications of replacing the existing facility would result in a significant increase in user revenue funding (i.e. an increase of approximately \$13.8 million). This project was included in the 2013 DC Study as 100% growth-related (i.e. no user rate funding) as an expansion only project.

#### 2.3 Debt Charges

There are no existing debt charges for Water Supply. However, debt financing is anticipated for 2020 for the Whitby water supply plant (estimated at \$96.2 million), resulting in anticipated debt charges of \$9.3 million starting in 2021, a portion (approximately \$4.0 million) of which is recoverable from residential development charges.

There are on-going debt charge commitments for sewer, mainly related to the Stage III Expansion at the Duffin Creek Water Pollution Control Plant (Bio-solids Management) and the Courtice, Port Darlington and Nonquon Water Pollution Control Plants. The 2018 debt charges for the Sanitary Sewerage budget totalling \$21.4 million includes \$11.2 million to be recovered from residential sewer development charge revenue (approximately 1,200 new units) and \$1.4 million in debt charges will be recovered from commercial development charges. Approximately \$8.8 million is to be recovered from user rates.

Debt charges for sanitary sewer are anticipated to remain fairly level over the forecast period (2019-2027) with new debt anticipated for the Courtice Trunk Sanitary Sewer and Duffin Creek WPCP, offset by a decrease in debt charges as debt is retired for the Duffin Creek WPCP and Courtice WPCP.

#### 2.4 Utility Finance

The Utility Finance Division of the Finance Department is included in the water supply and sanitary sewerage budget as it is fully funded by water and sewer user rates. This area provides three main services:

- Customer service (including collections and cash processing) to provide customer service to over 175,000 water/sanitary sewer customers, respond to over 124,400 inquiries (telephone, e-mails and in-person) and collection of approximately \$205 million annually;
- Billing and Analysis responsible to issue approximately 700,000 water/sewer bills annually to over 175,000 customers and setting up new customer accounts; and
- Meter Reading responsible for obtaining water meter readings associated with residential and non-residential customer accounts as well as investigating and assisting customers to identify water consumption issues.

The increase in the Utility Finance costs are mainly related to the implementation of the new water supply and sanitary sewerage billing / customer service system (\$582k).

## 3. York Durham Sewage System (YDSS) Administration Fee

The annual YDSS operating budget includes an Administration Fee related to Durham's indirect YDSS operating costs. The existing YDSS operating agreement provides for the recovery from York Region of general administration costs in addition to the direct operating costs of the YDSS.

The majority of costs to operate the YDSS are direct operating costs such as labour, utilities, chemicals and associated materials. In addition to the direct costs, there are indirect administration costs incurred by Durham in supporting the operations at Duffin Creek WPCP including Human Resources, Financial Management, Information Technology and Legal Services. These costs are charged as an "Administration Fee" to the Duffin Creek WPCP operations. Such a fee is common and has been charged since Durham first assumed operating responsibilities in 1980.

In June 2017, Councils of the Region of York and the Region of Durham extended the York Durham Sewage System Operating Agreement and authorized the execution of the Memorandum of Understanding (MOU) dated November 2, 2015 between York and Durham Region upon final approval of the Duffin Creek Plant Outfall Class Environmental Assessment. Included in the November 2, 2015 MOU was a proposed administration fee quantum and escalation framework.

Since June 2017, staff has continued to negotiate the administration fee quantum and escalation in an effort to resolve outstanding budget and reconciliation items. Management Committee on September 15, 2017 approved an updated administration fee quantum and escalation as outlined in Confidential Attachment #1 to this report.

As the administration fee quantum and escalation have been updated and approved by the YDSS Management Committee and are reflected in the proposed 2018 Business Plan and Budget for the YDSS, it is recommended that the administration fee quantum and escalation clause (item #1) for the YDSS be removed from the MOU as outlined in Confidential Attachment #1 to Report 2017-COW-165.

A similar report is being presented to York Region Committee of the Whole and Council on December 7 and December 14, 2017 respectively.

#### 4. Risks

There are a number of risks to both the proposed 2018 water supply and sanitary sewerage programs and over the forecast period as follows:

- Potential for further reduction in water usage resulting in lower user revenue, without corresponding cost reductions;
- Slow development growth, restricting the funding available for growthrelated capital costs;
- Higher energy costs (i.e. hydro and natural gas);
- Increasing construction costs resulting in higher user rate requirements;
   and
- Potential of loss grant funding under the Clean Water and Wastewater Fund (CWWF) for projects not meeting the deadlines as prescribed under the CWWF program.

#### 5. Conclusion

The 2018 Water Supply and Sanitary Sewerage Systems Business Plans

and Budgets can be financed within the proposed overall water supply and sanitary sewerage user rate increase of 4.0% and other related funding including development charges and fees/charges.

Accordingly, the 2018 Business Plans and Budgets for Water Supply and Sanitary Sewerage Systems are recommended for approval.

#### 6. Attachments

Detailed Consolidated 2018 Business Plans & Budgets for Water Supply and Sanitary Sewerage are available on-line through the link provided on the December 6, 2017 Committee of the Whole Agenda or in hard copy by contacting the Finance Department at (905) 668-7711 ext. 2303.

Confidential Attachment #1 (Confidential provided under separate cover)

Respectfully submitted,

Original signed by

R.J. Clapp, CPA, CA

Commissioner of Finance

Recommended for Presentation to Committee

Original signed by
G.H. Cubitt, MSW
Chief Administrative Officer

## **TABLE OF CONTENTS**

### **2018 BUSINESS PLANS & BUDGETS**

### **WORKS – WATER SUPPLY SYSTEM**

# NOTE: On this page, just click on the particular Section and you will be linked to the corresponding page

	Page Number
STRATEGIC PLANNING	13
PROGRAM SUMMARY	15
EXPLANATION OF PROGRAM CHANGES	18
PROGRAM DETAILS	
Watermain Cleaning and Repairs	22
2. Valves and Hydrants	
3. Water Connections	28
4. Water Meters	31
5. Depot Operations	34
6. Plants East	37
7. Plants Central	41
8. Plants North	45
9. Sunvalley	49
. 10. SCADA Systems	51
11. Engineering and Staff Support	53
12. Facilities Management	60
13. Administration	64
14.TANGIBLE CAPITAL ASSETS PROGRAM SUMMARY	66
1. Tangible Capital Assets – New	. 67
2. Tangible Capital Assets – Replacement	
3. Construction	
a. 2018 Construction Program	
b. 2019 Construction Program	
c. 2020 Construction Program	
d. 2021 Construction Program	
e. 2022 Construction Program	83
f. 2023 Construction Program	
g. 2024 Construction Program	
h. 2025 Construction Program	90
i. 2026 Construction Program	92
j. 2027 Construction Program	
k. 2018 Capital Budget Project Details	
2018 Capital Budget and Nine Year Forecast	172



## 2018 Business Plan

Works - Water Supply System

## **Major Services & Activities**

#### Water Distribution System Maintenance

- Prevent loss of water causing excessive flow rates, low pressure, increased pumpage and treatment through maintenance and repair activities, and the extensive replacement of polybutylene services.
- To ensure that all hydrants and valves are in working condition when they are operated.
- Maintain (clean and repair) and operate the Region's linear water distribution system in an efficient and cost effective manner.
- Maintain the inventory of water meters to accurately measure the consumption of water to maximize revenue for the Region.
- Aggressive residential meter replacement program to address meters over 20 years old that are still in service.

## Water Supply and Treatment

- Maintain a healthy community.
- Plan, design and construct water supply infrastructure.
- Operate and maintain the water supply system across the Region providing potable water through infrastructure including surface water plants, elevated tanks, standpipes, wells, reservoirs and pumping stations.
- Maintain records of water quality, water flow and the cost of water supply operations.
- Maintain Drinking Water Quality Management System under the Safe Drinking Water Act.
- Maintain all programs for compliance with Ministry of the Environment and Climate Change Acts and Regulations.
- Plan, implement and maintain requirements under the Clean Water Act for Source Water Protection.

# The following information highlights the Department's focus on the Durham Region Strategic Plan:

**Strategic Goal C.2** - Protect, enhance and where appropriate restore significant water resources, agricultural land, natural heritage and environmentally sensitive areas.

## **Key Deliverables**

**Responsibility - Co-Lead** 

◆ Continue to protect the Region's drinking water supply (source water protection)

#### STRATEGIC PLANNING



## 2018 Business Plan

Works - Water Supply System

**Strategic Goal C.4** - Demonstrate leadership in sustainable asset management and environmentally friendly municipal practices.

#### **Key Deliverables**

#### Responsibility - Co-Lead

◆ Plan, forecast and manage provision, operation, maintenance and capital costs for existing and new infrastructure

**Strategic Goal C.5** - Work more closely with local municipalities and other partners to manage growth through effective, progressive and integrated long-term planning.

### **Key Deliverables**

#### **Responsibility - Co-Lead**

- Identify opportunities to improve the planning and approval process to promote alignment and integration with area municipalities
- Continue to offer planning support to local municipalities to ensure compliance with Regional and Provincial plans

Strate	gic Goals
Goal	Description Responsibility - Support
A.1	Propel the business and investment climate forward in Durham Region to enable more local employment.
B.3	Cultivate strong, safe and secure communities and healthy workplaces.
C.1	Invest in efforts to mitigate and adapt to climate change to build resiliency across the region.
D.1	Deliver Regional services in a financially prudent and sustainable manner.
D.2	Foster awareness of Regional programs and services.
D.3	Improve communication and collaboration across the Region and in particular with local municipalities.
D.4	Promote a culture of openness and encourage public engagement in governance and decision making.
D.5	Demonstrate accountability and transparency by measuring performance and reporting on results.
D.6	Invest in the organization by attracting and retaining a skilled and diverse workforce.
D.7	Focus resources on continuous improvement and innovation.



## 2018 Business Plan

Works - Water Supply System

By F	Program	2017		2018		
	(\$,000's)	Estimated	Approved	Base	Program	Proposed
	(\$,000 \$)	Actuals	Budget	Budget	Change	Budget
Expe	ense Programs	\$	\$	\$	\$	\$
OPE	RATIONS:					
1	Watermain Cleaning and					
	Repairs	4,216	3,981	3,312	337	3,649
2	Valves and Hydrants	2,604	2,545	2,591	246	2,837
3	Water Connections	3,738	3,567	3,627	156	3,783
4	Water Meters	596	579	585	14	599
5	Depot Operations	5,234	5,406	5,524	26	5,550
	Subtotal	16,388	16,078	15,639	779	16,418
PLAI	NTS:					_
6	Plants East	2,473	2,848	2,781	(90)	2,691
7	Plants Central	13,200	14,674	13,309	(372)	12,937
8	Plants North	2,326	2,835	2,832	(40)	2,792
9	Sunvalley	-	-	-	-	-
10	SCADA Systems		-		-	
	Subtotal	17,999	20,357	18,922	(502)	18,420
COM	IMON SERVICES:					
11	Engineering and Staff Support	5,796	6,040	6,149	37	6,186
12	Facilities Management	5,964	6,353	6,187	316	6,503
13	Administration	251	297	304	-	304
	Headquarters Shared Cost	1,029	1,029	1,050	-	1,050
	Subtotal	13,040	13,719	13,690	353	14,043
7	Total Operating Program					
	Expenses	47,427	50,154	48,251	630	48,881

## **PROGRAM SUMMARY**



## 2018 Business Plan

Works - Water Supply System

By Program	20	17		2018	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
(ψ,σσσσ)	Actuals	Budget	Budget	Change	Budget
14 Tangible Capital Assets:					
1W Facilities Management - New	25	25	-	246	246
2W - Replacement	1,402	1,402	360	851	1,211
3W Fleet/Equipment - New	352	352	-	134	134
4W - Replacement	659	659	761	-	761
5W Buildings - Replacement	43	43	-	-	-
6W Construction of Municipal					
Services	35,728	35,728	35,728	5,319	41,047
Net Tangible Capital Assets	38,209	38,209	36,849	6,550	43,399
Net Program Expenses	85,636	88,363	85,100	7,180	92,280
			(\$3,263)		
Summary of Increase (Decrease	se)	<b>——</b>	-3.69%		\$3,917
				<b></b>	4.43%

## **PROGRAM SUMMARY**



## 2018 Business Plan

Works - Water Supply System

## **Summary of Base Budget Changes**

	\$	Comments
Salaries & Benefits	447	Economic increases
Salaries & Benefits	61	Annualization (0.941 position)
Operating Expenses	(1,696)	Utility savings
Operating Expenses	176	Inflationary increases (other)
Cathodic Protection Program	(700)	Remove one-time special program
Fees & Services	(18)	Inflationary increases
Minor Assets & Equipment	(2)	Reduced requirements
Major Repairs & Renovations	(171)	Remove one-time items (various)
Tangible Capital Assets	(1,360)	Remove one-time items (various)
	(3,263)	



## **2018 Program Changes**

Works - Water Supply System

\$ 000's

## **Maintenance Operations**

<ul> <li>Watermain Cleaning and Repairs</li> <li>Increase for watermain repairs to address the cost of restoration work required as part of repair activities</li> <li>Increase to reflect actual costs and forecasted requirements related to hydrant flushing activities (\$14k) and leak detection and repair, foam swabbing, and cathodic protection (\$20k)</li> </ul>	303 34 337
Valves and Hydrants  ◆ Increase for valve repair and reconditioning, including increased restoration costs for leak	
repairs	76
<ul> <li>Adjustments to reflect actual costs and forecasted requirements related to the maintenance of valve boxes (\$43k), and various other valve and hydrant activities (-\$6k)</li> </ul>	37
<ul> <li>Increase in resources associated with the hydrant inspections, monthly maintenance, calibration, winterization and spring preparation</li> </ul>	97
<ul> <li>Increase in the anti-tampering program to deter water theft from hydrants (\$20k) and reduction to revenues reflecting non-recoverable costs related to the installation of devices (\$16k)</li> </ul>	36
	246
Water Connections	
<ul> <li>Adjustments to reflect actual costs and forecasted requirements, including decreases for water connection repair services (-\$22k), and service box inspections (-\$145k) and an increase for water service box repairs (\$323k)</li> </ul>	156
	156
Water Meters	
<ul> <li>Increase to reflect actual costs and forecasted requirements related to the calibration of water meters (\$13k) and the removal of meters (\$1k)</li> </ul>	14
_	14



## 2018 Program Changes

**Works - Water Supply System** 

\$ 000's

25

19

83

(113)

## **Depot Operations**

- Proposed new positions representing 0.777 FTE, to start July 1st, 2018:
  - One (1) Project Manager in Maintenance Operations to assist the Manager in the delivery of services and to ensure compliance with changing standards and regulations. This position will be shared with General Tax and Sanitary Sewerage (Annualized impact is \$50.3k) (0.333 FTE)

 One (1) Maintenance Clerk at Orono Depot to provide clerical support to the depot. This position will be shared with General Tax and Sanitary Sewerage (Annualized impact is \$38.5k) (0.444 FTE)

 Increase in technical training to ensure staff meet licensing requirements and remain current with regards to the latest industry advancements

 Increase in the general locating program based on projected demands 32

 Decrease in overhead supervision based on review of historical actuals and forecasted requirements

 Adjustments to reflect actual costs and forecasted requirements in various accounts, including; radio communications and GPS (-\$16k), small tools and equipment (-\$16k), and (20)various other accounts (\$12k)

26

## **Water Supply Plants**

## Plants East (Bowmanville, Orono, Newcastle)

- Increase in overtime based on review of actuals and forecasted requirements 35
- Decreases to various accounts resulting from a comprehensive review of requirements, including: temporary pay (-\$13k), radio communications and GPS (-\$34k), electrical and (107)instrumentation parts (-\$24k), chemicals (-\$18k), and generator maintenance (-\$18k)

 Adjustments to reflect actual costs and forecasted requirements in various accounts 11 (29)

Increase in bulk water fees collected due to higher volume of construction in the area

(90)

(212)

## Plants Central (Ajax, Oshawa, Whitby)

 Decrease in temporary pay due to fewer resources required for SCADA implementation work at the plant

 Decrease in program materials based on review of actuals and forecasted requirements (85)

 Decrease in chemicals based on review of actuals and forecasted requirements (57)

 Increase in equipment maintenance and repair due to aging infrastructure 53

- Decrease in fleet fuel and maintenance to better represent actual fleet requirements (107)
- Major repairs of assets used in the provision of services, including Chemical Wood Stave 30 liners
- Adjustments to reflect actual costs and forecasted requirements in various accounts 47 Increase in revenues, including; bulk water fees collected due to higher volume of

construction in the area (-\$23k) and miscellaneous revenue based on review of actuals and (41)forecasted requirements (\$-18k) (372)



## **2018 Program Changes**

Works - Water Supply System

\$ 000's

37

## Water Supply Plants (continued)

Plants North (Uxbridge, Scugog, Brock)	
<ul> <li>Increase for program materials and supplies related to the SCADA roll-out to Plants North, based on historical actuals and forecasted requirements</li> </ul>	139
<ul> <li>Decreases to various accounts resulting from a comprehensive review of requirements, including; temporary pay (-\$24k), radio communications and GPS (-\$15k), electrical and instrumentation parts (-\$13k), chemicals (-\$11k), fleet fuel and maintenance (-\$28k), Environmental Laboratory fees (-\$60k) and various other accounts (-\$6k)</li> </ul>	(157)
Increase in bulk water fees collected due to increased construction in the area	(22) (40)
SCADA Systems	
<ul> <li>Increase in temporary staff to address short-term SCADA related requirements</li> <li>Adjustments to reflect actual costs and forecasted requirements in various other accounts</li> <li>Allocation of above changes to all Water Supply Plants and Water Pollution Control Plants</li> </ul>	76 (27) (49) <b>0</b>
Engineering and Staff Support	
<ul> <li>Proposed new position representing 0.385 FTE, to start July 1st, 2018:</li> <li>One (1) Inspector 3 in Construction to inspect plant projects to ensure adherence to design, review as-built drawings and to provide quality control. This position will be shared with General Tax and Sanitary Sewerage (Annualized impact is \$40.8k) (0.385 FTE)</li> </ul>	20
<ul> <li>Reallocation of resources to Duffin Creek WPCP based on the nature of work performed (-0.160 FTE)</li> </ul>	(29)
<ul> <li>Increase in temporary staff to support records management initiatives, shared with General Tax, Sanitary Sewerage, and Solid Waste Management</li> <li>Increases to support the Region's Source Water Protection initiatives based on historical</li> </ul>	11
actuals, including; personnel related costs (\$11k), community relations (\$10k), technical materials and supplies (\$5k), consulting (\$26k), Environmental Laboratory fees (\$20k) and various other accounts (\$2k)	74
Decrease in consulting fees to reflect actual costs and forecasted requirements	(75)
<ul> <li>Increase in consulting fees for a maintenance contract related to SCADA services</li> <li>Increase in departmental communiciations support provided through Corporate</li> </ul>	100
Communications related to Water Supply initiatives in the Works Department	16
<ul> <li>Adjustments to reflect actual costs and forecasted requirements in various accounts</li> </ul>	(80)



## **2018 Program Changes**

Works - Water Supply System

\$ 000's

## **Facilities Management**

- Proposed new positions representing 0.606 FTE, to start July 1, 2018:
  - One (1) Policy Analyst to develop and analyze long term facility needs, and assist in planning for capital work to sustain Regional facility assets. This position is shared with General Tax, Sanitary Sewerage and Solid Waste Management (Annualized impact is \$36.6k) (0.303 FTE)

18

 One (1) Project Coordinator to provide updated base building drawings and manage As-Built/Record drawings for Regional facilities. This position is shared with General Tax, Sanitary Sewerage and Solid Waste Management (Annualized impact is \$30.0k) (0.303 FTE)

15

 Decrease in security monitoring costs due to new monitoring contract (-\$27k) and security guard costs due to improved security monitoring at program sites (-\$16k)

(43)

• Decrease in hoist related expenses due to change in service contract

(16)

 One time increase in professional fees to fund site master plans at the Ajax, Oshawa, and Sunderland Depots

73

• Major repairs and renovations of assets utilized in the provision of services, including floor drain repairs (\$36k) at Ajax Depot; installing electric door openers (\$24k) at Oshawa/Whitby Depot; a lighting retrofit (\$56k) at Bowmanville WSP; transformer pad repairs (\$45k) and security system upgrades (\$64k) at Plants East; a gate replacement (\$17k) at Ajax WSP; installation of a parallel backflow preventer (\$24k) at Whitby WSP; bathroom renovations (\$11k) at Oshawa WSP; and fence replacement (\$34k) at Cannington Wells 2 & 7

311

(42)

 Adjustments to reflect actual costs and forecasted requirements in various accounts, including; payroll recoveries (\$81k), building and grounds operations (-\$23k), interdepartmental transfers (-\$81k), and various other accounts (-\$19k)

316

### **Tangible Capital Assets**

 Program changes include the acquisition of new assets and the replacement of assets related to depot operations, plant and facilities management, fleet, equipment and construction projects, including the construction of municipal services. Refer to capital schedules for detailed information

6,550

**Total Program Changes** 

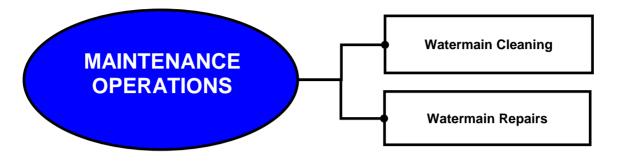
7,180

# PROGRAM 1 WATERMAIN CLEANING AND REPAIRS



## 2018 Program Detail

**Works - Water Supply System** 



#### **Purpose:**

 To maintain (clean and repair) and operate the Region's water distribution system in an efficient and cost effective manner for the Region's approximately 173,021 customers and maintain required water for fire protection

#### **Description of Program Activities:**

- The Region maintains and operates approximately 2,470 km of watermains
- Dead-end watermains are flushed regularly as determined by Ministry of the Environment and Climate Change (MOECC) legislation. Flushing at hydrants and blow offs provides the public with a potable water supply for domestic, institutional, commercial and industrial use
- Where conditions warrant, such as severe loss of head pressure, sediment build-up or customer complaints about water quality, watermains are cleaned by foam swab methods. Foam swabbing is conducted on a scheduled frequency and as recommended through system reviews. The frequency of cleaning is also dependent upon the operating conditions
- Repairs to watermain breaks are funded through this program. All major watermain breaks are isolated and repaired immediately upon inspection. All minor leaks are repaired as part of the regular program. Watermain repairs are budgeted at levels that reflect current break patterns, the aging system and increasing inventories
- Watermains will be cathodically protected against corrosion through the preventative maintenance contract

#### **Description of Program Resources:**

Resources delivering program services are shared with all activity based maintenance activities in the Water Supply, Sanitary Sewerage and General Tax operating budgets. Resource utilization is charged to the activity based programs through maintenance work orders



## 2018 Program Detail

**Works - Water Supply System** 

#### Performance Measurements:

- All major watermain breaks are isolated and repaired immediately upon detection
- Where conditions warrant, watermains are cleaned by foam swab method
- Preventative Maintenance Contract for cathodic protection of ferrous watermains involves the installation of sacrificial anodes. These prevent corrosion on the exterior surface of the pipe, which in turn prevents corrosion breaks and extends the life of the watermain. The cathodic protection program targets all ductile and cast iron watermains in the Region, and is administered through Technical Support. Each year a contract is awarded for the installation of anodes and test stations
- The Region has an ongoing Leak Detection program, administered through Technical Support. The surveys are performed on watermains not greater than 200mm in diameter every 5 years and on watermains greater than 200mm in diameter but not greater than 400mm in diameter every 10 years. Each year a contract is awarded for the survey
- Flushing and Testing of Dead End Watermains: All designated hydrants and blow offs at dead-ends or other extremities shall be flushed on a regular program basis (annually) and tested to ensure that the potable water meets the Ontario Drinking Water Standards. Static water pressure is taken and recorded at each designated hydrant at the time of flushing. Hydrant flushing is done on a complaint basis. Records of problem areas are maintained for investigation and future cleaning or rehabilitation

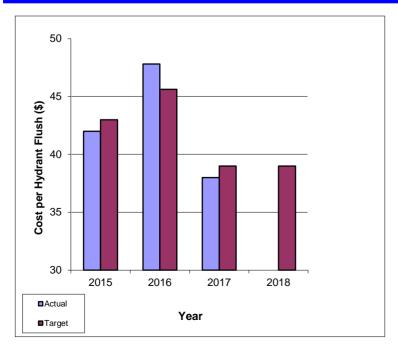
## Units of Service (Flushing Hydrants and Repairing Watermains)

	Target	Proj Actual	Target
	2017	2017	2018
ush Hydrants	11,678	12,358	12,300
epair Watermains	436	496	498

a) Flu

b) Rep

## Efficiency:



#### Cost Per Unit of Service - Flushing **Hydrants**

Cost per unit includes all labour, materials and equipment utilized in repair activities

# PROGRAM 1 WATERMAIN CLEANING AND REPAIRS



## 2018 Program Detail

Works - Water Supply System

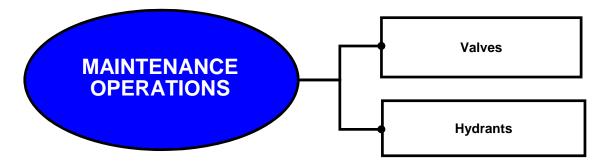
<b>Detailed Cost of Program:</b>	20	17		2018	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
	Actuals	Budget	Budget	Change	Budget
Flush at Hydrant - Blowoff	469	458	468	14	482
Repair Watermains Watermain - Leaks, Swabs,	2,500	2,289	2,309	303	2,612
Cathodic Protection	1,247	1,234	535	20	555
Net Program Expenses	4,216	3,981	3,312	337	3,649

## PROGRAM 2 VALVES AND HYDRANTS



## 2018 Program Detail

Works - Water Supply System



### **Purpose:**

 To maintain and operate the Region's water valves and hydrants in an efficient and cost effective manner and ensure that all hydrants and valves are in working condition when they are operated

### **Description of Program Activities:**

- There are 26,406 valves (including air relief valves) and 15,593 hydrants in the Region
- Valves 300 mm or larger in size are operated to ensure proper working conditions
- Existing valves are replaced as required
- Valve boxes are maintained and repaired as required
- Valve chambers are repaired as required
- Hydrants are repaired as required

## **Description of Program Resources:**

Resources delivering program services are shared with all activity based maintenance activities in the Water Supply, Sanitary Sewerage and General Tax operating budgets. Resource utilization is charged to the activity based programs through maintenance work orders



## 2018 Program Detail

Works - Water Supply System

### **Performance Measurements:**

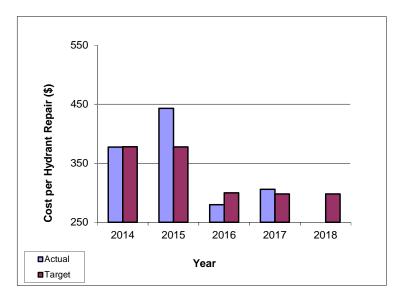
- All line valves 300 mm in diameter and larger are operated annually
- All line valves less than 300 mm in diameter are operated every four years
- All valve chambers to be pumped dry and inspected annually
- All hydrants to have control valves installed on a program basis
- All hydrants to be inspected and tested annually in accordance with Regional standards

## Units of Service (Valve and Hydrant Repairs, Hydrant Inspections)

- a) Valve Repairs
- b) Hydrant Inspections
- c) Hydrant Repairs

Target	Proj Actual	Target
2017	2017	2018
231	270	271
37,334	38,553	41,631
2,109	2,076	2,136

## **Efficiency:**



## Cost Per Unit of Service Hydrant Repairs

Cost per unit includes all labour, materials and equipment utilized in the repair activities. The cost is an average across the depots, which encounter varying conditions and maintenance issues on a repair by repair basis.

# PROGRAM 2 VALVES AND HYDRANTS



## **2018 Program Detail**

Works - Water Supply System

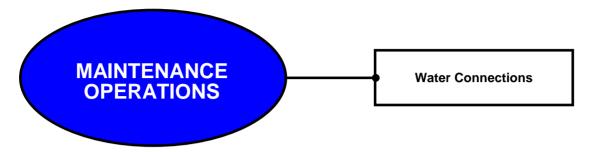
<b>Detailed Cost of Program:</b>	20	17		2018	
(\$,000's)	<b>Estimated</b>	Approved	Base	Program	Proposed
(ψ,000 δ)	Actuals	Budget	Budget	Change	Budget
Operation & Inspection	262	250	260		260
Operation & Inspection	363	359	368		368
Repair - Recondition Valves	542	463	466	76	542
Maintain Valve Boxes	391	344	347	43	390
Valve Records - Operations Staff	118	137	141	(6)	135
Hydrant Inspection & Operation	677	645	661	58	719
Anti Tamper Device (Install /					
Remove)	36	-	-	36	36
Hydrant Repair	636	629	637	-	637
Hydrant Painting	149	138	139	14	153
Hydrant Fire Flow Testing	19	-	-	21	21
Hydrant Other	102	96	98	4	102
Hydrant Permits	(429)	(266)	(266)	-	(266)
Net Program Expenses	2,604	2,545	2,591	246	2,837

# PROGRAM 3 WATER CONNECTIONS



## 2018 Program Detail

Works - Water Supply System



## **Purpose:**

To maintain and operate the Region's water connections in an efficient and cost effective manner for the Region's approximately 173,021 customers and provide potable water for domestic use and fire protection; prevent damage to private and public property; protect public investment in the water system by maintaining maximum capacities and extending useful life of system; and to prevent loss of water causing excessive flow rates, low pressure, increased pumpage and treatment

### **Description of Program Activities:**

Water service connections are repaired or renewed as required

### **Description of Program Resources:**

Resources delivering program services are shared with all activity based maintenance activities in the Water Supply, Sanitary Sewerage and General Tax operating budgets. Resource utilization is charged to the activity based programs through maintenance work orders



## 2018 Program Detail

Works - Water Supply System

### **Performance Measurements:**

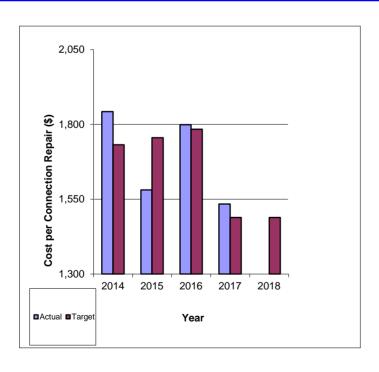
- All major service connection breaks on street are isolated and repaired upon detection
- All service valves on water services 100 mm in diameter and larger are operated every four years
- All curb stops on water services 50 mm in diameter and less are operated/repaired based on customer complaints
- Polybutylene Service Connections: An extensive 10 year program to replace polybutylene service connections is underway with the goal to have all these connections replaced by 2021

### **Units of Service**

a) Water Service Connection Repairs

Target	Proj Actual	Target
2017	2017	2018
1,556	1,553	1,565

#### **Efficiency:**



## Cost Per Unit of Service - Water Service Connection Repairs

Cost per unit includes all labour, materials and equipment utilized in the repair activities. The cost is an average across the depots, which encounter varying conditions and maintenance issues on a repair by repair basis.

# PROGRAM 3 WATER CONNECTIONS



## **2018 Program Detail**

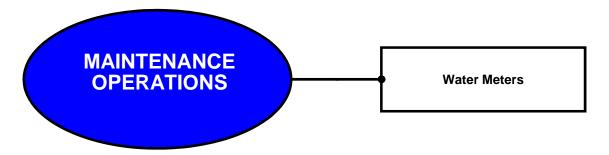
Works - Water Supply System

<b>Detailed Cost of Program:</b>	20	17		2018	
(\$,000,\$)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget
Water Service Repair	2,383	2,316	2,352	(22)	2,330
Inspect Service Boxes	217	380	390	(145)	245
Water Service Box Repair	1,138	871	885	323	1,208
Net Program Expenses	3,738	3,567	3,627	156	3,783



## 2018 Program Detail

Works - Water Supply System



#### **Purpose:**

• To maintain the inventory of water meters and the water supply system to accurately measure the consumption of water to maximize revenue for the Region

## **Description of Program Activities:**

- Existing residential meters are scheduled to be replaced when they are 20 years old depending on available funds and the condition of the meters
- Meters larger than 17 mm will be tested, repaired and replaced as required in accordance with the existing service levels
- Meters will be removed due to demolitions and winter conditions as required

#### **Description of Program Resources:**

Resources delivering program services are shared with all activity based maintenance activities in the Water Supply, Sanitary Sewerage and General Tax operating budgets. Resource utilization is charged to the activity based programs through maintenance work orders

#### **Performance Measurements:**

- Water meters are replaced on a routine program at intervals based on the following cycle:
  - 17 mm every 20 years; 19 mm every 15 years; 25 mm every 10 years; and 40 mm every 10 years
- ◆ Water meters 50 mm in size are replaced with a recalibrated meter every 8 years
- Water meters are tested, overhauled, recalibrated or replaced at intervals in accordance with the following:
  - -75mm every 3 years; 100 mm every 2 years; 150 mm every year; and over 150 mm every 6 months



## **2018 Program Detail**

Works - Water Supply System

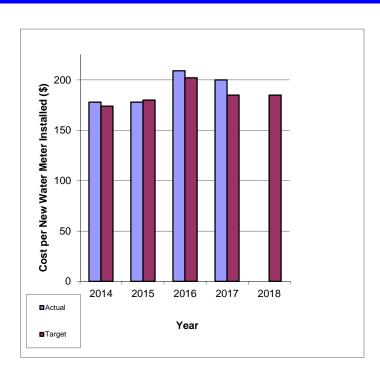
## **Units of Service**

- a) Residential Meter Install and Replace (Capital Item)
- b) Large Meter Repair

Target	Proj Actual	Target
2017	2017	2018
6,300	6,300	6,300
874	885	880

Installation of Water Meters is budgeted under Capital Projects

## **Efficiency:**



## Cost Per Unit of Service - Installation of New Residential Water Meters

Cost per unit includes all labour, materials and equipment utilized. Installation and replacement of water meters is categorized as capital.

# PROGRAM 4 WATER METERS



## **2018 Program Detail**

Works - Water Supply System

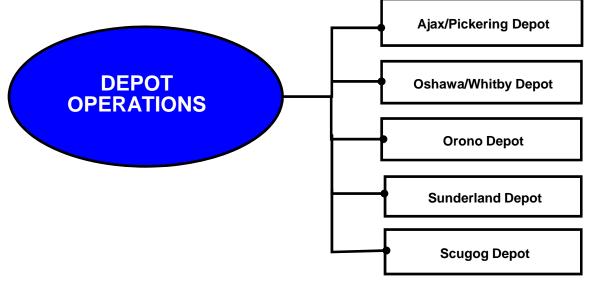
<b>Detailed Cost of Program:</b>	20	17		2018	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
	Actuals	Budget	Budget	Change	Budget
Meter Repair - Calibration	96	82	84	13	97
Large Meter Repair	479	477	481	-	481
Remove Meters	21	20	20	1	21
Net Program Expenses	596	579	585	14	599

# PROGRAM 5 DEPOT OPERATIONS



## 2018 Program Detail

Works - Water Supply System



### **Purpose:**

 To provide leadership and direction to the Works depots, effectively monitoring and managing activities including water connections, water meters, and watermain cleaning and repairs, ensuring compliance with approved budgets and policy guidelines

### **Description of Program Activities:**

- To provide the administrative services required to support depot-related maintenance activities (i.e. water connections, water meters, watermain cleaning and repairs)
- Maintain proper inventory records

## **Description of Program Resources:**

◆ 2018 Full Time Employees 15.847

◆ 2017 Full Time Employees 15.070

One (1) Project Manager in Maintenance Operations to assist the Manager in the delivery of services and to ensure compliance with changing standards and regulations. This position will be shared with General Tax and Sanitary Sewerage (0.333 FTE)

One (1) Maintenance Clerk at Orono Depot to provide clerical support to the depot. This position will be shared with General Tax and Sanitary Sewerage (0.444 FTE)



## 2018 Program Detail

Works - Water Supply System

<b>Detailed Cost of Program:</b>	20	17		2018	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
	Actuals	Budget	Budget	Change	Budget
Operating Expenses					
Personnel Expenses	1,795	1,795	1,843	63	1,906
Payroll Maintenance Management - Charge	2,353	2,526	2,602	(108)	2,494
Payroll Maintenance Management - Recovery	(16)	(19)	(20)	3	(17)
<b>Net Personnel Expenses</b>	4,132	4,302	4,425	(42)	4,383
Personnel Related	522	556	556	83	639
Communications	168	195	195	(29)	166
Supplies	171	200	199	(4)	195
Materials & Services	230	80	80	4	84
<b>Buildings &amp; Grounds Operations</b>	60	60	60	-	60
Equipment Maintenance & Repairs	3	2	2	1	3
Vehicle Operations	397	386	387	8	395
Professional Services	1	1	1	-	1
Minor Assets & Equipment	· .		4	_	4
Contribution to Reserve &			7		7
Reserve Funds	11	11	11	-	11
Operating Expenses Subtotal	5,695	5,793	5,920	21	5,941
Transfers from Related Entities					
NextGen Charges	28	26	26	1	27
Transfers from Related Entities Subtotal	28	26	26	1	27
Inter-Departmental Transfers & Recoveries					
Recovery from Fleet	(221)	(239)	(244)		(244)
Inter-Departmental Transfers & Recoveries Subtotal	(221)	(239)	(244)	-	(244)
Gross Operating Expenses	5,502	5,580	5,702	22	5,724

# PROGRAM 5 DEPOT OPERATIONS



## 2018 Program Detail

Works - Water Supply System

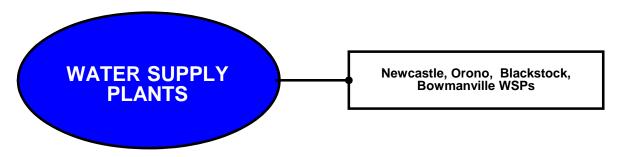
<b>Detailed Cost of Program:</b>	20	17		2018	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
(\$,000 \$)	Actuals	Budget	Budget	Change	Budget
Tangible Capital Assets					
New	102	102		121	121
Total Tangible Capital Assets	102	102		121	121
Total Expenses	5,604	5,682	5,702	143	5,845
Revenues					
Fees & Service Charges	(259)	(157)	(161)	1	(160)
Sundry Revenue	(9)	(17)	(17)	3	(14)
Total Revenues	(268)	(174)	(178)	4	(174)
Net Program Expenses	5,336	5,508	5,524	147	5,671

<sup>\*</sup> Tangible Capital Assets are stated separately on the Program Summary

Net Program Expenses Per Above	5,671
Less: Tangible Capital Assets	(121)
Net Operating Program Expenses Per Program Summary	5,550



Works - Water Supply System



### Purpose:

- To supply the public with safe, potable, aesthetically acceptable water
- To ensure all quality and quantity requirements are addressed

### **Description of Program Activities:**

- Operate the water supply system for the communities in the Municipality of Clarington and the Township of Scugog (Blackstock), consisting of 2 surface water plants, 1 elevated tank, 2 standpipes, 4 wells, 4 storage facilities and 3 pumping stations
- Continuously monitor water quality
- Maintain pressures, flows and levels in the distribution system
- Maintain records of plants and system flows, pressures, levels and all other operating parameters
- Perform both scheduled and breakdown maintenance on all equipment
- Provide training for staff on process, safety, new equipment and all other related topics
- Collect water samples throughout the system for quality assurance purposes
- Administer programs required under the Ministry of the Environment and Climate Change (MOECC) Acts and Regulations
- Participate in the construction of facilities within the service area

### **Description of Program Resources:**

2018 Full Time Employees 9.3302017 Full Time Employees 9.330



Works - Water Supply System

### **Performance Measurements:**

- Cost per megalitre of water treated
- Number of emergency callouts
- Number of boil water advisories issued annually

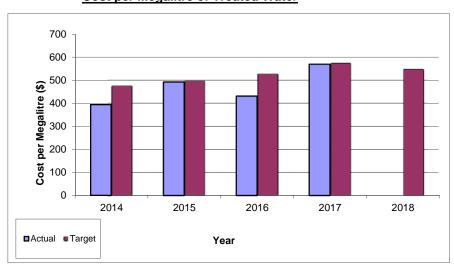
### **Units of Service**

- a) Megalitres of water treated at the plant
- b) Number of Emergency Callouts
- c) Number of Boil Water Advisories

Target	Proj Actual	Target
2017	2017	2018
4,900	4,299	4,900
325	383	350
0	0	0

## **Efficiency:**

### Cost per Megalitre of Treated Water





Works - Water Supply System

<b>Detailed Cost of Program:</b>	20	17		2018	
(\$ 000'a)	Estimated	Approved	Base	Program	Proposed
(\$,000's)	Actuals	Budget	Budget	Change	Budget
Operating Expenses					
Personnel Expenses	1,207	1,276	1,306	21	1,327
Personnel Related	25	33	33	-	33
Communications	102	120	120	(35)	85
Supplies	201	188	188	(17)	171
Utilities	461	614	538	-	538
Chemicals	71	71	71	(18)	53
Computer Maintenance &					
Operations	16	16	16	(4)	12
Materials & Services	16	17	17	(1)	16
Equipment Maintenance &				. ,	
Repairs	91	122	122	3	125
Vehicle Operations	31	14	14	6	20
Professional Services	18	28	28	(9)	19
Major Repairs & Renovations	30	30	-	-	-
Operating Expenses Subtotal	2,269	2,529	2,453	(54)	2,399
Inter-Departmental Transfers & Recoveries					
Works - SCADA Group Charge Works - Regional Environmental	106	191	201	(3)	198
Lab Charge Recovery - Works - Ajax WSP -	119	126	125	13	138
Labour	32	62	62	(17)	45
Inter-Departmental Transfers & Recoveries Subtotal	257	379	388	(7)	381
Gross Operating Expenses	2,526	2,908	2,841	(61)	2,780
Tangible Capital Assets					
Replacement	50	50	105	-	105
Total Tangible Capital Assets	50	50	105	-	105
Total Expenses	2,576	2,958	2,946	(61)	2,885



Works - Water Supply System

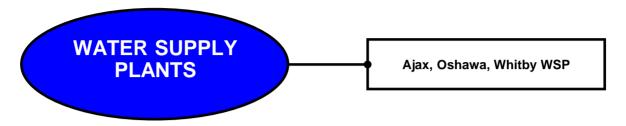
<b>Detailed Cost of Program:</b>	20	17		2018	
(\$,000's)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget
Revenues Fees & Service Charges	(53)	(60)	(60)	(29)	(89)
Total Revenues	(53)	(60)	(60)	(29)	(89)
Net Program Expenses	2,523	2,898	2,886	(90)	2,796

<sup>\*</sup> Tangible Capital Assets are stated separately on the Program Summary

Net Program Expenses Per Above2,796Less: Tangible Capital Assets(105)Net Operating Program Expenses Per Program Summary2,691



Works - Water Supply System



### **Purpose:**

- To supply the public with safe, potable, aesthetically acceptable water
- To ensure all quality and quantity requirements are addressed

### **Description of Program Activities:**

- Operate and maintain 3 water supply plants, 11 remote water pumping stations and 10 storage facilities in compliance with provincial legislation
- Continuously monitor water quality
- Maintain pressures, flows and levels in the distribution system
- Maintain records of plants and system flows, pressures, levels and all other operating parameters
- · Perform both scheduled and breakdown maintenance on all equipment
- Provide training for staff on process, safety, new equipment and all other related topics
- Collect water samples throughout the system for quality assurance purposes
- Administer programs required under the Ministry of the Environment and Climate Change (MOECC) Acts and Regulations
- Participate in the construction of facilities within the service area
- Maintain standby diesel equipment in water supply plants, water pollution control plants, pumping stations, long-term care facilities, Regional Headquarters and paramedic response stations
- Maintain and expand SCADA systems throughout water supply plants, water pollution control plants, pumping stations and storage facilities

### **Description of Program Resources:**

2018 Full Time Employees 45.4302017 Full Time Employees 45.430



Works - Water Supply System

### **Performance Measurements:**

- Cost per megalitre of water treated
- Number of emergency callouts
- Number of boil water advisories issued annually

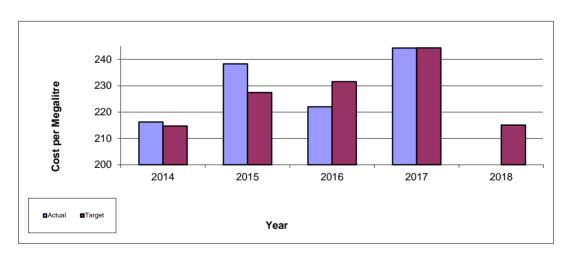
### **Units of Service**

- a) Megalitre of water treated at the plant
- b) Number of Emergency Callouts
- c) Number of Boil Water Advisories

Target	Proj Actual	Target
2017	2017	2018
60,000	54,000	60,000
275	280	275
0	0	0

### **Efficiency:**

#### **Cost per Megalitre of Treated Water**





Works - Water Supply System

<b>Detailed Cost of Program:</b>	20	17		2018	
(\$ 000la)	Estimated	Approved	Base	Program	Proposed
(\$,000's)	Actuals	Budget	Budget	Change	Budget
Operating Expenses	-				
Personnel Expenses	5,157	5,235	5,419	(120)	5,299
Personnel Related	72	114	114	22	136
Communications	215	238	238	(42)	196
Supplies	792	817	816	(92)	724
Utilities	5,129	6,273	4,731	-	4,731
Chemicals	616	627	627	(57)	570
Computer Maintenance &					
Operations	131	145	145	(55)	90
Materials & Services	54	37	37	46	83
Equipment Maintenance &					
Repairs	459	453	453	53	506
Vehicle Operations	353	463	464	(103)	361
Professional Services	51	48	48	8	56
Minor Assets & Equipment	10	10	-	-	-
Major Repairs & Renovations	_	-		30	30
Operating Expenses Subtotal	13,039	14,460	13,092	(310)	12,782
Inter-Departmental Transfers &					
Recoveries					
Works - SCADA Group Charge	256	319	321	(4)	317
Works - Regional Environmental	470	000	200		000
Lab Charge Recovery - Works - Ajax WSP -	172	200	200	9	209
Labour	(136)	(142)	(141)	(26)	(167)
Recovery - Sunvalley	(23)	(23)	(23)	(23)	(23)
Inter-Departmental Transfers &					
Recoveries Subtotal	269	354	357	(21)	336
Gross Operating Expenses	13,308	14,814	13,449	(331)	13,118
Tangible Capital Assets					
New	250	250	_	_	_
Replacement	525	525	200	_	200
Total Tangible Capital Assets	775	775	200	-	200
Total Expenses	14,083	15,589	13,649	(331)	13,318
: <b></b>	,,,,,,,,	. 5,555	,	(001)	

## PROGRAM 7 PLANTS CENTRAL



# 2018 Program Detail

Works - Water Supply System

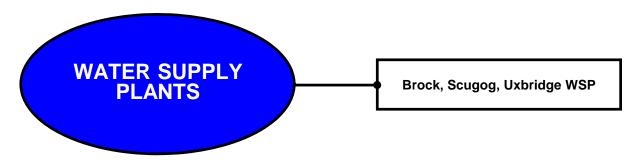
<b>Detailed Cost of Program:</b>	20	17		2018	
(\$,000's)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget
Revenues Fees & Service Charges	(83)	(80)	(80)	(23)	(103)
Sundry Revenue	(25)	(60)	(60)	(18)	(78)
Total Revenues	(108)	(140)	(140)	(41)	(181)
Net Program Expenses	13,975	15,449	13,509	(372)	13,137

<sup>\*</sup> Tangible Capital Assets are stated separately on the Program Summary

Net Program Expenses Per Above	13,137
Less: Tangible Capital Assets	(200)
Net Operating Program Expenses Per Program Summary	12,937



Works - Water Supply System



### **Purpose:**

- ◆ To supply the public with safe, potable, aesthetically acceptable water
- To ensure all quality and quantity requirements are addressed

### **Description of Program Activities:**

- Operate the water supply system for 7 communities consisting of 21 wells, 1 surface water plant, 5 towers/standpipes and 2 storage facilities
- Continuously monitor water quality
- Maintain pressures, flows and levels in the distribution system
- Maintain records of plants and system flows, pressures, levels and all other operating parameters
- Perform both scheduled and breakdown maintenance on all equipment
- Provide training for staff on process, safety, new equipment and all other related topics
- Collect water samples throughout the system for quality assurance purposes
- Administer programs required under the Ministry of the Environment and Climate Change (MOECC) Acts and Regulations
- Participate in the construction of facilities within the service area

### **Description of Program Resources:**

2018 Full Time Employees 8.8302017 Full Time Employees 8.830

### **Performance Measurements:**

- Cost per megalitre of water treated
- Number of emergency callouts
- Number of boil water advisories issued annually



Works - Water Supply System

### Performance Measurements: (continued)

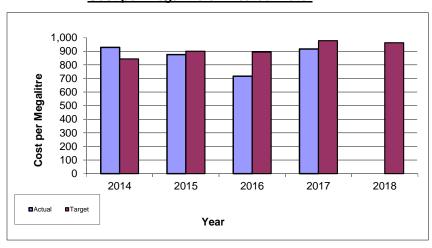
## **Units of Service**

- a) Megalitre of water treated at the plant
- b) Number of Emergency Callouts
- c) Number of Boil Water Advisories

Target	Proj Actual	Target
2017	2017	2018
2,900	2,537	2,900
275	259	270
0	0	0

## **Efficiency:**

### **Cost per Megalitre of Treated Water**





Works - Water Supply System

<b>Detailed Cost of Program:</b>	20	17		2018	
(\$ 000la)	Estimated	Approved	Base	Program	Proposed
(\$,000's)	Actuals	Budget	Budget	Change	Budget
Operating Expenses					
Personnel Expenses	1,023	1,118	1,147	(27)	1,120
Personnel Related	24	44	44	1	45
Communications	53	117	117	(15)	102
Supplies	302	212	211	126	337
Utilities	364	504	461	5	466
Chemicals	108	126	126	(11)	115
Computer Maintenance &					
Operations	9	9	9	(2)	7
Materials & Services	11	27	26	(3)	23
Equipment Maintenance &					
Repairs	125	171	172	-	172
Vehicle Operations	90	123	123	(28)	95
Professional Services	15	14	15	2	17
Operating Expenses Subtotal	2,124	2,465	2,451	48	2,499
Inter-Departmental Transfers &					
Recoveries					
Works - SCADA Group Charge Works - Regional Environmental	95	171	181	(2)	179
Lab Charge	190	250	250	(60)	190
Recovery - Works - Ajax WSP -					
Labour	10	14	15	(4)	11_
Inter-Departmental Transfers &					
Recoveries Subtotal	295	435	446	(66)	380
Gross Operating Expenses	2,419	2,900	2,897	(18)	2,879
Tangible Capital Assets					
Replacement			70		70
Total Tangible Capital Assets			70	-	70
Total Expenses	2,419	2,900	2,967	(18)	2,949



Works - Water Supply System

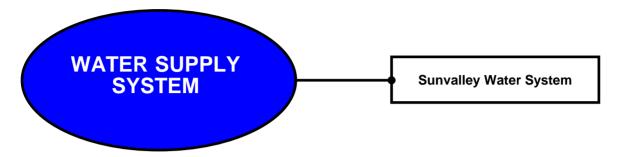
<b>Detailed Cost of Program:</b>	20	17		2018	
(\$,000's)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget
Revenues Fees & Service Charges	(93)	(65)	(65)	(22)	(87)
Total Revenues	(93)	(65)	(65)	(22)	(87)
Net Program Expenses	2,326	2,835	2,902	(40)	2,862

<sup>\*</sup> Tangible Capital Assets are stated separately on the Program Summary

Net Program Expenses Per Above2,862Less: Tangible Capital Assets(70)Net Operating Program Expenses Per Program Summary2,792



Works - Water Supply System



### **Purpose:**

- To supply the Sunvalley Community (17 households) with safe, potable, aesthetically acceptable water
- To ensure all quality and quantity requirements are addressed

### **Description of Program Activities:**

- Operate the private water system in this community in the City of Oshawa as ordered by the Ministry of the Environment and Climate Change (MOECC)
- Carry out maintenance (preventative, breakdown)
- Maintain records (quality, flow, financial)
- Train staff in process, safety and other related topics
- Collect samples throughout the system

### **Performance Measurements:**

- Cost of operation
- Number of emergency callouts
- Number of customer complaints
- Number of boil water advisories issued annually

### **Units of Service**

- a) Number of Emergency Callouts
- b) Number of Customer Complaints

Target 2017	Proj Actual 2017	Target 2018
4	4	4
0	0	0

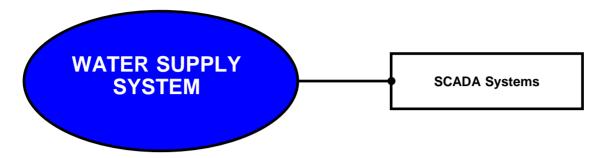


Works - Water Supply System

<b>Detailed Cost of Program:</b>	20	17		2018	
(\$,000's)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget
Operating Expenses					
Supplies	-	2	2	-	2
Materials & Services	-	1	1	-	1
Minor Assets & Equipment	2	2	2	-	2
Operating Expenses Subtotal	2	5	5	-	5
Inter-Departmental Transfers & Recoveries Ajax Water Supply Plant Charge	23	23	23	-	23
Inter-Departmental Transfers & Recoveries Subtotal	23	23	23	-	23
Total Expenses	25	28	28	-	28
Revenues					
Fees & Service Charges	(25)	(28)	(28)	-	(28)
Total Revenues	(25)	(28)	(28)	-	(28)
Net Program Expenses				-	



Works - Water Supply System



### **Purpose:**

The centralized SCADA Systems group located at the Oshawa Water Supply Plant coordinates and plans
maintenance and upgrades to the Supervisory Control and Data Acquisition (SCADA) system throughout the
Water Supply and Water Pollution Control Plants

### **Description of Program Activities:**

- Address day-to-day issues as well as deal with emergency situations with 24/7 availability
- Administration and quality control as it relates to SCADA projects
- Develop and maintain SCADA operating procedures
- Ensure SCADA standards are adhered to in new asset creation, upgrades and modifications
- Update and modify Programmable Logic Controller (PLC) programs
- Provide testing, documenting and install patches throughout SCADA systems
- Maintain database of data to develop trends for analysis and diagnostics
- Deployment, troubleshoot, and maintenance of LAN and WAN communication equipment both wired and wireless
- Secure SCADA network from unauthorized use
- Research and test new SCADA technologies
- Commission and decommissioning of SCADA projects and upgrades
- · Assist engineering department with SCADA projects and new initiatives
- Maintain, replace, and back-up all equipment connected to the SCADA network
- Contract administration for external support agreements

### **Description of Program Resources:**

2018 Full Time Employees 13.6602017 Full Time Employees 13.660



Works - Water Supply System

<b>Detailed Cost of Program:</b>	20	17	2018			
(\$,000's)	Estimated Approved		Base	Program	Proposed	
	Actuals	Budget	Budget	Change	Budget	
Operating Expenses						
Personnel Expenses	1,443	1,669	1,645	76	1,721	
Personnel Related	135	132	132	15	147	
Communications	2	8	8	(5)	3	
Supplies	39	37	37	4	41	
Computer Maintenance &				(4)	_	
Operations	9	9	9	(4)	5	
Materials & Services	25	20	20	-	20	
Equipment Maintenance & Repairs	10	33	33	(15)	18	
Professional Services	30	50	50	(22)	28	
Operating Expenses Subtotal	1,693	1,958	1,934	49	1,983	
Inter-Departmental Transfers & Recoveries						
SCADA Systems Recovery	(1,693)	(1,958)	(1,934)	(49)	(1,983)	
Inter-Departmental Transfers &						
Recoveries Subtotal	(1,693)	(1,958)	(1,934)	(49)	(1,983)	
Gross Operating Expenses		-		-	-	
Tangible Capital Assets						
Replacement			100	-	100	
Total Tangible Capital Assets	-		100	-	100	
Net Program Expenses			100	-	100	

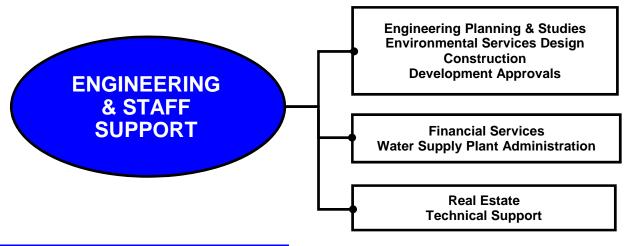
<sup>\*</sup> Tangible Capital Assets are stated separately on the Program Summary

Net Program Expenses Per Above	100
Less: Tangible Capital Assets	(100)
Net Operating Program Expenses Per Program Summary	



## 2018 Program Detail

Works - Water Supply System



### **Purpose:**

Represents the portions of various divisions of the Works Department that are attributable to the Water Supply System including:

#### **Engineering Planning and Studies**

• To provide overall leadership and guidance to the various Departments of the Region of Durham which affect long-range planning of the Municipal Water Supply and Distribution Systems and Municipal Wastewater Collection and Treatment Systems; to service existing customers and future customers forecast under the anticipated growth recognized in the Durham Region Official Plan

#### **Environmental Services Design**

To plan, design and initiate construction of water supply system infrastructure to provide service for existing and new customers, in compliance with all applicable legislation and regulations. Water supply infrastructure includes water supply plants, pumping stations, water storage facilities and watermains and appurtenances. To develop and maintain an information database on the linear and vertical assets of the Region's water infrastructure and to regularly update other Divisions and Departments on the condition of these assets which include watermains, water supply plants, pumping stations, storage reservoirs and elevated tanks

#### Construction

To plan, design and construct Regional infrastructure including all roads, sanitary and storm sewers and associated services, watermains and associated services, bridges, culverts, water supply plants and associated wells, pumping stations and modifications, water pollution control plants and associated pumping stations and modifications, all as budgeted for in the current year's business plan including all similar construction necessitated by emergencies

#### **Development Approvals**

 To assist and facilitate well planned industrial, commercial and residential development proposals within Durham Region by providing cost effective municipal water, sanitary sewerage and Regional road services, while protecting the interests of the Region and the public

### Financial Services

To provide overall leadership and direction to the various divisions of the Works Department in effectively
monitoring and managing expenditures to ensure compliance with approved budgets and policy guidelines



## 2018 Program Detail

Works - Water Supply System

### Purpose: (continued)

#### Water Supply Plant Administration

 To provide management of the Plant Operations Division including; the co-ordination and monitoring of expenditures, dealing with personnel and administrative issues and planning for the long term operational needs of the division in accordance with policies, guidelines and legislation

#### Real Estate

 To administer and manage the real estate function for the Region including the rental of properties and the purchase of land to facilitate construction of municipal services

#### Technical Support

- A technical working group directing and supporting the following programs:
  - Sewer-Use By-Law Enforcement
  - Water/Wastewater Treatment Operations
  - Maintenance Operations (including landfill monitoring)
  - Water Energy Efficiency Programs
  - Data System Management
  - Source Water Protection

### **Description of Program Activities:**

The duties and services provided are required to comply with all applicable legislation and represent those areas of the Works Department which relate directly to the provision and management of the water distribution and supply infrastructure. The activities include: engineering planning and studies, detailed design, construction and asset management and ongoing post commissioning support.

#### **Engineering Planning and Studies**

- Develop and implement a comprehensive servicing strategy for the water supply and sanitary sewerage systems throughout the Region through the completion of Official Plan Servicing Studies and providing input into the Development Charges Studies
- Coordinate the use and protection of our valuable groundwater resources through development of wellhead protection areas, review of land uses within these areas, and liaison with neighbouring municipalities on groundwater management practices
- Complete Environmental Assessments, as required, for water supply and sanitary sewerage capital projects prior to Capital Projects proceeding to detailed design and construction
- Provide technical review of applications for new development and comment on availability of water supply and sanitary sewerage services, over-sizing, and ensure that the Region's standards are being met
- Act as Durham Region representatives on various internal and external Committees related to water supply and sanitary sewerage servicing

#### **Environmental Services Design**

Plan and implement the rehabilitation/replacement of existing infrastructure in conjunction with Regional and Area Municipality Road programs and independent of road programs. Conduct Asset Management studies to prioritize deficiencies and optimize use of financing for rehabilitation and replacement of existing water supply infrastructure. Design and initiate construction of water supply infrastructure to service existing and new development and in response to new regulations



## 2018 Program Detail

Works - Water Supply System

### Description of Program Activities: (continued)

#### Construction

- To provide the administrative services which calculate the budgets for infrastructure projects, develop and award the tenders and oversee the construction projects
- To provide the contract administrative services required to complete the construction activities including the processing and executing of all required project documentation, bonding and insurance, and progress payments
- Fulfilling contract requirements such as issuing substantial and final completion certificates, maintaining statutory, deficiency, maintenance and finishing holdbacks and final contract releases
- To provide required quality control and quality assurance for all construction projects, including topographic surveying and layout, sewer and water infrastructure testing (SWAT), construction inspection, commissioning services, as constructed measurements and maintaining all as constructed drawings, testing of construction materials and providing geotechnical investigations and associated services
- To provide asset management services including the management and monitoring of the Region's infrastructure assets

#### **Development Approvals**

- Review and process development applications, including land severances, with minimum delay, ensuring that they meet Regional guidelines and standards and services are sized to meet long range Regional servicing objectives
- Negotiate and prepare draft servicing, subdivision or front ending agreements that are balanced and fair to ensure no adverse financial impact on the Region
- Assess feasibility, request for funding, coordinate collection charges, issue connection applications and payment agreements and initiate the passage of by-laws for Regional residents who request sewer and/or water service
- Co-ordinate the Development Charge collection process with local municipalities and the Finance
  Department to ensure timely issuance of building permits and adequate cash flow from development for the
  construction of Regional growth related infrastructure
- Control development to balance available capacities or identify required improvements to accommodate the development by coordinating comments and discussing issues with Local Area Municipalities, other Divisions and Departments

#### Financial Services

- Coordinate the preparation of the Works Department Annual Operating and Capital Budgets
- Manage and execute transactional items to recover costs from internal programs and divisions as well as outside agencies, developers and other area municipalities related to current and capital programs
- Liaison with the Finance Department and other senior levels of government regarding matters of Budget Management and policy related to funding and expenditures
- Ensure Works staff meet deadlines set by Regional Council and the Finance Department
- Provide clerical and administrative support related to committee reports and official correspondence
- Provide mail and reception services for the Works Department at Regional Headquarters
- Maintain proper inventory of office materials and supplies for staff use



## 2018 Program Detail

Works - Water Supply System

### **Description of Program Activities: (continued)**

#### Water Supply Plant Administration

- Assist in the preparation of the Plant Operations budget
- Monitor and approve expenditures in accordance with approved budgets, policies and guidelines
- Manage divisional administrative needs in accordance with agreements, policies, guidelines and legislative requirements
- Develop policies, methods and guidelines for the efficient and effective operation of the Region's Water Supply Plant facilities
- · Liaise with government, public and private agencies

#### Real Estate

- Negotiate property agreements for the acquisition of lands and property rights necessary for implementation
  of Regional programs including the construction of road, sanitary sewerage and water supply projects
- Co-ordinate the expropriation process where necessary
- Locate and negotiate lease agreements for facilities required by various Regional Departments and coordinate leasehold improvements to the facilities in conjunction with the client and with the Facilities Management Division
- Manage the rental of Region owned properties, including the collection of rent and the disposal of properties no longer required by the Region
- Compile and maintain records on all Region owned property including limited interest such as sanitary sewerage and water supply easements, leases, licenses, permission to enter agreements, pipe crossings and encroachments
- Co-ordinate, plan and schedule the re-registration of easements as directed by Provincial legislation
- Provide title information and cost estimates related to land and leasing, to other Divisions and Departments, as required

#### Technical Support

A technical working group directing and supporting the following programs:

Sewer-Use By-Law Enforcement:

Enforcement of the Sewer-Use By-law 55-2013, to protect the infrastructure and the treatment facilities, to maintain compliance with regulatory requirements through monitoring, investigation, compliance programs and surcharge agreements and to maintain public/staff safety

Water/Wastewater Treatment Operations:

Provide technical support in areas of treatment operations and design, monitoring and reporting for compliance requirements, response and investigation of consumer concerns and enquiries, training of staff, response to adverse water quality issues and related regulatory notifications

• Maintenance Operations:

Provide technical support in areas of maintenance operations, including contract administration of maintenance and rehabilitation programs for watermains, budget preparation, review of new infrastructure to meet Regional Standards, review of new products, procedures, standards and guidelines

Water Energy Efficiency Programs:

The Water Energy Efficiency Program focuses on education of the public and outreach through newsletters, presentations, schools and the Central Lake Ontario Conservation Authority's (CLOCA) Children's Watershed Festival. This program also undertakes innovative water efficiency field studies through partnerships with area municipalities

The Energy Management Group assist plant operation in energy control, and demand reduction projects, conduct energy audits for major energy using Regional Facilities through power monitoring and energy use reduction projects



## 2018 Program Detail

Works - Water Supply System

### **Description of Program Activities: (continued)**

Data System Management (GIS Group):

 The Data System Management (DSM) maintains the linear infrastructure data of the existing Water Supply, Sanitary Sewerage and Storm Sewer System using leading edge Geographical Information System (GIS) technology and provides services to inside and outside users for all cartographic or inventory needs. DSM develops and maintains applications for convenient data access to infrastructure data

### **Description of Program Resources:**

◆ 2018 Full Time Employees 70.558

◆ 2017 Full Time Employees 70.333 (restated)

One (1) Inspector 3 in Construction to inspect plant projects to ensure adherence to design, review as-built drawings and to provide quality control. This position will be shared with General Tax and Sanitary Sewerage (0.385 FTE)

Reallocation of resources to Duffin Creek WPCP (-0.160 FTE)

### **Performance Measurements:**

- Resources to provide staff for administration/engineering support. Also includes general office expenditures such as telephone costs, office supplies and operating costs
- Resource Management through budgeting and forecasting future needs
- Timely receipt of all regulatory approvals to proceed with the refurbishment and construction of water related infrastructure projects
- Quality control through Construction Inspection and Contract Administration
- Monitoring the state of the water-related linear infrastructure to optimize the maintenance reinvestment required
- Coordination of all related activities including safety, real estate and data management
- Timely delivery of major water supply infrastructure projects to ensure growth and development can proceed as planned
- Minimizing over expenditures and ensuring that optimum value is obtained for all water infrastructure related expenditures
- Implementation of water infrastructure projects in full compliance with all applicable municipal, provincial and federal legislation



# 2018 Program Detail

Works - Water Supply System

<b>Detailed Cost of Program:</b>	20	17			
(\$,000's)	Estimated	Approved	Base	Program	Proposed
(\$,000 \$)	Actuals	Budget	Budget	Change	Budget
Operating Expenses					_
Personnel Expenses	7,937	8,221	8,400	(37)	8,363
Payroll Maintenance					
Management - Recovery	(3,526)	(3,708)	(3,803)	(40)	(3,843)
Net Personnel Expenses	4,411	4,513	4,597	(77)	4,520
Personnel Related	261	265	266	17	283
Communications	90	94	94	6	100
Supplies	56	77	77	(11)	66
Computer Maintenance &				, ,	
Operations	117	149	149	(18)	131
Materials & Services	300	231	230	70	300
Equipment Maintenance &					
Repairs	53	204	203	_	203
Vehicle Operations	24	29	29	(7)	22
Professional Services	545	470	470	51	521
Minor Assets & Equipment	-	-	4	3	7
Contribution to Reserve &			·	Ü	,
Reserve Funds	1	7	7	(5)	2
Operating Expenses Subtotal	5,858	6,039	6,126	29	6,155
Inter-Departmental Transfers &					
Recoveries					
Corporate Communication	400	400	4 4 7	40	400
Charge Corporate IT Charge	126 169	126 169	147 169	16	163 169
Corporate HR Charge	85	85	85	-	85
Works - Regional Environmental	00	00	00		00
Lab Charge	110	110	110	39	149
Recovery - Works - General Tax	(8)	(10)	(9)	-	(9)
Recovery - Regional					
Environmental Lab	(36)	(36)	(36)	-	(36)
Inter-Departmental Transfers &					
Recoveries Subtotal	446	444	466	55	521
Gross Operating Expenses	6,304	6,483	6,592	84	6,676



# 2018 Program Detail

Works - Water Supply System

<b>Detailed Cost of Program:</b>	20	17	2018			
(\$,000's)	Estimated	Approved	Base	Program	Proposed	
(\$,000 \$)	Actuals	Budget	Budget	Change	Budget	
Tangible Capital Assets						
New	-	-	_	13	13	
Replacement	84	84	285	-	285	
Total Tangible Capital Assets	84	84	285	13	298	
Total Expenses	6,388	6,567	6,877	97	6,974	
Revenues						
Fees & Service Charges	(271)	(222)	(222)	(34)	(256)	
Sale of Publications	(15)	(15)	(15)	-	(15)	
Sundry Revenue	(222)	(206)	(206)	(13)	(219)	
Total Revenues	(508)	(443)	(443) (47)		(490)	
Net Program Expenses	5,880	6,124	6,434	50	6,484	

<sup>\*</sup> Tangible Capital Assets are stated separately on the Program Summary

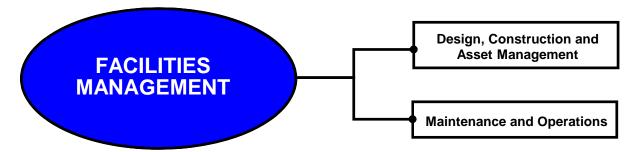
Net Program Expenses Per Above	6,484
Less: Tangible Capital Assets	(298)
Net Operating Program Expenses Per Program Summary	6,186

# PROGRAM 12 FACILITIES MANAGEMENT



## 2018 Program Detail

Works - Water Supply System



### **Purpose:**

- Provide overall lifecycle management for Regional facilities including:
  - Detailed design and construction of new facilities and leasehold improvements
  - Lifecycle maintenance planning and replacement strategies
  - Ongoing and preventative maintenance and overall operation of Regional facilities, properties and grounds through Regional and contracted forces
  - Centralized security services

### **Description of Program Activities:**

The Region has 216 facilities with an estimated total area of 501,080 square metres (5.4 million square feet), which generate a significant number of repair and maintenance requests over the course of a year. Major Regional facilities with complex heating, ventilation and air conditioning systems and a large number of occupants create a unique and challenging environment for facility related work

#### **Design, Construction and Asset Management**

- The Design, Construction and Asset Management unit provides project management services for all facility capital construction and maintenance projects undertaken by the Region, including those delivered for Social Housing, Long-Term Care and Durham Regional Police Service. The Design, Construction and Asset Management unit is responsible for managing all facets of facility construction projects from their inception through to completion
- Office design and staff relocation are constant demands on any organization. The Design, Construction and Asset Management unit provides expertise to plan, supervise and implement these changes in a timely and professional manner with minimal effect on staff and the delivery of their programs
- As facilities age, a greater amount of time and resources is required to maintain them in an acceptable, reliable operating condition, and retain the inherent asset value. The Design, Construction and Asset Management unit is responsible for the Region wide condition and inspection program, which identifies and prioritizes the work required on Regional facilities, providing a life cycle management approach to prioritize state of good repair investments
- Services provided: Functional Review/Scope of Work determination; Budget estimates; Consultant selection; Council approvals as required; Design review oversight and management; Quotation and tenders; Construction management; Move/relocation management; Commissioning of facility; Warranty management; Project closeout; Post occupancy review; Leasehold renovations or office design and relocation services; Computer Assisted Drafting and Design (CAD) services; Long and short term accommodation studies; Maintain databases; Accommodation planning; Implementation of Interior Renovations; Furniture Management

# PROGRAM 12 FACILITIES MANAGEMENT



## 2018 Program Detail

Works - Water Supply System

### **Description of Program Activities (continued):**

#### **Maintenance and Operations**

- Water Supply and Water Pollution Control Plants and Pumping Stations, Traffic, Maintenance and Transit Depots, Solid Waste/Recycling locations, Childcare Centres, Paramedic Stations and leased facilities require support, each with special facility maintenance and property needs based on the clientele and use
- All Regional facilities require service contracts to complement the daily operation of the facility so client
  programs may be delivered effectively, such as boiler/heating/air systems, elevators, backflow prevention,
  fire and life safety, ground maintenance and custodial/environmental services
- Services provided: Planned preventative maintenance; Contract administration; Occupant support; 24/7
   Emergency response; Custodial services
- In addition to the Region's 216 facilities, the Facilities Management division also looks after the security of the Regional Administration Headquarters building, including access control, security patrol and guard services, and CCTV installation, operation and maintenance
- Services provided: Security access control; Parking management; Response to Emergency Alarm System;
   Key control administration; Photo I.D. cards; 24/7 response to Security Systems Alarms

### **Description of Program Resources:**

◆ 2018 Full Time Employees 19.627

◆ 2017 Full Time Employees 19.021 (restated)

One (1) Policy Analyst to develp and analyze the long term facility needs, and assisting in planning for capital work to sustain Regional facility assets. This position is shared with General Tax, Sanitary Sewerage and Solid Waste Management (0.303 FTE)

One (1) Project Coordinator to provide updated base building drawings and manage As-Built/Record drawings for Regional facilities. This position is shared with General Tax, Sanitary Sewerage and Solid Waste Management (0.303 FTE)

#### **Performance Measurements:**

- Compliance with all building code standards
- Monitoring of costs
- Investigation and resolution of all requests/complaints



Works - Water Supply System

<b>Detailed Cost of Program:</b>	20	17		2018	
(\$ 000la)	Estimated	Approved	Base	Program	Proposed
(\$,000's)	Actuals	Budget	Budget	Change	Budget
Operating Expenses	-				
Personnel Expenses	1,940	2,108	2,163	30	2,193
Payroll Maintenance					
Management - Recovery	(517)	(624)	(624)	81	(543)
Net Payroll Expenses	1,423	1,484	1,539	111	1,650
Personnel Related	54	71	71	(6)	65
Communications	20	25	25	(6)	19
Supplies	65	48	47	-	47
Utilities	139	179	144	1	145
Computer Maintenance &					
Operations	15	17	17	(2)	15
Materials & Services	75	83	83	(7)	76
<b>Buildings &amp; Grounds Operations</b>	985	1,083	1,094	(49)	1,045
Equipment Maintenance &					
Repairs	87	103	103	(18)	85
Vehicle Operations	35	41	41	-	41
Professional Services	15	15 10		78	88
Contracted Services	232	276	276	(19)	257
Financial Expenses	785	785	801	3	804
Property Taxes	1,316	1,392	1,321	-	1,321
Major Repairs & Renovations	141	141	-	311	311
Operating Expenses Subtotal	5,387	5,738	5,572	397	5,969
Inter-Departmental Transfers &					
Recoveries	22	00	00		00
Works - General Tax Charge Works - Facilities Management	20	20	20	-	20
Charge	579	624	624	(81)	543
Inter-Departmental Transfers &	0.0	<u> </u>		(0.)	0.0
Recoveries Subtotal	599	644	644	(81)	563
Gross Operating Expenses	5,986	6,382	6,216	316	6,532
Tangible Capital Assets					
New	25	25	-	246	246
Replacement	1,445	1,445	360	851	1,211
Total Tangible Capital Assets	1,470	1,470	360	1,097	1,457
Total Expenses	7,456	7,852	6,576	1,413	7,989

# PROGRAM 12 FACILITIES MANAGEMENT



# 2018 Program Detail

Works - Water Supply System

<b>Detailed Cost of Program:</b>	20	17	2018			
(\$,000's)			Base Budget	Program Change	Proposed Budget	
Revenues						
Rents	(4)	(11)	(11)	-	(11)	
Revenue from Municipalities	(18)	(18)	(18)	-	(18)	
Total Revenues	(22)	(29)	(29)	-	(29)	
Net Program Expenses	7,434	7,823	6,547	1,413	7,960	

<sup>\*</sup> Tangible Capital Assets are stated separately on the Program Summary

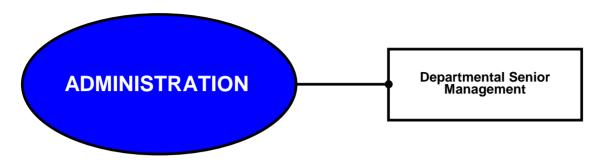
Net Program Expenses Per Above	7,960
Less: Tangible Capital Assets	(1,457)
Net Operating Program Expenses Per Program Summary	6,503

### PROGRAM 13 ADMINISTRATION



# 2018 Program Detail

Works - Water Supply System



### **Purpose:**

- Provide overall direction and strategic planning for the Works Department with respect to Planning, Design, Construction, Operation and Maintenance of the Region's Water Supply System
- To ensure that all legislated requirements are adhered to and all operations remain in compliance with regulatory bodies

## **Description of Program Activities:**

- Advise Committee of the Whole, Senior Management and Regional Council on all Works Department related matters
- Manage the operations of the Works Department through its divisions: Construction, Compliance, Development Approvals, Engineering Planning and Studies, Environmental Services Design, Facilities Management, Financial Services, Maintenance Operations, Plants Operations, Transportation Design, Transportation Infrastructure, Traffic Engineering and Operations, Real Estate and Waste Management
- Represent the Region's interests with other groups, including Provincial Ministries, other Regions and interest groups
- ◆ Provide administrative support to the general operations and special activities of the Works Department
- Coordination of Committee of the Whole reports for presentation to Regional Council related to the Water Supply System

### **Description of Program Resources:**

2018 Full Time Employees 1.6002017 Full Time Employees 1.600

## PROGRAM 13 ADMINISTRATION



# **2018 Program Detail**

Works - Water Supply System

<b>Detailed Cost of Program:</b>	20	17	2018			
(\$,000's)	Estimated Approved		Base	Program	Proposed	
(ψ,000 3)	Actuals	Budget	Budget	Change	Budget	
Operating Expenses						
Personnel Expenses	245	289	296	-	296	
Personnel Related	6	8	8	-	8	
Net Program Expenses	251	297	304	-	304	

# PROGRAM 14 TANGIBLE CAPITAL ASSETS PROGRAM SUMMARY



# 2018 Business Plan

Works - Water Supply System

By	Program	20	17	2018				
(\$,000's)		Estimated	Approved	Base	Program	am Proposed		
	(φ,000 δ)	Actuals	Budget	Budget	Change	Budget		
Tan	gible Capital Assets:		_			_		
1W	Facilities Management - New	25	25	-	246	246		
2W	- Replacement	1,402	1,402	360	851	1,211		
3W	Fleet/Equipment - New	352	352	-	134	134		
4W	- Replacement	659	659	761	-	761		
5W	Buildings - Replacement	43	43	-	-	-		
6W	Construction of Municipal							
	Services	35,728	35,728	35,728	5,319	41,047		
Net	Tangible Capital Assets							
	gram Expenses	38,209	38,209	36,849	6,550	43,399		
				(\$1,360)				
Sur	nmary of Increase (Decrea	se)		-3.56%		\$5,190		
J •	, ::	,	<u> </u>		<b></b>	13.58%		



## **Works - Water Supply Systems**

Program Detail Page	Location	Item Description	Item #	Qty	Unit Cost	Gross Total Cost	Water Total	Other Financing	Net Water
	Oshawa/Whitby								
<ol><li>Depot Operations</li></ol>	Depot	Tandem Combination Dump Truck/Snow Plow	113	1	\$ 360,000	\$360,000	\$120,000		\$120,000
	Sunderland								
	Depot	Laptop/Tablet Vehicle Mount	126	1	\$ 2,700	\$2,700	\$900	\$0	\$900
<ol><li>Engineering and Staff Support</li></ol>	Construction	1/2 Ton Pick-up Truck	19	1	\$ 40,000	\$40,000	\$13,333	\$0	\$13,333
12. Facilities Management	Ajax Depot	Access Control on Gates	7	1	\$ 96,000	\$96,000	\$32,000	\$0	\$32,000
	All Depots	Keybox	13	1	\$ 114,000	\$114,000	\$38,000	\$0	\$38,000
	Beaverton WSP	Dehumidifier Installation	150	1	\$ 57,500	\$57,500	\$57,500	\$0	\$57,500
	Oshawa/Whitby								
	Depot	Install perimeter fencing and gate	118	1	\$ 235,000	\$235,000	\$78,333	\$0	\$78,333
	Seaton	Seaton Facility Site Master Plan	142	1	\$ 160,000	\$160,000	\$40,000	\$0	\$40,000
Grand Total	and Total					\$1,065,200	\$380,066	\$0	\$380,066

#### **Tangible Capital Asset Program Summary**

1W Facilities Management - New3W Fleet/Equipment - New

245,833 134,233 **380,066** 



# **Works - Water Supply Systems**

Program Detail Page	Location	Item Description	Item #	Qty	Unit Cost	Gross Total Cost	Water Total	Other Financing	Net Water
06. Plants East	Plants East	Chlorine Analyzers	240	3	\$ 10,000	\$30,000	\$30,000	\$0	\$30,000
		Pump / Motor / Mixer Repair / Replacement	234	1	\$ 50,000	\$50,000	\$50,000	\$0	\$50,000
		SCADA / Communications / UPS	235	1	\$ 25,000	\$25,000	\$25,000	\$0	\$25,000
07. Plants Central	Ajax WSP	Aluminum Sulphate Pump Replacements	143	1	\$ 40,000	\$40,000	\$40,000	\$0	\$40,000
		Replacement Fluoride System	147	1	\$ 50,000	\$50,000	\$50,000	\$0	\$50,000
		Replacement Hypo System	148	1	\$ 100,000	\$100,000	\$100,000	\$0	\$100,000
	Plants Central	Chlorine Analyzers	226	1	\$ 10,000	\$10,000	\$10,000	\$0	\$10,000
08. Plants North	Plants North	Chlorine Analyzers	247	2	\$ 10,000	\$20,000	\$20,000	\$0	\$20,000
	Plants North - Quaker Hill	Fire Pump Replacement	257	1	\$ 50,000	\$50,000	\$50,000	\$0	\$50,000
10. SCADA Systems	Plants Central	Network Upgrades/Wireless/Phones/Paging/Fibre - CSIT	229	1	\$ 100,000	\$100,000	\$100,000	\$0	\$100,000
11. Engineering and Staff Support	Construction	Scanner and Wide Format B&W Printer (Oce Replacement)	18	1	\$ 65,000	\$65,000		\$0	
		Survey Total Station	22	1	\$ 40,000	\$40,000	\$13,333	\$0	\$13,333
	Financial Services	Desktop Computer & Monitor Refresh	136	209	\$ 950	\$198,550		\$0	. ,
		Laptop Computer & Monitor Refresh	138	35	\$ 1,729	\$60,500	\$20,000	\$0	\$20,000
		Office Reconfiguration	135	1	\$ 80,000	\$80,000	\$26,667	\$0	
		Power Computer & Monitor Refresh	139	19	\$ 2,671	\$50,750	\$26,458	\$0	\$26,458
		Power Desktop Computer & Monitor Refresh	137	86	\$ 1,951	\$167,805	\$114,725	\$0	\$114,725
12. Facilities Management	Ajax WSP	Motor Control Centre Room Cooling	146	1	\$ 210,000	\$210,000	\$210,000	\$0	
	All Depots	Digital Video Recorder (DVR) Upgrades	14	1	\$ 30,000	\$30,000	\$10,000	\$0	\$10,000
	Facilities Maintenance & Operations	Renovation & Reconfiguration to accommodate Facilities Maintenance staff	1	1	\$ 2,554,000	\$2,554,000	\$851,333	\$0	\$851,333
	Oshawa/Whitby Depot	Fleet Garage Furnace Replacement	115	1	\$ 70,000	\$70,000		\$0	
		Replace Hydraulic Cylinders in Hoist #2	117	1	\$ 120,000	\$120,000		\$0	
	Plants Central	Digital Video Recorder (DVR) Upgrades	224	1	\$ 55,000	\$55,000	\$55,000	\$0	\$55,000
	Plants Central - Grandview St. PS	Overhead Hoist Replacement	232	1	\$ 21,500	\$21,500	\$21,500	\$0	\$21,500
Grand Total	, 0	Overhous Floid Repideoment	202	'	Ψ 21,300	\$4,198,105		\$0 \$0	
Granu Total						<b>⊅4,190,10</b> 3	φ1,9/1,/10	<b>\$</b> 0	φ1,9/1,/1

### **TANGIBLE CAPITAL ASSETS - REPLACEMENT**



# **2018 Program Detail**

**Works - Water Supply Systems** 

Program Detail Page	Location	Item Description	Item #	Qty	Unit Cost	Gross Total Cost	Water Total	Other Financing	Net Water		
•			Tangible Capital Asset Program Summary								
			2W Facilities Management - Replacement								
			4W Fleet/Equipment - Replacement								
									1,971,716		

# PROGRAM 6W TCA - CONSTRUCTION



# 2018 Program Detail

Works - Water Supply System

<b>Detailed Cost of Program:</b>	20	17	2018					
(\$,000's)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget			
Tangible Capital Assets		_			_			
Capital Fund Contribution	35,728	35,728	35,728	5,319	41,047			
Total Tangible Capital Assets	35,728	35,728	35,728	5,319	41,047			

# 2018 Construction Program - Water Supply

DC Project Description Item				Grant/ Subsidy/ Other	Cost Expenditure Attribution (\$000,'s)							
		EA Land Design Const.			User Revenue Total Benefit to User Existing Revenue	Commercial Development Charges	Residential Development Charges	New Institutional Charges	New Industrial Charges	Asset Management Reserve Fund		
			Α	В	c	D	Ε̈́	F	Ğ	н	I	
A LINEAR INFRASTRUCTURE												
Regional Road Program												
* 4 R.R. 33 (Harmony Rd.) from Rossland Rd. to Conlin Rd., Oshawa		С	300	0.00	300.00	300.00	0.00	0.00	0.00	0.00	0.00	
7 R.R. 53 (Stevenson Rd.) from Hwy 401 to Bond St., Oshawa		D	150	0.00	150.00	150.00	0.00	0.00	0.00	0.00	0.00	
10 R.R. 58 Manning Rd/Adelaide Ave from Garrard Rd to Thornton Rd, O/M	/	D	100	0.00	100.00	100.00	0.00	0.00	0.00	0.00	0.00	
11 R.R. 59 (Gibb St) from Stevenson Rd to Simcoe St, Oshawa		D	100	0.00	100.00	100.00	0.00	0.00	0.00		0.00	
13 R.R. 60 (Wentworth St.) from Simcoe St. to Farewell St., Oshawa		D	130	0.00	130.00	130.00	0.00	0.00	0.00		0.00	
15 Hwy 12 (Brock St) from Timber Mill Ave to Taunton Rd., Whitby		D,C	400	0.00	400.00	400.00	0.00	0.00	0.00		0.00	
Sub-total			1,180	0.00	1,180.00	1,180.00	0.00	0.00	0.00	0.00	0.00	
Area Municipality Road Programs												
17A City of Pickering Road Program		D,C	100	0.00	100.00	100.000	0.000	0.000	0.000		0.000	
17B Town of Ajax Road Program		D,C	540	0.00	540.00	540.000	0.000	0.000	0.000		0.000	
17C Town of Whitby Road Program		D,C	1,400	0.00	1,400.00	1,400.000	0.000	0.000	0.000		0.000	
17D City of Oshawa Road Program		D,C	300	0.00	300.00	300.000	0.000	0.000	0.000		0.000	
17E Municipality of Clarington Road Program		D,C	440	0.00	440.00	440.000	0.000	0.000	0.000		0.000	
17F Township of Scugog Road Program		D,C	425	0.00	425.00	425.000	0.000	0.000	0.000		0.000	
17G Township of Uxbridge Road Program		D,C	200	0.00	200.00	200.000	0.000	0.000	0.000		0.000	
17H Township of Brock Road Program		D,C	0	0.00	0.00	0.000	0.000	0.000	0.000		0.000	
17i Allowance for unknown Water Supply requirements in conjunction with area municipality road programs in various locations		D,C	290	0.00	289.70	289.695	0.000	0.000	0.000	0.000	0.000	
Sub-total			3,695	0.00	3,694.70	3,694.695	0.000	0.000	0.000	0.000	0.000	
MTO & GO Transit projects			·		·	·						
19 Watermain replacement at Brock St. and Hwy 401, Whitby		D,C	2,100	0.00	2,100.00	2,100.000	0.000	0.000	0.000		0.000	
20 Watermain replacement at Simcoe St./Albert St. & Hwy 401, Oshawa		D	100	0.00	100.00	100.000	0.000	0.000	0.000		0.000	
Sub-total  Betterments/Replacement			2,200	0.00	2,200.00	2,200.000	0.000	0.000	0.000		0.000	
21 Water works independent of road programs in various locations		D,C	329	0.00	328.50	328.500	0.000	0.000	0.000		0.000	
22 Rehabilitation of existing watermains in various locations		D,C	1,600	0.00	1,600.00	1,600.000	0.000	0.000	0.000		0.000	
23 Replacement of wm on Kingston Rd fr Glenanna to Brock, Pickering		D,C	1,200	0.00	1,200.00	1,200.000	0.000	0.000	0.000		0.000	
27 Replacement of wm on Cameron from Elizabeth to Windsor, Ajax		D	40	0.00	0.00	0.000	0.000	0.000	0.000		40.000	
28 Replacement of wm on Windsor Dr fr Old Kingston to Cameron, Ajax		D	40	0.00	0.00	0.000	0.000	0.000	0.000		40.000	
40 Replacement of wm on Harcourt Dr from Florell Dr to DE, Oshawa 41 Replacement of wm Athol St from Centre St to Albert St, Oshawa		C	340 460	0.00	0.00	0.000	0.000	0.000	0.000		340.000 460.000	
43 Replacement of wm Oxford St from Stone St to Albert St, Oshawa  43 Replacement of wm Oxford St from Stone St to Dwight Ave, Oshawa		C	1,035	0.00	0.00	0.000	0.000	0.000	0.000		1,035.000	
44 Replacement of wm Lakeview Park Ave fr Birchcliffe to Simcoe, Oshawa	1	C	860	0.00	0.00	0.000	0.000	0.000	0.000		860.000	
45 Replacement of wm Simcoe St from Llyod St. to Elm St, Oshawa	•	C	840	0.00	0.00	0.000	0.000	0.000	0.000		840.000	
46 Replacement of wm Lanark Dr from Annapolis Ave to Waverly St, Oshav	va	C	90	0.00	0.00	0.000	0.000	0.000	0.000		90.000	
47 Replacement of wm Adelaide Ave from Oshawa Bl to Juliana Dr, Oshaw		Č	530	0.00	0.00	0.000	0.000	0.000	0.000		530.000	
Sub-total Sub-total			7,364	0.00	3,128.50	3,128.500		0.000	0.000			

# 2018 Construction Program - Water Supply

					Cost Expenditure Attribution (\$000,'s)						
		EA			User Re						Asset
Project Description		Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Management Reserve Fund
System Expansion			^	В	·	D		r			'
* 61 Zone 1 FM on Rossland Rd. from Church St. to Westney Rd, Ajax	104	D	100	35.36	0.00	0.000	1.740	56.750	0.260	5.890	0.000
* 63 Zone 1 FM on Harwood Ave from Rossland to Kerrison Dr., Ajax	105	D	400	149.84	0.00	0.000	6.760	219.640	1.000	22.760	0.000
* 69 Zone 3 FM on Conlin Rd from Anderson St. to Garrard Rd. PS, Whitby	225	D	500	0.00	0.00	0.000	13.500		2.000	45.500	0.000
77 Zone 1 FM on Bloor St. from Ritson Rd.to Wilson Rd., Oshawa	219	D	500	0.00	0.00	0.000	13.500		2.000	45.500	0.000
* 79 Zone 3 FM on Conlin Rd. fr Garrard PS to Ritson Rd., W/O	228	D	1,000	0.00	0.00	0.000	27.000		4.000	91.000	
* 88 Zone 2 FM on Bloor St from Townline Rd. to Trulls, Courtice	224	D	500	0.00	25.00	25.000	12.800	417.050	1.900	43.250	0.000
* 89 Courtice Zone 1 feedermain - Phase 2 Courtice	220	С	1,000	0.00	0.00	0.000	27.000		4.000	91.000	0.000
* 90 Zone 1 FM on Baseline Rd. from Prestonvale Rd. to Trulls Rd., C	221	D	150	0.00	0.00	0.000	4.050		0.600	13.650	0.000
* 94 Zone 1 FM on Baseline Rd from Liberty St to RR 57, Bowmanville	308	D	400	0.00	20.00	20.000	10.240		1.520	34.600	
* 97 Zone 2 FM on Third Concession Rd. from Middle Rd. to Mearns, CL	310	С	3,500	0.00	0.00	0.000	94.500		14.000	318.500	0.000
102 Watermain on Concession Rd. 5 fr Cedar Beach Rd to 850 m East		D,C	1,100	0.00	1,100.00	1,100.000	0.000		0.000	0.000	
Sub-total			9,150	185.20	1,145.00	1,145.000	211.090	6,865.780	31.280	711.650	0.000
Other Linear Infrastructure											
103 Replacement of meters		С	3,100	0.00	3,100.00	3,100.000	0.000	0.000	0.000	0.000	0.000
* 104 Design - Replacement of Polybutylene service connections		D,C	13,300	0.00	13,026.00	13,026.000	0.000	0.000	0.000	0.000	274.000
105 Depots - Replacement of Polybutylene service connections		С	1,400	0.00	1,400.00	1,400.000	0.000	0.000	0.000	0.000	0.000
106 Depots - Replacement of Lead service connections		D,C	100	0.00	100.00	100.000	0.000		0.000	0.000	
107 Replacement of valves		С	200	0.00	200.00	200.000	0.000		0.000	0.000	0.000
108 Replacement of hydrants		С	160	0.00	160.00	160.000	0.000		0.000	0.000	
Sub-total  B BUILDINGS			18,260	0.00	17,986.00	17,986.000	0.000	0.000	0.000	0.000	274.000
* 109 Regional Environmental Laboratory Upgrades, Pickering	709	С	3,100	1,550.00	0.00	0.000	41.850	1,360.900	6.200	141.050	0.000
* 110 Seaton Zone 4 Reservoir & Zone 5 Pumping Station		D,C	18,800	18,600.00	200.00	200.000	0.000	0.000	0.000	0.000	0.000
* 115 Whitby WSP Preventive upgrades		D	330	0.00	330.00	330.000	0.000	0.000	0.000	0.000	0.000
* 136 Expansion of Newcastle WSP, Clarington	311	С	40,000	0.00	13,800.00	13,800.000	2,096.000	16,846.600	288.200	6,969.200	0.000
* 141 Alternative water source, Scugog	400	D	1,500	0.000	1,284.090	1,284.090	17.250	138.825	2.385	57.450	0.000
* 144 Blackstock WSS - MW 7 upgrades		D,C	1,500	0.00	1,500.00	1,500.000	0.000		0.000	0.000	0.000
150 Wellhead protection at Regional well sites	800	D,C	800	0.00	800.00	800.000	0.000	0.000	0.000	0.000	0.000
Sub-total Sub-total			66,030	20,150.00	17,914.09	17,914.090	2,155.100	18,346.325	296.785	7,167.700	0.000
C MACHINERY AND EQUIPMENT											
* 156 Grandview Water Pumping Station Standby power, Oshawa		D	100	0.00	100.00	100.000	0.000	0.000	0.000	0.000	0.000
* 158 Oshawa WSP - MCC replacement		D,C	120	0.00	120.00	120.000	0.000	0.000	0.000	0.000	0.000
* 159 Oshawa WSP - upgrades to the UPS		D	300	0.00	300.00	300.000					
* 160 Waverly Rd. WPS - upgrades, Oshawa		D	100	0.00	100.00	100.000			0.000		
* 161 Bowmanville Zone 2 Reservoir - standby power with transfer switch		D,C	150	0.00	150.00	150.000			0.000		
* 162 Bowmanville WSP-Replacement of the Standby power		D	850	0.00	850.00	850.000			0.000	0.000	
* 163 Concession St. WPS- Hydraulic Study		S	60	0.00	60.00	60.000			0.000		
* 164 Concession St. WPS - Station upgrades		D	100	0.00	100.00	100.000			0.000		
* 167 Orono WSS - standpipe water storage tank - Standby power		D,C	150	0.00	150.00	150.000			0.000		
* 171 Port Perry WSS - MW No. 6 - replacement of Motor Control Center  * 172 Sunderland Standpipe - recoating, Sunderland		D D	250	0.00	250.00	250.000 100.000			0.000 0.000		
172 Sundenand Standpipe - Tecoating, Sundenand	l	U	100	0.00	100.00	100.000	0.000	0.000	0.000	0.000	0.000

#### 2018 Construction Program - Water Supply Cost Expenditure Attribution (\$000,'s) EΑ **User Revenue** Asset DC Land Grant/ Total Commercial Residential New New Management **Project Description** Subsidy/ Benefit to Development Development Institutional Reserve Item Design Gross User Industrial No. Const Cost Other Existing Revenue Charges Charges Charges Charges Fund D Α н 173 Beaverton WSP - Station upgrades D 250 0.00 250.00 250.000 0.000 0.000 0.000 0.000 0.000 174 Automatic bulk water dispensing system D.C 300 0.00 300.00 300.000 0.000 0.000 0.000 0.000 0.000 175 Fuel Tank compliance - Region Wide 0.00 700.00 700.000 0.000 0.000 С 700 0.000 0.000 0.000 176 Water Supply Plants - grounding studies D 350 0.00 350.00 350.000 0.000 0.000 0.000 0.000 0.000 Sub-total 3.880 0.00 3,880.00 3,880.000 0.000 0.000 0.000 0.000 0.000 IT INFRASTRUCTURE Sub-total 0.00 0.00 0.000 0.000 0.000 0.000 0.000 0.000 ALLOWANCES AND OTHER PROVISIONS 183 Allowance for acquisition of easements D.C 150 0.00 150.00 150.000 0.000 0.000 0.000 0.000 0.000 184 Allowance for engineering studies D.C 0.00 150.00 150.000 0.000 0.000 0.000 0.000 0.000 150 100.000 0.000 186 Preliminary Engineering D 100 0.00 100.00 0.000 0.000 0.000 0.000 187 Allowance for sundry extensions as per council policy D.C 15 0.00 15.00 15.000 0.000 0.000 0.000 0.000 0.000 188 Allowance for unknown requirements D.C 100 0.00 100.00 100.000 0.000 0.000 0.000 0.000 0.000 189 Allowance for Regional share for works in conjunction with 708 D.C 1.460 0.00 0.00 0.000 39.420 1.281.880 5.840 132.860 0.000 residential subdivision development 190 Allowance for Regional share for works in conjunction with 706 D.C 400 0.00 0.00 0.000 10.800 351.200 1.600 36.400 0.000 non-residential development 191 Well interference works D 400 0.00 0.00 0.000 0.000 400.000 0.000 0.000 0.000 Sub-total 2.775 0.00 515.00 515.000 50.220 2.033.080 7.440 169.260 0.000 **Total Cost Attribution** 114,533.195 20,335.200 51,643.29 51,643.285 2,416.410 27.245.185 335.505 8.048.610 4,509.000 DC Revenue Shortfall to be financed from User Revenue 1,126.715 47.305 1.079.410 New institutional Charges and New Industrial Charges Debenture: Expansion of Newcastle WSP, Clarington (Item No. 136) 11.722.792 288.200 5,569.200 Subtotal: 11.722.792 288.200 5.569.200 Other Financing - Seaton Landowners Feedermain on Rossland Rd. from Church St. to Westney Rd., Ajax (Item No. 61) 35.360 Feedermain on Harwood Ave from Rossland Rd. to Magill Dr., Ajax (Item No. 63) 149.840 Seaton Zone 4 Reservoir and Zone 5 pumping station, Pickering (Item No. 110) 18.600.000 Subtotal: 18,785.200 0.000 0.000 0.000 0.000 0.000 0.000 0.000 Other Financing - Regional Municipality of York: Regional Environmental Laboratory Upgrades (Item No. 109) 1.550.000

Subtotal:

Total Financing (including available Development Charge financing)

1.550.000

20,335.200

0.000

0.000

41,047.208

0.000

2,416.410

0.000

27,245.185

0.000

0.000

0.000

1,400.000

0.000

4,509.000

<sup>\*</sup> Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

						<del> </del>	Cos	t Expenditure Attr (\$000,'s)	ibution	<del> </del>	
		EA			User Re						Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Management Reserve Fund I
A LINEAR INFRASTRUCTURE											
Regional Road Program											
* 1 R.R. 14 (Liberty St.) from Baseline Rd. to King St., Bowmanville		D	350	0.000	350.000	350.000	0.000	0.000	0.000	0.000	0.000
* 2 R.R. 22 (Victoria St.) from South Blair St. to E of Thickson Rd., Whitby		С	1,150	0.000	1,150.000	1,150.000	0.000	0.000	0.000	0.000	0.000
* 9 R.R. 57 (Martin Rd.) from Baseline Rd. to Nash Rd., Bowmanville		С	385	0.000	385.000	385.000	0.000	0.000	0.000	0.000	0.000
11 R.R. 59 (Gibb St.) from Stevenson Rd. to Simcoe St., Oshawa		С	800	0.000	800.000	800.000	0.000	0.000	0.000	0.000	0.000
14 Hwy 12 (Brock St) from Manning Rd. to Rossland Rd., Whitby		С	130	0.000	130.000	130.000	0.000	0.000	0.000	0.000	0.000
Sub-total			2,815	0.000	2,815.000	2,815.000	0.000	0.000	0.000	0.000	0.000
Area Municipality Road Programs											
17A City of Pickering Road Program		D,C	600	0.000	600.000	600.000	0.000	0.000	0.000	0.000	0.000
17B Town of Ajax Road Program		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
17C Town of Whitby Road Program		D,C	1,230	0.000	1,230.000	1,230.000	0.000	0.000	0.000	0.000	0.000
17D City of Oshawa Road Program		D,C	1,100	0.000	1,100.000	1,100.000	0.000	0.000	0.000	0.000	0.000
17E Municipality of Clarington Road Program		D,C	370	0.000	370.000	370.000	0.000	0.000	0.000	0.000	0.000
17F Township of Scugog Road Program		D,C	130	0.000	130.000	130.000	0.000	0.000	0.000	0.000	0.000
17G Township of Uxbridge Road Program		D,C	270	0.000	270.000	270.000	0.000	0.000	0.000	0.000	0.000
17H Township of Brock Road Program		D,C	250	0.000	250.000	250.000	0.000	0.000	0.000	0.000	0.000
17i Allowance for unknown requirements in conjunction		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
with area municipality road programs Sub-total			4,350	0.000	4,350.000	4,350.000	0.000	0.000	0.000	0.000	0.000
MTO & GO Transit projects											
* 18 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
20 Watermain replacement at Simcoe St./Albert St. & Hwy 401, Oshawa		D	900	0.000	900.000	900.000	0.000	0.000	0.000	0.000	0.000
Sub-total Sub-total			1,000	0.000	1,000.000	1,000.000	0.000	0.000	0.000	0.000	0.000
Betterments/Replacement											
21 Works independent of road programs in various locations		D,C	675	0.000	675.000	675.000	0.000	0.000	0.000	0.000	0.000
22 Rehabilitation of existing watermains in various locations		D,C	1,600	0.000	1,600.000	1,600.000	0.000	0.000	0.000	0.000	0.000
24 Replacement of wm on Rougemount Dr from Kingston Rd to 100m S, Pic	ckering	D,C	180	0.000	0.000	0.000	0.000	0.000	0.000	0.000	180.000
27 Replacement of wm on Cameron from Elizabeth to Windsor, Ajax		С	360	0.000	0.000	0.000	0.000	0.000	0.000	0.000	360.000
28 Replacement of wm on Windsor Dr fr Old Kingston to Cameron, Ajax		С	360	0.000	0.000	0.000	0.000	0.000	0.000	0.000	360.000
30 Replacement of wm on RR 26 from William Smith to William Smith, Whit		D,C	210	0.000	0.000	0.000	0.000	0.000	0.000	0.000	210.000
31 Replacement of wm on Thickson Rd from Nichol Ave to Bellwood Rd, W		D,C	180	0.000	0.000	0.000	0.000	0.000	0.000	0.000	180.000
32 Replacement of wm on Consumers Dr from Thickson Rd to Sunray St, W	/hitby	D,C	360	0.000	0.000	0.000	0.000	0.000	0.000	0.000	360.000
42 Replacement of wm on Farewell St from CNR to Bloor St, Oshawa		C	30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	30.000
49 Replacement of wm on RR 2A from King St to Brock St, Oshawa 54 Replacement of wm on North St. from N of CPR to Concession 3., Newc	0.041.0	D,C	730 60	0.000	0.000 60.000	0.000 60.000	0.000	0.000	0.000	0.000	730.000
54 Replacement of wm on North St. from N of CPR to Concession 3., Newc	astie	D D	100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
* 56 WM to be abandoned on Simcoe St from 215 m E McRae, Cannington    * 56 WM to be abandoned on Simcoe St from Osborne St to John St, Beaver	ton	D,C	40	0.000	0.000	0.000	0.000	0.000	0.000 0.000	0.000	40.000
60 Allowance for construction of services in unserviced areas	ION	D,C C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
Sub-total		C	5,085	0.000	2,535.000	2,535.000	0.000	0.000	0.000	0.000	2,550.000
Gub (ord)			5,005	0.000	2,000.000	2,333.000	0.000	0.000	0.000	0.000	2,000.000

							Cos	t Expenditure Attri (\$000,'s)	ibution		
Project Description	DC Item No.	EA Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	User Re Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Asset Management Reserve Fund I
System Expansion											
* 61 Zone 1 FM on Rossland Rd. from Church St. to Westney Rd, Ajax	105	С	6,000	2,121.600	0.000	0.000	104.400	3,405.000	15.600	353.400	0.000
* 63 Zone 1 FM on Harwood Ave from Rossland to Kerrison Dr., Ajax	104	С	4,100	1,535.860	0.000	0.000	69.290	2,251.310	10.250	233.290	0.000
* 66 Zone 1 FM on Victoria St. from Thickson Rd to Thornton Rd., Whitby	215	С	12,500	0.000	625.000	625.000	320.000	10,426.250	47.500	1,081.250	0.000
* 71 Zone 3 FM on Anderson St. from Conlin Rd. to Clair Ave., Whitby	227	D	500	0.000	0.000	0.000	13.500	439.000	2.000	45.500	0.000
<ul> <li>72 Zone 4 FM from Thickson Rd. PS Z4 to Z4 Reservoir, Whitby</li> </ul>	236	D	1,600	0.000	0.000	0.000	43.200	1,404.800	6.400	145.600	0.000
<ul> <li>* 73 Zone 4 FM on Brawley Rd. from Duff Rd. to Ashburn Rd., Whitby</li> </ul>	237	D	600	0.000	0.000	0.000	16.200	526.800	2.400	54.600	0.000
77 Zone 1 FM on Bloor St. from Ritson Rd.to Wilson Rd., Oshawa	219	D,C	4,500	0.000	0.000	0.000	121.500	3,951.000	18.000	409.500	0.000
* 79 Zone 3 FM on Conlin Rd. from Ritson to Garrard Rd. PS., W/O	230	D,C	16,200	0.000	0.000	0.000	437.400	14,223.600	64.800	1,474.200	0.000
* 80 Zone 3 FM on Conlin Rd. from Ritson Rd. to Wilson Rd., Oshawa	228	С	3,800	0.000	0.000	0.000	102.600	3,336.400	15.200	345.800	0.000
* 81 Zone 3 FM on Harmony Rd. from Coldstream to 400 m S of Conlin, O	229	С	2,540	0.000	0.000	0.000	68.580	2,230.120	10.160	231.140	0.000
* 83 Zone 4 FM on Harmony Rd. from Greenhill to 400 m S Conlin Rd., O	231	C D	640	0.000	0.000	0.000	17.280	561.920	2.560 6.000	58.240	0.000
85 Zone 4 FM from PS to Zone 4 Reservoir, Oshawa     88 Zone 2 FM on Bloor St from Townline Rd. to Trulls, Courtice	235 224	С	1,500 6,050	0.000	302.500	302.500	40.500 154.880	1,317.000 5,046.305	22.990	136.500 523.325	0.000
* 89 Courtice Zone 1 feedermain - Phase 3 Courtice	220	C	4,200	0.000	0.000	0.000	113.400	3,687.600	16.800	382.200	0.000
* 90 Zone 1 FM on Baseline Rd. from Prestonvale Rd. to Trulls Rd., Courtice	221	D.C	2,650	0.000	0.000	0.000	71.550	2,326.700	10.600	241.150	0.000
* 91 Zone 1 FM on Prestonvale Rd from Baseline Rd to 950m N., Courtice	223	D,C	300	0.000	0.000	0.000	8.100	263.400	1.200	27.300	0.000
* 93 Zone 1 FM on Lambs Rd. from Hwy 2 to Liberty Res, Bowmanville	307	C	12,400	0.000	0.000	0.000	334.800	10,887.200	49.600	1,128.400	0.000
* 100 Zone 1 FM on King St. from Rudell Rd to 200m N., Newcastle	316	C	1.000	0.000	0.000	0.000	27.000	878.000	4.000	91.000	0.000
Sub-total		-	81,080	3,657.460	927.500	927.500	2,064.180	67,162.405	306.060	6,962.395	0.000
Other Linear Infrastructure											
103 Replacement of meters		С	3,100	0.000	3,100.000	3,100.000	0.000	0.000	0.000	0.000	0.000
<ul> <li>104 Design - Replacement of Polybutylene service connections</li> </ul>		D,C	13,600	0.000	12,141.000	12,141.000	0.000	0.000	0.000	0.000	1,459.000
105 Depots - Replacement of Polybutylene service connections		С	1,200	0.000	1,200.000	1,200.000	0.000	0.000	0.000	0.000	0.000
106 Depots - Replacement of Lead service connections		D,C	1,000	0.000	1,000.000	1,000.000	0.000	0.000	0.000	0.000	0.000
107 Replacement of valves		С	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
108 Replacement of hydrants		С	160	0.000	160.000	160.000	0.000	0.000	0.000	0.000	0.000
Sub-total  B BUILDINGS			19,260	0.000	17,801.000	17,801.000	0.000	0.000	0.000	0.000	1,459.000
* 111 Expansion of Ajax WSP, Ajax	100	EA	1,500	840.000	495.000	495.000	13.200	106.050	1.800	43.950	0.000
<ul> <li>112 Ajax Zone 1 storage faciltiy - 11,360 m<sup>3</sup></li> </ul>	101	EA	600	0.000	0.000	0.000	16.200	526.800	2.400	54.600	0.000
* 114 Expansion of Whitby WSP, Whitby	200	С	2,000	0.000	115.600	115.600	150.800	1,211.600	20.800	501.200	0.000
118 Garrard Rd. Zone 3 - upgrades , Whitby	207	D	260	0.000	0.000	0.000	7.020	228.280	1.040	23.660	0.000
120 New Zone 4 pumping station, Whitby	212	D	600	0.000	0.000	0.000	16.200	526.800	2.400	54.600	0.000
121 Proposed Whitby Zone 4 Storage Facility	205	D	1,100	0.000	132.000	132.000	26.100	849.904	3.897	88.099	0.000
127 Zone 4 pumping station at Harmony Rd. Reservoir, Oshawa	208	D	500	0.000	66.600	66.600	11.680	380.550	1.745	39.425	0.000
* 128 Proposed Oshawa Zone 4 Storage facility, Oshawa	214	D	850	0.000	113.220	113.220	19.856	646.935	2.967	67.023	0.000
* 132 Liberty St. Zone 1 reservoir and abandon existing elevated tank	301	С	11,600	0.000	4,600.560	4,600.560	189.080	6,145.680	27.840	636.840	0.000
* 137 Proposed Zone 1 reservoir, Newcastle Clarington	312	D	900	0.000	48.780	48.780	22.950	747.360	3.429	77.481	0.000
138 Proposed Zone 2 Water Pumping Station, Newcastle	315	D	500	0.000	0.000	0.000	13.500	439.000	2.000	45.500	0.000
* 142 Port Perry Water Storage Facility - additional Capacity 2.8 ML	401	D	1,000	0.000	853.500	853.500	3.900	128.600	0.600	13.400	0.000
* 145 New Well and pumphouse, Uxbridge	500	D	620	0.000	28.954	28.954	47.244	380.060	6.572	157.170	0.000
* 147 Sunderland New well and pumphouse, Brock	601	D	500	0.000	489.745	489.745	0.820	6.595	0.113	2.727	0.000
* 148 New Well and pumphouse, Cannington	600	С	4,500	0.000	4,407.705	4,407.705	7.379	59.355	1.021	24.540	0.000

							Cost	Expenditure Attri (\$000,'s)	bution		
		EA			User Re	wonue					Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Management Reserve Fund
* 150 Wellhead protection at Regional well sites	800	D,C	800	0.000	800.000	800.000	0.000	0.000	0.000	0.000	0.000
Sub-total		,-	27,830	840.000	12,151.664	12,151.664	545.928	12,383.569	78.624	1,830.215	0.000
C MACHINERY AND EQUIPMENT											
* 151 Finch Ave. Elevated Tank Recoating, Pickering		D	120	0.000	120.000	120.000	0.000	0.000	0.000	0.000	0.000
* 156 Grandview Water Pumping Station Standby power, Oshawa		С	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
<ul> <li>159 Oshawa WSP - upgrades to the UPS</li> </ul>		С	700	0.000	700.000	700.000	0.000	0.000	0.000	0.000	0.000
<ul> <li>* 160 Waverly Rd. WPS - upgrades, Oshawa</li> </ul>		D	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
<ul> <li>162 Bowmanville WSP-Replacement of the Standby power</li> </ul>		С	1,500	0.000	1,500.000	1,500.000	0.000	0.000	0.000	0.000	0.000
* 164 Concession St. WPS- Station upgrades		D	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
165 Newtonville WPS- Station upgrades		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
* 166 Orono Standpipe - recoating, Orono		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
* 171 Port Perry WSS - MW No. 6 - Station upgrades		С	2,200	0.000	2,200.000	2,200.000	0.000	0.000	0.000	0.000	0.000
* 172 Sunderland Standpipe - recoating, Sunderland		С	650	0.000	650.000	650.000	0.000	0.000	0.000	0.000	0.000
* 173 Beaverton WSP - Station upgrades		С	2,500	0.000	2,500.000	2,500.000	0.000	0.000	0.000	0.000	0.000
* 174 Automatic bulk water dispensing system		D,C	440	0.000	440.000	440.000	0.000	0.000	0.000	0.000	0.000
Sub-total  D IT INFRASTRUCTURE			8,760	0.000	8,760.000	8,760.000	0.000	0.000	0.000	0.000	0.000
* 177 Plant SCADA system upgrades	700	С	5,000	0.000	3.150.000	3,150.000	148.000	1,189.500	20.500	492.000	0.000
Sub-total			5,000	0.000	3,150.000	3,150.000	148.000	1,189.500	20.500	492.000	0.000
E ALLOWANCES AND OTHER PROVISIONS			·		·	·					
179 Emergency Planning		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
180 Asset Condition Assessments-Report		D	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.000
181 Asset Condition Assessment/Investigation Large CPP feedermain		D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000
182 Master Planning energy management		D	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
183 Allowance for acquisition of easements		D,C	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
184 Allowance for engineering studies		D,C	300	0.000	300.000	300.000	0.000	0.000	0.000	0.000	0.000
185 Allowance for CTC Source Water Protection Plan		D	300	0.000	300.000	300.000	0.000	0.000	0.000	0.000	0.000
186 Preliminary Engineering		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
187 Allowance for sundry extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000	0.000	0.000	0.000
188 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
189 Allowance for Regional share for works in conjunction with residential subdivision development	708	D,C	1,460	0.000	0.000	0.000	39.420	1,281.880	5.840	132.860	0.000
190 Allowance for Regional share for works in conjunction with non-residential development	706	D,C	400	0.000	0.000	0.000	10.800	351.200	1.600	36.400	0.000
191 Well interference works		D	400	0.000	0.000	0.000	0.000	400.000	0.000	0.000	0.000
Sub-total		ט	4,025	0.000	1,265.000	1,265.000	50.220	2,033.080	7.440	169.260	500.000
Total Cost Attribution			159,205	4,497.460	54,755.164	54,755.164	2,808.328	82,768.554	412.624	9,453.870	4,509.000

<sup>\*</sup> Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

							Cost Ex	penditure Attribu (\$000,'s)	ıtion		T
		EA			User Re	evenue					Asset
Project Description It		Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Management Reserve Fund I
A LINEAR INFRASTRUCTURE  Regional Road Program											
* 3 R.R. 26 (Thickson Rd.) from Wentworth St. to C.N.R. bridge, Whitby		С	180	0.000	180.000	180.000	0.000	0.000	0.000	0.000	0.000
6 R.R. 43 Cochrane St. from Ferguson St. to Bonacord Ave. Whitby		C	850	0.000	850.000	850.000	0.000	0.000	0.000	0.000	0.000
* 9 R.R. 57 (Martin Rd.) from Baseline Rd. to Nash Rd., Bowmanville		C	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
13 R.R. 60 (Wentworth St.) from Simcoe St. to Farewell St., Oshawa		C	1,200	0.000	1,200.000	1,200.000	0.000	0.000	0.000	0.000	
Sub-total Sub-total			2,380	0.000	2,380.000	2,380.000	0.000	0.000	0.000	0.000	0.000
Area Municipality Road Programs					·						
17A City of Pickering Road Program		D,C	275	0.000	275.000	275.000	0.000	0.000	0.000	0.000	0.000
17B Town of Ajax Road Program		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
17C Town of Whitby Road Program		D,C	620	0.000	620.000	620.000	0.000	0.000	0.000	0.000	
17D City of Oshawa Road Program		D,C	1,100	0.000	1,100.000	1,100.000	0.000	0.000	0.000	0.000	0.000
17E Municipality of Clarington Road Program		D,C	370	0.000	370.000	370.000	0.000	0.000	0.000	0.000	0.000
17F Township of Scugog Road Program		D,C	130	0.000	130.000	130.000	0.000	0.000	0.000	0.000	0.000
17G Township of Uxbridge Road Program		D,C	270	0.000	270.000	270.000	0.000	0.000	0.000	0.000	
17H Township of Brock Road Program		D,C	250	0.000	250.000	250.000	0.000	0.000	0.000	0.000	
17i Allowance for unknown requirements in conjunction with area municipality road programs		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
Sub-total			3,415	0.000	3,415.000	3,415.000	0.000	0.000	0.000	0.000	0.000
MTO & GO Transit projects											
* 18 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	
Sub-total			100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Betterments/Replacement											
20 Works independent of road programs in various locations		D,C	675	0.000	675.000	675.000	0.000	0.000	0.000	0.000	0.000
21 Rehabilitation of existing watermains in various locations		D,C	1,600	0.000	1,600.000	1,600.000	0.000	0.000	0.000	0.000	0.000
31 Replacement of wm on Thickson Rd from Nichol Ave to Bellwood Rd, Whit	by :	D,C	360	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
38 Replacement of wm on Hwy 2 from Wilson Rd. to Harmony Crk., Oshawa	[	D	820	0.000	0.000	0.000	0.000	0.000	0.000	0.000	820.000
39 Replacement of wm on Hwy 2 from Harmony Rd to Kingsway, Oshawa		D	100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
54 Replacement of wm on North St. from N of CPR to Concession 3., Newcas	stle	С	1,140	0.000	1,140.000	1,140.000	0.000	0.000	0.000	0.000	0.000
55 Replacement of wm on Cameron St from 215 m E McRae, Cannington		С	1,000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	,
60 Allowance for construction of services in unserviced areas		С	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	
Sub-total			5,895	0.000	3,615.000	3,615.000	0.000	0.000	0.000	0.000	2,280.000

							Cost Ex	penditure Attribu (\$000,'s)	ıtion		
		EA			User Re	avonuo.					Asset
	DC	Land		Grant/	User Re	Total	Commercial	Residential	New	New	Management
Project Description	Item No.	Design Const.	Gross Cost	Subsidy/ Other	Benefit to Existing	User Revenue	Development Charges	Development Charges	Institutional Charges	Industrial Charges	Reserve Fund
			Α	В	С	D	E	F	G	Н	I
System Expansion											
* 66 Zone 1 FM from Whitby WSP to Victoria St./CNR, Whitby	215	С	12,000	0.000	600.000	600.000	307.200	10,009.200	45.600	1,038.000	0.000
* 69 Zone 3 FM on Conlin Rd from Anderson St. to Garrard Rd PS, Whitby	225	D,C	4,000	0.000	0.000	0.000	108.000	3,512.000		364.000	0.000
* 71 Zone 3 FM on Anderson St. from Conlin Rd. to Clair Ave, Whitby	227	Ċ	4,650	0.000	0.000	0.000	125.550	4,082.700		423.150	0.000
* 78 WM modifications in conjunction w/Harmony Creek sewer, Oshawa		C	150	0.000	150.000	150.000	0.000	0.000	0.000		0.000
* 91 Zone 1 FM on Prestonvale Rd from Baseline Rd to 950m N., Courtice	223	С	1,500	0.000	0.000	0.000	40.500	1,317.000	6.000	136.500	0.000
* 92 Zone 1 FM on easement from Townline Rd to Prestonvale Rd, Courtice	222	D	300	0.000	0.000	0.000	8.100	263.400	1.200	27.300	0.000
* 94 Zone 1 FM on Baseline Rd from Liberty St to RR 57, Bowmanville	308	D,C	4,450	0.000	222.500	222.500	113.920	3,711.745	16.910		0.000
Sub-total			27,050	0.000	972.500	972.500	703.270	22,896.045	104.310	2,373.875	0.000
Other Linear Infrastructure											
103 Replacement of meters		С	1,000	0.000	1,000.000	1,000.000	0.000	0.000	0.000	0.000	0.000
104 Design - Replacement of Polybutylene service connections		D,C	14,200	0.000	12,471.000	12,471.000	0.000	0.000	0.000	0.000	1,729.000
105 Depots - Replacement of Polybutylene service connections		С	1,000	0.000	1,000.000	1,000.000	0.000	0.000	0.000	0.000	0.000
106 Depots - Replacement of Lead service connections		D,C	1,000	0.000	1,000.000	1,000.000	0.000	0.000		0.000	0.000
107 Replacement of valves		С	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	
108 Replacement of hydrants		С	160	0.000	160.000	160.000	0.000	0.000	0.000	0.000	0.000
Sub-total			17,560	0.000	15,831.000	15,831.000	0.000	0.000	0.000	0.000	1,729.000
B BUILDINGS											
* 114 Expansion of Whitby WSP, Whitby	200	С	138,000	0.000	7,976.400	7,976.400	-,	83,600.400	,	- /	
* 116 Whitby WSP - Plant No. 1 upgrades		D	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
118 Garrard Rd. Zone 3 - pump modifications, Whitby	207	С	1,140	0.000	0.000	0.000	30.780	1,000.920	4.560	103.740	0.000
* 141 Alternative water source, Scugog	400	С	17,600	0.000	15,067.360	15,067.360	202.400	1,629.760	28.160		
* 145 New Well and pumphouse, Uxbridge	500	С	3,000	0.000	140.100	140.100	228.600	1,839.000	31.800	760.500	0.000
<ul> <li>* 147 Sunderland New well and pumphouse, Brock</li> </ul>	601	С	4,000	0.000	3,917.960	3,917.960	6.559	52.760		21.814	0.000
150 Wellhead protection at Regional well sites	800	D,C	800	0.000	800.000	800.000	0.000	0.000	0.000		0.000
Sub-total			164,740	0.000	28,101.820	28,101.820	10,873.539	88,122.840	1,500.628	36,141.174	0.000
C MACHINERY AND EQUIPMENT											
* 151 Finch Ave. Elevated Tank Recoating, Pickering		С	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.000
* 156 Grandview Water Pumping Station Standby power, Oshawa		С	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000
* 157 Oshawa WSP - Valve Chamber Upgrades		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
* 160 Waverly Rd. WPS - upgrades, Oshawa		С	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000
* 164 Concession St. WPS- Transfer switch/replacement of standby power		С	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000
* 165 Newtonville WPS- Station upgrades		D	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
* 166 Orono Standpipe - recoating, Orono		С	700	0.000	700.000	700.000	0.000	0.000	0.000	0.000	0.000
* 169 Mill St. WPS - Station upgrades		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
* 170 Greenbank WSS - upgrades to the UPS		D,C	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.000
* 174 Automatic bulk water dispensing system		D,C	440	0.000	440.000	440.000	0.000	0.000	0.000	0.000	0.000
Sub-total Sub-total			8,490	0.000	8,490.000	8,490.000	0.000	0.000	0.000	0.000	0.000
1		I I									l l

				-	Cost Expenditure Attribution (\$000,'s)  User Revenue  Asset								
Project Description	DC Item No.	EA Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	User Re Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Asset Management Reserve Fund I		
D IT INFRASTRUCTURE													
* 177 Plant SCADA system upgrades	700	С	2,240	0.000	1,411.200	1,411.200	66.304	532.896	9.184	220.416	0.000		
Sub-total			2,240	0.000	1,411.200	1,411.200	66.304	532.896	9.184	220.416	0.000		
E ALLOWANCES AND OTHER PROVISIONS													
180 Asset Condition Assessments-Report		D	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.000		
181 Asset Condition Assessment/Investigation Large CPP feedermain		D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000		
183 Allowance for acquisition of easements		D,C	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000		
184 Allowance for engineering studies		D,C	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000		
186 Preliminary Engineering		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000		
187 Allowance for sundry extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000		0.000	0.000		
188 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000		0.000	0.000		
189 Allowance for Regional share for works in conjunction with residential subdivision development	708	D,C	1,460	0.000	0.000	0.000	39.420	1,281.880	5.840	132.860	0.000		
190 Allowance for Regional share for works in conjunction with non-residential development	706	D,C	400	0.000	0.000	0.000	10.800	351.200	1.600	36.400	0.000		
191 Well interference works		D	400	0.000	0.000	0.000	0.000	400.000	0.000	0.000	0.000		
Sub-total			3,275	0.000	515.000	515.000	50.220	2,033.080	7.440	169.260	500.000		
Total Cost Attribution			235,145	0.000	64,831.520	64,831.520	11,693.333	113,584.861	1,621.562	38,904.725	4,509.000		

<sup>\*</sup> Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

							Cost E	expenditure Attri (\$000,'s)	ibution	,	
		EA			User Re	evenue					Asset
Project Description It		Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Management Reserve Fund I
A LINEAR INFRASTRUCTURE											
Regional Road Program											
* 1 R.R. 14 (Liberty St.) from Baseline Rd. to King St., Bowmanville		С	1,350	0.000	1,350.000	1,350.000	0.000	0.000	0.000	0.000	0.000
7 R.R. 53 (Stevenson Rd.) from Hwy 401 to Bond St., Oshawa		С	1,100	0.000	1,100.000	1,100.000	0.000	0.000	0.000	0.000	0.000
8 R.R. 53 (Stevenson Rd.) from Bond St. to Rossland Rd., Oshawa		D	140	0.000	140.000	140.000	0.000	0.000	0.000	0.000	0.000
10 R.R. 58 Manning Rd/Adelaide Ave. Intersection improvements		С	800	0.000	800.000	800.000	0.000	0.000	0.000	0.000	0.000
Sub-total  Area Municipality Road Programs			3,390	0.000	3,390.000	3,390.000	0.000	0.000	0.000	0.000	0.000
17A City of Pickering Road Program	Î	D,C	275	0.000	275.000	275.000	0.000	0.000	0.000	0.000	0.000
17B Town of Ajax Road Program		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
17C Town of Whitby Road Program		D,C	620	0.000	620.000	620.000	0.000	0.000	0.000	0.000	0.000
17D City of Oshawa Road Program		D,C	1,100	0.000	1,100.000	1,100.000	0.000	0.000	0.000	0.000	0.000
17E Municipality of Clarington Road Program		D,C	370	0.000	370.000	370.000	0.000	0.000	0.000	0.000	0.000
17F Township of Scugog Road Program		D,C	130	0.000	130.000	130.000	0.000	0.000	0.000	0.000	0.000
17G Township of Uxbridge Road Program		D,C	270	0.000	270.000	270.000	0.000	0.000	0.000	0.000	0.000
17H Township of Brock Road Program		D,C	250	0.000	250.000	250.000	0.000	0.000	0.000	0.000	0.000
17i Allowance for unknown requirements in conjunction with area municipality road programs		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
Sub-total  MTO & GO Transit projects			3,415	0.000	3,415.000	3,415.000	0.000	0.000	0.000	0.000	0.000
* 18 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Sub-total		5,0	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Betterments/Replacement											
20 Works independent of road programs in various locations		D,C	720	0.000	720.000	720.000	0.000	0.000	0.000	0.000	0.000
21 Rehabilitation of existing watermains in various locations		D,C	1,600	0.000	1,600.000	1,600.000	0.000	0.000	0.000	0.000	0.000
29 Replacement of wm on Notion Rd from Kingston Rd to 230 m S, Pickering	g	D,C	110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	110.000
36 Replacement of fm on Bloor St. from Cubert St to Oxford St, Oshawa		D,C	270	0.000	0.000	0.000	0.000	0.000	0.000	0.000	270.000
39 Replacement of wm on Hwy 2 from Harmony Rd to Kingsway, Oshawa		С	1,950	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1,950.000
* 50 Replacement of wm on RR 16 from Lakeview Park to Kawartha Av, Osha	wa	D	120	0.000	0.000	0.000	0.000	0.000	0.000	0.000	120.000
58 Replacement of wm on Bay St from Mill St to Union St, Beaverton		D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000
60 Allowance for construction of services in unserviced areas	-	С	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
Sub-total			5,170	0.000	2,520.000	2,520.000	0.000	0.000	0.000	0.000	2,650.000

							Cost E	Expenditure Attri (\$000,'s)	bution		
		EA.			User Ro			<b>.</b>			Asset
Project Description	DC Item	Land Design	Gross	Grant/ Subsidy/	Benefit to	Total User	Commercial Development	Residential Development	New Institutional	New Industrial	Management Reserve
1 Toject Description	No.	Const.	Cost	Other	Existing	Revenue	Charges	Charges	Charges	Charges	Fund
			Α	В	C	D	E	F	G	Н	1
System Expansion											
			1 100	2.000		0.000	07.000	4 000 000		107.100	
* 64 Zone 2 FM on Taunton Rd. & William Jackson Dr., Ajax	106	D	1,400	0.000	0.000	0.000	37.800	1,229.200	5.600	127.400	0.000
* 66 Zone 1 FM on Victoria St. from CNR to Thickson Rd. , Whitby	216	С	16,200	0.000	810.000	810.000	414.720	13,512.420	61.560	1,401.300	0.000
* 72 Zone 4 FM from Thickson Rd. PS Z4 to Z4 Reservoir, Whitby	236	С	14,900	0.000	0.000	0.000	402.300	13,082.200	59.600	1,355.900	0.000
* 73 Zone 4 FM on Brawley Rd. from Duff Rd. to Ashburn Rd., Whitby	237	С	5,200	0.000	0.000	0.000	140.400	4,565.600	20.800	473.200	0.000
* 84 Zone 4 FM on Harmony Rd from Conlin Rd to Z 4 PS, Oshawa	233	D	900	0.000	0.000	0.000	24.300	790.200	3.600	81.900	0.000
* 85 Zone 4 FM from PS to Zone 4 Reservoir, Oshawa	235	С	13,300	0.000	0.000	0.000	359.100	11,677.400	53.200	1,210.300	0.000
* 92 Zone 1 FM on easement from Townline Rd to Prestonvale Rd, Courtic	222	С	1,300	0.000	0.000	0.000	35.100	1,141.400	5.200	118.300	0.000
* 99 Zone 1 feedermain from Arthur St Res to New Zone 1 Res., Newcastle	317	С	2,650	0.000	0.000	0.000	71.550	2,326.700	10.600	241.150	0.000
* 101 Zone 2 feedermain on Arthur St from Z 2 PS to 650 m N, Newcastle	318	С	1,150	0.000	0.000	0.000	31.050	1,009.700	4.600	104.650	0.000
Sub-total			57,000	0.000	810.000	810.000	1,516.320	49,334.820	224.760	5,114.100	0.000
Other Linear Infrastructure											
103 Replacement of meters		С	1,000	0.000	1,000.000	1,000.000	0.000	0.000	0.000	0.000	0.000
* 104 Design - Replacement of Polybutylene service connections		D,C	9,000	0.000	7,641.000	7,641.000	0.000	0.000	0.000	0.000	1,359.000
105 Depots - Replacement of Polybutylene service connections		C	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.000
106 Depots - Replacement of Lead service connections		D.C	1.000	0.000	1.000.000	1.000.000	0.000	0.000	0.000	0.000	0.000
107 Replacement of valves		C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
108 Replacement of hydrants		Č	160	0.000	160.000	160.000	0.000	0.000	0.000	0.000	0.000
Sub-total			11,860	0.000	10,501.000	10,501.000	0.000	0.000	0.000	0.000	1,359.000
B BUILDINGS											
* 111 Expansion of Ajax WSP, Ajax	100	D	4,500	2,520.000	1,485.000	1,485.000	39.600	318.150	5.400	131.850	0.000
* 112 Ajax Zone 1 storage faciltiy - 11,360 m <sup>3</sup>	101	D	600	0.000	0.000	0.000	16.200	526.800	2.400	54.600	0.000
* 117 Garrard Rd Reservoir expansion, Whitby	202	D	3,350	0.000	170.850	170.850	85.760	2.791.220	12.730	289,440	0.000
* 119 Thickson Rd. Zone 3 Pumping Station expansion, Whitby	210	EA	500	0.000	0.000	0.000	13.500	439.000	2.000	45.500	0.000
120 New Zone 4 pumping station, Whitby	212	С	6,300	0.000	0.000	0.000	170.100	5,531.400	25.200	573.300	0.000
121 Proposed Whitby Zone 4 Storage Facility	205	C	8,500	0.000	1.020.000	1.020.000	201.680	6,567.440	30.116	680.765	0.000
127 Proposed Zone 4 Pumping Station at Harmony Rd Res, Whitby	208	C	6,500	0.000	865.800	865.800	151.840	4,947.150	22.685	512.525	0.000
* 128 Proposed Oshawa Zone 4 Storage facility, Oshawa	206	C	7,920	0.000	1,054.944	1,054.944	185.011	6,027.912	27.641	624.492	0.000
* 137 Proposed Zone 1 reservoir, Newcastle Clarington	312	C	6,400	0.000	346.880	346.880	163.200	5,314.560	24.384	550.976	0.000
138 Proposed Zone 1 reservoir, Newcastie Clarington  138 Proposed Zone 2 Water Pumping Station, Newcastle	315	C	4,250	0.000	0.000	0.000	114.750	3,731.500	17.000	386.750	0.000
* 142 Port Perry Water Storage Facility - additional Capacity 2.8 ML	401	C	11,100	0.000	9,473.850	9,473.850	44.400	1,427.460	6.660	147.630	0.000
* 143 Greenbank WSS - replacement of MW No. 1, Scugog	401	D	250	0.000	250.000	250.000	0.000	0.000	0.000	0.000	0.000
	===										
* 146 Expansion of Quaker Hill reservoir, Uxbridge	501	D	400	0.000	18.680	18.680	30.480	245.200	4.240	101.400	0.000
* 150 Wellhead protection at Regional well sites	800	D,C	800	0.000	800.000	800.000	0.000	0.000	0.000	0.000	0.000
Sub-total  C MACHINERY AND EQUIPMENT			61,370	2,520.000	15,486.004	15,486.004	1,216.521	37,867.792	180.455	4,099.228	0.000
* 165 Newtonville WPS - Station upgrades		С	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000
* 168 Orono WSS - Station Upgrades		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
* 169 Mill St. WPS - Station upgrades		D	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
* 174 Automatic bulk water dispensing system - Phase I		D.C	300	0.000	300.000	300.000	0.000	0.000	0.000	0.000	0.000
		_ , ~	2,550	0.000	2,550.000	2,550.000	0.000	0.000	0.000	0.000	0.000

					Cost Expenditure Attribution (\$000,'s)								
Project Description	DC Item No.	EA Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	User Re Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Asset Management Reserve Fund I		
D IT INFRASTRUCTURE													
Sub-total			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
E ALLOWANCES AND OTHER PROVISIONS													
180 Asset Condition Assessments-Report		D	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.000		
181 Asset Condition Assessment/Investigation Large CPP feedermain		D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000		
183 Allowance for acquisition of easements		D,C	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000		
184 Allowance for engineering studies		D,C	300	0.000	300.000	300.000	0.000	0.000	0.000	0.000	0.000		
185 Allowance for CTC Source Water Protection Plan		D	300	0.000	300.000	300.000	0.000	0.000	0.000	0.000	0.000		
186 Preliminary Engineering		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000		
187 Allowance for sundry extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000	0.000	0.000	0.000		
188 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000		
189 Allowance for Regional share for works in conjunction with residential subdivision development	708	D,C	1,460	0.000	0.000	0.000	39.420	1,281.880	5.840	132.860	0.000		
190 Allowance for Regional share for works in conjunction with non-residential development	706	D,C	400	0.000	0.000	0.000	10.800	351.200	1.600	36.400	0.000		
191 Well interference works		D	400	0.000	0.000	0.000	0.000	400.000	0.000	0.000	0.000		
Sub-total	•		3,725	0.000	965.000	965.000	50.220	2,033.080	7.440	169.260	500.000		
Total Cost Attribution			148,580	2,520.000	39,737.004	39,737.004	2,783.061	89,235.692	412.655	9,382.588	4,509.000		

<sup>\*</sup> Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

							Cost Exp	penditure Attrib (\$000,'s)	oution		
		EA				User Revenue					Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Management Reserve Fund I
A LINEAR INFRASTRUCTURE  Regional Road Program											
* 5 R.R. 36 (Hopkins St.) from Consumers Dr. to Dundas St., Whitby		D	50	0.000	50.000	50.000	0.000	0.000	0.000	0.000	0.000
* 12 R.R. 59 (Gibb St.)/Olive Ave. Interconnection, Oshawa		D	40	0.000	40.000	40.000	0.000	0.000	0.000	0.000	0.000
16 Allowance for watermains in conjuction with Regional Roads		D,C	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000
Sub-total  Area Municipality Road Programs			2,090	0.000	2,090.000	2,090.000	0.000		0.000	0.000	0.000
17A City of Pickering Road Program		D,C	275	0.000	275.000	275.000	0.000	0.000	0.000	0.000	0.000
17B Town of Ajax Road Program		D,C	200	0.000	200.000	200.000	0.000	0.000		0.000	0.000
17C Town of Whitby Road Program		D,C	620	0.000	620.000	620.000	0.000	0.000	0.000	0.000	0.000
17D City of Oshawa Road Program		D,C	1,100	0.000	1,100.000	1,100.000	0.000	0.000	0.000	0.000	0.000
17E Municipality of Clarington Road Program		D,C	370	0.000	370.000	370.000	0.000	0.000	0.000	0.000	0.000
17F Township of Scugog Road Program		D,C	130	0.000	130.000	130.000	0.000	0.000	0.000	0.000	0.000
17G Township of Uxbridge Road Program		D,C	270	0.000	270.000	270.000	0.000	0.000	0.000	0.000	0.000
17H Township of Brock Road Program		D,C	250	0.000	250.000	250.000	0.000	0.000	0.000	0.000	0.000
17i Allowance for unknown requirements in conjunction with area municipality road programs		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
Sub-total Sub-total			3,415	0.000	3,415.000	3,415.000	0.000	0.000	0.000	0.000	0.000
MTO & GO Transit projects											
* 18 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Sub-total  Betterments/Replacement			100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
21 Works independent of road programs in various locations		D,C	760	0.000	760.000	760.000	0.000	0.000	0.000	0.000	0.000
22 Rehabilitation of existing watermains in various locations		D,C	1,600	0.000	1,600.000	1,600.000	0.000	0.000		0.000	0.000
33 Replacement of wm on Maria St from Annes St to Frances St, Whitby	-	D,C	375	0.000	0.000	0.000	0.000	0.000	0.000	0.000	375.000
34 Replacement of wm on Orchard Crt from St Lawrence St to W/L, Whitb	,	D,C	150	0.000	0.000	0.000	0.000	0.000	0.000	0.000	150.000
35 Replacement of wm on Simcoe St S from Quebec St to Gibb St, Oshav		D,C	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000
37 Replacement of FM on Bloor St from Wilson Rd to Holland St, Oshawa		D,C	370	0.000	0.000	0.000	0.000	0.000		0.000	370.000
48 Replacement of wm on Valencia Rd. from Oxford St. to dead-end, Osh		D,C	360	0.000	0.000	0.000	0.000	0.000	0.000	0.000	360.000
<ul> <li>50 Replacement of wm on RR 16 from Lakeview Park to Kawartha Av, Os</li> </ul>	hawa	С	1,300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1,300.000
58 Replacement of wm on Bay St from Mill St to Union St, Beaverton		С	1,150	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1,150.000
* 59 Replacement of watermains in various locations		D,C	104	0.000	0.000	0.000	0.000			0.000	104.000
60 Allowance for construction of services in unserviced areas	-	С	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
Sub-total		1 T	6,569	0.000	2,560.000	2,560.000	0.000	0.000	0.000	0.000	4,009.000

							Cost Exp	penditure Attrib (\$000,'s)	ution		
		EA				User Revenue					Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Management Reserve Fund
System Expansion											
* 64 Zone 2 FM on Taunton Rd. & William Jackson Dr., Ajax	106	D	2.900	0.000	0.000	0.000	78.300	2.546.200	11.600	263.900	0.000
* 65 Zone 2 on Church St. from Rossland Rd to Taunton Rd., Ajax	110	D	600	0.000	0.000	0.000	16.200	526.800	2.400	54.600	0.000
* 67 Zone 1 on Manning from Anderson to Hydro Corridor, Whitby	218	D	400	0.000	0.000	0.000	10.800	351.200	1.600	36.400	0.000
* 70 Zone 3 FM on Anderson/Watford St fr Clair Ave to Carnwith Dr, Whitb	226	D	600	0.000	0.000	0.000	16.200	526.800	2.400	54.600	0.000
* 82 Zone 4 FM on Conlin Rd. from Harmony Rd. to Grandview St., Oshaw	232	D	300	0.000	0.000	0.000	8.100	263.400	1.200	27.300	0.000
* 84 Zone 4 FM on Harmony Rd from Conlin Rd to Z 4 PS, Oshawa	233	С	3,600	0.000	0.000	0.000	97.200	3,160.800	14.400	327.600	0.000
Sub-total			8,400	0.000	0.000	0.000	226.800	7,375.200	33.600	764.400	0.000
Other Linear Infrastructure											
103 Replacement of meters		С	1.000	0.000	1.000.000	1.000.000	0.000	0.000	0.000	0.000	0.000
106 Depots - Replacement of lead service connections		D.C	1,000	0.000	1,000.000	1.000.000	0.000	0.000	0.000	0.000	0.000
107 Replacement of valves		C	200	0.000	200.000	200.000		0.000	0.000	0.000	
108 Replacement of hydrants		C	160	0.000	160.000	160.000	0.000	0.000	0.000	0.000	0.000
Sub-total			2,360	0.000	2,360.000	2,360.000	0.000	0.000	0.000	0.000	0.000
B BUILDINGS											
* 116 Whitby WSP - Plant No. 1 upgrades		С	5,000	0.000	5,000.000	5,000.000	0.000	0.000	0.000	0.000	0.000
123 Taunton Rd Zone 2 Reservoir Expansion, Oshawa	203	EA	500	0.000	11.000	11.000	13.200	429.350	1.950	44.500	0.000
* 124 Grandview Zone 2 Pumping Station expansion, Oshawa	209	EA	500	0.000	0.000	0.000	13.500	439.000	2.000	45.500	0.000
* 130 Hortop Pumping Station Replacement, Oshawa		D	1,000	0.000	1,000.000	1,000.000	0.000	0.000	0.000	0.000	0.000
* 131 Bowmanville WSP Expansion	300	EA	500	0.000	0.000	0.000	40.000	321.500	5.500	133.000	0.000
* 146 Expansion of Quaker Hill reservoir, Uxbridge	501	С	3,420	0.000	159.714	159.714	260.604	2,096.460	36.252	866.970	0.000
* 150 Wellhead protection at Regional well sites	800	D,C	800	0.000	800.000	800.000	0.000	0.000	0.000	0.000	0.000
Sub-total			11,720	0.000	6,970.714	6,970.714	327.304	3,286.310	45.702	1,089.970	0.000
C MACHINERY AND EQUIPMENT											
* 154 Whitby WSP - Plate Settling Tanks	201	D	100	0.000	84.500	84.500		9.970	0.170	4.120	
* 155 Installation of stand by power at Whitby WSP, Whitby		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
* 157 Oshawa WSP - Valve Chamber Upgrades		С	570	0.000	570.000	570.000	0.000	0.000	0.000	0.000	0.000
* 168 Orono WSS - Station Upgrades		D	150	0.000	150.000	150.000		0.000	0.000	0.000	0.000
* 169 Mill St. WPS - Station upgrades Switch Gear/Standby power		D	2,000	0.000	2,000.000	2,000.000			0.000	0.000	
* 174 Automatic bulk water dispensing system - Phase I		D,C	300	0.000	300.000	300.000	0.000	0.000	0.000	0.000	0.000
Sub-total			3,220	0.000	3,204.500	3,204.500	1.240	9.970	0.170	4.120	0.000
D IT INFRASTRUCTURE											
Sub-total			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

					Cost Expenditure Attribution (\$000,'s)						
Project Description	DC Item No.	EA Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	User Revenue Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Asset Management Reserve Fund I
E ALLOWANCES AND OTHER PROVISIONS											
* 178 Regional Water Supply Master Planning Study	701	D,C	800	0.000	0.000	0.000	21.600	702.400	3.200	72.800	0.000
180 Asset Condition Assessments-Report		D	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.000
181 Asset Condition Assessment/Investigation Large CPP feedermain		D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000
183 Allowance for acquisition of easements		D,C	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
184 Allowance for engineering studies		D,C	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
186 Preliminary Engineering		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
187 Allowance for sundry extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000	0.000	0.000	0.000
188 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
189 Allowance for Regional share for works in conjunction with residential subdivision development	708	D,C	1,460	0.000	0.000	0.000	39.420	1,281.880	5.840	132.860	0.000
190 Allowance for Regional share for works in conjunction with non-residential development	706	D,C	400	0.000	0.000	0.000	10.800	351.200	1.600	36.400	0.000
191 Well interference works		D	1,000	0.000	0.000	0.000	0.000	1,000.000	0.000	0.000	0.000
Sub-total Sub-total	•		4,675	0.000	515.000	515.000	71.820	3,335.480	10.640	242.060	500.000
Total Cost Attribution			42,549	0.000	21,215.214	21,215.214	627.164	14,006.960	90.112	2,100.550	4,509.000

<sup>\*</sup> Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

							Cost Ex	penditure Attrib (\$000,'s)	ution		
		EA		0	User R	Revenue	0	Baatilandal	Massa	News	Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Management Reserve Fund I
A LINEAR INFRASTRUCTURE  Regional Road Program											
16 Allowance for watermains in conjuction with Regional Roads		D,C	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000
Sub-total			2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000
Area Municipality Road Programs											
17A City of Pickering Road Program		D,C	275	0.000	275.000	275.000	0.000	0.000	0.000	0.000	
17B Town of Ajax Road Program		D,C	200	0.000	200.000	200.000	0.000	0.000		0.000	0.000
17C Town of Whitby Road Program		D,C	620	0.000	620.000	620.000	0.000	0.000		0.000	0.000
17D City of Oshawa Road Program		D,C	1,100	0.000	1,100.000	1,100.000 370.000	0.000	0.000	0.000	0.000	
17E Municipality of Clarington Road Program 17F Township of Scugog Road Program		D,C D,C	370 130	0.000	370.000 130.000	130.000	0.000	0.000		0.000	
17G Township of Oxbridge Road Program		D,C	270	0.000	270.000	270.000	0.000	0.000		0.000	
17H Township of Brock Road Program		D,C	250	0.000	250.000	250.000	0.000	0.000	0.000	0.000	0.000
17i Allowance for unknown requirements in conjunction		D,C	200	0.000	200.000	200.000	0.000	0.000		0.000	
with area municipality road programs		, -									
Sub-total			3,415	0.000	3,415.000	3,415.000	0.000	0.000	0.000	0.000	0.000
MTO & GO Transit projects											
* 18 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Sub-total  Betterments/Replacement			100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
21 Works independent of road programs in various locations		D,C	800	0.000	800.000	800.000	0.000	0.000	0.000	0.000	0.000
22 Rehabilitation of existing watermains in various locations		D,C	1,600	0.000	1,600.000	1,600.000	0.000	0.000		0.000	0.000
25 Replacement of wm on Brock Rd from Feldspar to Clements, Pickering	9	D,C	600	0.000	0.000	0.000	0.000	0.000		0.000	600.000
29 Replacement of wm on Dowty Rd from Thomson St to Hunt St, Ajax		D,C	700	0.000	0.000	0.000	0.000	0.000	0.000	0.000	700.000
57 Replacement of wm on Centre St. from Mara Rd. to James St., Beaver * 59 Replacement of watermains in various locations	rton	D,C D,C	360 2,349	0.000	0.000	0.000	0.000	0.000	0.000	0.000	360.000 2,349.000
60 Allowance for construction of services in unserviced areas		C C	2,349	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
Sub-total			6,609	0.000	2,600.000	2,600.000	0.000	0.000		0.000	
System Expansion											
* 64 Zone 2 FM on Taunton Rd. & William Jackson Dr., Ajax	106	С	2,700	0.000	0.000	0.000	72.900	2,370.600	10.800	245.700	0.000
* 65 Zone 2 on Church St. from Rossland Rd to Taunton Rd., Ajax	110	С	3,000	0.000	0.000	0.000	81.000	2,634.000	12.000	273.000	0.000
* 67 Zone 1 on Manning from Anderson to Hydro Corridor, Whitby	218		1,500	0.000	0.000	0.000					
* 70 Zone 3 FM on Anderson/Watford St fr Clair Ave to Carnwith Dr, Whitb		С	6,100	0.000	0.000	0.000					
* 76 WM on Britannia Dr from Thornton Rd to Windfields Farm Dr, Oshawa		D	260	0.000	0.000	0.000					
* 82 Zone 4 FM on Conlin Rd. from Harmony Rd. to Grandview St., Oshaw Sub-total	232	С	1,050 14,610	0.000	0.000 0.000	0.000 0.000					
Other Linear Infrastructure											
103 Replacement of meters		С	1,000	0.000	1,000.000	1,000.000	0.000	0.000	0.000	0.000	0.000

							Cost Ex	penditure Attrib (\$000,'s)	ution		
		EA			User R	evenue					Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Management Reserve Fund
106 Depots - Replacement of Lead service connections		D,C	5,000	0.000	5,000.000	5,000.000	0.000	0.000	0.000		0.000
107 Replacement of valves		C	200	0.000	200.000	200.000	0.000	0.000	0.000		0.000
108 Replacement of hydrants		C	160	0.000	160.000	160.000	0.000	0.000	0.000		0.000
Sub-total			6,360	0.000	6,360.000	6,360.000	0.000	0.000	0.000	0.000	0.000
B BUILDINGS											
* 111 Expansion of Ajax WSP, Ajax	100	С	92,880	52,012.800	0.000	0.000	3,269.376		445.824	,	0.000
* 112 Ajax Zone 1 storage faciltiy - 11 ML	101	С	10,800	0.000	0.000	0.000	291.600	9,482.400	43.200		0.000
* 116 Whitby WSP - Plant No. 1 upgrades		С	5,000	0.000	5,000.000	5,000.000	0.000	0.000	0.000		0.000
* 117 Garrard Rd Reservoir expansion, Whitby	202	С	13,350	0.000	680.850	680.850	341.760	11,123.220	50.730	,	0.000
* 119 Thickson Rd. Zone 3 Pumping Station expansion, Whitby	210	D	1,100	0.000	0.000	0.000	29.700	965.800	4.400		0.000
* 130 Hortop Pumping Station Replacement, Oshawa		С	9,000	0.000	9,000.000	9,000.000	0.000	0.000	0.000		0.000
* 143 Greenbank WSS - replacement of Municipal Well No. 1, Scugog	000	С	1,000	0.000	1,000.000	1,000.000	0.000	0.000	0.000		0.000
* 150 Wellhead protection at Regional well sites Sub-total	800	D,C	800 133,930	0.000 52,012.800	800.000 16,480.850	800.000 16,480.850	0.000 3,932.436	0.000 47,856.460	0.000 544.154		0.000
C MACHINERY AND EQUIPMENT			400	0.000	400,000	400,000	0.000	0.000	0.000	0.000	0.000
* 153 Cherrywood WPS - Station Upgrades, Pickering	201	D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
<ul> <li>* 154 Whitby WSP - Plate Settling Tanks</li> <li>* 155 Installation of stand by power at Whitby WSP, Whitby</li> </ul>	201	C	10,150 3,100	0.000	8,576.750 3,100.000	8,576.750 3,100.000	125.860 0.000	1,011.955 0.000	17.255 0.000	418.180 0.000	0.000
* 168 Orono WSS - Plant upgrades		C	2,500	0.000	2,500.000	2,500.000	0.000	0.000	0.000		0.000
* 174 Automatic bulk water dispensing system		D,C	300	0.000	300.000	300.000	0.000	0.000	0.000	0.000	0.000
Sub-total		5,0	16,150	0.000	14,576.750	14,576.750	125.860	1,011.955	17.255		0.000
D IT INFRASTRUCTURE											
Sub-total			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E ALLOWANCES AND OTHER PROVISIONS											
180 Asset Condition Assessments-Report		D	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.000
181 Asset Condition Assessment/Investigation Large CPP feedermain		D	200	0.000	0.000	0.000	0.000	0.000	0.000		200.000
182 Master Planning energy management		D	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
183 Allowance for acquisition of easements		D,C	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
184 Allowance for engineering studies		D,C	300	0.000	300.000	300.000	0.000	0.000	0.000	0.000	0.000
185 Allowance for CTC Source Water Protection Plan		D	300	0.000	300.000	300.000	0.000	0.000	0.000	0.000	0.000
186 Preliminary Engineering		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
187 Allowance for sundry extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000	0.000		0.000
188 Allowance for unknown requirements	700	D,C D,C	100 1,460	0.000	100.000	100.000	0.000				0.000
189 Allowance for Regional share for works in conjunction with residential subdivision development	708			0.000	0.000	0.000	39.420	·	5.840		
190 Allowance for Regional share for works in conjunction with non-residential development	706	D,C	400	0.000	0.000	0.000	10.800				0.000
191 Well interference works		D	1,000	0.000	0.000	0.000	0.000	1,000.000	0.000		0.000
Sub-total			4,525	0.000	1,165.000	1,165.000	50.220	2,633.080	7.440	169.260	500.000
Total Cost Attribution * Indicates Capital project requires prior and/or future funding commitm	onto E	Pofor to C	187,699		46,697.600	46,697.600	4,502.986	64,329.075	627.289	15,020.250	4,509.000

Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

							Cost Ex	openditure Attrib (\$000,'s)	oution		
	DC	EA		Grant/	User Re		Commonsial	Dooidoutial	Name	New	Asset
Project Description	Item No.	Land Design Const.	Gross Cost A	Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	Industrial Charges H	Management Reserve Fund
A LINEAR INFRASTRUCTURE											
Regional Road Program											
* 5 R.R. 36 (Hopkins St.) from Consumers Dr. to Dundas St., Whitby		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.00
* 8 R.R. 53 (Stevenson Rd.) from Bond St. to Rossland Rd., Oshawa		С	1,240	0.000	1,240.000	1,240.000	0.000	0.000	0.000	0.000	0.00
* 12 R.R. 59 (Gibb St.)/Olive Ave. Interconnection, Oshawa		С	135	0.000	135.000	135.000	0.000	0.000	0.000	0.000	0.00
16 Allowance for watermains in conjuction with Regional Roads		D,C	1,800	0.000	1,800.000	1,800.000	0.000	0.000	0.000	0.000	0.00
Sub-total Sub-total			3,275	0.000	3,275.000	3,275.000	0.000	0.000	0.000	0.000	0.00
Area Municipality Road Programs											
17A City of Pickering Road Program		D,C	275	0.000	275.000	275.000	0.000	0.000	0.000	0.000	0.00
17B Town of Ajax Road Program		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	
17C Town of Whitby Road Program		D,C	620	0.000	620.000	620.000	0.000	0.000	0.000	0.000	
17D City of Oshawa Road Program		D,C	1,100	0.000	1.100.000	1,100.000	0.000	0.000	0.000	0.000	
17E Municipality of Clarington Road Program		D,C	370	0.000	370.000	370.000		0.000	0.000	0.000	
17F Township of Scugog Road Program		D,C	130	0.000	130.000	130.000	0.000	0.000	0.000	0.000	
17G Township of Uxbridge Road Program		D,C	270	0.000	270.000	270.000	0.000	0.000	0.000	0.000	
17H Township of Brock Road Program		D,C	250	0.000	250.000	250.000	0.000	0.000	0.000	0.000	
17i Allowance for unknown requirements in conjunction		D,C	200	0.000	200.000	200.000		0.000	0.000		
with area municipality road programs		5,0	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
Sub-total Sub-total			3,415	0.000	3,415.000	3,415.000	0.000	0.000	0.000	0.000	0.000
MTO & GO Transit projects											
* 18 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Sub-total			100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	
Betterments/Replacement											
21 Works independent of road programs in various locations		D,C	800	0.000	800.000	800.000	0.000	0.000	0.000	0.000	0.00
22 Rehabilitation of existing watermains in various locations		D,C	1,600	0.000	1,600.000	1,600.000		0.000	0.000	0.000	
51 Replacement of wm on Madawaska Ave from Sauble to Wecker, Osha	wa	D	1,000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
* 59 Replacement of watermains in various locations		D,C	3,009	0.000	0.000	0.000		0.000	0.000	0.000	
60 Allowance for construction of services in unserviced areas		Ċ	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	
Sub-total			6,609	0.000	2,600.000	2,600.000		0.000	0.000	0.000	
System Expansion											
* 64 Zone 2 FM on Taunton Rd & William Jackson Dr, Ajax	106	С	2,100	0.000	0.000	0.000	56.700	1,843.800	8.400	191.100	0.000
* 74 Zone 4 FM on Ashburn Rd from Brawley Rd to Columbus Rd, Whitby	234	D	700	0.000	0.000	0.000		614.600	2.800		
* 75 Zone 4 FM on Columbus Rd from Thickson Rd to Ritson Rd, Oshawa		D	600	0.000	0.000	0.000					
* 76 WM on Britannia Dr from Thornton Rd to Windfields Farm Dr, Oshawa		С	1,360	0.000	0.000	0.000		1,194.080	5.440		
* 98 Zone 2 FM from Z 2 PS to Z 2 reservoir, Bowmanville	309	EA	600	0.000	0.000	0.000		526.800	2.400		
Sub-total	300		5,360	0.000	0.000	0.000					
Other Linear Infrastructure											
Other Linear Infrastructure				00							
ı		1 1		88 l			1	1	1	1	1

							Cost Ex	penditure Attrib (\$000,'s)	oution		
Project Description	DC Item	EA Land Design	Gross	Grant/ Subsidy/	User Re	Total User	Commercial Development	Residential Development	New Institutional	New Industrial	Asset Management Reserve
	No.	Const.	Cost	Other	Existing	Revenue	Charges	Charges	Charges	Charges	Fund
103 Replacement of meters		С	<b>A</b> 1,500	<b>B</b> 0.000	<b>C</b> 1,500.000	<b>D</b> 1,500.000	<b>E</b> 0.000	<b>F</b> 0.000	<b>G</b> 0.000	<b>H</b> 0.000	0.000
106 Depots - Replacement of Lead service connections		D.C	5,000	0.000	5,000.000	5,000.000	0.000	0.000	0.000	0.000	
107 Replacement of valves		C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	
108 Replacement of hydrants		C	160	0.000	160.000	160.000	0.000	0.000	0.000	0.000	
Sub-total			6,860	0.000	6,860.000	6,860.000	0.000	0.000	0.000	0.000	
B BUILDINGS			,,,,,,			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
* 116 Whitby WSP - Plant No. 1 upgrades		С	5,000	0.000	5,000.000	5,000.000	0.000	0.000	0.000	0.000	0.000
123 Taunton Rd Zone 2 Reservoir Expansion, Oshawa	203	D	1,200	0.000	26.400	26.400	31.680	1,030.440	4.680	106.800	
* 124 Grandview Zone 2 Pumping Station expansion, Oshawa	209	D	600	0.000	0.000	0.000	16.200	526.800	2.400	54.600	
* 125 Taunton Rd. Pumping Station expansion, Oshawa	211	EA	500	0.000	0.000	0.000	13.500	439.000	2.000	45.500	0.000
* 126 Harmony Rd. reservoir expansion, Oshawa	204	EA	525	0.000	129.518	129.518	10.658	347.235	1.575	36.015	
* 131 Bowmanville Water Supply Plant Expansion	300	D	1,500	0.000	0.000	0.000	120.000	964.500	16.500	399.000	
* 133 Concession St. WPS expansion, Bowmanville	303	D	600	0.000	45.120	45.120	14.958	487.200	2.232	50.490	
134 Proposed Zone 2 Water Pumping Station, Bowmanville	304	D	1,100	0.000	82.720	82.720	27.423	893.200	4.092	92.565	
* 139 Proposed Zone 2 Reservoir, Newcastle	314	EA	500	0.000	0.000	0.000	13.500	439.000		45.500	
* 150 Wellhead protection at Regional well sites	800	D,C	800	0.000	800.000	800.000	0.000	0.000	0.000	0.000	
Sub-total  C MACHINERY AND EQUIPMENT			12,325	0.000	6,083.758	6,083.758	247.919	5,127.375	35.479	830.470	
153 Cherrywood WPS - Station Upgrades, Pickering		D	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
Sub-total  D IT INFRASTRUCTURE			150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
Sub-total  E ALLOWANCES AND OTHER PROVISIONS			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180 Asset Condition Assessments-Report		D	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.000
181 Asset Condition Assessment/Investigation Large CPP feedermain	1	D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
183 Allowance for acquisition of easements		D,C	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	
184 Allowance for engineering studies	<u> </u>	D,C	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	
186 Preliminary Engineering	1	D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	
187 Allowance for sundry extensions as per council policy	1	D,C	15	0.000	15.000	15.000	0.000	0.000	0.000	0.000	
188 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	
189 Allowance for Regional share for works in conjunction with residential subdivision development	708	D,C	1,460	0.000	0.000	0.000	39.420	1,281.880	5.840	132.860	
190 Allowance for Regional share for works in conjunction with non-residential development	706	D,C	400	0.000	0.000	0.000	10.800	351.200	1.600	36.400	
191 Well interference works	j .	D	1,000	0.000	0.000	0.000	0.000	1,000.000	0.000	0.000	0.000
Sub-total Sub-total			3,875	0.000	515.000	515.000	50.220	2,633.080	7.440	169.260	500.000
Total Cost Attribution			41,969	0.000	22,998.758	22,998.758	442.859	12,466.535	64.359	1,487.490	4,509.000

<sup>\*</sup> Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

							Cost Ex	penditure Attrib (\$000,'s)	ution		
		EA			User Re	evenue					Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Management Reserve Fund
A LINEAR INFRASTRUCTURE  Regional Road Program											
			075	0.000	075.000	075.000	0.000	0.000	0.000	0.000	0.000
* 5 R.R. 36 (Hopkins St.) from Consumers Dr. to Dundas St., Whitby		С	375	0.000	375.000	375.000	0.000	0.000	0.000	0.000	0.000
16 Allowance for watermains in conjuction with Regional Roads Sub-total		D,C	1,700 2,075	0.000	1,700.000 2,075.000	1,700.000 2,075.000	0.000	0.000	0.000	0.000	0.000
Area Municipality Road Programs			,		·	·					
17A City of Pickering Road Program		D,C	275	0.000	275.000	275.000	0.000	0.000	0.000	0.000	0.000
17B Town of Ajax Road Program		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
17C Town of Whitby Road Program		D,C	620	0.000	620.000	620.000	0.000	0.000	0.000	0.000	0.000
17D City of Oshawa Road Program		D,C	1,100	0.000	1,100.000	1,100.000	0.000	0.000	0.000	0.000	0.000
17E Municipality of Clarington Road Program		D,C	370	0.000	370.000	370.000	0.000	0.000	0.000	0.000	0.000
17F Township of Scugog Road Program		D,C	130	0.000	130.000	130.000	0.000	0.000	0.000	0.000	0.000
17G Township of Uxbridge Road Program		D,C D,C	270	0.000	270.000 250.000	270.000	0.000	0.000	0.000	0.000	0.000
17H Township of Brock Road Program  17i Allowance for unknown requirements in conjunction with area municipality road programs		D,C D,C	250 200	0.000	200.000	250.000 200.000	0.000	0.000	0.000	0.000	0.000
Sub-total			3,415	0.000	3,415.000	3,415.000	0.000	0.000	0.000	0.000	0.000
MTO & GO Transit projects											
* 18 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Sub-total  Betterments/Replacement			100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
21 Works independent of road programs in various locations		D,C	800	0.000	800.000	800.000	0.000	0.000	0.000	0.000	0.000
22 Rehabilitation of existing watermains in various locations		D,C	1,600	0.000	1,600.000	1,600.000	0.000	0.000	0.000	0.000	0.000
* 59 Replacement of watermains in various locations		D,C	3,709	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3,709.000
60 Allowance for construction of services in unserviced areas		С	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
Sub-total			6,309	0.000	2,600.000	2,600.000	0.000	0.000	0.000	0.000	3,709.000
System Expansion											
* 62 Zone 1 FM on Bayly St. from Pickering Beach to Toy, Pickering	103	D	1,000	209.100	0.000	0.000	21.327	694.400	3.185	71.989	0.000
* 68 Zone 1 West Whitby FM from Brock/Victoria St to Rossland Rd, W	241	D,C	560	0.000	113.288	113.288	12.040	392.224	1.792	40.656	0.000
* 74 Zone 4 FM on Ashburn Rd. from Brawley Rd. to Columbus Rd., Whitby	234	С	2,800	0.000	0.000	0.000	75.600	2,458.400	11.200	254.800	0.000
* 86 Zone 4 FM on Ritson Rd from Columbus to Winchester, Oshawa	239	D	1,400	0.000	0.000	0.000	37.800	1,229.200	5.600	127.400	0.000
* 87 Zone 4 FM on Winchester Rd from Ritson Rd to Grandview Oshawa Sub-total	240	D	1,800 7,560	0.000 209.100	0.000 113.288	0.000 113.288	48.600 195.367	1,580.400 6,354.624	7.200 28.977	163.800 658.645	0.000

							Cost Ex	openditure Attrib (\$000,'s)	ution		
	DC	EA		Grant/	User Re	evenue Total	Commoraial	Residential	New	New	Asset
Project Description	Item No.	Land Design Const.	Gross Cost A	Subsidy/ Other B	Benefit to Existing C	User Revenue D	Commercial Development Charges E	Development Charges F	Institutional Charges G	Industrial Charges H	Management Reserve Fund
Other Linear Infrastructure			Α	В	<u> </u>	U	<u> </u>	г	<u> </u>	п	<u>'</u>
103 Replacement of meters		С	1,800	0.000	1,800.000	1,800.000	0.000	0.000	0.000	0.000	
106 Depots - Replacement of Lead service connections		D,C	5,000	0.000	5,000.000	5,000.000	0.000	0.000	0.000	0.000	
107 Replacement of valves		С	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	
108 Replacement of hydrants		С	160	0.000	160.000	160.000	0.000	0.000	0.000	0.000	
Sub-total			7,160	0.000	7,160.000	7,160.000	0.000	0.000	0.000	0.000	0.000
B BUILDINGS											
* 113 Intake crib chlorine line replacement Ajax and Whitby WSP		С	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.000
* 119 Thickson Rd. Zone 3 Pumping Station expansion, Whitby	210	C	10,600	0.000	0.000	0.000	286.200	9,306.800	42.400	964.600	
* 135 Bowmanville Zone 2 reservoir expansion, Clarington	302	EA	550	0.000	467.500	467.500	2.255	72.435	0.330	7.480	
* 149 New water storage facility, Brock	602	EA	550	0.000	0.000	0.000	14.850	482.900	2.200	50.050	0.000
* 150 Wellhead protection at Regional well sites	800	D,C	800	0.000	800.000	800.000	0.000	0.000	0.000	0.000	0.000
Sub-total			12,800	0.000	1,267.500	1,267.500	303.305	9,862.135	44.930	1,022.130	300.000
C MACHINERY AND EQUIPMENT											
* 152 Rosebank WPS - Station Upgrades, Pickering		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	
<ul> <li>153 Cherrywood WPS - Station Upgrades, Pickering</li> </ul>		С	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000
Sub-total			2,100	0.000	2,100.000	2,100.000	0.000	0.000	0.000	0.000	0.000
D IT INFRASTRUCTURE											
0.1.441				0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sub-total			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E ALLOWANCES AND OTHER PROVISIONS											
180 Asset Condition Assessments-Report		D	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.000
181 Asset Condition Assessment/Investigation Large CPP feedermain		D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
183 Allowance for acquisition of easements		D,C	150	0.000	150.000	150.000		0.000	0.000	0.000	
184 Allowance for engineering studies		D,C	300	0.000	300.000	300.000	0.000	0.000	0.000	0.000	
185 Allowance for CTC Source Water Protection Plan		D	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	
186 Preliminary Engineering		D	100	0.000	100.000	100.000		0.000	0.000	0.000	
187 Allowance for sundry extensions as per council policy	ļ	D,C	15	0.000	15.000	15.000	0.000	0.000	0.000	0.000	
188 Allowance for unknown requirements	700	D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	
189 Allowance for Regional share for works in conjunction with	708	D,C	1,460	0.000	0.000	0.000	39.420	1,281.880	5.840	132.860	0.000
residential subdivision development  190 Allowance for Regional share for works in conjunction with non-residential development	706	D,C	400	0.000	0.000	0.000	10.800	351.200	1.600	36.400	0.000
191 Well interference works		D	1,000	0.000	0.000	0.000	0.000	1,000.000	0.000	0.000	0.000
Sub-total			4,525	0.000	1,165.000	1,165.000	50.220	2,633.080	7.440	169.260	500.000
Total Cost Attribution			46,044	209.100	19,995.788	19,995.788	548.892	18,849.839	81.347	1,850.035	4,509.000

<sup>\*</sup> Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

							Cost E	openditure Attrib (\$000,'s)	oution		<b>.</b>
		EA			User Re						Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Management Reserve Fund I
A LINEAR INFRASTRUCTURE											
Regional Road Program											
16 Allowance for watermains in conjuction with Regional Roads		D,C	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000
Sub-total			2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000
Area Municipality Road Programs											
17A City of Pickering Road Program		D,C	275	0.000	275.000	275.000		0.000	0.000	0.000	0.000
17B Town of Ajax Road Program		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
17C Town of Whitby Road Program		D,C	620	0.000	620.000	620.000		0.000	0.000	0.000	0.000
17D City of Oshawa Road Program		D,C D.C	1,100 370	0.000	1,100.000 370.000	1,100.000 370.000	0.000	0.000	0.000	0.000	0.000
17E Municipality of Clarington Road Program 17F Township of Scugog Road Program		D,C	130	0.000	130.000	130.000	0.000	0.000	0.000	0.000	0.000
17G Township of Occupy Road Program		D,C	270	0.000	270.000	270.000		0.000	0.000	0.000	0.000
17H Township of Brock Road Program		D,C	250	0.000	250.000	250.000	0.000	0.000	0.000	0.000	0.000
17i Allowance for unknown requirements in conjunction		D,C	200	0.000	200.000	200.000		0.000	0.000	0.000	0.000
with area municipality road programs		, -									
Sub-total  MTO & GO Transit projects			3,415	0.000	3,415.000	3,415.000	0.000	0.000	0.000	0.000	0.000
* 18 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Sub-total			100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Betterments/Replacement											
21 Works independent of road programs in various locations		D,C	800	0.000	800.000	800.000	0.000	0.000	0.000	0.000	0.000
22 Rehabilitation of existing watermains in various locations		D,C	1,600	0.000	1,600.000	1,600.000	0.000	0.000	0.000	0.000	0.000
52 Replacement of wm on Port Darlington Rd. from Lake Rd. to WSP, Boy			300	0.000	0.000	0.000		0.000	0.000	0.000	300.000
53 Replacement of wm on Baseline Rd. from Liberty Rd. to Mearns Ave, B	Bowma		100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	100.000
* 59 Replacement of watermains in various locations		D,C	2,109	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2,109.000
60 Allowance for construction of services in unserviced areas		С	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
Sub-total  System Expansion			5,109	0.000	2,600.000	2,600.000	0.000	0.000	0.000	0.000	2,509.000
* 75 Zone 4 FM on Columbus Rd. from Thickson Rd to Ritson, Oshawa	238	С	5,800	0.000	0.000	0.000	156.600	5,092.400	23.200	527.800	0.000
* 95 Zone 1 FM from Bowmanville WSP to Baseline Rd., Bowmanville	305	EA	520	0.000	70.980	70.980	12.116	394.212	1.820	40.872	0.000
* 96 Zone 1 FM on Baseline Rd. from Wharf St. to Mearns Ave., Bowmanv	306	EA	520	0.000	0.000	0.000					
* 98 Zone 2 FM from Z 2 PS to Z 2 reservoir, Bowmanville	309	D	600	0.000	0.000	0.000		526.800		54.600	0.000
Sub-total Other Linear Infrastructure			7,440	0.000	70.980	70.980	198.956	6,469.972	29.500	670.592	0.000
103 Replacement of meters		С	1,300	0.000	1,300.000	1,300.000		0.000	0.000	0.000	0.000
106 Depots - Replacement of Lead service connections 107 Replacement of valves		D,C	5,000	0.000	5,000.000	5,000.000					
		С	200	0.000	200.000	200.000			0.000		0.000

	20 Construction Frogram - Water Sup	<u> </u>										
								Cost Ex	penditure Attrib (\$000,'s)	oution		
			EA			User Re	wonue					Asset
		DC	Land		Grant/	USELKE	Total	Commercial	Residential	New	New	Management
	Project Description	Item	Design	Gross	Subsidy/	Benefit to	User	Development	Development	Institutional	Industrial	Reserve
		No.	Const.	Cost A	Other B	Existing C	Revenue D	Charges E	Charges F	Charges G	Charges H	Fund
10	8 Replacement of hydrants		С	160	0.000	160.000	160.000	0.000	0.000	0.000	0.000	0.000
	Sub-total Sub-total			6,660	0.000	6,660.000	6,660.000	0.000	0.000	0.000	0.000	0.000
В	BUILDINGS											
* 11	3 Intake crib chlorine line replacement Ajax and Whitby WSP		С	1,500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1,500.000
12	2 Proposed Whitby Zone 5 Pumping Station and feedermain, Whitby	213	D	2,500	0.000	55.000	55.000	66.000	2,146.750	9.750	222.500	0.000
	3 Taunton Rd Zone 2 Reservoir Expansion, Oshawa	203	С	10,800	0.000	237.600	237.600	285.120	9,273.960	42.120	961.200	
	4 Grandview Zone 2 Pumping Station expansion, Oshawa	209	С	5,300	0.000	0.000	0.000	143.100	4,653.400	21.200	482.300	
	5 Taunton Rd. Pumping Station expansion, Oshawa	211	D	650	0.000	0.000	0.000	17.550	570.700	2.600	59.150	
	<ul><li>9 Proposed Oshawa Zone 5 Pumping Station and feedermain, Oshawa</li><li>1 Bowmanville WSP Expansion</li></ul>	214 300	D C	2,000 84,500	0.000	44.000 0.000	44.000 0.000	52.800 6,760.000	1,717.400 54,333.500	7.800 929.500	178.000 22,477.000	
	3 Concession St. Water Pumping Station expansion, Bowmanville	303	C	5,000	0.000	376.000	376.000	124.650	4.060.000	18.600	420.750	0.000
	4 New Zone 2 Water Pumping Station, Bowmanville	304	C	7,450	0.000	560.240	560.240	185.729	6,049.400	27.714	626.918	
	9 Proposed Zone 2 Reservoir, Newcastle	302	D	600	0.000	0.000	0.000	16.200	526.800	2.400	54.600	
	O Proposed Orono storage facility, Clarington	313	EA	400	0.000	348.880	348.880	1.360	44.880	0.240	4.640	0.000
* 15	0 Wellhead protection at Regional well sites	800	D,C	800	0.000	800.000	800.000	0.000	0.000	0.000	0.000	
	Sub-total			121,500	0.000	2,421.720	2,421.720	7,652.509	83,376.790	1,061.924	25,487.058	1,500.000
С	MACHINERY AND EQUIPMENT											
	2 Rosebank WPS - Station Upgrades, Pickering		D	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	
* 15	8 Oshawa WSP - Motor Control Center - replacement		D	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	
	Sub-total			350	0.000	350.000	350.000	0.000	0.000	0.000	0.000	0.000
D	IT INFRASTRUCTURE											
	Sub-total			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	oub total			Ü	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E 40	ALLOWANCES AND OTHER PROVISIONS			200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000
	Asset Condition Assessments-Report     Asset Condition Assessment/Investigation Large CPP feedermain		D D	300 200	0.000	0.000	0.000	0.000	0.000	0.000 0.000	0.000	
	3 Allowance for acquisition of easements		D,C	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	
	4 Allowance for engineering studies		D,C	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	
	6 Preliminary Engineering		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	
	7 Allowance for sundry extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000	0.000	0.000	
18	8 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
	Allowance for Regional share for works in conjunction with residential subdivision development	708	D,C	1,460	0.000	0.000	0.000	39.420	1,281.880	5.840	132.860	0.000
	Allowance for Regional share for works in conjunction with non-residential development	706	D,C	400	0.000	0.000	0.000	10.800	351.200	1.600	36.400	0.000
19	1 Well interference works		D	1,000	0.000	0.000	0.000	0.000	1,000.000	0.000	0.000	0.000
	Sub-total			3,875	0.000	515.000	515.000	50.220	2,633.080	7.440	169.260	500.000
	Total Cost Attribution			150,449	0.000	18,132.700	18,132.700	7,901.685	92,479.842	1,098.864	26,326.910	4,509.000

<sup>\*</sup> Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

							Cost Ex	cpenditure Attrib (\$000,'s)	ution		Τ
		EA			User Re	venue					Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Managemen Reserve Fund
A LINEAR INFRASTRUCTURE											
Regional Road Program											
16 Allowance for watermains in conjuction with Regional Roads		D,C	2.000	0.000	2.000.000	2.000.000	0.000	0.000	0.000	0.000	0.00
Sub-total		5,0	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.00
Area Municipality Road Programs			,		,	,					
17A City of Pickering Road Program		D.C	275	0.000	275.000	275.000	0.000	0.000	0.000	0.000	0.00
17B Town of Ajax Road Program		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.00
17C Town of Whitby Road Program		D,C	620	0.000	620.000	620.000	0.000	0.000	0.000	0.000	0.00
17D City of Oshawa Road Program		D,C	1,100	0.000	1,100.000	1,100.000	0.000	0.000	0.000	0.000	0.00
17E Municipality of Clarington Road Program		D,C	370	0.000	370.000	370.000	0.000	0.000	0.000	0.000	0.00
17F Township of Scugog Road Program		D,C	130	0.000	130.000	130.000	0.000	0.000	0.000	0.000	0.00
17G Township of Uxbridge Road Program		D,C	270	0.000	270.000	270.000	0.000	0.000	0.000	0.000	
17H Township of Brock Road Program		D,C	250	0.000	250.000	250.000	0.000	0.000	0.000	0.000	0.00
17i Allowance for unknown requirements in conjunction		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.00
with area municipality road programs			0.445	0.000	0.445.000	0.445.000	0.000	0.000	0.000	0.000	0.00
Sub-total MTO & GO Transit projects			3,415	0.000	3,415.000	3,415.000	0.000	0.000	0.000	0.000	0.00
* 18 Allowance for unknown requirements		D.C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.00
Sub-total		,	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.00
Betterments/Replacement											
21 Works independent of road programs in various locations		D,C	800	0.000	800.000	800.000		0.000	0.000	0.000	0.00
22 Rehabilitation of existing watermains in various locations		D,C	1,600	0.000	1,600.000	1,600.000	0.000	0.000	0.000	0.000	0.00
* 59 Replacement of watermains in various locations		D,C	4,009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
60 Allowance for construction of services in unserviced areas		С	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	
Sub-total  System Expansion			6,609	0.000	2,600.000	2,600.000	0.000	0.000	0.000	0.000	4,009.00
* 62 Zone 1 FM on Bayly St. from Pickering Beach to Toy, Pickering	103	С	17,000	3,554.700	0.000	0.000	362.551	11,804.800	54.137	1,223.813	0.00
Sub-total			17,000	3,554.700	0.000	0.000	362.551	11,804.800	54.137	1,223.813	0.00
Other Linear Infrastructure											
103 Replacement of meters		С	1,500	0.000	1,500.000	1,500.000	0.000	0.000	0.000	0.000	0.00
106 Depots - Replacement of Lead service connections		D,C	5,000	0.000	5,000.000	5,000.000	0.000	0.000	0.000	0.000	0.00
107 Replacement of valves		С	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.00
108 Replacement of hydrants		С	160	0.000	160.000	160.000	0.000	0.000	0.000	0.000	0.00
Sub-total			6,860	0.000	6,860.000	6,860.000	0.000	0.000	0.000	0.000	0.00

							Cost Ex	kpenditure Attrib (\$000,'s)	ution		
		EA			User Re						Asset
Project Description	Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Management Reserve Fund I
B BUILDINGS											
122 Proposed Whitby Zone 5 Pumping Station and feedermain, Whitby	213	С	9,900	0.000	217.800	217.800	261.360	8,501.130	38.610	881.100	0.000
129 Proposed Oshawa Zone 5 Pumping Station and feedermain, Oshawa	214	С	7,600	0.000	167.200	167.200	200.640	6,526.120	29.640	676.400	0.000
150 Wellhead protection at Regional well sites	800	D,C	800	0.000	800.000	800.000	0.000	0.000	0.000	0.000	0.000
Sub-total			18,300	0.000	1,185.000	1,185.000	462.000	15,027.250	68.250	1,557.500	0.000
C MACHINERY AND EQUIPMENT											
* 152 Rosebank WPS - Station Upgrades, Pickering		С	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000
* 158 Oshawa WSP - Motor Control Center - replacement		D	1,000	0.000	1,000.000	1,000.000	0.000	0.000	0.000	0.000	0.000
Sub-total			3,000	0.000	3,000.000	3,000.000	0.000	0.000	0.000	0.000	0.000
D IT INFRASTRUCTURE											
Sub-total			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E ALLOWANCES AND OTHER PROVISIONS											
* 178 Regional Water Supply Master Planning Study	701	D,C	800	0.000	0.000	0.000	21.600	702.400	3.200	72.800	0.000
180 Asset Condition Assessments-Report		D	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.000
181 Asset Condition Assessment/Investigation Large CPP feedermain		D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000
183 Allowance for acquisition of easements		D,C	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
184 Allowance for engineering studies 184 Allowance for CTC Source Water Protection Plan		D,C D	300 500	0.000	300.000 500.000	300.000 500.000	0.000	0.000	0.000	0.000	0.000
186 Preliminary Engineering		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
187 Allowance for sundry extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000	0.000	0.000	0.000
188 Allowance for unknown requirements	1	D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
189 Allowance for Regional share for works in conjunction with residential subdivision development	708	D,C	1,460	0.000	0.000	0.000	39.420	1,281.880	5.840	132.860	0.000
190 Allowance for Regional share for works in conjunction with non-residential development	706	D,C	400	0.000	0.000	0.000	10.800	351.200	1.600	36.400	0.000
191 Well interference works		D	1,000	0.000	0.000	0.000	0.000	1,000.000	0.000	0.000	0.000
Sub-total			5,325	0.000	1,165.000	1,165.000	71.820	3,335.480	10.640	242.060	500.000
Total Cost Attribution			62,609	3,554.700	20,325.000	20,325.000	896.371	30,167.530	133.027	3,023.373	4,509.000

<sup>\*</sup> Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

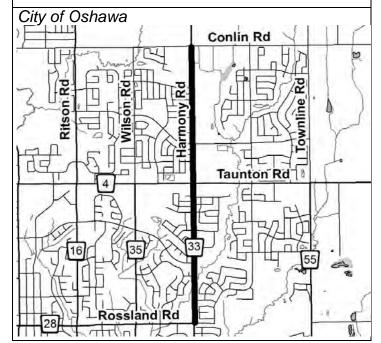
#### ITEM NO. 4

#### REGIONAL ROAD PROGRAM

R.R.33 (Harmony Rd.) from Rossland Rd. to Conlin Rd., Oshawa Phase 2: Rossland Rd. to Taunton Rd.

#### Project No. R0716

#### **RELATED PROJECTS**



## **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	1		1				
		2018		Four Yea	r Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	40.000	8.800					48.800
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		291.200					291.200
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	40.000	300.000	0.000	0.000	0.000	0.000	340.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	40.000	300.000					340.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	40.000	300.000	0.000	0.000	0.000	0.000	340.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

ITEM NO. 7

REGIONAL ROAD PROGRAM

R.R. 53 (Stevenson Rd.) from Highway 401 to Bond St., Oshawa

Project No. R1820

#### **RELATED PROJECTS**



## **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Yea	r Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		150.000					150.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION					1,100.000		1,100.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	150.000	0.000	0.000	1,100.000	0.000	1,250.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		150.000			1,100.000		1,250.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	150.000	0.000	0.000	1,100.000	0.000	1,250.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

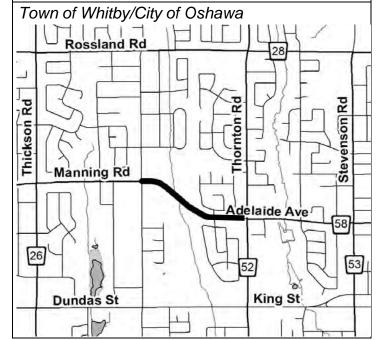
ITEM NO. 10

#### REGIONAL ROAD PROGRAM

R.R.58 (Manning Rd.)/Adelaide Ave. interconnection from Garrard Rd. to Thornton Rd., Whitby/Oshawa

Project No.: R0517

#### **RELATED PROJECTS**



## **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		100.000					100.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION					800.000		800.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	100.000	0.000	0.000	800.000	0.000	900.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		100.000			800.000		900.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	100.000	0.000	0.000	800.000	0.000	900.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

ITEM NO. 11

REGIONAL ROAD PROGRAM

R.R.59 (Gibb St.) from Stevenson Rd. to Simcoe St., Oshawa

Project No.: R0604

#### **RELATED PROJECTS**

2018 Sanitary Sewerage System Capital Budget Item No.: 7

# City of Oshawa



## **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018		2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		100.000					100.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			800.000				800.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	100.000	800.000	0.000	0.000	0.000	900.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		100.000	800.000				900.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	100.000	800.000	0.000	0.000	0.000	900.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016. Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### ITEM NO. 13

#### REGIONAL ROAD PROGRAM

R.R.60 (Wentworth St.) from Simcoe St. to Farewell St., Oshawa

Project No.: O1704

### **RELATED PROJECTS**

# City of Oshawa 16 Bloor St 22 Wentworth St 60 Wentworth St

## **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	20.000	130.000					150.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION				1,200.000			1,200.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	20.000	130.000	0.000	1,200.000	0.000	0.000	1,350.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	20.000	130.000		1,200.000			1,350.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	20.000	130.000	0.000	1,200.000	0.000	0.000	1,350.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

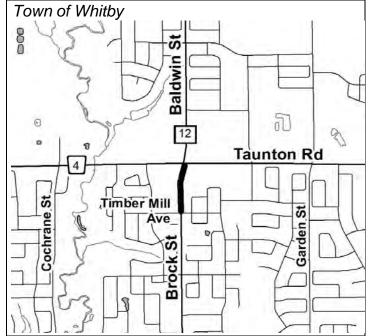
#### ITEM NO. 15

#### REGIONAL ROAD PROGRAM

Highway 12 (Brock St.) from Timber Mill Ave. to Taunton Rd., Whitby

Project No.: R0419

#### **RELATED PROJECTS**



## **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		58.000					58.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		342.000					342.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	400.000	0.000	0.000	0.000	0.000	400.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		400.000					400.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	400.000	0.000	0.000	0.000	0.000	400.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

ITEM NO. 17A

#### **Area Municipality Road Programs**

CITY OF PICKERING ROAD PROGRAM (1 Project)

Refer to Construction of Municipal Services summary for list of streets

Project No.: P1899

2018 Sanitary Sewerage Capital Budget Item No. 11A

## **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		100.000	20.000	40.000	40.000	40.000	240.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			580.000	235.000	235.000	235.000	1,285.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	100.000	600.000	275.000	275.000	275.000	1,525.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		100.000	600.000	275.000	275.000	275.000	1,525.000
DEBENTURES							0.000
OTHER						_	0.000
TOTAL ATTRIBUTION	0.000	100.000	600.000	275.000	275.000	275.000	1,525.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

Replacement of deficient watermains and/or construction of new works in conjunction with road reconstruction proposed by the City of Pickering.

ITEM NO. 17B

#### **Area Municipality Road Programs**

TOWN OF AJAX ROAD PROGRAM (5 Projects)

Refer to Construction of Municipal Services summary

for list of streets Project No.: A1899

2018 Sanitary Sewerage Capital Budget Item No. 11B

## **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		60.000	35.000	35.000	35.000	35.000	200.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		480.000	165.000	165.000	165.000	165.000	1,140.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	540.000	200.000	200.000	200.000	200.000	1,340.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		540.000	200.000	200.000	200.000	200.000	1,340.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	540.000	200.000	200.000	200.000	200.000	1,340.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

Replacement of deficient watermains and/or construction of new works in conjunction with road reconstruction proposed by the Town of Ajax

ITEM NO. 17C

#### **Area Municipality Road Programs**

TOWN OF WHITBY ROAD PROGRAM (1 Project)

Refer to Construction of Municipal Services summary for list of streets

Project No.: W1899

2018 Sanitary Sewerage Capital Budget Item No. 11C

## **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		193.900	150.000	116.000	116.000	116.000	691.900
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		1,206.100	1,080.000	504.000	504.000	504.000	3,798.100
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	1,400.000	1,230.000	620.000	620.000	620.000	4,490.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		1,400.000	1,230.000	620.000	620.000	620.000	4,490.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	1,400.000	1,230.000	620.000	620.000	620.000	4,490.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

Replacement of deficient watermains and/or construction of new works in conjunction with road reconstruction proposed by the Town of Whitby.

ITEM NO. 17D

#### **Area Municipality Road Programs**

CITY OF OSHAWA ROAD PROGRAM (4 Projects)

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Refer to Construction of Municipal Services summary

for list of streets Project No.: O1899

2018 Sanitary Sewerage Capital Budget Item No. 11D

## **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	r Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		31.000	152.000	152.000	152.000	152.000	639.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		269.000	948.000	948.000	948.000	948.000	4,061.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	300.000	1,100.000	1,100.000	1,100.000	1,100.000	4,700.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		300.000	1,100.000	1,100.000	1,100.000	1,100.000	4,700.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	300.000	1,100.000	1,100.000	1,100.000	1,100.000	4,700.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

Replacement of deficient watermains and/or construction of new works in conjunction with road reconstruction proposed by the City of Oshawa.

#### ITEM NO. 17E

#### **Area Municipality Road Programs**

MUNICIPALITY OF CLARINGTON ROAD PROGRAM (4 Projects)

Refer to Construction of Municipal Services summary for list of streets
Project No.: C1899

2018 Sanitary Sewerage Capital Budget Item No. 11E

## **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		100.000	46.000	46.000	46.000	46.000	284.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		340.000	324.000	324.000	324.000	324.000	1,636.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	440.000	370.000	370.000	370.000	370.000	1,920.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		440.000	370.000	370.000	370.000	370.000	1,920.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	440.000	370.000	370.000	370.000	370.000	1,920.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

Replacement of deficient watermains and/or construction of new works in conjunction with road reconstruction proposed by the Municipality of Clarington.

ITEM NO. 17F

#### **Area Municipality Road Programs**

TOWNSHIP OF SCUGOG ROAD PROGRAM (1 Project)

Refer to Construction of Municipal Services summary for list of streets

Project No.: S1899

2018 Sanitary Sewerage Capital Budget Item No. 17F

## **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		65.000	17.200	17.200	17.200	17.200	133.800
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		360.000	112.800	112.800	112.800	112.800	811.200
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	425.000	130.000	130.000	130.000	130.000	945.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		425.000	130.000	130.000	130.000	130.000	945.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	425.000	130.000	130.000	130.000	130.000	945.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

Replacement of deficient watermains and/or construction of new works in conjunction with road reconstruction proposed by the Township of Scugog.

ITEM NO. 17G

#### **Area Municipality Road Programs**

TOWNSHIP OF UXBRIDGE ROAD PROGRAM (2 Projects)

Refer to Construction of Municipal Services summary

for list of streets Project No.: U1899

2018 Sanitary Sewerage Capital Budget Item No. 11G

## **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		25.000	38.600	38.600	38.600	38.600	179.400
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		175.000	231.400	231.400	231.400	231.400	1,100.600
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	200.000	270.000	270.000	270.000	270.000	1,280.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		200.000	270.000	270.000	270.000	270.000	1,280.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	200.000	270.000	270.000	270.000	270.000	1,280.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

Replacement of deficient watermains and/or construction of new works in conjunction with road reconstruction proposed by the Township of Uxbridge.

ITEM NO. 17H

### **Area Municipality Road Programs**

TOWNSHIP OF BROCK ROAD PROGRAM (0 Projects)

Refer to Construction of Municipal Services summary for list of streets

Project No.: -

2018 Sanitary Sewerage Capital Budget Item No. 11H

No Works proposed in 2018

### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING			38.000	38.000	38.000	38.000	152.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			212.000	212.000	212.000	212.000	848.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	0.000	250.000	250.000	250.000	250.000	1,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES			250.000	250.000	250.000	250.000	1,000.000
DEBENTURES							0.000
OTHER						_	0.000
TOTAL ATTRIBUTION	0.000	0.000	250.000	250.000	250.000	250.000	1,000.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

Replacement of deficient watermains and/or construction of new works in conjunction with road reconstruction proposed by the Township of Brock.

### ITEM NO. 17i

### **Area Municipality Road Programs**

ALLOWANCE FOR UNKNOWN WATER SUPPLY REQUIREMENTS IN CONJUNCTION WITH AREA MUNICIPALITY ROAD PROGRAMS IN VARIOUS LOCATIONS

Refer to Construction of Municipal Services summary

for list of streets Project No.: M1803

2018 Sanitary Sewerage Capital Budget Item No. 11i

### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		60.000	25.000	25.000	25.000	25.000	160.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		229.695	175.000	175.000	175.000	175.000	929.69
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	289.695	200.000	200.000	200.000	200.000	1,089.69
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		289.695	200.000	200.000	200.000	200.000	1,089.695
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	289.695	200.000	200.000	200.000	200.000	1,089.69

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

This allowance is to provide for unanticipated watermain works in conjunction with area municipality road programs in various locations (Items 17A to 17H)

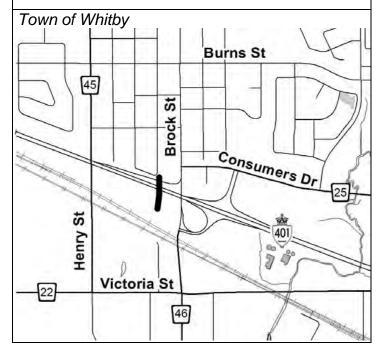
### ITEM NO. 19

### MTO & GO TRANSIT PROJECTS:

Watermain replacement in conjunction with the MTO's bridge work and ramp realignment at Brock St., Whitby

Project No.: D1737

### RELATED PROJECTS



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	250.000	50.000					300.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		2,050.000					2,050.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	250.000	2,100.000	0.000	0.000	0.000	0.000	2,350.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	250.000	2,100.000					2,350.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	250.000	2,100.000	0.000	0.000	0.000	0.000	2,350.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

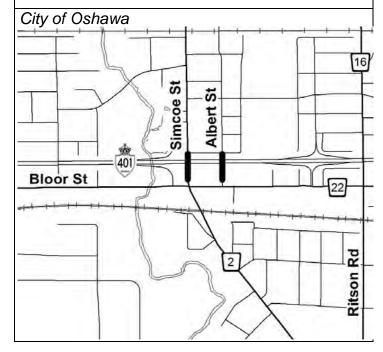
### ITEM NO. 20

### MTO & GO TRANSIT PROJECTS:

Watermain replacement in conjunction with the MTO's bridge work at Simcoe St. and Albert St., Oshawa

Project No.: D1801

### **RELATED PROJECTS**



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		100.000	40.000				140.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			860.000				860.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	100.000	900.000	0.000	0.000	0.000	1,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		100.000	900.000				1,000.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	100.000	900.000	0.000	0.000	0.000	1,000.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

### PROJECT LOCATION & DESCRIPTION ITEM NO. 21 BETTERMENTS/ REPLACEMENTS Water works to rectify identified system deficiencies independent of road programs in various locations Project No.: M1899 RELATED PROJECTS

### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		70.400	90.000	90.000	108.000	112.000	470.400
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		258.100	585.000	585.000	612.000	648.000	2,688.100
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	328.500	675.000	675.000	720.000	760.000	3,158.500
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		328.500	675.000	675.000	720.000	760.000	3,158.500
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	328.500	675.000	675.000	720.000	760.000	3,158.500

NEED/EXF	PLANATION OF	- PROJECI
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### **REGION OF DURHAM, 2018 CAPITAL BUDGET PROJECT DETAIL**

### **WATER SUPPLY SYSTEM**

### PROJECT LOCATION & DESCRIPTION ITEM NO. 22 BETTERMENTS/ REPLACEMENTS Rehabilitation of existing watermains in various locations Project No.: D1812 RELATED PROJECTS

### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		230.000	230.000	230.000	230.000	230.000	1,150.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		1,370.000	1,370.000	1,370.000	1,370.000	1,370.000	6,850.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	1,600.000	1,600.000	1,600.000	1,600.000	1,600.000	8,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		1,600.000	1,600.000	1,600.000	1,600.000	1,600.000	8,000.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION		1,600.000	1,600.000	1,600.000	1,600.000	1,600.000	8,000.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

Rehabilitation (cement mortar lining) of watermains in various locations.

### **REGION OF DURHAM, 2018 CAPITAL BUDGET PROJECT DETAIL**

### **WATER SUPPLY SYSTEM**

### **PROJECT LOCATION & DESCRIPTION**

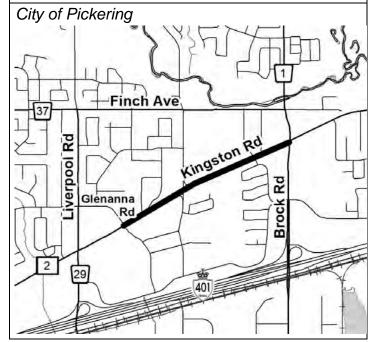
**ITEM NO.: 23** 

### BETTERMENTS/ REPLACEMENTS

Replacement of watermain on Kingston Rd. (Highway No. 2) from Glenanna Rd. to Brock Rd., Pickering

Project No.: D1802

### **RELATED PROJECTS**



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		120.000					120.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		1,080.000					1,080.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	1,200.000	0.000	0.000	0.000	0.000	1,200.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		1,200.000					1,200.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	1,200.000	0.000	0.000	0.000	0.000	1,200.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

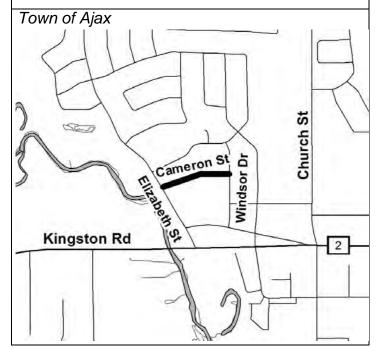
### ITEM NO. 27

### BETTERMENTS/ REPLACEMENTS

Replacement of watermain on Cameron St. from Elizabeth St. to Windsor Dr., Ajax

Project No.: A1801

### **RELATED PROJECTS**



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		40.000					40.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			360.000				360.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	40.000	360.000	0.000	0.000	0.000	400.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND		40.000	360.000				400.000
TOTAL ATTRIBUTION	0.000	40.000	360.000	0.000	0.000	0.000	400.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### **NEED/EXPLANATION OF PROJECT**

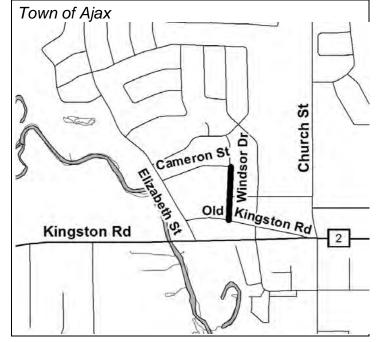
ITEM NO. 28

### BETTERMENTS/ REPLACEMENTS

Replacement of a watermain on Windsor Dr. from Old Kingston Rd. to Cameron St., Ajax

Project No.: A1802

### **RELATED PROJECTS**



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		40.000					40.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			360.000				360.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	40.000	360.000	0.000	0.000	0.000	400.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND		40.000	360.000				400.000
TOTAL ATTRIBUTION	0.000	40.000	360.000	0.000	0.000	0.000	400.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### **NEED/EXPLANATION OF PROJECT**

ITEM NO. 40

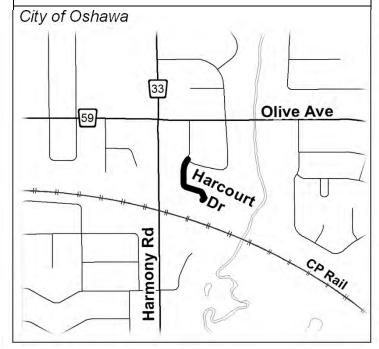
### BETTERMENTS/ REPLACEMENTS

Replacement of the watermain on Harcourt Dr. from Florell Dr. to dead-end, Oshawa

Project No.: O1604

### **RELATED PROJECTS**

2016 Water Supply Capital Budget Item No.: 45



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	100.000						100.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		340.000					340.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	100.000	340.000	0.000	0.000	0.000	0.000	440.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND	100.000	340.000					440.000
TOTAL ATTRIBUTION	100.000	340.000	0.000	0.000	0.000	0.000	440.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

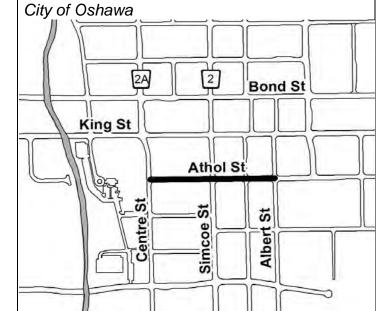
### ITEM NO. 41

### BETTERMENTS/ REPLACEMENTS

Replacement of the watermain on Athol St. E. from Centre St. to Albert St., Oshawa

Project No.: O1710

### **RELATED PROJECTS**



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	5.000	60.000					65.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		400.000					400.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	5.000	460.000	0.000	0.000	0.000	0.000	465.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND	5.000	460.000					465.000
TOTAL ATTRIBUTION	5.000	460.000	0.000	0.000	0.000	0.000	465.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

### ITEM NO. 43

### BETTERMENTS/ REPLACEMENTS

Replacement of watermain on Oxford St. from Stone St. to Dwight Ave., Oshawa

Project No.: O1702

### **RELATED PROJECTS**

2017 Water Supply Capital Budget Item No. 51 2017 Sanitary Sewerage Capital Budget Item No. 30



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	85.000	65.000					150.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		970.000					970.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	85.000	1,035.000	0.000	0.000	0.000	0.000	1,120.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND	85.000	1,035.000					1,120.000
TOTAL ATTRIBUTION	85.000	1,035.000	0.000	0.000	0.000	0.000	1,120.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

### **REGION OF DURHAM, 2018 CAPITAL BUDGET PROJECT DETAIL**

### WATER SUPPLY SYSTEM

### **PROJECT LOCATION & DESCRIPTION**

ITEM NO. 44

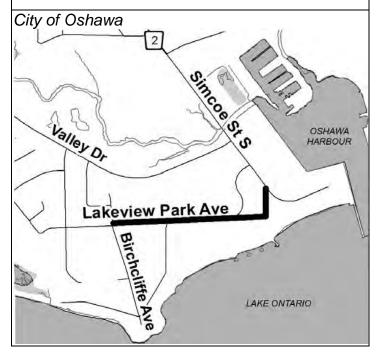
### BETTERMENTS/ REPLACEMENTS

Replacement of watermain on Lakeview Park Avenue from Birchcliffe Ave. to Simcoe St. South, Oshawa

Project No.: O1703

### **RELATED PROJECTS**

2017 Water Supply Capital Budget Item No. 52



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	60.000	70.000					130.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		790.000					790.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	60.000	860.000	0.000	0.000	0.000	0.000	920.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND	60.000	860.000					920.000
TOTAL ATTRIBUTION	60.000	860.000	0.000	0.000	0.000	0.000	920.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

### ITEM NO. 45

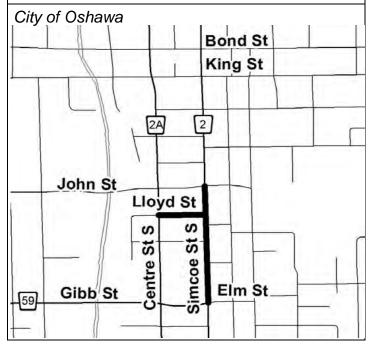
### BETTERMENTS/ REPLACEMENTS

Replacement of a watermain on Simcoe St. from John St. to Elm St. & Llyod St. from Centre St. to Simcoe St., Oshawa

Project No.: O1602

### **RELATED PROJECTS**

2018 Sanitary Sewerage Capital Budget Item No. 27



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	160.000						160.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	140.000	840.000					980.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	300.000	840.000	0.000	0.000	0.000	0.000	1,140.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND	300.000	840.000					1,140.000
TOTAL ATTRIBUTION	300.000	840.000	0.000	0.000	0.000	0.000	1,140.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

### ITEM NO. 46

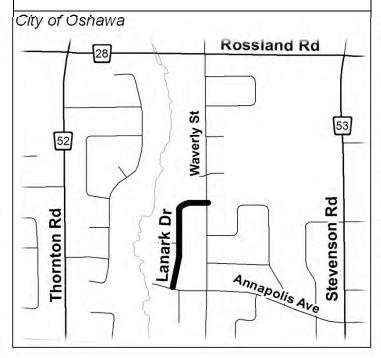
### BETTERMENTS/ REPLACEMENTS

Replacement of watermain on Lanark Dr. from Annapolis Ave. to Waverly St., Oshawa

Project No.: O1603

### **RELATED PROJECTS**

2016 Water Supply Capital Budget Item No. 44



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	95.000						95.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	485.000	90.000					575.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	580.000	90.000	0.000	0.000	0.000	0.000	670.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND	580.000	90.000					670.000
TOTAL ATTRIBUTION	580.000	90.000	0.000	0.000	0.000	0.000	670.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### **NEED/EXPLANATION OF PROJECT**

### ITEM NO. 47

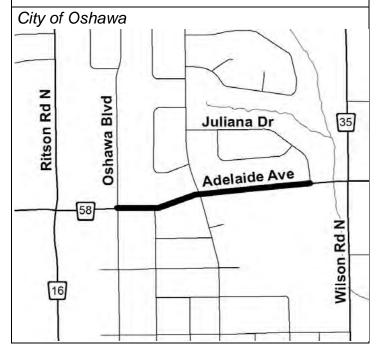
### BETTERMENTS/ REPLACEMENTS

Replacement of watermain on Adelaide Ave. from Oshawa Blvd. to to Juliana Dr., Oshawa

Project No.: O1509

### **RELATED PROJECTS**

2015 Water Supply Capital Budget Item No. 60



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	170.000						170.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	500.000	530.000					1,030.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	670.000	530.000	0.000	0.000	0.000	0.000	1,200.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND	670.000	530.000					1,200.000
TOTAL ATTRIBUTION	670.000	530.000	0.000	0.000	0.000	0.000	1,200.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### **NEED/EXPLANATION OF PROJECT**

ITEM NO. 61

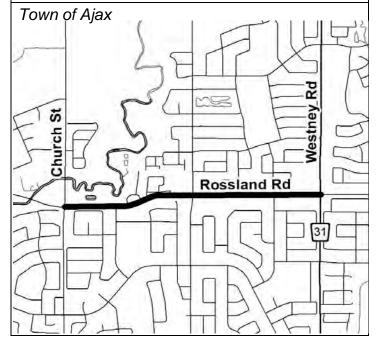
### SYSTEM EXPANSION

Zone 1 feedermain on Rossland Rd. from Church St. to Westney Rd., Ajax

Project No.: D1522

### RELATED PROJECTS

2016 Water Supply Capital Budget Item No. 66



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	100.000	100.000	650.000				850.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			5,350.000				5,350.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	100.000	100.000	6,000.000	0.000	0.000	0.000	6,200.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES	56.750	56.750	3,405.000				3,518.500
NEW COMMERCIAL DEVELOPMENT CHARGES*	1.740	1.740	104.400				107.880
USER REVENUES	6.150	6.150	369.000				381.300
DEBENTURES							0.000
OTHER	35.360	35.360	2,121.600			_	2,192.320
TOTAL ATTRIBUTION	100.000	100.000	6,000.000	0.000	0.000	0.000	6,200.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

Construction of feedermain to service new development. Timing of construction dependent on rate of development.

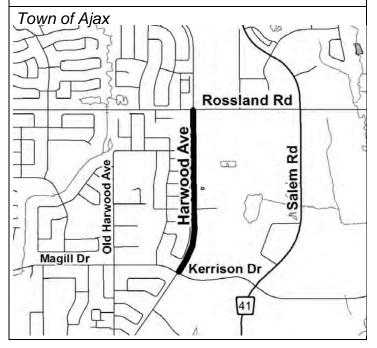
ITEM NO. 63

### SYSTEM EXPANSION

Zone 1 feedermain on Harwood Ave. from Rossland Rd. to Kerrison Dr., Ajax

Project No.: D1803

### **RELATED PROJECTS**



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

				Four Year	Forecast		
	Budget Prior to 2018	2018 CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		400.000	240.000				640.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			3,860.000				3,860.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	400.000	4,100.000	0.000	0.000	0.000	4,500.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES		219.640	2,251.310				2,470.950
NEW COMMERCIAL DEVELOPMENT CHARGES*		6.760	69.290				76.050
USER REVENUES		23.760	243.540				267.300
DEBENTURES							0.000
OTHER		149.840	1,535.860				1,685.700
TOTAL ATTRIBUTION	0.000	400.000	4,100.000	0.000	0.000	0.000	4,500.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

Construction of feedermain to service new development. Timing of construction dependent on rate of development.

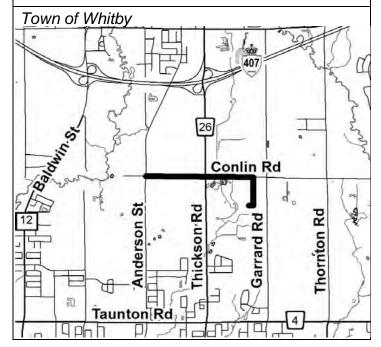
ITEM NO. 69

### SYSTEM EXPANSION

Zone 3 feedermain on Conlin Rd. from Anderson St. to Garrard Rd. Pumping Station, Whitby

Project No.: D1804

### **RELATED PROJECTS**



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

				Four Year I	Forecast		
	Budget Prior to 2018	2018 CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		500.000		160.000			660.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION				3,840.000			3,840.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	500.000	0.000	4,000.000	0.000	0.000	4,500.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES		439.000		3,512.000			3,951.000
NEW COMMERCIAL DEVELOPMENT CHARGES*		13.500		108.000			121.500
USER REVENUES		47.500		380.000			427.500
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	500.000	0.000	4,000.000	0.000	0.000	4,500.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

Construction of feedermain to service new development. Timing of construction dependent on rate of development.

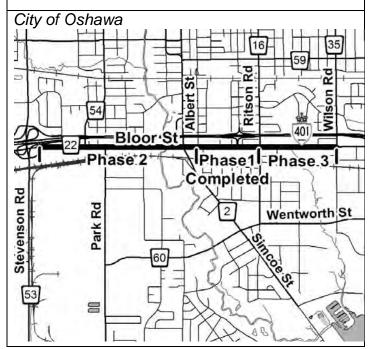
### ITEM NO. 77

### SYSTEM EXPANSION

Zone 1 feedermain on Bloor St. from Stevenson Rd. to Wilson Rd., Oshawa (Phase 3: Ritson Rd. to Wilson Rd.)

Project No.: O1709

### **RELATED PROJECTS**



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018		2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	100.000	500.000	100.000				700.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			4,400.000				4,400.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	100.000	500.000	4,500.000	0.000	0.000	0.000	5,100.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES	87.800	439.000	3,951.000				4,477.800
NEW COMMERCIAL DEVELOPMENT CHARGES*	2.700	13.500	121.500				137.700
USER REVENUES	9.500	47.500	427.500				484.500
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	100.000	500.000	4,500.000	0.000	0.000	0.000	5,100.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### **NEED/EXPLANATION OF PROJECT**

Project to be completed in phases:

Phase 1: Albert St. to Ritson Rd. - Completed

Phase 2: Stevenson Rd. to Albert St.- Construction has commenced

Phase 3: Ritson Rd. Wilson Rd.

ITEM NO.: 79

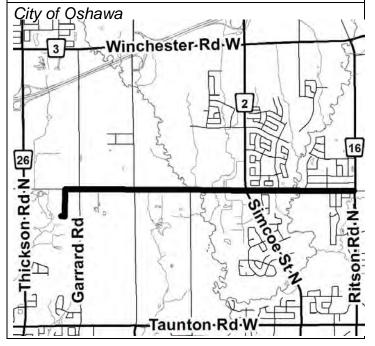
### SYSTEM EXPANSION

Zone 3 feedermain on Conlin Rd. from Garrard Rd. Zone 3 pumping station to Ritson Rd., Oshawa

Project No.: D1602

### **RELATED PROJECTS**

2016 Water Supply Capital Budget Item No. 85



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	100.000	1,000.000	1,420.000				2,520.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			14,780.000				14,780.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	100.000	1,000.000	16,200.000	0.000	0.000	0.000	17,300.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES	87.800	878.000	14,223.600				15,189.400
NEW COMMERCIAL DEVELOPMENT CHARGES*	2.700	27.000	437.400				467.100
USER REVENUES	9.500	95.000	1,539.000				1,643.500
DEBENTURES							0.000
AMRF							0.000
TOTAL ATTRIBUTION	100.000	1,000.000	16,200.000	0.000	0.000	0.000	17,300.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

ITEM NO. 88

### SYSTEM EXPANSION

Zone 2 feedermain on Bloor St. from Townline Rd. to Trulls Rd., Courtice

Project No. C1201

### **RELATED PROJECTS**

2012 Water Supply Capital Budget Item No. 59

### Municipality of Clarington (Courtice)



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	250.000	500.000					750.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			6,050.000				6,050.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	250.000	500.000	6,050.000	0.000	0.000	0.000	6,800.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES	215.000	417.050	5,046.305				5,678.355
NEW COMMERCIAL DEVELOPMENT CHARGES*	7.900	12.800	154.880				175.580
USER REVENUES	27.100	70.150	848.815				946.065
DEBENTURES							0.000
OTHER - CWWF							0.000
TOTAL ATTRIBUTION	250.000	500.000	6,050.000	0.000	0.000	0.000	6,800.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

### ITEM NO. 89

### SYSTEM EXPANSION

Courtice - Zone 1 feedermain Phase 2: 100 m North of Energy Dr. to the intersection of Baseline Rd. and Courtice Rd., Courtice

### Project No. D1303

### **RELATED PROJECTS**

2013 Water Supply Capital Budget Item No. 61 2014 Water Supply Capital Budget Item No. 83

# Municipality of Clarington (Courtice) Bloor St Bloor St Phase 3 Phase 1 Completed Completed

### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2242		Four Year	Forecast		
	Budget Prior to 2018	2018 CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	1,050.000						1,050.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	3,800.000	1,000.000	4,200.000				9,000.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	4,850.000	1,000.000	4,200.000	0.000	0.000	0.000	10,050.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES	4,214.400	878.000	3,687.600				8,780.000
NEW COMMERCIAL DEVELOPMENT CHARGES*	129.600	27.000	113.400				270.000
USER REVENUES	506.000	95.000	399.000				1,000.000
DEBENTURES							0.000
OTHER - CWWF							0.000
TOTAL ATTRIBUTION	4,850.000	1,000.000	4,200.000	0.000	0.000	0.000	10,050.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

Phase 1- 400 m South of Energy Dr. to 100 m North of Energy Rd.

Phase 2- 100 m North of Energy Dr. to the intersection of Baseline Rd. and Courtice Rd.

Phase 3 - Baseline Rd. from Courtice Rd. to Trulls Rd. and Trulls Rd. from Baseline Rd. Bloor St.

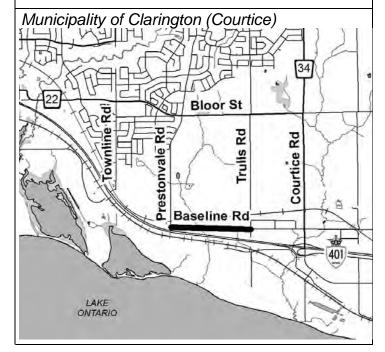
ITEM NO. 90

### SYSTEM EXPANSION

Zone 1 feedermain on Baseline Rd. from Prestonvale Rd. to Trulls Rd. Courtice

Project No.: D1805

### **RELATED PROJECTS**



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		150.000	130.000				280.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			2,520.000				2,520.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	150.000	2,650.000	0.000	0.000	0.000	2,800.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES		131.700	2,326.700				2,458.400
NEW COMMERCIAL DEVELOPMENT CHARGES*		4.050	71.550				75.600
USER REVENUES		14.250	251.750				266.000
DEBENTURES							0.000
OTHER - CWWF							0.000
TOTAL ATTRIBUTION	0.000	150.000	2,650.000	0.000	0.000	0.000	2,800.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

Construction of feedermain to service new development. Timing of construction dependent on rate of development

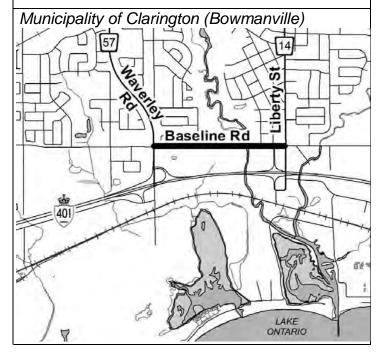
ITEM NO. 94

### SYSTEM EXPANSION

Zone 1 feedermain on Baseline Rd. from R.R. 57 (Martin Rd.) to Liberty St., Bowmanville

Project No.: D1807

### **RELATED PROJECTS**



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018		2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		400.000		250.000			650.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION				4,200.000			4,200.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	400.000	0.000	4,450.000	0.000	0.000	4,850.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES		333.640		3,711.745			4,045.385
NEW COMMERCIAL DEVELOPMENT CHARGES*		10.240		113.920			124.160
USER REVENUES		56.120		624.335			680.455
DEBENTURES							0.000
OTHER - CWWF				_		_	0.000
TOTAL ATTRIBUTION	0.000	400.000	0.000	4,450.000	0.000	0.000	4,850.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

Construction of feedermain to service new development. Timing of construction dependent on rate of development

### ITEM NO. 97

### SYSTEM EXPANSION

Zone 2 feedermain on Concession Rd. 3 from Middle Rd./Scugog St. to Mearn Ave., Bowmanville

Project No. C0502

### **RELATED PROJECTS**

2005 Water Supply Capital Budget Item No. 50 2006 Water Supply Capital Budget Item No. 53

# Municipality of Clarington (Bowmanville) Concession Rd 3 Nearms Ave

### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year I	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	780.000						780.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		3,500.000					3,500.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	780.000	3,500.000	0.000	0.000	0.000	0.000	4,280.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES	715.200	3,073.000					3,788.200
NEW COMMERCIAL DEVELOPMENT CHARGES*		94.500					94.500
USER REVENUES	64.800	332.500					397.300
DEBENTURES							0.000
OTHER - CWWF							0.000
TOTAL ATTRIBUTION	780.000	3,500.000	0.000	0.000	0.000	0.000	4,280.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

Construction of feedermain to service new development. Timing of construction dependent on rate of development

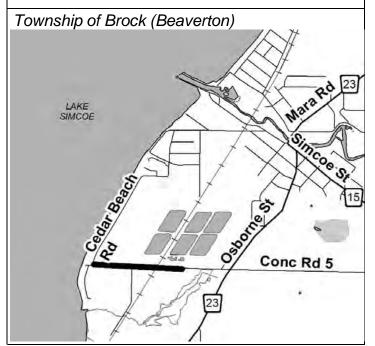
**ITEM NO. 102** 

### SYSTEM EXPANSION

Watermain on Concession Rd. 5 from Cedar Beach Rd. to 850 m east of Cedar Beach Rd., Beaverton

Project No.: D1836

### **RELATED PROJECTS**



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		155.000					155.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		945.000					945.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	1,100.000	0.000	0.000	0.000	0.000	1,100.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		1,100.000					1,100.000
DEBENTURES							0.000
OTHER - CWWF							0.000
TOTAL ATTRIBUTION	0.000	1,100.000	0.000	0.000	0.000	0.000	1,100.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

Looping required for system security, fire protection and to maintain the Region's standard of water quality.

PROJE	CT LOCATION & DESCRIPTION
ITEM NO. 103	
OTHER LINEAR INFR	ASTRUCTURE
Replacement of meter	s
Project No.: D1806	
	RELATED PROJECTS

### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING							0.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		3,100.000	3,100.000	1,000.000	1,000.000	1,000.000	9,200.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	3,100.000	3,100.000	1,000.000	1,000.000	1,000.000	9,200.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		3,100.000	3,100.000	1,000.000	1,000.000	1,000.000	9,200.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	3,100.000	3,100.000	1,000.000	1,000.000	1,000.000	9,200.000

NEE	D/EXPLANA	TION OF	PROJECT

## PROJECT LOCATION & DESCRIPTION ITEM NO. 104 OTHER LINEAR INFRASTRUCTURE Design - Replacement of polybutylene service connections in various locations Project No.: D1899 RELATED PROJECTS

### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		1,427.500	1,300.000	1,600.000	1,800.000		6,127.500
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		11,872.500	12,300.000	12,600.000	7,200.000		43,972.500
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	13,300.000	13,600.000	14,200.000	9,000.000	0.000	50,100.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		13,026.000	12,141.000	12,471.000	7,641.000		45,279.000
DEBENTURES							0.000
ASSET MGMT RESERVE FUND		274.000	1,459.000	1,729.000	1,359.000		4,821.000
TOTAL ATTRIBUTION	0.000	13,300.000	13,600.000	14,200.000	9,000.000	0.000	50,100.000

NEED/EXPL	ANATION OF	PROJECT

### PROJECT LOCATION & DESCRIPTION ITEM NO.: 105 OTHER LINEAR INFRASTRUCTURE Depot - Replacement of polybutylene service connections in various locations Project No.: M1825 RELATED PROJECTS

### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year I	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING							0.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		1,400.000	1,200.000	1,000.000	500.000		4,100.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	1,400.000	1,200.000	1,000.000	500.000	0.000	4,100.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		1,400.000	1,200.000	1,000.000	500.000		4,100.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	1,400.000	1,200.000	1,000.000	500.000	0.000	4,100.000

NEED/EXPL	ANATION	OF P	ROJEC:

### **PROJECT LOCATION & DESCRIPTION** ITEM NO.: 106 OTHER LINEAR INFRASTRUCTURE Replacement of lead service connections in various locations Project No.: M1832 RELATED PROJECTS

### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		20.000	100.000	100.000	100.000	100.000	420.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		80.000	900.000	900.000	900.000	900.000	3,680.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	100.000	1,000.000	1,000.000	1,000.000	1,000.000	4,100.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		100.000	1,000.000	1,000.000	1,000.000	1,000.000	4,100.000
DEBENTURES						İ	0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	100.000	1,000.000	1,000.000	1,000.000	1,000.000	4,100.000

NFFD/FXPI	ANATION OF	PROJECT

PROJECT LOCATION & DESCRIPTION	N
EM NO. 107	
THER LINEAR INFRASTRUCTURE	
eplacement of valves	
roject No. M1826	
RELATED PROJECTS	

### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018					
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING							0.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		200.000	200.000	200.000	200.000	200.000	1,000.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	200.000	200.000	200.000	200.000	200.000	1,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		200.000	200.000	200.000	200.000	200.000	1,000.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	200.000	200.000	200.000	200.000	200.000	1,000.000

NEED/EXPLANATION O	F PROJECT
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PROJECT LOCATION & DESCRIPTION					
TEM NO. 108					
OTHER LINEAR INFRASTRUCTURE					
Replacement of hydrants					
Project No. M1827					
RELATED PROJECTS					

### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018					
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING							0.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		160.000	160.000	160.000	160.000	160.000	800.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	160.000	160.000	160.000	160.000	160.000	800.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		160.000	160.000	160.000	160.000	160.000	800.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	160.000	160.000	160.000	160.000	160.000	800.000

NEED/EXPLANATION OF PRO	JJEC
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**ITEM NO. 109** 

**BUILDINGS** 

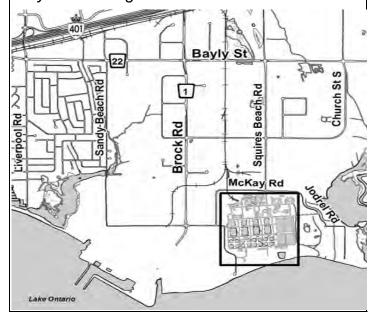
Regional Environmental Laboratory Upgrades and ventilation associated works, Pickering

Project No.: Y1602

### **RELATED PROJECTS**

2016 Water Supply Capital Budget Item No. 116 2017 Water Supply Capital Budget Item No. 121 2018 Sanitary Sewerage Capital Budget Item No. 64

### City of Pickering



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

				Four Year	_		
	Budget	2018					
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	450.000						450.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		3,100.000					3,100.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	450.000	3,100.000	0.000	0.000	0.000	0.000	3,550.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES	197.550	1,360.900					1,558.450
NEW COMMERCIAL DEVELOPMENT CHARGES*	6.075	41.850					47.925
USER REVENUES	21.375	147.250					168.625
DEBENTURES							0.000
OTHER - YORK REGION	225.000	1,550.000					1,775.000
TOTAL ATTRIBUTION	450.000	3,100.000	0.000	0.000	0.000	0.000	3,550.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

Cost sharing with York Region

**ITEM NO. 110** 

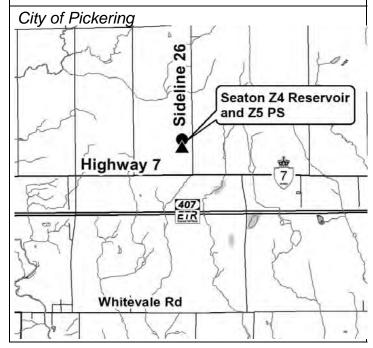
### **BUILDINGS**

Seaton Zone 4 Reservoir and Zone 5 pumping station, Pickering various locations

Project No.: D1701

### **RELATED PROJECTS**

2017 Water Supply Capital Budget Item No. 122



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018	Four Year Forecast				
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	1,200.000	1,700.000					2,900.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		17,100.000					17,100.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	1,200.000	18,800.000	0.000	0.000	0.000	0.000	20,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	100.000	200.000					300.000
DEBENTURE							0.000
OTHER - DEVELOPER	1,100.000	18,600.000					19,700.000
TOTAL ATTRIBUTION	1,200.000	18,800.000	0.000	0.000	0.000	0.000	20,000.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

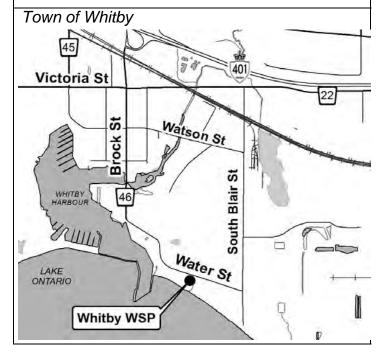
ITEM NO.: 115

### **BUILDINGS**

Whitby Water Supply Plant - Backflow preventer for the backwash wastewater and clearwell overflow pipe

Project No.: D1808

### **RELATED PROJECTS**



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget 2018		Four Year Forecast				
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		60.000					60.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		270.000					270.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	330.000	0.000	0.000	0.000	0.000	330.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		330.000					330.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	330.000	0.000	0.000	0.000	0.000	330.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

ITEM NO.: 136

#### BUILDINGS

Expansion of Newcastle Water Supply Plant from 8.2 MLD to 16.4 MLD and demolish the existing plant

Project No.: D1107

#### **RELATED PROJECTS**

2012 Water Supply Capital Budget Item No. 83 2014 Water Supply Capital Budget Item No. 115 2015 Water Supply Capital Budget Item No. 139

#### Municipality of Clarington (Newcastle)



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	3,900.000						3,900.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		40,000.000					40,000.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	3,900.000	40,000.000	0.000	0.000	0.000	0.000	43,900.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES	2,536.100	16,846.600					19,382.700
NEW COMMERCIAL DEVELOPMENT CHARGES*	319.600	2,096.000					2,415.600
USER REVENUES	1,044.300	2,077.208					3,121.508
DEBENTURES		17,580.192					17,580.192
NEW INDUSTRIAL DEV. CHGS.		1,400.000					1,400.000
TOTAL ATTRIBUTION	3,900.000	40,000.000	0.000	0.000	0.000	0.000	43,900.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

ITEM NO.: 141

BUILDINGS

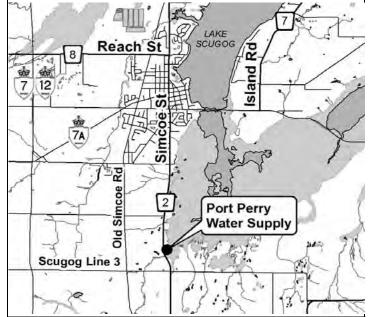
Port Perry - Alternative Water Supply Source

Project No.: S0102

**RELATED PROJECTS** 

2007 Water Supply Capital Budget Item No. 76 2010 Water Supply Capital Budget Item No. 82 2014 Water Supply Capital Budget Item No. 119

#### Township of Scugog (Port Perry)



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	3,030.000	1,500.000					4,530.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			17,600.000				17,600.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	3,030.000	1,500.000	17,600.000	0.000	0.000	0.000	22,130.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES	339.700	138.825		1,629.760			2,108.285
NEW COMMERCIAL DEVELOPMENT CHARGES*	39.350	17.250		202.400			259.000
USER REVENUES	2,650.950	1,343.925		15,767.840			19,762.715
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	3,030.000	1,500.000	0.000	17,600.000	0.000	0.000	22,130.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

ITEM NO.: 144

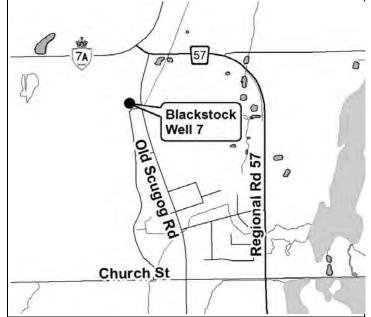
**BUILDINGS** 

Blackstock Groundwater Supply System - Municipal Well No. 7 upgrades

Project No.: D1838

**RELATED PROJECTS** 

#### Township of Scugog (Blackstock)



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		200.000					200.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		1,300.000					1,300.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	1,500.000	0.000	0.000	0.000	0.000	1,500.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		1,500.000					1,500.000
DEBENTURES							0.000
OTHER				_			0.000
TOTAL ATTRIBUTION	0.000	1,500.000	0.000	0.000	0.000	0.000	1,500.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

## **PROJECT LOCATION & DESCRIPTION ITEM NO. 150 BUILDINGS** Wellhead protection at Regional well sites Project No. M0101 **RELATED PROJECTS**

#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year I	orecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		114.000	114.000	114.000	114.000	114.000	570.00
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		686.000	686.000	686.000	686.000	686.000	3,430.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	800.000	800.000	800.000	800.000	800.000	4,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		800.000	800.000	800.000	800.000	800.000	4,000.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	800.000	800.000	800.000	800.000	800.000	4,000.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

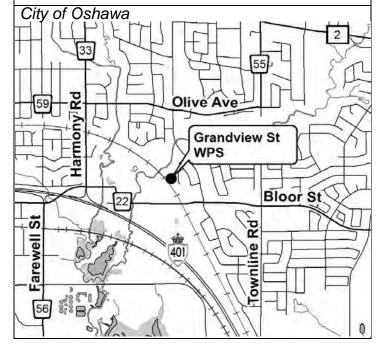
#### **ITEM NO. 156**

#### MACHINERY AND EQUIPMENT

Grandview Water Pumping Station - Station upgrades
Electrical System Study, Grounding Study, Replacement of the Motor
Control Centre, Diesel transfer switch and Standby power

Project No.: D1809

#### **RELATED PROJECTS**



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		100.000	150.000				250.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION				2,000.000			2,000.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	100.000	150.000	2,000.000	0.000	0.000	2,250.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		100.000	150.000	2,000.000			2,250.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	100.000	150.000	2,000.000	0.000	0.000	2,250.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

ITEM NO. 158

MACHINERY AND EQUIPMENT

Oshawa Water Supply Plant - Replacement of the Motor Control Centre

Project No.: D1810

#### RELATED PROJECTS



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		15.500					15.500
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		104.500					104.500
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	120.000	0.000	0.000	0.000	0.000	120.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		120.000					120.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	120.000	0.000	0.000	0.000	0.000	120.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

Low lift pump motor control centre replacement

**ITEM NO. 159** 

MACHINERY AND EQUIPMENT

Oshawa Water Supply Plant - upgrading the uninterrupted power supply (UPS)

Project No.: D1811

#### **RELATED PROJECTS**

# City of Oshawa Wentworth Dr Since 
#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		150.000					150.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		150.000	700.000				850.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	300.000	700.000	0.000	0.000	0.000	1,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		300.000	700.000				1,000.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	300.000	700.000	0.000	0.000	0.000	1,000.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

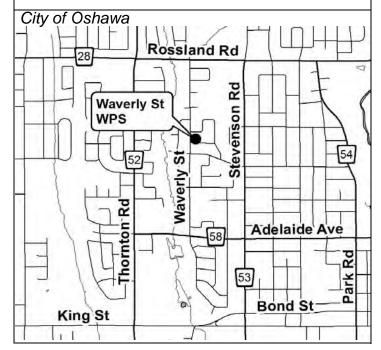
Low lift pump motor control centre replacement

#### **ITEM NO. 160**

#### MACHINERY AND EQUIPMENT

Waverly St. Water Pumping Station - Station upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch and Standby power Project No.: D1837

#### **RELATED PROJECTS**



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		100.000	150.000				250.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION				2,000.000			2,000.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	100.000	150.000	2,000.000	0.000	0.000	2,250.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		100.000	150.000	2,000.000			2,250.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	100.000	150.000	2,000.000	0.000	0.000	2,250.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016. Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

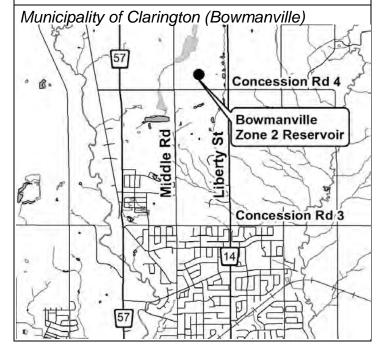
**ITEM NO.: 161** 

MACHINERY AND EQUIPMENT

Bowmanville Zone 2 Reservoir - Generator with transfer switch

Project No.: D1813

#### **RELATED PROJECTS**



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		21.500					21.500
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		128.500					128.500
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	150.000	0.000	0.000	0.000	0.000	150.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		150.000					150.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	150.000	0.000	0.000	0.000	0.000	150.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

Upgrading the power supply system required to operate the system during communication and electrical power failure.

#### **ITEM NO. 162**

#### MACHINERY AND EQUIPMENT

Bowmanville Water Supply Plant - replacement of the standby power and upgrading the uninterrupted power supply (UPS)

Project No.: D1814

#### **RELATED PROJECTS**

#### Municipality of Clarington (Bowmanville)



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		850.000					850.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			1,500.000				1,500.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	850.000	1,500.000	0.000	0.000	0.000	2,350.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		850.000	1,500.000				2,350.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	850.000	1,500.000	0.000	0.000	0.000	2,350.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

### **PROJECT LOCATION & DESCRIPTION ITEM NO. 163** MACHINERY AND EQUIPMENT Concession St. Water Pumping Station - Hydraulic Study for Zone 1 Project No.: D1815 **RELATED PROJECTS** Municipality of Clarington (Newcastle) Scugog **Concession St** WPS Concession St St 2

#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		60.000					60.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	60.000	0.000	0.000	0.000	0.000	60.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		60.000					60.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	60.000	0.000	0.000	0.000	0.000	60.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

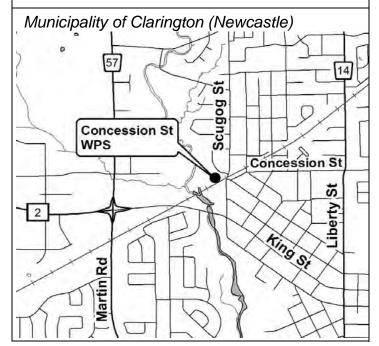
Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### **ITEM NO. 164**

#### MACHINERY AND EQUIPMENT

Concession St. Water Pumping Station - Station upgrades
Electrical System Study, Grounding Study, Replacement of the Motor
Control Centre, Diesel transfer switch and Standby power
Project No.: D1816

#### **RELATED PROJECTS**



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		100.000	150.000				250.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION				2,000.000			2,000.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	100.000	150.000	2,000.000	0.000	0.000	2,250.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		100.000	150.000	2,000.000			2,250.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	100.000	150.000	2,000.000	0.000	0.000	2,250.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### **NEED/EXPLANATION OF PROJECT**

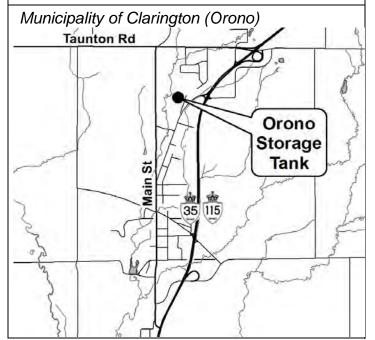
#### **ITEM NO. 167**

#### MACHINERY AND EQUIPMENT

Orono Water Supply System - Standpipe Water Storage Tank Standby power with transfer switch

Project No.: D1817

#### **RELATED PROJECTS**



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		22.000					22.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		128.000					128.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	150.000	0.000	0.000	0.000	0.000	150.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		150.000					150.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	150.000	0.000	0.000	0.000	0.000	150.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

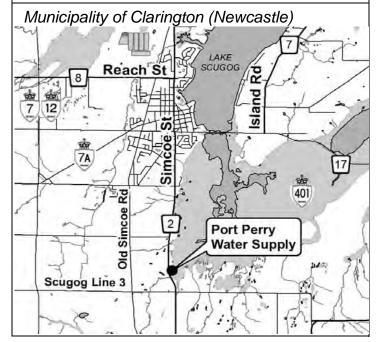
#### NEED/EXPLANATION OF PROJECT

#### **ITEM NO. 171**

#### MACHINERY AND EQUIPMENT

Port Perry Groundwater Supply System Municipal Well No.6 upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch and Standby power Project No.: D1818

#### **RELATED PROJECTS**



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		250.000					250.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			2,200.000				2,200.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	250.000	2,200.000	0.000	0.000	0.000	2,450.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		250.000	2,200.000				2,450.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	250.000	2,200.000	0.000	0.000	0.000	2,450.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

**ITEM NO. 172** 

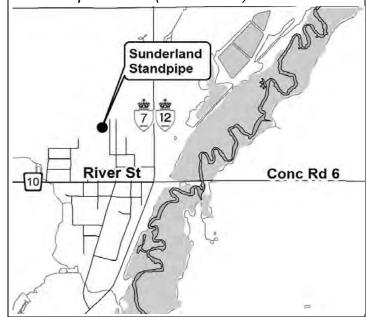
MACHINERY AND EQUIPMENT

Sunderland Standpipe Water Storage Tank - Recoating

Project No.: D1839

**RELATED PROJECTS** 

#### Township of Brock (Sunderland)



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		100.000					100.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			650.000				650.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	100.000	650.000	0.000	0.000	0.000	750.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		100.000	650.000				750.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	100.000	650.000	0.000	0.000	0.000	750.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

#### **WATER SUPPLY SYSTEM**

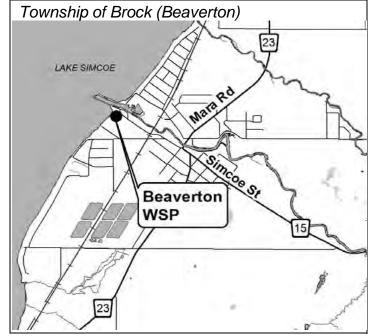
#### **PROJECT LOCATION & DESCRIPTION**

**ITEM NO. 173** 

#### MACHINERY AND EQUIPMENT

Beaverton Water Supply Plant - upgrades
Electrical System Study, Grounding Study, Replacement of the Motor
Control Centre, Diesel transfer switch and Standby power
Project No.: D1819

#### **RELATED PROJECTS**



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		250.000					250.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			2,500.000				2,500.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	250.000	2,500.000	0.000	0.000	0.000	2,750.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		250.000	2,500.000				2,750.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	250.000	2,500.000	0.000	0.000	0.000	2,750.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

#### **WATER SUPPLY SYSTEM**

#### **PROJECT LOCATION & DESCRIPTION**

**ITEM NO. 174** 

MACHINERY AND EQUIPMENT

Automatic Bulk Water Dispensing System

Project No.: D1717

RELATED PROJECTS

2017 Water Supply Capital Budget Item No. 169

#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	120.000	60.000	60.000	60.000	60.000	60.000	420.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	480.000	240.000	380.000	380.000	240.000	240.000	1,960.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	600.000	300.000	440.000	440.000	300.000	300.000	2,380.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	600.000	300.000	440.000	440.000	300.000	300.000	2,380.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	600.000	300.000	440.000	440.000	300.000	300.000	2,380.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

Required to provide a secure, efficient and accessible method of supplying bulk water to customers.

#### **WATER SUPPLY SYSTEM**

#### **PROJECT LOCATION & DESCRIPTION**

**ITEM NO. 175** 

MACHINERY AND EQUIPMENT

Fuel Tank Compliance

Project No. D1613

#### RELATED PROJECTS

2016 Water Supply Capital Budget Item No. 172 2017 Water Supply Capital Budget Item No. 170

#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	350.000						350.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	1,350.000	700.000					2,050.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	1,700.000	700.000	0.000	0.000	0.000	0.000	2,400.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	1,700.000	700.000					2,400.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	1,700.000	700.000	0.000	0.000	0.000	0.000	2,400.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

Allowance for fuel tank inspections in various locations in the Region.

#### **WATER SUPPLY SYSTEM**

# PROJECT LOCATION & DESCRIPTION ITEM NO. 176 MACHINERY AND EQUIPMENT Water Supply Plants Grounding Study Project No.: D1820 RELATED PROJECTS

#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		350.000					350.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	350.000	0.000	0.000	0.000	0.000	350.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		350.000					350.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	350.000	0.000	0.000	0.000	0.000	350.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

Allowance for fuel tank inspections in various locations in the Region.

**ITEM NO. 183** 

ALLOWANCES AND OTHER PROVISIONS

Allowance for acquisition of easements

Project No. M1801

RELATED PROJECTS

2018 Sanitary Sewerage Budget Item No. 122

#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING							0.000
LAND ACQUISITION		150.000	150.000	150.000	150.000	150.000	750.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	150.000	150.000	150.000	150.000	150.000	750.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		150.000	150.000	150.000	150.000	150.000	750.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	150.000	150.000	150.000	150.000	150.000	750.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

A number of watermains are located on easements to which the Region does not have a clear title.

This allowance is for acquisition of easement for existing watermains in various locations.

#### WATER SUPPLY SYSTEM

### PROJECT LOCATION & DESCRIPTION ITEM NO. 184

ALLOWANCES AND OTHER PROVISIONS

Allowance for engineering studies

Project No.: M1807

RELATED PROJECTS

2018 Sanitary Sewerage Budget Item No. 123

#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		150.000	300.000	150.000	300.000	150.000	1,050.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	150.000	300.000	150.000	300.000	150.000	1,050.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		150.000	300.000	150.000	300.000	150.000	1,050.000
DEBENTURE			İ				0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	150.000	300.000	150.000	300.000	150.000	1,050.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPL	ANATION	OF I	PRO	JEC:

#### WATER SUPPLY SYSTEM

#### **PROJECT LOCATION & DESCRIPTION**

**ITEM NO. 186** 

ALLOWANCES AND OTHER PROVISIONS

Preliminary Engineering

Project No. 66143

RELATED PROJECTS

2018 Sanitary Sewerage Budget Item No. 125

#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		100.000	100.000	100.000	100.000	100.000	500.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	100.000	100.000	100.000	100.000	100.000	500.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		100.000	100.000	100.000	100.000	100.000	500.000
DEBENTURES			İ				0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	100.000	100.000	100.000	100.000	100.000	500.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### **NEED/EXPLANATION OF PROJECT**

Allowance for preliminary engineering carried out in advance of budget provision.

#### WATER SUPPLY SYSTEM

#### PROJECT LOCATION & DESCRIPTION

**ITEM NO. 187** 

ALLOWANCES AND OTHER PROVISIONS

Allowance for sundry extensions as per Council policy

Project No. M1808

**RELATED PROJECTS** 

2018 Sanitary Sewerage Budget Item No. 126

#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		15.000	15.000	15.000	15.000	15.000	75.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	15.000	15.000	15.000	15.000	15.000	75.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		15.000	15.000	15.000	15.000	15.000	75.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	15.000	15.000	15.000	15.000	15.000	75.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/I	FXPI	ANAT	ION	OF	PRO.	JFC:

Regional share for sundry extensions.

#### WATER SUPPLY SYSTEM

#### PROJECT LOCATION & DESCRIPTION

**ITEM NO. 188** 

ALLOWANCES AND OTHER PROVISIONS

Allowance for unknown requirements

Project No. M1809

**RELATED PROJECTS** 

2018 Sanitary Sewerage Budget Item No. 127

#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		100.000	100.000	100.000	100.000	100.000	500.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	100.000	100.000	100.000	100.000	100.000	500.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		100.000	100.000	100.000	100.000	100.000	500.000
DEBENTURES			İ				0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	100.000	100.000	100.000	100.000	100.000	500.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPL	ANATION	$\cap$ F	PRO	JEC:

Allowance for unanticipated works.

#### WATER SUPPLY SYSTEM

#### **PROJECT LOCATION & DESCRIPTION**

**ITEM NO. 189** 

#### ALLOWANCES AND OTHER PROVISIONS

Allowance for Regional share for works in conjunction with residential subdivision development.

Project No. M1810

#### **RELATED PROJECTS**

2018 Sanitary Sewerage Budget Item No. 128

#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		200.000	200.000	200.000	200.000	200.000	1,000.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		1,260.000	1,260.000	1,260.000	1,260.000	1,260.000	6,300.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	1,460.000	1,460.000	1,460.000	1,460.000	1,460.000	7,300.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES		1,281.880	1,281.880	1,281.880	1,281.880	1,281.880	6,409.400
NEW COMMERCIAL DEVELOPMENT CHARGES*		39.420	39.420	39.420	39.420	39.420	197.100
USER REVENUES		138.700	138.700	138.700	138.700	138.700	693.500
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	1,460.000	1,460.000	1,460.000	1,460.000	1,460.000	7,300.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

Regional share for watermains related to existing, new residential and new non-residential development, in conjunction with new residential subdivisions.

#### WATER SUPPLY SYSTEM

#### PROJECT LOCATION & DESCRIPTION

**ITEM NO. 190** 

#### ALLOWANCES AND OTHER PROVISIONS

Allowance for Regional share for works in conjunction with non residential development.

Project No. M1811

#### **RELATED PROJECTS**

2018 Sanitary Sewerage Budget Item No. 129

#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		57.200	57.200	57.200	57.200	57.200	286.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		342.800	342.800	342.800	342.800	342.800	1,714.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	400.000	400.000	400.000	400.000	400.000	2,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES		351.200	351.200	351.200	351.200	351.200	1,756.000
NEW COMMERCIAL DEVELOPMENT CHARGES*		10.800	10.800	10.800	10.800	10.800	54.000
USER REVENUES		38.000	38.000	38.000	38.000	38.000	190.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	400.000	400.000	400.000	400.000	400.000	2,000.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

Allowance for possible Regional share in design and construction of watermains for non- residential development.

#### WATER SUPPLY SYSTEM

# PROJECT LOCATION & DESCRIPTION ITEM NO. 191 ALLOWANCES AND OTHER PROVISIONS Well interference works Project No. M1814 RELATED PROJECTS

#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		65.000	65.000	65.000	65.000	110.000	370.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		335.000	335.000	335.000	335.000	890.000	2,230.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	400.000	400.000	400.000	400.000	1,000.000	2,600.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES		400.000	400.000	400.000	400.000	1,000.000	2,600.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
DEBENTURES							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	400.000	400.000	400.000	400.000	1,000.000	2,600.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

Allowance for construction of well interference works in accordance with Regional policy.

#### CONSTRUCTION OF MUNICIPAL SERVICES

2010 C	APITAL BUDGET AND NINE YEAR FORECAST		BUDGET	2018				A.I.	ne Year Foreca	aet					
ITEM No.	PROJECT DESCRIPTION	Project No.	PRIOR TO 2018	CAPITAL BUDGET	2019	2020	2021	2022	ne Year Forec	2024	2025	2026	2027	TOTAL	REMARKS
140.	CONSTRUCTION OF MUNICIPAL SERVICES ROAD RELATED PROJECTS	110.	2010	DODGET	2015	2020	2021	2022	2023	2024	2020	2020	2021	IOIAL	NEMPRING
Α	LINEAR INFRASTRUCTURE														
	Regional Road Program														Replacement of deficient watermains and/or construction of required works in conjunction with the Regional Road Program.
1	R.R. 14 (Liberty St.) from Baseline Rd. to King St., Bowmanville	R0503			350,000		1,350,000							1,700,000	
2	R.R. 22 (Victoria St.) from South Blair St. to east of Thickson Rd., Whitby (Realignment) Detailed Design Construction Total	T4011	250,000		1,150,000									250,000 1,150,000 1,400,000	Watermain to be constructed with the road realignment.
3	R.R. 26 (Thickson Rd.) from Wentworth St. to Canadian National Railway bridge, Whitby	R0710	25,000			180,000								205,000	
4	R.R. 33 (Harmony Rd.) from Rossland Rd. to Conlin Rd., Oshawa (Phase 2 - Rossland Rd. to Taunton Rd. local main) Detailed Design Construction Total Cost	R0717 R0716 R1723	1,025,000 40,000	300,000										40,000 300,000	Construction to be coordinated with the Zone 3 feedermain. Phase I - Harmony Rd. & Conlin Rd. intersection improvements completed Phase II - Between Rossland Rd. and Taunton Rd. (watermain looping) Phase III - Taunton Rd. to Conlin Rd. (feedermain only)
5	R.R. 36 (Hopkins St.) from Consumers Dr. to Dundas St., Whitby Phase 1 - Hopkins St. overpass Phase 2 - Consumers Dr. to Dundas St. Total							50,000		100,000	375,000			150,000 375,000 525,000	Phase 2 beyond the current forecast
6	R.R. 43 (Cochrane St.) from Ferguson St. to Bonacord Ave., Whitby Detailed Design Construction Total	R1519	85,000			850,000								85,000 850,000 935,000	
7	R.R. 53 (Stevenson Rd.) from Highway 401 to Bond St., Oshawa Detailed Design Construction Total	R1820		150,000			1,100,000							150,000 1,100,000 1,250,000	
8	R.R. 53 (Stevenson Rd.) from Bond St. to Rossland Rd., Oshawa Detailed Design Construction Total						140,000			1,240,000				140,000 1,240,000 1,380,000	
9	R.R.57 (Martin Rd.) from Baseline Rd. to Nash Rd. Bowmarville Detailed Design Construction Total	R1309	25,000		385,000	150,000								25,000 535,000 560,000	Phase I: R.R. 57 (Martin Rd.) from Hwy 2 to Stevens Rd. Phase II: R.R. 57 (Waverly Rd.) from Baseline Rd. to Hwy 2 Phase III: R.R. 57 (Martin Rd.) from Stevens Rd. to Nash Rd.
10	R.R. 58 Manning Rd./Adelaide Ave. interconnection from Garrard Rd. to Thornton Rd., Whitby and Oshawa Detailed Design Construction Total	R0517		100,000			800,000							100,000 800,000 900,000	Looping required for system security, fire protection and to maintain the Region's standard of water quality.
11	R.R. 59 (Gibb St.) from Stevenson Rd. to Simcoe St., Oshawa Detailied Design Construction Total	R0604		100,000	800,000									100,000 800,000 900,000	
12	R.R. 59 (Gibb St.)/Olive Ave. Interconnection from Simcoe St. to Ritson Rd., Oshawa Detailed Design Construction Total	R0116						40,000		135,000				40,000 135,000 175,000	

#### CONSTRUCTION OF MUNICIPAL SERVICES

			BUDGET	2018				Ni	ne Year Forec	ast			_		
ITEM No.	PROJECT DESCRIPTION	Project No.	PRIOR TO 2018	CAPITAL BUDGET	2019	2020	2021	2022	2023	2024	2025	2026	2027	TOTAL	REMARKS
13	R.R. 60 (Wentworth St.) from Simcoe St. to Farewell St., Oshawa (Rehabilitation) Preliminary Work Detailed Design Construction Total	O1704	20,000	130,000		1,200,000								20,000 130,000 1,200,000 1,350,000	
14	Highway 12 (Brock St.) from Manning Rd. to Rossland Rd., Whitby Detailed Design Construction Total	R1523	15,000		130,000									15,000 130,000 145,000	
15	Highway 12 (Brock St.) from Timber Mill Ave. to Taunton Rd., Whitby Detailed Design Construction Total	R0419		58,000 342,000										58,000 342,000 400,000	
16	Allowance for watermains in conjunction with the Regional Road Program							2,000,000	2,000,000	1,800,000	1,700,000	2,000,000	2,000,000	11,500,000	
	Sub-total Regional road program		1,485,000	1,180,000	2,815,000	2,380,000	3,390,000	2,090,000	2,000,000	3,275,000	2,075,000	2,000,000	2,000,000	24,690,000	
17	Area Municipality Road Programs														
	The repair and replacement of deficient watermains are proposed to be carried out both in conjunction with area municipality road programs (Item No.'s 17A to 17i), 18 projects and independent of road programs in various locations including watermain cement mortar lining program (Item No. 20 & 21) 6 projects.  Total 24 projects.														
17A	<u>City of Pickering Road Program</u> (1 Project)	P1899		100,000										100,000	Replacement of deficient watermains and/or construction of required works in conjunction with the City of Pickering
	Sandy Beach Rd. from 300 m north of Alyssum St. to 210 m south of Alyssum St.														road program.
	Works forecast for 2019 to 2027				600,000	275,000	275,000	275,000	275,000	275,000	275,000	275,000	275,000	2,800,000	
17B	Town of Ajax Road Program (5 Projects)	A1899		540,000										540,000	Replacement of deficient watermains and/or construction of required works in conjunction with the Town of Ajax
	Mills Rd. from Station St. to Hunt St. Lakeview Blvd. from Poplar Ave. to Maple Ave. Farley Ct. from Dreyer Dr. to dead-end Dreyer Dr. from Harwood Ave to Pickering Beach Rd. Graham Crt. from Dreyer Dr. to dead-end														road program.
	Works forecast for 2019 to 2027				200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,800,000	
17C	Town of Whitby Road Program (1 Project)	W1899		1,400,000										1,400,000	Replacement of deficient watermains and/or construction of required works in conjunction with the Town of Whitby
	Centre St. from Miller St. to Dunlop St.														
	Works forecast for 2019 to 2027				1,230,000	620,000	620,000	620,000	620,000	620,000	620,000	620,000	620,000	6,190,000	
17D	City of Oshawa Road Program (4 Projects)	O1899		300,000										300,000	Replacement of deficient watermains and/or construction of required works in conjunction with the City of Oshawa
	Oshawa Blvd. from Eulalie Ave. to Gliddon Ave. Verdun Rd. from Eulalie Ave. to Gliddon Ave. Grenfell St. from Elmgrove Ave to Pine Ave. Hillside Ave. from Laval Dr. to Park Rd. S. Bermuda Ave. Culvert Replacement														road program.
	Works forecast for 2019 to 2027				1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	9,900,000	

#### CONSTRUCTION OF MUNICIPAL SERVICES

	THE BODGET AND MINE TEACTOREGAST		BUDGET	2018				Ni	ne Year Foreca	ast					
ITEM No.	PROJECT DESCRIPTION	Project No.	PRIOR TO	CAPITAL BUDGET	2019	2020	2021	2022	2023	2024	2025	2026	2027	TOTAL	REMARKS
17E	Municipality of Clarington Road Program.  (4 Projects)  Prospect St. from Odell St. to Fourth St., Bowmanville  Second St. from Prospect St. to Lambs Lane, Bowmanville  Veterans Ave. from Prospect St. to Lambs Lane, Bowmanville  Liberty Place and Alexander Blvd. from Liberty St. to W/L, Bowmanville	C1899	2010	440,000	2019	2020	2021	2022	2023	2024	2023	2020	2021		Replacement of deficient watermains and/or construction of required works in conjunction with the Municipality of Clarington road program.
	Works forecast for 2019 to 2027				370,000	370,000	370,000	370,000	370,000	370,000	370,000	370,000	370,000	3,330,000	
17F	Township of Scugog Road Program (1 Project) Crandell St. from Scugog St. to Queen St.	S1899		425,000										425,000	Replacement of deficient watermains and/or construction of required works in conjunction with the Township of Scugog road program.
	Works forecast for 2019 to 2027				130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	1,170,000	
17G	Township of Uxbridge Road Program (2 Projects) Planks Lane from Main St. to Third Ave. Collins St. from Victoria Dr. to west limits	U1899		200,000										200,000	Replacement of deficient watermains and/or construction of required works in conjunction with the Township of Uxbridge road program.
	Works forecast for 2019 to 2027				270,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000	2,430,000	
17H	Township of Brock Road Program (0 Projects)													0	Replacement of deficient watermains and/or construction of required works in conjunction with the Township of Brock road program.
	Works forecast for 2019 to 2027				250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	2,250,000	
17i	Allowance for unknown Water Supply requirements in conjunction with area municipality road programs in various locations	M1803		289,695	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	2,089,695	Allowance to provide for unanticipated watermain works in conjunction with area municipality road programs in various locations (ttems No. 17A to 17H).
	Sub-total works to rectify identified deficiencies and/or construction of required works in conjunction with area municipality road programs (Items 17A to 17)			3,694,695	4,350,000	3,415,000	3,415,000	3,415,000	3,415,000	3,415,000	3,415,000	3,415,000	3,415,000	35,364,695	
18	MTO & Go Transit projects:  Allowance for watermains in conjunction with the MTO & Go Transit projects				100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	900,000	
19	Watermain replacement in conjunction with the MTO's bridge work and ramp realignment at Brock St., Whitby	D1737	250,000	2,100,000										2,350,000	Allowanace for watermain replacement
20	Watermain replacement in conjunction with the MTO's bridge work at Simcoe St. and Albert St., Oshawa	D1801		100,000	900,000									1,000,000	Allowance for watermain replacement
	Sub-total works in conjunction with the MTO and GO Transit projects		250,000	2,200,000	1,000,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	4,250,000	
	Betterments/Replacement														
21	Water works to rectify identified system deficiencies independent of road programs in various locations (5 Projects)	M1899		328,500										328,500	Provision for replacement and/or rehabilitation of deficient watermains independent of road programs in various locations.
	River St from Sunderland MW No. 1 to 425 m east of MW No. 1 Sunderland														INVALIUI IS.
	Erosion protection for watermains in various locations	M1815													
	Allowance for final restoration for remedial works constructed in prior years	M1816													

#### CONSTRUCTION OF MUNICIPAL SERVICES

			BUDGET	2018				Ni	ne Year Forec	ast					
ITEM No.	PROJECT DESCRIPTION	Project No.	PRIOR TO 2018	CAPITAL BUDGET	2019	2020	2021	2022	2023	2024	2025	2026	2027	TOTAL	REMARKS
	Remedial works in various locations (Locations and priorities under review)	M1818			-2.0										
	Preliminary engineering/surveys for future construction of remedial works	M1817													
	Future remedial works in various locations				675,000	675,000	720,000	760,000	800,000	800,000	800,000	800,000	800,000	6,830,000	
22	Rehabilitation of existing watermains in various locations	D1812		1,600,000	1,600,000	1,600,000	1,600,000	1,600,000	1,600,000	1,600,000	1,600,000	1,600,000	1,600,000	16,000,000	Rehabilitation (cement mortar lining) of watermains in various locations.
	PICKERING/ AJAX SYSTEM														watermains in various locations.
23	Replacement of watermain on Kingston Rd. (Highway No. 2) from Glenanna Rd. to Brock Rd., Pickering Detailed Design Construction Total	D1802		120,000 1,080,000										120,000 1,080,000 1,200,000	Will be completed in conjunction with the BRT. Watermain has reached the end of its useful service life.
24	Replacement of a watermain on Rougemount Dr. from Kingston Rd. to approx. 100 m South, Pickering				180,000									180,000	Asset Management Project - watermain has reached the end of its useful service life.
25	Replacement of a watermain on Brock Rd. from Feldspar Crt. to Clements Rd., Pickering								600,000					600,000	Asset Management Project - watermain has reached the end of its useful service life.
26	Replacement of a watermain on Notion Rd. from Kingston Rd. to approx. 230 m South, Pickering						110,000							110,000	Asset Management Project - watermain has reached the end of its useful service life.
27	Replacement of watermain on Cameron St. from Elizabeth St. to Windsor Dr., Ajax Detailed Design Construction Total	A1801		40,000	360,000									40,000 360,000 400,000	Asset Management Project - watermain has reached the end of its useful service life.
28	Replacement of watermain on Windsor Dr. from Old Kingston Rd. to Cameron St., Ajax Detailed Design Construction Total	A1802		40,000	360,000									40,000 360,000 400,000	Asset Management Project - watermain has reached the end of its useful service life.
29	Replacement of a watermain on Dowty Rd. from Thomson St. to Hunt St., Ajax								700,000					700,000	Asset Management Project - watermain has reached the end of its useful service life.
	WHITBY / OSHAWA / CLARINGTON (COURTICE) SYSTEM														
30	Replacement of watermain on R.R. 26 (Thickson Rd.) from 84 m north of William Smith Dr. to 60 m south of William Smith Dr., Whitby				210,000									210,000	Asset Management Project - watermain has reached the end of its useful service life.
31	Replacement of watermain on R.R. 26 (Thickson Rd.) from south of Nichol Ave. to Bellwood Rd., Whitby				180,000	360,000								540,000	Asset Management Project - watermain has reached the end of its useful service life.
32	Replacement of watermain on Consumers Dr. from 140 m west of Thickson Rd. S to 110 m east of Sunray St., Whitby				360,000									360,000	Asset Management Project - watermain has reached the end of its useful service life.
33	Replacement of a watermain on Maria St. from Annes St. to Frances St., Whitby							375,000						375,000	Asset Management Project - watermain has reached the end of its useful service life.
34	Replacement of a watermain on Orchard Crt. from St. Lawrence St. to west limits of Orchard Crt., Whitby							150,000						150,000	Asset Management Project - watermain has reached the end of its useful service life.
35	Replacement of a watermain on Simcoe St. S. from Quebec St. to Gibb St., Oshawa							200,000						200,000	Asset Management Project - watermain has reached the end of its useful service life.
36	Replacement of a feedermain on R.R. 22 (Bloor St.) from Cubert St. to Oxford St., Oshawa						270,000							270,000	Asset Management Project - feedermain has reached the end of its useful service life.
37	Replacement of a feedermain on R.R. 22 (Bloor St.) from Wilson Rd. to Holland St., Oshawa							370,000						370,000	Asset Management Project - feedermain has reached the end of its useful service life.
38	Replacement of watermain on Highway No. 2 (King St. E.) from Wilson Rd. to Riverside Dr., Oshawa					820,000								820,000	Asset Management Project - watermain has reached the end of its useful service life.

#### CONSTRUCTION OF MUNICIPAL SERVICES

			BUDGET	2018				N	ine Year Forec	ast					
ITEM No.	PROJECT DESCRIPTION	Project No.	PRIOR TO 2018	CAPITAL BUDGET	2019	2020	2021	2022	2023	2024	2025	2026	2027	TOTAL	REMARKS
39	Replacement of watermain on Highway No. 2 (King St. E.) from	NO.	2016	BUDGET	2019	100,000	1,950,000	2022	2023	2024	2025	2020	2021		Asset Management Project - watermain
40	Harmony Rd. to Kingsway College, Oshawa  Replacement of a watermain on Harcourt Dr. from Florell Dr. to dead-end, Oshawa  Detailed Design  Construction  Total	O1604	100,000	340,000										100,000 340,000 440,000	has reached the end of its useful service life.  Asset Management Project - watermain has reached the end of its useful service life.
41	Replacement of watermain on Athol St. E. from Centre St. to Albert St., Oshawa Detailed Design Construction Total	O1710	5,000	60,000 400,000										65,000 400,000 465,000	Asset Management Project - watermain has reached the end of its useful service life.
42	Replacement of watermain on Farewell St. from Canadian National Railway to Bloor St., Oshawa	O1701	470,000		30,000									500,000	Asset Management Project - watermain has reached the end of its useful service life.
43	Replacement of watermain on Oxford St. from Stone St. to Dwight Ave., Oshawa Detailed Design Construction Total	O1702	85,000	65,000 970,000										150,000 970,000 1,120,000	Asset Management Project - watermain has reached the end of its useful service life.
44	Replacement of watermain on Lakeview Park Avenue from Birchcliffe Ave. to Simcoe St. S., Oshawa Detailed Design Construction Total	O1703	60,000	70,000 790,000										130,000 790,000 920,000	Asset Management Project - watermain has reached the end of its useful service life.
45	Replacement of watermain on Simcoe St. from John St. to Elm St. & Llyod St. from Centre St. to Simcoe St., Oshawa Detailed Design Construction Total	O1602	160,000 140,000	840,000										160,000 980,000 1,140,000	Asset Management Project - watermain has reached the end of its useful service life.
46	Replacement of watermain on Lanark Dr. from Annapolis Ave. to Waverly Rd., Oshawa Detailed Design Construction Total	O1603	95,000 485,000	90,000										95,000 575,000 670,000	Asset Management Project - watermain has reached the end of its useful service life.
47	Replacement of watermain on Adelaide Ave. from Oshawa Blvd. to Juliana Dr., Oshawa Detailed Design Construction Total	O1509	170,000 500,000	530,000										170,000 1,030,000 1,200,000	Asset Management Project - watermain has reached the end of its useful service life.
48	Replacement of watermain on Valencia Rd. from Oxford St. to dead-end, Oshawa							360,000						360,000	Asset Management Project - watermain has reached the end of its useful service life.
49	Replacement of watermain on R.R. 2A (Centre St.) from King St. W to Brock St. W., Oshawa	O1503	120,000		730,000									850,000	Asset Management Project - watermain has reached the end of its useful service life.
50	Replacement of a watermain on R.R. 16 (Ritson Rd.) from Lakeview Park to 100 m north of Kawartha Ave., Oshawa						120,000	1,300,000						1,420,000	Asset Management Project - watermain has reached the end of its useful service life.
51	Replacement of a watermain on Madawaska Ave. from Sauble St. to Wecker St., Oshawa									1,000,000				1,000,000	Asset Management Project - watermain has reached the end of its useful service life.
	CLARINGTON (BOWMANVILLE) SYSTEM														
52	Replacement of watermain on Port Darlington Rd. from Lake Rd. to Bowmanville Water Supply Plant, Bowmanville Detailed Design Total											300,000		300,000	Asset Management Project - watermain has reached the end of its useful service life. Replacement to be completed in conjunction with feedermain works. Construction beyond forecast.
53	Replacement of watermain on Baseline Rd. E. from Liberty St. to Mearns Ave., Bowmanville Detailed Design Total											100,000		100,000	Asset Management Project - watermain has reached the end of its useful service life. Replacement to be completed in conjunction with feedermain works.  Construction beyond forecast.
	CLARINGTON (NEWCASTLE) SYSTEM														
54	Watermain on North St. from Grady St. to 750 m South of Concession Rd. 3, Newcastle Detailed Design Construction Total	C1601	50,000 880,000		60,000	1,140,000								110,000 2,020,000 2,130,000	Phase 1: Grady St. to North of CPR Phase 2: North of CPR to 750 m S. Concession Rd. 3

#### CONSTRUCTION OF MUNICIPAL SERVICES

			BUDGET	2018	Nine Year Forecast										
ITEM No.	PROJECT DESCRIPTION	Project No.	PRIOR TO 2018	CAPITAL BUDGET	2019	2020	2021	2022	2023	2024	2025	2026	2027	TOTAL	REMARKS
	BROCK (CANNINGTON) SYSTEM		20.0	50502.	20.0	2020	2021	2022	2020	2021	2020	2020	2021	1017.2	TO THE WATER
55	Replacement of watermain on Cameron St. from 215 m east of McRae St. to 750 m west of R.R. 2 (Simcoe St.), Cannington				100,000	1,000,000								1,100,000	Asset Management Project - watermain has reached the end of its useful service life.
	BROCK (BEAVERTON) SYSTEM														
56	Watermain to be abandoned on R.R. 15 (Simcoe St.) from Osborne St. to John St., Beaverton				40,000									40,000	Asset Management Project - watermain has reached the end of its useful service life.
57	Replacement of watermain on Centre St. from Mara Rd. to James St., Beaverton								360,000					360,000	Asset Management Project - watermain has reached the end of its useful service life.
58	Replacement of watermain on Bay St. from Mill St. to Union St., Beaverton						200,000	1,150,000						1,350,000	Asset Management Project - watermain has reached the end of its useful service life.
59	Allowance for replacement of watermains in various locations							104,000	2,349,000	3,009,000	3,709,000	2,109,000	4,009,000	15,289,000	
60	Allowance for construction of services in unserviced areas in response to requests or petitions				200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,800,000	Allowance for construction of watermains in unserviced areas in response to requests or petitions.
	Sub-total Betterments/Replacement			7,363,500	5,085,000	5,895,000	5,170,000	6,569,000	6,609,000	6,609,000	6,309,000	5,109,000	6,609,000	61,327,500	
	System Expansion														
61	PICKERING / AJAX SYSTEM Zone 1 feedermain on Rossland Rd. from Church St. to Westney Rd., Ajax Detailed Design Construction Total	D1522	100,000	100,000	650,000 5,350,000									850,000 5,350,000 6,200,000	
62	Zone 1 feedermain on Bayly St. from Pickering Beach Rd. to Toy Ave., Pickering/Ajax Detailed Design Construction Total										1,000,000		17,000,000	1,000,000 17,000,000 18,000,000	
63	Zone 1 feedermain on Harwood Ave. from Rossland Rd. to Kerrison Dr., Ajax Detailed Design Construction Total	D1803		400,000	240,000 3,860,000									640,000 3,860,000 4,500,000	
64	Zone 2 feedermain on William Jackson Dr. & Taunton Rd. from Earl Grey Ave. to 200 m west of Harwood Ave., Pickering/ Ajax Detailed Design Construction Total						1,400,000	2,900,000	2,700,000	2,100,000				7,700,000	Construction of feedermain to service new development. Timing of construction dependent on rate development Phase 1: Westney Rd. to 200 m West of Harwood Ave. Phase 2: Church St. to Rawencroft Rd. Phase 3: Earl Grey Ave. to Church St
65	Zone 2 feedermain on Church St. from south side of the hydro right of way to Taunton Rd., Ajax Detailed Design Construction Total							600,000	3,000,000					3,000,000	Construction of feedermain to service new development. Timing of construction dependent on rate development Phase 1: Rossland Rd. to Hydro Right of way Phase 2: Hydro Right of way to Taunton Rd.
Ī	WHITBY / OSHAWA / CLARINGTON (COURTICE) SYSTEM														
66	Zone 1 feedermain from Whitby Water Supply Plant to Thornton Rd., Whitby/Oshawa Conceptual Planning - Corridor Study Detailed Design Construction Total	W1001	100,000 1,600,000		12,500,000	12,000,000	16,200,000							1,600,000 40,700,000	Construction of feedermain to service new development. Timing of construction of dependent on rate development in Office of the State o
67	Zone 1 feedermain on Manning Rd. from Anderson St. to Hydro corridor., Whitby Detailed Design Construction Total							400,000	1,500,000					400,000 1,500,000 1,900,000	

#### CONSTRUCTION OF MUNICIPAL SERVICES

			BUDGET	2018		Nine Year Forecast									
TEM No.	PROJECT DESCRIPTION	Project No.	PRIOR TO 2018	CAPITAL BUDGET	2019	2020	2021	2022	2023	2024	2025	2026	2027	TOTAL	REMARKS
68	Zone 1 West Whitby feedermain on Brock St./Victoria St. to Rossland Rd., Whitby Environmental Assessment	-	-	-	-	-			-		560,000	-			Construction of feedermain to service new development. Timing of construction dependent on rate of development Phase 1 - Brock St./Victoria St. to Hwy No. 2 Phase 2 - Hwy No. 2 to Rossland Rd. Construction beyond forecast
69	Zone 3 feedermain on Conlin Rd. from Anderson St. to Garrard Rd. Pumping Station., Whitby Detailed Design Construction Total	D1804		500,000		160,000 3,840,000								660,000 3,840,000 4,500,000	Construction of feedermain to service new development. Timing of construction dependent on rate of development.
70	Zone 3 feedermain on Anderson St. and Watford St. from Clair Ave. to Carmvith Dr., Whitby Detailed Design Construction Total							600,000	6,100,000					600,000 6,100,000 6,700,000	Construction of feedermain to service new development. Timing of construction dependent on rate of development.
71	Zone 3 feedermain on Anderson St. from Conlin Rd. to Clair Ave., Whitby Detailed Design Construction Total				500,000	4,650,000								500,000 4,650,000 5,150,000	
72	Zone 4 feedermain from Thickson Rd. Zone 4 pumping station to Zone 4 Reservoir, Whitby Detailed Design Construction Total				1,600,000		14,900,000							1,600,000 14,900,000 16,500,000	
73	Zone 4 feedermain on Brawley Rd. from Duffs Rd. to Ashburn Rd., Whitby Detailed Design Construction Total				600,000		5,200,000							600,000 5,200,000 5,800,000	
74	Zone 4 feedermain on Ashburn Rd. from Brawley Rd. to Columbus Rd., Whitby Detailed Design Construction Total									700,000	2,800,000			700,000 2,800,000 3,500,000	
75	Zone 4 feedermain on Columbus Rd. from Thickson Rd. to Ritson Rd., Whitby/Oshawa Detailed Design Construction Total									600,000		5,800,000		600,000 5,800,000 6,400,000	Construction of feedermain to service new development. Timing of construction dependent on rate of development. Construction of feedermain beyond forecast.
76	Watermain on Britannia Dr. from Thornton Rd. to Windfields Farm Dr., Oshawa Detailed Design Construction Total	D1614	80,000						260,000	1,360,000				340,000 1,360,000 1,700,000	
77	Zone 1 feedermain on Bloor St. from Ritson Rd. to Wilson Rd., Oshawa Phase 3 Detailed Design Construction Total	O1709	100,000	500,000	100,000 4,400,000										Pjase 1: Albert St. to Ritson Rd completed Phase 2: Stevenson Rd. to Albert St construction has commenced Phase 3: Ritson Rd. to Wilson Rd detailed design
78	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					150,000								150,000	Allowance for relocation of existing watermains in conjunction with construction of the sanitary sewer.
79	Zone 3 feedermain on Conlin Rd. from Garrard Rd Zone 3 Pumping Station to Ritson Rd., Oshawa Preliminary/Detailed Design Construction Total	D1602	100,000	1,000,000	1,420,000 14,780,000									2,520,000 14,780,000 17,300,000	
80	Zone 3 feedermain on Conlin Rd. from Ritson Rd. to Wilson Rd., Oshawa Detailed Design Construction Total	D1405	300,000		3,800,000									300,000 3,800,000 4,100,000	Construction of feedermain to service new development. Timing of construction dependent on rate of development

#### CONSTRUCTION OF MUNICIPAL SERVICES

_			BUDGET	2018	Nine Year Forecast										
ITEM No.	PROJECT DESCRIPTION	Project No.	PRIOR TO 2018	CAPITAL BUDGET	2019	2020	2021	2022	2023	2024	2025	2026	2027	TOTAL	REMARKS
81	Zone 3 feedermain on Harmony Rd. from Taunton Rd. to 400 m South of Conlin Rd., Oshawa Phase 2: Coldstream Dr. to 400 m South of Conlin Rd. Detailed Design Construction	D1604	60,000		2,540,000									60,000 2,540,000 2,600,000	Construction being coordinated with Transportation department
82	Zone 4 feedermain on Conlin Rd. from Harmony Rd. to Grandview St., Oshawa Detailed Design Construction Total							300,000	1,050,000						Construction of feedermain to service new development. Timing of construction dependent on rate of development
83	Zone 4 feedermain on Harmony Rd. from Greenhill Ave. to 400 m south of Conlin Rd., Oshawa Detailed Design Construction Total	D1615	60,000		640,000										Construction of feedermain to service new development. Timing of construction dependent on rate of development
84	Zone 4 feedermain on Harmony Rd. from Conlin Rd. to New Zone 4 Pumping Station, Oshawa Detailed Design Construction Total						900,000	3,600,000						900,000 3,600,000 4,500,000	Construction of feedermain to service new development. Timing of construction dependent on rate of development
85	Zone 4 feedermain from Proposed Zone 4 Pumping Station at Harmony Reservoir to Proposed Oshawa Zone 4 Reservoir, Oshawa Detailed Design Construction Total				1,500,000		13,300,000							1,500,000 13,300,000 14,800,000	Construction of feedermain to service new development. Timing of construction Construction of feedermain beyond forecast
86	Zone 4 feedermain on Ritson Rd. from Columbus Rd. to Winchester Rd., Oshawa Detailed Design										1,400,000			1,400,000	Construction of feedermain to service new development. Timing of construction dependent on rate of development. Construction of feedermain beyond forecast
87	Zone 4 feedermain on Winchester Rd. from Ritson Rd. to Grandview St., Oshawa Detailed Design										1,800,000			1,800,000	Construction of feedermain to service new development. Timing of construction dependent on rate of development.  Construction of feedermain beyond forecast
88	Zone 2 feedermain on Bloor St. from Townline Rd. to Trulls Rd., Courtice Detailed Design Construction Total	C1201	250,000	500,000	6,050,000									750,000 6,050,000 6,800,000	Construction of feedermain to service new development. Timing of construction dependent on rate of development
89	Courtice - Zone 1 feedermain Phase 1- 400 m South of Energy Dr. to 100 m North of Energy Rd. Phase 2- 100 m North of Energy Dr. to the intersection of Baseline Rd. and Courtice Rd. Phase 3 - Baseline Rd. from Trulls Rd. to Courtice Rd. & Trulls Rd. from Baseline Rd. to Bloor St., Courtice	D1303													Project to be coordinated with the Courtice Trunk Sanitary Sewer. Construction of feedermain to service new development. Timing of construction dependent on rate of development
	Detailed Design Construction Total		1,050,000 3,800,000	1,000,000	4,200,000									1,050,000 9,000,000 10,050,000	
90	Zone 1 feedermain on Baseline Rd. from Prestonvale Rd. to Trulls Rd., Courtice Detailed Design Construction Total	D1805		150,000	130,000 2,520,000									280,000 2,520,000 2,800,000	Construction of feedermain to service new development. Timing of construction dependent on rate of development
91	Zone 1 feedermain on Prestonvale Rd. from Baseline Rd. to 950 m North of Baseline Rd., Courtice Detailed Design Construction Total				300,000	1,500,000								300,000 1,500,000 1,800,000	Construction of feedermain to service new development. Timing of construction dependent on rate of development
92	Zone 1 feedermain on easement from Townline Rd. to Prestonvale Rd., Courtice Detailed Design Construction Total					300,000	1,300,000							300,000 1,300,000 1,600,000	Construction of feedermain to service new development. Timing of construction dependent on rate of development

#### CONSTRUCTION OF MUNICIPAL SERVICES

	APITAL BUDGET AND NINE YEAR FURECAST		BUDGET	2018		Nine Year Forecast									
ITEM No.	PROJECT DESCRIPTION	Project No.	PRIOR TO	CAPITAL BUDGET	2019	2020	2021	2022	2023	2024	2025	2026	2027	TOTAL	REMARKS
NO.	CLARINGTON (BOWMANVILLE) SYSTEM	NO.	2018	BUDGET	2019	2020	2021	2022	2023	2024	2020	2020	2021	IUIAL	CANAMAN
93	Zone 1 feedermain on Lambs Rd. from Hwy No. 2 (King St.) to Zone 1 Liberty Street Reservoir Environmental Assessment & Detailed Design Construction	C1202	3,820,500 11,179,505		12,400,000									23,579,505	Required to accommodate new development. Construction to be completed in conjunction with Liberty St. Zone 1 Reservoir. Feedermain will be completed in phases. Phase I: Hwy No. 2 to Concession St. Phase II: Concession St. to reservoir
94	Zone 1 feedermain on Baseline Rd. from R.R. 57 (Waverly Rd.) to Liberty St., Bowmanville Detailed Design Construction Total	D1807		400,000		250,000 4,200,000									Construction of feedermain to service new development. Timing of construction dependent on rate of development
95	Zone 1 feedermain from Bowmanville Water Supply Plant to Baseline Rd., Bowmanville Environmental Assessment											520,000		520,000	Construction of feedermain to service new development. Timing of construction dependent on rate of development Detailed design and construction beyond forecast
96	Zone 1 feedermain on Baseline Rd. from Wharf St. to Mearns Ave., Bowmanville Environmental Assessment											520,000		520,000	Construction of feedermain to service new development. Timing of construction dependent on rate of development Detailed design and construction beyond forecast
97	Zone 2 feedermain on Concession Rd. 3 from Middle Rd./ Sougog St. to Mearns Ave., Bowmanville Detailed Design Construction Total	C0502	780,000	3,500,000											Construction of feedermain to service new development. Timing of construction dependent on rate of development
98	Zone 2 feedermain from Zone 2 pumping station to Zone 2 Reservoir, Bowmanville Environmental Assessment Detailed Design Total									600,000		600,000			Construction of feedermain to service new development. Timing of construction dependent on rate of development Construction beyond forecast
	CLARINGTON (NEWCASTLE) SYSTEM														
99	Zone 1 feedermain from Arthur Street reservoir to future Zone 1 reservoir Detailed Design Construction Total	C1203	250,000				2,650,000							250,000 2,650,000 2,900,000	
100	Zone 1 feedermain on King Ave. (Highway No. 2) from Rudell Rd. to 200 m west of North St., Newcastle Detailed Design Construction Total	D1406	200,000		1,000,000									200,000 1,000,000 1,200,000	
101	Zone 2 feedermain on Arthur St. from the Zone 2 pumping station to 650m south, Newcastle Detailed Design Construction Total	D1605	180,000 120,000				1,150,000							180,000 1,270,000 1,450,000	Construction of feedermain to service new development. Timing of construction dependent on rate of development
	BROCK (BEAVERTON) SYSTEM														
102	Watermain on Concession Rd. 5 from Cedar Beach Rd. to 850 m east of Cedar Beach Rd., Beaverton	D1836		1,100,000										1,100,000	Looping required for system security, fire protection and to maintain the Region's standard of water quality.
	Sub-total System Expansion		24,130,005	9,150,000	81,080,000	27,050,000	57,000,000	8,400,000	14,610,000	5,360,000	7,560,000	7,440,000	17,000,000	258,780,005	
	Other Linear Infrastructure														
103	Replacement of meters	D1806		3,100,000	3,100,000	1,000,000	1,000,000	1,000,000	1,000,000	1,500,000	1,800,000	1,300,000	1,500,000	16,300,000	Replacement of meters that have reached the end of their service life.
104	Design - Replacement of polybutylene service connections in various locations	D1899		13,300,000	13,600,000	14,200,000	9,000,000							50,100,000	
105	Depots - Replacement of polybutylene service connections in various locations	M1825		1,400,000	1,200,000	1,000,000	500,000							4,100,000	
106	Depots - Replacement of lead service connections in various locations	M1832		100,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	29,100,000	

### CONSTRUCTION OF MUNICIPAL SERVICES

			BUDGET	2018				N	ne Year Forec	ast					
ITEM No.	PROJECT DESCRIPTION	Project No.	PRIOR TO	CAPITAL BUDGET	2019	2020	2021	2022	2023	2024	2025	2026	2027	TOTAL	REMARKS
107	Replacement of valves	M1826	2010	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	2,000,000	
108	Replacement of hydrants	M1827		160,000	160,000	160,000	160,000	160,000	160,000	160,000	160,000	160,000	160,000	1,600,000	
	. ,				-	·									
	Sub-total Other Linear Infrastructure			18,260,000	19,260,000	17,560,000	11,860,000	2,360,000	6,360,000	6,860,000	7,160,000	6,660,000	6,860,000	103,200,000	
В	BUILDINGS														
	PICKERING / AJAX SYSTEM														
109	Regional Environmental Laboratory Upgrades and ventilation	Y1602													Cost sharing with York Region
	associated works Preliminary work/Detailed Design		450,000											450,000	
	Construction Total			3,100,000										3,100,000 3,550,000	
110	Seaton Zone 4 Reservoir and Zone 5 Water Pumping Station,														Durham to oversee the detailed design and
	Pickering Detailed Design	D1701	1,200,000	1,700,000											construction of vertical infrastructure required for the development of the Seaton
	Construction Total			17,100,000										17,100,000 20,000,000	Community.
111	Expansion of the Ajax Water Supply Plant from 163.6 MLD to														
	327 MLD, Ajax Environmental Assessment				1,500,000										Construction of future expansion required to accommodate new development.
	Detailed Design Construction						4,500,000		92,880,000					4,500,000 92,880,000	Timing of construction dependent on rate of development.
	Total													98,880,000	
112	Proposed Ajax Zone 1 Storage facility - 11 ML, Ajax Environmental Assessment				600,000									600.000	Construction of pumping station to service new development. Timing of construction
	Detailed Design				600,000		600,000							600,000	dependent on rate of development
	Construction Total								10,800,000					10,800,000	
113	Intake crib chlorine line replacement at the Ajax and Whitby Water Supply Plants										300,000	1,500,000		1,800,000	Asset Management Project - intake crib lines have reached the end of their useful service life.
	WHITBY / OSHAWA / CLARINGTON (COURTICE) SYSTEM														
114	Expansion of the Whitby Water Supply Plant from 109 MLD	D9944													Preliminary and detailed design initiated.
	to 218 MLD, Whitby Land and Detailed Design		7,350,000		2,000,000									9,350,000	Construction to commence in 2020
	Construction Total					138,000,000								138,000,000 147,350,000	
														, ,	
115	Whitby Water Supply Plant - Backflow preventer for the backwash wastewater and clearwell overflow pipe.	D1808													Preventive measure for the effluent pipes to prevent surcharging during higher lake water levels
	Preliminary work/Detailed Design Construction			60,000 270,000										60,000 270,000	
	Total			270,000										330,000	
116	Whitby Water Supply Plant - Plant 1 upgrades					200,000		5,000,000	5,000,000	5,000,000				15 200 000	Project budget to be confirmed and updated upon
110	writing water coppiy riant - riant i upgrades					200,000		3,000,000	3,000,000	3,000,000				15,200,000	the completion of preliminary investigation
447	Corrord Rd. Zono 4 Bagan rair Europaign from														
117	Garrard Rd. Zone 1 Reservoir Expansion from 31 ML to 50 ML, Whitby														
	Environmental Assessment and Detailed Design Construction						3,350,000		13,350,000					3,350,000 13,350,000	
	Total													16,700,000	
118	Garrard Rd. Zone 3 Water Pumping Station - upgrades Whitby														Upgrades at the pumping are required to receive increased flows from the water supply
	Detailed Design				260,000	4 440 000									system.
	Construction Total					1,140,000								1,140,000 1,400,000	
										]					1

#### CONSTRUCTION OF MUNICIPAL SERVICES

			BUDGET	2018				Ni	ne Year Forec	ast					
ITEM No.	PROJECT DESCRIPTION	Project No.	PRIOR TO 2018	CAPITAL BUDGET	2019	2020	2021	2022	2023	2024	2025	2026	2027	TOTAL	REMARKS
119	Thickson Rd. Zone 3 Water Pumping Station Expansion to 22.7 MLD, Whitby Environmental Assessment Detailed Design Construction	No.	20.0	202021	20.0	2020	500,000		1,100,000	202.4	10,600,000	2020	2021	500,000 1,100,000 10,600,000 12,200,000	Expansion of pumping station required to accommodate new development.
120	Proposed Zone 4 Pumping Station at the Thickson Rd. Reservoir, Whitby Environmental Assessment Detailed Design Construction Total	D1608	600,000		600,000		6,300,000							600,000 600,000 6,300,000 7,500,000	Construction of pumping station to service new development. Timing of construction dependent on rate of development
121	Proposed Whitby Zone 4 Storage Facility - 11 ML Whitby Environmental Assessment Detailed Design Construction Total	D1505	500,000		1,100,000		8,500,000							500,000 1,100,000 8,500,000 10,100,000	
122	Proposed Whitby Zone 5 Pumping Station and feedermain, Whitby Detailed Design Construction Total											2,500,000	9,900,000	2,500,000 9,900,000 12,400,000	Construction of pumping station and feedermain to service new development. Timing of construction dependent on rate of development
123	Taunton Rd. Zone 2 Reservoir Expansion from 13 ML to 27 ML, Oshawa Environmental Assessment Detailed Design Construction Total							500,000		1,200,000		10,800,000		500,000 1,200,000 10,800,000 12,500,000	Construction of reservoir required to accommodate new development.
124	Grandview Zone 2 Pumping Station Expansion, Oshawa Environmental Assessment Detailed Design Construction Total							500,000		600,000		5,300,000		500,000 600,000 5,300,000 6,400,000	Pumping station expansion required to accommodate new development.
125	Taunton Rd. Zone 3 Water Pumping Station Expansion from from 27 MLD to 75 MLD Oshawa Environmental Assessment Detailed Design Total									500,000		650,000			Pumping station expansion required to accommodate new development. Construction beyond forecast.
126	Harmony Rd. Zone 3 Reservoir Expansion, Oshawa Environmental Assessment									525,000				525,000	Construction of reservoir required to accommodate new development. Detailed design and construction beyond forecast.
127	Proposed Zone 4 Pumping Station at the Harmony Rd. Reservoir, Oshawa Environmental Assessment Detailed Design Construction Total	D1507	500,000		500,000		6,500,000							500,000 500,000 6,500,000 7,500,000	Construction of pumping station required to accommodate new development.
128	Proposed Oshawa Zone 4 Storage Facility - 11 ML Oshawa Environmental Assessment Detailed Design Construction Total	D1609	500,000		850,000		7,920,000							500,000 850,000 7,920,000 9,270,000	Timing of expansion dependent on rate of development.
129	Proposed Zone 5 Pumping Station and feedermain, Oshawa Detailed Design Construction Total											2,000,000	7,600,000	2,000,000 7,600,000 9,600,000	Construction of pumping station required to accommodate new development.
130	Hortop Water Pumping Station - Replacement Oshawa Detailed Design Construction Total							1,000,000	9,000,000					1,000,000 9,000,000 10,000,000	The pumping station has reached the end of it's useful life.

### CONSTRUCTION OF MUNICIPAL SERVICES

			BUDGET	2018				Ni	ne Year Foreca	ast					
ITEM No.	PROJECT DESCRIPTION	Project No.	PRIOR TO 2018	CAPITAL BUDGET	2019	2020	2021	2022	2023	2024	2025	2026	2027	TOTAL	REMARKS
NO.	CLARINGTON (BOWMANVILLE) SYSTEM	140.	2010	BODGET	2019	2020	2021	2022	2023	2024	2023	2020	2021	TOTAL	KEMAKKS
131	Bowmanville Water Supply Plant Expansion from 36 MLD to 55 MLD Environmental Assessment Detailed Design Construction							500,000		1,500,000		84,500,000		500,000 1,500,000 84,500,000 86,500,000	
132	Proposed Liberty Street Zone 1 Reservoir (11 ML) and demolition of the Existing Elevated Tank Update Environmental Assessment and Detailed Design Construction Total	D1106	1,200,000		11,600,000										Construction of future reservoir required to accommodate new development. Upon completion the existing elevated tank will be decommissioned.
133	Concession St. Water Pumping Station Expansion Detailed Design Construction Total									600,000		5,000,000		600,000 5,000,000 5,600,000	
134	Proposed Zone 2 Pumping Station at the Zone 1 Reservoir Detailed Design Construction Total									1,100,000		7,450,000		1,100,000 7,450,000 8,550,000	
135	Bowmanville Zone 2 Reservoir Expansion Environmental Assessment										550,000			550,000	Timing of expansion dependent on rate of development. Detailed design and construction beyond forecast
	CLARINGTON (NEWCASTLE) SYSTEM														
136	Expansion of Newcastle Water Supply Plant from 8.2 MLD to 16.4 MLD and demolish the existing plant Process study and Detailed Design Construction Total	D1107	3,900,000	40,000,000										3,900,000 40,000,000 43,900,000	
137	Proposed Zone 1 Reservoir 7 ML Environmental Assessment & Land Detailed Design Construction Total	D1202	300,000		900,000		6,400,000							900,000	Construction of future reservoir required to accommodate new development. Timing of construction dependent on rate of development.
138	Proposed Zone 2 Water Pumping Station Environmental Assessment & Land Detailed Design Construction Total	D1610	500,000		500,000		4,250,000							500,000 500,000 4,250,000 5,250,000	
139	Proposed Zone 2 reservoir Environmental Assessment & Land Detailed Design Total									500,000		600,000		600,000	Construction of future reservoir required to accommodate new development. Timing of construction dependent on rate of development.
140	CLARINGTON (ORONO) SYSTEM Proposed Zone 1 Orono Storage Facility (1 ML)														Detailed design and construction beyond forecast.
	Environmental Assessment  SCUGOG (PORT PERRY) SYSTEM											400,000		400,000	
141	Alternative Water Supply Source Environmental Assessment and Detailed Design Construction Total	S0102	3,030,000	1,500,000		17,600,000								4,530,000 17,600,000 22,130,000	Environmental Assessment and engineering required to identify a new water supply source to provide improved water quality.
142	Port Perry Storage Facility - additional capacity 2.8 ML Detailed Design Construction Total				1,000,000		11,100,000							1,000,000 11,100,000 12,100,000	New Reservoir to provide increased system security and capacity for new development
	SCUGOG (GREENBANK) SYSTEM														
143	Greenbank Water Supply System - Replacement of Municipal Well 1 Detailed Design Construction Total						250,000		1,000,000					250,000 1,000,000 1,250,000	

### CONSTRUCTION OF MUNICIPAL SERVICES

	PITAL BUDGET AND NINE TEAR FORECAST														
ITEM		Project	BUDGET PRIOR TO	2018 CAPITAL	I				ine Year Foreca						
No.	PROJECT DESCRIPTION SCUGOG (BLACKSTOCK) SYSTEM	No.	2018	BUDGET	2019	2020	2021	2022	2023	2024	2025	2026	2027	TOTAL	REMARKS
144	Blackstock Water Supply System - Upgrades to Municipal Well 7 Detailed Design Construction Total	D1838		200,000 1,300,000										200,000 1,300,000 1,500,000	
	UXBRIDGE (UXBRIDGE) SYSTEM														
145	New Well and Pumphouse, Uxbridge Environmental Assessment Detailed Design Construction Total	D1508	500,000		620,000	3,000,000									
146	Expansion of Quaker Hill Reservoir from 2.8 ML to 5.2 ML Detailed Design Construction	U0701	230,000				400,000	3,420,000						630,000 3,420,000 4,050,000	
147	BROCK (SUNDERLAND) SYSTEM  New Well and Pumphouse with standby power Environmental Assessment and Detailed Design Construction Total	K0601	650,000		500,000	4,000,000								1,150,000 4,000,000 5,150,000	
148	BROCK (CANNINGTON) SYSTEM  New Well and Pumphouse Environmental Assessment and Detailed Design Construction Total	K0701	1,750,000		4,500,000									4,500,000	Required to provide security to the system and capacity for new development. EA completed Detailed Design phase.
149	BROCK (BEAVERTON) SYSTEM Additional Water Storage from 2 ML to 4.8 ML Environmental Assessment										550,000			550,000	Required to provide security to the system and capacity for new development. Detailed design and construction beyond forecast.
150	REGION WIDE  Wellhead protection at Regional well sites	M0101		800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	8,000,000	Monitoring and studies required to identify aquifer protection zones for the existing and future well systems operated by the Region. Implementation of some Wellhead Protection Study findings. Includes Permit to Take Water requirements.
	Sub-total Buildings		23,160,000	66,030,000	27,830,000	164,740,000	61,370,000	11,720,000	133,930,000	12,325,000	12,800,000	121,500,000	18,300,000	653,705,000	
С	MACHINERY AND EQUIPMENT														
	PICKERING / AJAX SYSTEM														
151	Finch Ave. Elevated Water Storage Tank - Recoating Detailed Design Construction Total				120,000	500,000								120,000 500,000 620,000	
152	Rosebank Rd. Water Pumping Station - Station upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch and Standby power Preliminary Works/Detailed Design Construction										100,000	150,000	2,000,000	250,000 2,000,000 2,250,000	Preventative maintenance work Emergency control and power supply systems required to operate systems during communications and electrical power failures.
153	Cherrywood Water Pumping Station - Station upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch and Standby power Preliminary Works/Detailed Design Construction Total								100,000	150,000	2,000,000				Preventative maintenance work Emergency control and power supply systems required to operate systems during communications and electrical power failures.

### CONSTRUCTION OF MUNICIPAL SERVICES

	THE BODGET AND NINE TEACH ONE GAST		BUDGET	2018				N	ne Year Foreca	ast					
ITEM No.	PROJECT DESCRIPTION	Project No.	PRIOR TO 2018	CAPITAL BUDGET	2019	2020	2021	2022	2023	2024	2025	2026	2027	TOTAL	REMARKS
NO.	WHITBY / OSHAWA / CLARINGTON (COURTICE)	NO.	2010	BUDGET	2019	2020	2021	2022	2023	2024	2025	2026	2021	TOTAL	REWARKS
154 155	SYSTEM  Plate settling tanks at the Whitby Water Supply Plant Detailed Design Construction Total  Installation of standby power at the Whitby Water Supply Plant	W0401	549,000					100,000	10,150,000					10,150,000	Required to remove algae which accumulates on the screen filters and can reduce Water Supply Plant capacity.  To be completed after the Whitby Water Supply Plant expansion  Emergency control and power supply
155	installation of satingly power at the whitely water Supply Plant Detailed Design Construction Total	D1120	300,000					100,000	3,100,000					3,100,000	Emergency Cuntur and powers supply systems required to operate systems during communications and electrical power failures. To be completed after the Whitby Water Supply Plant expansion
156	Grandview Water Pumping Station - Station upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch and Standby power Preliminary Works/Detailed Design Construction Total	D1809		100,000	150,000	2,000,000								250,000 2,000,000 2,250,000	
157	Oshawa Water Supply Plant - Valve Chamber Upgrades Detailed Design Construction Total					100,000		570,000						100,000 570,000 670,000	
158	Oshawa Water Supply Plant - Replacement of the Motor Control Centre Phase 1 Phase 2	D1810		120,000								200,000	1,000,000	120,000 1,200,000	Phase 1 - low lift pump motor control centre Phase 2 - remaining motor control centres
159	Oshawa Water Supply Plant - upgrading the uninterrupted power supply (UPS) Detailed Design Construction Total	D1811		150,000 150,000	700,000										Emergency control and power supply systems required to operate systems during communications and electrical power failures.
160	Waverly Rd. Water Pumping Station - Station upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch and Standby power Preliminary Works/Detailed Design Construction Total	D1837		100,000	150,000	2,000,000									Preventative maintenance work Emergency control and power supply systems required to operate systems during communications and electrical power failures.
	CLARINGTON (BOWMANVILLE) SYSTEM														
161	Bowmanville Zone 2 Reservoir - Standby power with transfer switch Detailed Design Construction Total	D1813		21,500 128,500										21,500 128,500 150,000	Upgrading the power supply system required to operate the system during communication and electrical power failures.
162	Bowmanville WSP - replacement of the standby power and upgrading the uninterrupted power supply (UPS) Detailed Design/UPS upgrades Construction Total	D1814		850,000	1,500,000										Emergency control and power supply systems required to operate systems during communications and electrical power failures.
	CLARINGTON (NEWCASTLE) SYSTEM														
163	Concession St. Water Pumping Station - Hydraulic Study for Zone 1	D1815		60,000										60,000	
164	Concession St. Water Pumping Station - Station upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch and Standby power Preliminary Works/Detailed Design Construction Total	D1816		100,000	150,000	2,000,000								250,000 2,000,000 2,250,000	Preventative maintenance work Emergency control and power supply systems required to operate systems during communications and electrical power failures.
165	Newtonville Water Pumping Station - Station upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch and Standby power Preliminary Works/Detailed Design Construction Total				100,000	150,000	2,000,000								Preventative maintenance work Emergency control and power supply systems required to operate systems during communications and electrical power failures.

#### CONSTRUCTION OF MUNICIPAL SERVICES

			BUDGET	2018				Ni	ne Year Foreca	est					
ITEM No.	PROJECT DESCRIPTION	Project No.	PRIOR TO 2018	CAPITAL BUDGET	2019	2020	2021	2022	2023	2024	2025	2026	2027	TOTAL	REMARKS
140.	CLARINGTON (ORONO) SYSTEM	140.	2010	BODGET	2013	2020	2021	2022	2023	2024	2023	2020	2021	TOTAL	KLIMARKO
166	Orono Water Supply System - Standpipe Water Storage Tank -recoating Detailed Design Construction Total	D1704	60,000		100,000	700,000								160,000 700,000 860,000	
167	Orono Water Supply System - Standpipe Water Storage Tank Standby power with transfer switch Detailed Design Construction Tottal	D1817		22,000 128,000										22,000 128,000 150,000	Emergency control and power supply systems required to operate systems during communications and electrical power failures.
168	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) Preliminary Works/Detailed Design Construction Total						100,000	150,000	2,500,000					250,000 2,500,000 2,750,000	
169	Mill St. Water Pumping Station - Station upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centire, Diesel transfer switch and Standby power Preliminary Works/Detailed Design Construction Total					100,000	150,000	2,000,000						250,000 2,000,000 2,250,000	Preventative maintenance work Emergency control and power supply systems required to operate systems during communications and electrical power failures.
	SCUGOG (GREENBANK) SYSTEM														
170	Greenbank Water Supply System - upgrades to the uninterrupted power supply (UPS)					500,000								500,000	Emergency control and power supply systems required to operate systems during communications and electrical
	SCUGOG (PORT PERRY) SYSTEM														power failures.
171	Port Perry Groundwater Supply System Municipal Well No. 6 - Upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch and Standby power Preliminary Works/Detailed Design Construction Total	D1818		250,000	2,200,000									250,000 2,200,000 2,450,000	Preventative maintenance work Emergency control and power supply systems required to operate systems during communications and electrical power failures.
	BROCK (SUNDERLAND) SYSTEM														
172	Sunderland Standpipe Water Storage Tank - Recoating Detailed Design Construction Total	D1839		100,000	650,000									100,000 650,000 750,000	Preventative maintenance work
	BROCK (BEAVERTON) SYSTEM														
173	Beaverton Water Supply Plant - upgrades Electrical System Study, Grounding Study, Replacement of the Motor Control Centre, Diesel transfer switch, Standby power and uninterrupted power supply (UPS) Preliminary Works/Detailed Design Construction Total  REGION WIDE	D1819		250,000	2,500,000									250,000 2,500,000 2,750,000	
174	Automatic Bulk Water Dispensing System Detailed Design Construction Total	D1717	120,000 480,000	60,000 240,000	60,000 380,000	60,000 380,000	60,000 240,000	60,000 240,000	60,000 240,000					480,000 2,200,000 2,680,000	Required to provide a secure, efficient and accessible method of supplying bulk water to customers.
175	Fuel Tank Compliance Inspection/Detailed Design Construction Total	D1613	350,000 1,350,000	700,000											Required to provide a secure, efficient and accessible method of supplying bulk water to customers.
176	Water Supply Plants Grounding Study	D1820		350,000										350,000	A grounding study will determine if equipment has proper ground fault protection installed and operating. Grounding is critical for the protection of electrical equipment and the safety of workers.
	Sub-Total Machinery and Equipment		3,209,000	3,880,000	8,760,000	8,490,000	2,550,000	3,220,000	16,150,000	150,000	2,100,000	350,000	3,000,000	51,859,000	

### CONSTRUCTION OF MUNICIPAL SERVICES

ITEM No. PI			BUDGET	2018	Nine Year Forecast						ı				
	PROJECT DESCRIPTION	Project No.	PRIOR TO 2018	CAPITAL BUDGET	2019	2020	2021	2022	2023	2024	2025	2026	2027	TOTAL	REMARKS
D IT	IT INFRASTRUCTURE														
	Plant SCADA system projects, to link plants north and olants east to the Ajax Water Supply Plant SCADA system	D0502	21,480,000		5,000,000	2,240,000								28,720,000	Implementation of a single centralized SCADA system for all WSP's to improve operational efficiency and monitor MOE compliance requirements.
S	Sub-total IT Infrastructure		21,480,000	0	5,000,000	2,240,000	0	0	0	0	0	0	0	28,720,000	
E A	ALLOWANCES AND OTHER PROVISIONS														
	Regional Water Supply Master Planning Study for the Regional Official Plan Review	D1421	900,000					800,000					800,000		Required to review and identify water supply infrastructure requirements to service new development as identified in the review of the Regional Official Plan.
179 Eı	Emergency Planning Updating Requirements	D1307	175,000		100,000									275,000	Allowance for updating required to ensure optimal performance during an emergency.
180 As	Asset Condition Assessments - Reports for the Vertical Assets	D1419	801,000		300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	3,501,000	Provincial requirement to assess conditions of all assets and develop a rehabilitation strategy.
	Asset Condition Assessment/ investigation on transmission oipe.	D1420	400,000		200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	2,200,000	Allowance for assessments on large transmission pipes.
182 M	Master planning energy management				200,000				200,000					400,000	Study to identify a long term strategy for implementation of an efficient and effective energy policy.
183 AI	Allowance for acquisition of easements	M1801		150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,500,000	Allowance for acquisition of easements for existing watermains.
184 AI	Allowance for engineering studies	M1807		150,000	300,000	150,000	300,000	150,000	300,000	150,000	300,000	150,000	300,000	2,250,000	Allowance for miscellaneous engineering studies.
	Allowance for CTC Source Water Protection Plan related to the Lake Ontario Collaborative	D1718	300,000		300,000		300,000		300,000		500,000		500,000	2,200,000	Required to implement the policies related to the approved CTC Source Protection Plan. Terms of reference and implementation plan under development.
186 Pi	Preliminary engineering	66143		100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,000,000	Allowance for preliminary engineering carried out in advance of budget provision.
187 AI	Allowance for sundry extensions as per Council policy	M1808		15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	150,000	Regional share for sundry extensions.
188 AI	Allowance for unknown requirements	M1809		100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,000,000	Allowance for unanticipated works.
	Allowance for Regional share for works in conjunction with residential subdivision development	M1810		1,460,000	1,460,000	1,460,000	1,460,000	1,460,000	1,460,000	1,460,000	1,460,000	1,460,000	1,460,000	14,600,000	Regional share for watermains related to existing, new residential and new non-residential development, in conjunction with new residential subdivisions.
	Allowance for Regional share for works in conjunction with non-residential development	M1811		400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	4,000,000	Allowance for possible Regional share in design and construction of watermains for non-residential development.
191 W	Well interference works	M1814		400,000	400,000	400,000	400,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	7,600,000	Allowance for construction of well interference works in accordance with Regional policy.
Sı	Sub-total Allowances and Other Provisions		2,576,000	2,775,000	4,025,000	3,275,000	3,725,000	4,675,000	4,525,000	3,875,000	4,525,000	3,875,000	5,325,000	43,176,000	
то	TOTAL GROSS EXPENDITURE		76,290,005	114,533,195	159,205,000	235,145,000	148,580,000	42,549,000	187,699,000	41,969,000	46,044,000	150,449,000	62,609,000	1,265,072,200	

### **TABLE OF CONTENTS**

### **2018 BUSINESS PLANS & BUDGETS**

### **WORKS – SANITARY SEWERAGE SYSTEM**

NOTE: On this page, just click on the particular Section and you will be linked to the corresponding page

	Page Number
STRATEGIC PLANNING	190
PROGRAM SUMMARY	192
EXPLANATION OF PROGRAM CHANGES	195
PROGRAM DETAILS	
Cleaning, Repairs and Maintenance Holes	199
2. Sewer Connections	
3. Depot Operations	
4. WPCPs and Pumping Stations	
5. Duffin Creek WPCP	
a. Management Committee	
b. Duffin Creek Plant	
c. Duffin Creek Tech Support	
d. Duffin Creek Administration	
e. Duffin Creek Facility	
g. Phosphorous Reduction Field Study (Durham Portion)	
6. Regional Environmental Laboratory	
7. Engineering and Staff Support	
8. Facilities Management	
9. Administration	
10.TANGIBLE CAPITAL ASSETS PROGRAM SUMMARY	242
Tangible Capital Assets – New	243
Tangible Capital Assets – Replacement	

### **TABLE OF CONTENTS**

#### 2018 BUSINESS PLANS & BUDGETS

# WORKS – SANITARY SEWERAGE SYSTEM (Continued)

# NOTE: On this page, just click on the particular Section and you will be linked to the corresponding page

#### Page Number 3. Construction 246 a. 2018 Construction Program..... 247 b. 2019 Construction Program..... 250 c. 2020 Construction Program..... 253 d. 2021 Construction Program..... 255 e. 2022 Construction Program..... 257 f. 2023 Construction Program..... 259 g. 2024 Construction Program..... 261 h. 2025 Construction Program..... 263 i. 2026 Construction Program..... 265 j. 2027 Construction Program..... 267 k. 2018 Capital Budget Project Detail..... 269 I. 2018 Capital Budget and Nine Year Forecast ..... 321



### 2018 Business Plan

Works - Sanitary Sewerage System

### **Major Services & Activities**

### Sanitary Sewerage System Maintenance

- Maintain and operate the Region's Sewage Collection Systems to ensure safe and efficient treatment of effluent.
- Prevent public health hazards and inconvenience through uninterrupted services.
- Installation and servicing (cleaning and repairing) of sanitary sewer service connections and maintenance holes.
- Maintain all programs for compliance with Ministry of the Environment and Climate Change Acts and Regulations.
- Enforcement of the Sewer-Use By-law 55-2013.

### Water Pollution Control Plants -Treatment and Services

- Plan, design and construct sanitary sewerage infrastructure.
- Protect the water environment.
- Operate and maintain all water pollution control plants and pumping stations for the Region, and treatment of sanitary sewage ensuring effluent meets or exceeds all Ministry of the Environment and Climate Change and regulatory discharge requirements.
- Operate and maintain the Regional Environmental Laboratory for the water and wastewater monitoring needs of the Regions of Durham and York, area municipalities and private clients.
- Operate and maintain the Duffin Creek WPCP for Durham and York Regions.

# The following information highlights the Department's focus on the Durham Region Strategic Plan:

**Strategic Goal C.2** - Protect, enhance and where appropriate restore significant water resources, agricultural land, natural heritage and environmentally sensitive areas.

### **Key Deliverables**

**Responsibility - Co-Lead** 

Continue to protect the Region's drinking water supply (source water protection)

### STRATEGIC PLANNING



### 2018 Business Plan

Works - Sanitary Sewerage System

**Strategic Goal C.4** - Demonstrate leadership in sustainable asset management and environmentally friendly municipal practices.

### **Key Deliverables**

### **Responsibility - Co-Lead**

 Plan, forecast and manage provision, operation, maintenance and capital costs for existing and new infrastructure

**Strategic Goal C.5** - Work more closely with local municipalities and other partners to manage growth through effective, progressive and integrated long-term planning.

### **Key Deliverables**

### **Responsibility - Co-Lead**

- Identify opportunities to improve the planning and approval process to promote alignment and integration with area municipalities
- Continue to offer planning support to local municipalities to ensure compliance with Regional and Provincial plans

Strate	gic Goals
Goal	Description Responsibility - Support
A.1	Propel the business and investment climate forward in Durham Region to enable more local employment.
B.3	Cultivate strong, safe and secure communities and healthy workplaces.
C.1	Invest in efforts to mitigate and adapt to climate change to build resiliency across the region.
C.5	Works more closely with local municipalities and other partners to manage growth through effective, progressive and integrated long-term planning.
D.1	Deliver Regional services in a financially prudent and sustainable manner.
D.2	Foster awareness of Regional programs and services.
D.3	Improve communication and collaboration across the Region and in particular with local municipalities.
D.4	Promote a culture of openness and encourage public engagement in governance and decision making.
D.5	Demonstrate accountability and transparency by measuring performance and reporting on results.
D.6	Invest in the organization by attracting and retaining a skilled and diverse workforce.
D.7	Focus resources on continuous improvement and innovation.



## 2018 Business Plan

Works - Sanitary Sewerage System

Ву	Program	20	17		2018	
	(¢ 000la)	Estimated	Approved	Base	Program	Proposed
	(\$,000's)	Actuals	Budget	Budget	Change	Budget
Exp	ense Programs	\$	\$	\$	\$	\$
OPE	RATIONS:					
1	Cleaning, Repairs and					
	Maintenance Holes	1,797	1,710	1,730	295	2,025
2	Sewer Connections	2,457	2,429	2,455	(56)	2,399
3	Depot Operations	2,902	3,003	3,064	(48)	3,016
	Subtotal	7,156	7,142	7,249	191	7,440
PLA	NTS:					
4	WPCPs and Pumping Stations	21,952	23,776	22,080	469	22,549
5	Duffin Creek WPCP					
	(a) Management Committee	3,206	3,447	3,194	(100)	3,094
	(b) Duffin Creek Plant	23,929	27,568	25,741	(10)	25,731
	(c) Duffin Creek Tech Support	208	200	207	62	269
	(d) Duffin Creek Administration	2,604	2,640	2,682	-	2,682
	(e) Duffin Creek Facility	1,967	1,843	1,620	199	1,819
	(f) York Contributions	(25,579)	(28,641)	(26,796)	(168)	(26,964)
	(g) Phosphorous Reduction					
	Field Study (Durham Portion)	103	-	_	39	39
	Total Duffin Creek WPCP	6,438	7,057	6,648	22	6,670
	Subtotal	28,390	30,833	28,728	491	29,219
CON	MON SERVICES:					
6	Regional Environmental					
	Laboratory	158	-	-	-	-
7	Engineering and Staff Support	5,410	5,615	5,763	32	5,795
8	Facilities Management	6,622	6,551	6,484	321	6,805
9	Administration	256	301	307	-	307
10	Headquarters Shared Cost	1,029	1,029	1,050	-	1,050
	Subtotal	13,475	13,496	13,604	353	13,957
	Total Operating Program					
	Expenses	49,021	51,471	49,581	1,035	50,616



## 2018 Business Plan

Works - Sanitary Sewerage System

By Program	20	17		2018	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
(\$,000 \$)	Actuals	Budget	Budget	Change	Budget
11 Tangible Capital Assets:					
1S Duffin Creek WPCP - New	109	109	-	566	566
2S - Replacement	1,441	1,441	1,313	-	1,313
3S Environmental Lab - New	40	40	-	-	-
4S - Replacement	315	315	480	-	480
5S Facilities Management - New	25	25	-	523	523
6S - Replacement	434	434	73	1,318	1,391
7S Fleet/Equipment - New	1,022	1,022	-	191	191
8S - Replacement	304	304	201	269	470
9S Construction of Municipal					
Services	19,443	19,443	19,443	516	19,959
Tangible Capital Assets					
Subtotal	23,133	23,133	21,510	3,383	24,893
Tangible Capital Assets Revenue & 10S Duffin Creek WPCP -	Recoveries:				
TCA Revenue from York	(1,246)	(1,246)	(1,021)	(437)	(1,458)
11S Environmental Lab - TCA					
Revenue from York	(78)	(78)	(10)	-	(10)
12S Environmental Lab - Recovery					
Reserve/Reserve Fund	(200)	(200)	(460)	-	(460)
Tangible Capital Assets					
Revenue & Recoveries Subtotal	(1,524)	(1,524)	(1,491)	(437)	(1,928)
Net Tangible Capital Assets	21,609	21,609	20,019	2,946	22,965
Net Program Expenses	70,630	73,080	69,600	3,981	73,581
			(\$3,480)		
Summary of Increase (Decrea	se)	<b>—</b>	-4.76%		\$501
				<b></b>	0.69%

### **PROGRAM SUMMARY**



## 2018 Business Plan

Works - Sanitary Sewerage System

### **Summary of Base Budget Changes**

	\$	Comments
Salaries & Benefits	1,004	Economic increases
Salaries & Benefits	66	Annualization (1.076 positions)
Operating Expenses	(4,195)	Utility savings
Operating Expenses	1,329	Inflationary increases (other)
Fees & Service Charges	(4)	Inflationary increases
Minor Assets & Equipment	37	Increased requirements
Major Repairs & Renovations	(127)	Remove one-time items (various)
Tangible Capital Assets	(1,590)	Remove one-time items (various)
	(3,480)	



## **2018 Program Changes**

Works - Sanitary Sewerage System

\$ 000's

### **Maintenance Operations**

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

• Increases to reflect actual costs and forecasted requirements related to sewer rehabilitation and repairs (\$134k), repairs at spot locations (\$17k), maintenance hole repairs (\$141k), and other related activities (\$3k)

295

295

### **Sewer Connections**

 Decrease to reflect actual costs and forecasted requirements related to connection cleaning (-\$22k) and connection repairs (-\$34k)

(56)

(56)

### **Depot Operations**

- Proposed new positions representing 0.523 FTEs, to start July 1st, 2018:
  - One (1) Project Manager in Maintenance Operations to assist the Manager in the delivery of services and to ensure compliance with changing standards and regulations. This position will be shared with General Tax and Water Supply (Annualized impact is \$50.2k) (0.333 FTE)

25

One (1) Maintenance Clerk at Orono Depot to provide clerical support to the depot. This
position will be shared with General Tax and Water Supply (Annualized impact is \$16.5k)
(0.190 FTE)

8

 Decrease in overhead supervision based on review of historical actuals and forecasted requirements

(75)

 Adjustments to reflect actuals costs and forecasted requirements in various accounts related to Depot Operations activities

(48)

(6)

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

### **Newcastle WPCP**

• Decrease in chemical requirements based on actual costs and forecasted requirements

(47)

Adjustments to reflect actual costs and forecasted requirements in various accounts

(/) **(54)** 

### **Courtice WPCP**

 Increase in sludge haulage and disposal costs due to flow diversions from other plants during their system improvement activities

161

Adjustments to various accounts due to a comprehensive review of requirements, including; overtime (-\$6k), program materials and supplies (-\$15k), chemicals (-\$14k), equipment maintenance and repairs (-\$5k), Environmental Lab fees (-\$8k), sludge disposal (-\$8k), and various other accounts (-\$23k)

(79)

Major Repairs and Renovations including a digester cleanout

250 **332** 



## **2018 Program Changes**

Works - Sanitary Sewerage System

\$ 000's

### Water Pollution Control Plants and Pumping Stations (continued)

vater Politition Control Plants and Pumping Stations (Continued)	
Harmony Creek WPCP	
<ul> <li>Decrease in sludge disposal costs due to reduction in biosolids output during Phase 3 major maintenance works</li> </ul>	(39)
<ul> <li>Adjustments to various accounts to reflect actual costs and forecasted requirements, including; electrical and instrumentation parts (\$16k) and various other accounts (-\$3k)</li> </ul>	13
	(26)
Corbett Creek WPCP	
<ul> <li>Reduction in fleet maintenance and fuel costs based on review of historical actuals and forecasted requirements</li> </ul>	(80)
<ul> <li>Increase in sludge haulage costs based on review of historical actuals and forecasted requirements</li> </ul>	50
<ul> <li>Adjustments to various accounts to reflect actual costs and forecasted requirements, including; electrical and instrumentation parts (\$22k), chemicals (-\$36k), equipment maintenance and repairs (\$40k), Environmental Lab fees (-\$7k), and various other accounts (-\$30k)</li> </ul>	(11)
	(41)
Uxbridge, Scugog, Brock WPCP	
<ul> <li>Increase in hydro costs for the Nonquon WPCP expansion</li> </ul>	173
<ul> <li>Reduction in fleet maintenance and fuel costs based on review of historical actuals and forecasted requirements</li> </ul>	(43)
<ul> <li>Decreases in equipment maintenance and repairs (-\$40k) and sludge haulage (-\$55k) and disposal (-\$33k) based on a comprehensive review of actual costs and forecasted requirements</li> </ul>	(128)
<ul> <li>Major Repairs and renovations including a clarifier gearbox replacement</li> </ul>	47
<ul> <li>Adjustments to various accounts to reflect actual costs and forecasted requirements</li> </ul>	(58)
	(9)
Port Darlington WPCP	
<ul> <li>Increase in sludge haulage costs based on review of historical actuals and forecasted requirements</li> </ul>	51
<ul> <li>Decreases to various accounts due to a comprehensive review of requirements, including; electrical and instrumentation parts (-\$14k), program materials and supplies (-\$16k), chemicals (-\$98k), equipment maintenance and repairs (-\$10k), Environmental Lab fees (-\$16k), and various other accounts (-\$26k)</li> </ul>	(180)
	(129)



## **2018 Program Changes**

Works - Sanitary Sewerage System

\$ 000's

## Water Pollution Control Plants and Pumping Stations (continued)

water i onution control i faints and i uniping stations (continued)	
Pumping Stations	
<ul> <li>Increase in odour chemicals to reduce hydrogen sulfide potential at Carruthers Creek Sewage Pumping Station (SPS)</li> </ul>	400
<ul> <li>Adjustments to reflect actual costs and forecasted requirements in various accounts</li> </ul>	(4)
	396
Total Water Pollution Control Plants and Pumping Stations	469
Duffin Creek WPCP	
<ul> <li>Reallocation of resources from Engineering and Staff Support based on the nature of work performed (0.330 FTE)</li> </ul>	61
<ul> <li>Decrease in consulting fees based on forecasted requirements</li> </ul>	(100)
<ul> <li>Increase in plant SCADA costs based on review of historical actuals and forecasted requirements</li> </ul>	137
<ul> <li>Increase in electrical costs due to new incinerator and adherence to electrical safety program</li> </ul>	64
<ul> <li>Decrease in chemical costs based on review of actual costs and forecasted requirements</li> </ul>	(54)
<ul> <li>Increase in purchased services for annual pump inspections</li> </ul>	255
<ul> <li>Increase in equipment maintenance and repairs for annual pump repairs</li> </ul>	100
<ul> <li>Decreases to various accounts due to a comprehensive review of requirements, including; shift differential (-\$36k), program materials and supplies (-\$85k), purchased services (-\$75k), cleaning and laundry (-\$27k), and equipment maintenance and repairs (-\$96k)</li> </ul>	(319)
<ul> <li>Durham portion of costs related to phosphorous reduction field study activities</li> </ul>	39
<ul> <li>Decrease in sludge disposal recovery due to decreased volume being shipped from other WPCPs</li> </ul>	86
<ul> <li>Increase in sewage dumping fees collected based on review of historical actuals</li> </ul>	(156)
Decrease in facilities costs based on review of historical actuals and new maintenance contracts	(37)
<ul> <li>Adjustments to reflect actual costs and forecasted requirements in various accounts</li> </ul>	(53)
<ul> <li>Increase for major renovations, including; excavation and cleaning of drainage swales (\$183k), installation of heat relief fans (\$33k), and backup cooling equipment for the SCADA room (\$20k)</li> </ul>	236
<ul> <li>Increase in recovery from York Region due to increase in operating expenses</li> </ul>	(168)
<ul> <li>Recovery related to phosphorous reduction field study activities</li> </ul>	(69)
	22
Regional Environmental Laboratory	
Decrease in small tools and equipment due to assessment of ongoing needs	(E7)
<ul> <li>Decrease in small tools and equipment due to assessment of ongoing needs</li> <li>Decrease in recoveries from internal sources based on a review of historical actuals and</li> </ul>	(57)
forecasted requirements	61
Increase in revenue from external customers due to enhanced testing requirements	(247)
<ul> <li>Adjustments to reflect actual costs and forecasted requirements in various accounts</li> </ul>	(23)
Decrease in recoveries from operations based on forecasted expenditures	266 <sup>°</sup>
	-



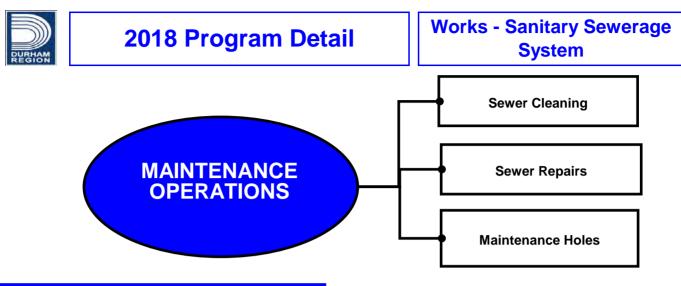
## **2018 Program Changes**

Works - Sanitary Sewerage System

\$ 000's

Engineering and Staff Support	
<ul> <li>Proposed new position representing 0.257 FTE, to start July 1st, 2018:</li> </ul>	
<ul> <li>One (1) Inspector 3 in Construction to inspect plant projects to ensure adherence to design,</li> </ul>	
review as-built drawings and to provide quality control. This position will be shared with	14
General Tax and Water Supply (Annualized impact is \$27.3k) (0.257 FTE)	
<ul> <li>Reallocation of resources to Duffin Creek WPCP based on the nature of work performed</li> </ul>	(31)
(-0.170 FTE)	(31)
<ul> <li>Increase in temporary employee funding to support records management initiatives, shared with</li> </ul>	18
General Tax, Water Supply, and Solid Waste Management	.0
• Increase in departmental communications support provided through Corporate Communications	14
related to Sanitary Sewerage initiatives in the Works Department	
Increase in consulting fees for various initiatives, including; WaterTrax data management,      Increase in consulting fees for various initiatives, including; WaterTrax data management,      Increase in consulting fees for various initiatives, including; WaterTrax data management,      Increase in consulting fees for various initiatives, including; WaterTrax data management,      Increase in consulting fees for various initiatives, including; WaterTrax data management,      Increase in consulting fees for various initiatives, including; WaterTrax data management,      Increase in consulting fees for various initiatives, including; WaterTrax data management,      Increase in consulting fees for various initiatives, including; WaterTrax data management,      Increase in consulting fees for various initiatives, including; WaterTrax data management,      Increase in consulting fees fees fees fees fees fees fees fee	44
University of Toronto Cyano Toxins study and algae sampling	(07)
<ul> <li>Adjustments to reflect actual costs and forecasted requirements in various accounts</li> </ul>	(27) <b>32</b>
	32
Facilities Management	
◆ Proposed new positions representing 0.536 FTE, to start July 1, 2018:	
One (1) Policy Analyst to develop and analyze long term facility needs, and assist in planning	
for capital work to sustain Regional facility assets. This position is shared with General Tax,	16
Water Supply and Solid Waste Management (Annualized impact is \$32.3k) (0.268 FTE)	
One (1) Project Coordinator to provide updated base building drawings and manage As-      This is the provide updated base building drawings and manage As-	
Built/Record drawings for Regional facilities. This position is shared with General Tax, Water	13
Supply and Solid Waste Management (Annualized impact is \$26.5k) (0.268 FTE)	
Decrease in hoist related expenses due to change in service contract	(23)
• One time increase in professional fees to fund site master plans at the Ajax, Oshawa, and	31
Sunderland Depots	45
• Increase in insurance costs related to Port Darlington and Nonquon WPCPs expansion projects	45
• Major repairs and renovations of assets utilized in the provision of services, including: floor drain	
repairs (\$15k) at Ajax Depot; installing electric door openers (\$10k) at Oshawa/Whitby Depot; a coil replacement (\$28k) at Courtice WPCP; overhead door repairs (\$28k) at Harmony Creek	
WPCP; door repairs (\$19k) at Corbett Creek WPCP; emergency lighting (\$21k) at Carruthers	
Creek SPS; and a lighting retrofit (\$103k) at Lake Simcoe WPCP	224
<ul> <li>Adjustments to various accounts to reflect actual costs and forecasted requirements</li> </ul>	15
Adjustifients to various accounts to reflect actual costs and forecasted requirements	321
Tangible Capital Assets	<u> </u>
Tangible Capital Assets	
<ul> <li>Program changes include the acquisition of new assets and the replacement of assets related to</li> </ul>	
depot operations, plant and facilities management, fleet, equipment and construction projects,	
including the construction of municipal services. Refer to capital schedules for detailed	2,946
information	
Total Program Changes	3,981

# PROGRAM 1 CLEANING, REPAIRS AND MAINTENANCE HOLES



### **Purpose:**

- To maintain and operate the Region's Sanitary Sewerage Collection Systems in an efficient and cost effective manner for the Region's approximately 168,724 customers
- To prevent public health hazards and inconvenience through interruption of service

### **Description of Program Activities:**

- The Region maintains and operates 2,067 km of gravity sanitary sewer
- 1,664 km of sanitary sewers up to 300 mm in size are cleaned by hydrojet once every 2 years
- 234 km of sanitary sewers from 350 mm to 600 mm in size are cleaned once every 4 years
- 125 km of sanitary sewers over 600 mm in size are cleaned as required
- There are 92 siphons in the Region which are cleaned once every year either by flushing or dragging operations
- Damaged sanitary sewers are repaired at spot locations as required
- Maintenance holes are budgeted to have major repairs or minor repairs made as required

### **Description of Program Resources:**

 Resources delivering program services are shared with all activity based maintenance activities in the Water Supply, Sanitary Sewerage and General Tax operating budgets. Resource utilization is charged to the activity based programs through maintenance work orders

### **Performance Measurements**

- Sanitary sewers up to 300 mm in size are cleaned by hydrojet once every 2 years
- Sanitary sewers from 350 mm to 600 mm in size are cleaned once every 4 years
- Sanitary sewers over 600 mm in size are cleaned as required
- Syphons cleaned once each year

# PROGRAM 1 CLEANING, REPAIRS AND MAINTENANCE HOLES



## 2018 Program Detail

Works - Sanitary Sewerage System

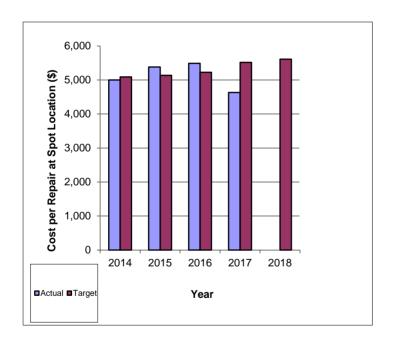
### **Units of Service:**

- a) Cleaning by Hydrojet (km)
- b) Repairs at Spot Locations
- c) Major Maintenance Hole Repairs

Target	Proj Actual	Target
2017	2017	2018
834	775	840
21	23	24
381	473	489

Cleaning of sanitary sewers by hydrojet is accomplished by Regional forces and by contracted services. All problem areas are cleaned using Regional forces. Cleaning by hydrojet to meet service levels is accomplished through contracted services.

### **Efficiency:**



### Cost per Repair at Spot Location

Cost per unit includes all labour, materials and equipment utilized in the repair activities.

# PROGRAM 1 CLEANING, REPAIRS AND MAINTENANCE HOLES



## 2018 Program Detail

Works - Sanitary Sewerage System

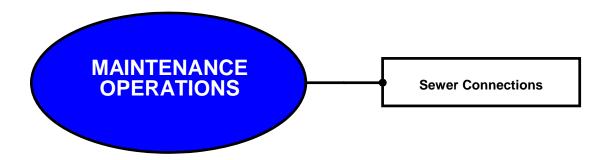
<b>Detailed Cost of Program:</b>	20	17	2018		
(\$,000's)	<b>Estimated</b>	Approved	Base	Program	Proposed
(\$,000 \$)	Actuals	Budget	Budget	Change	Budget
Cleaning by Hydrojet Cleaning any Method Non -	631	663	668	-	668
Programmed	248	284	288	3	291
Rehab - Repair - Contractor	178	116	116	134	250
Repairs at Spot Location	107	116	117	17	134
Major Maintenance Hole Repair	633	531	541	141	682
Net Program Expenses	1,797	1,710	1,730	295	2,025

### PROGRAM 2 SEWER CONNECTIONS



## 2018 Program Detail

Works - Sanitary Sewerage System



### **Purpose:**

- To maintain and operate the Region's Sanitary Sewerage Collection Systems in an efficient and cost effective manner for the Region's approximately 168,724 customers
- To prevent public health hazards and inconvenience through interruption of service

### **Description of Program Activities:**

- Cleaning of sanitary sewer service connections serving residential and non-residential buildings
- New sanitary sewer service connections installed as required
- Sanitary sewer service connections repaired or replaced as required

### **Description of Program Resources:**

 Resources delivering program services are shared with all activity based maintenance activities in the Water Supply, Sanitary Sewerage and General Tax operating budgets. Resource utilization is charged to the activity based programs through maintenance work orders

# PROGRAM 2 SEWER CONNECTIONS



## 2018 Program Detail

Works - Sanitary Sewerage System

### **Performance Measurements:**

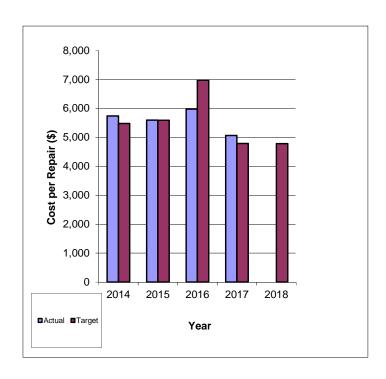
• Service connections are cleaned and repaired/replaced as stipulated in By-law #90-2003

### **Units of Service**

- a) Unscheduled Cleaning of Sewer Connections
- b) Connection Repairs

Target 2017	Proj Actual 2017	Target 2018
1,226	1,073	1,089
422	408	419

### **Efficiency**



### **Cost Per Connection Repair**

Cost per unit includes all labour, materials and equipment utilized in the repair activities.

# PROGRAM 2 SEWER CONNECTIONS

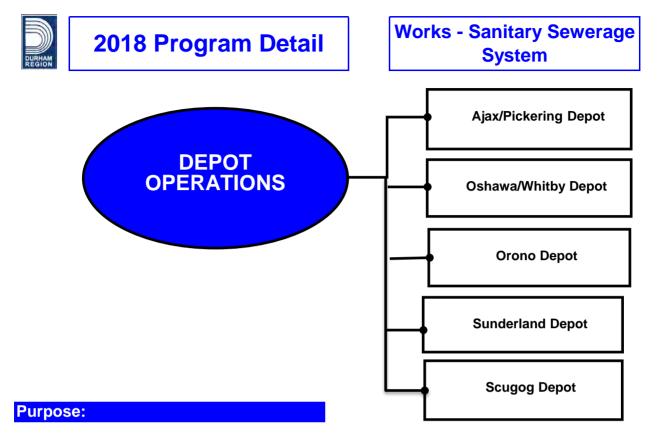


## **2018 Program Detail**

Works - Sanitary Sewerage System

<b>Detailed Cost of Program:</b>	20	17	2018			
(\$,000's)	Estimated Approved		Base	Program	Proposed	
(ψ,σσσσ)	Actuals	Budget	Budget	Change	Budget	
Connection Cleaning Connection Repair	390 2,067	408 2,021	416 2,039	(22) (34)	394 2,005	
Net Program Expenses	2,457	2,429	2,455	(56)	2,399	

# PROGRAM 3 DEPOT OPERATIONS



To provide leadership and direction to the Works depots, effectively monitoring and managing
activities including sewer cleaning, sewer repairs, sewer connections, and maintenance hole repairs,
ensuring compliance with approved budgets and policy guidelines

### **Description of Program Activities:**

- To provide administrative services required to support depot related maintenance activities (i.e. sewer cleaning, repairs, maintenance holes, sewer connections)
- Maintain proper inventory records

### **Description of Program Resources:**

2018 Full Time Employees 7.9832017 Full Time Employees 7.460

One (1) Project Manager in Maintenance Operations to assist the Manager in the delivery of services and to ensure compliance with changing standards and regulations. This position will be shared with General Tax and Water Supply (0.333 FTE)

One (1) Maintenance Clerk at Orono Depot to provide clerical support to the depot. This position will be shared with General Tax and Water Supply (0.190 FTE)



# 2018 Program Detail

Works - Sanitary Sewerage System

<b>Detailed Cost of Program:</b>	20	17		2018	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
	Actuals	Budget	Budget	Change	Budget
Operating Expenses					
Personnel Expenses	877	883	906	41	947
Payroll Maintenance Management - Charge	1,191	1,299	1,338	(75)	1,263
Payroll Maintenance Management - Recovery	(8)	(23)	(24)	11	(13)
<b>Net Personnel Expenses</b>	2,060	2,159	2,220	(23)	2,197
Personnel Related	173	182	182	-	182
Communications	81	93	92	(14)	78
Supplies	324	303	303	(7)	296
Materials & Services	97	97	97	15	112
<b>Buildings &amp; Grounds Operations</b>	60	60	60	-	60
Equipment Maintenance & Repairs	1	1	1	_	1
Vehicle Operations	255	258	258	(12)	246
Professional Services	1	1	1	(12)	1
Leased Facilities Expenses	4	4	4	_	4
Minor Assets & Equipment	-	· -	2	_	2
Contribution to Reserve &					
Reserve Funds	5	5	5	-	5
Operating Expenses Subtotal	3,061	3,163	3,225	(41)	3,184
Transfers from Related Entities					
NextGen Charges	12	11_	11	-	11_
Transfers from Related Entities		_			
Subtotal	12	11	11	-	11
Inter-Departmental Transfers & Recoveries					
Recovery from Fleet	(102)	(103)	(104)		(104)
Inter-Departmental Transfers &					
Recoveries Subtotal	(102)	(103)	(104)	-	(104)
Gross Operating Expenses	2,971	3,071	3,132	(41)	3,091

# PROGRAM 3 DEPOT OPERATIONS



## 2018 Program Detail

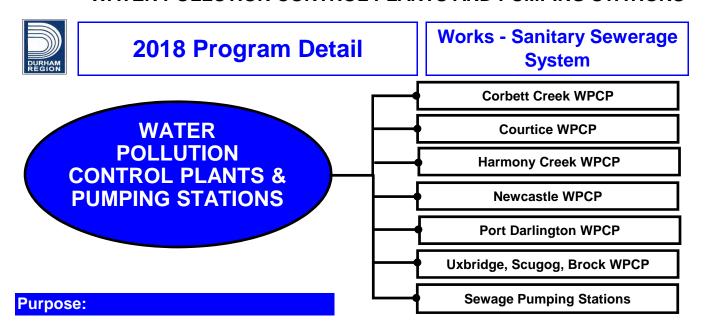
Works - Sanitary Sewerage System

<b>Detailed Cost of Program:</b>	20	17		2018	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
(ψ,000 δ)	Actuals	Budget	Budget	Change	Budget
Tangible Capital Assets					
New	102	102		121	121
Total Tangible Capital Assets	102	102		121	121
Total Expenses	3,073	3,173	3,132	80	3,212
Revenues					
Fees & Service Charges	(63)	(61)	(61)	(8)	(69)
Sundry Revenue	(6)	(7)	(7)	1	(6)
Total Revenues	(69)	(68)	(68)	(7)	(75)
Net Program Expenses	3,004	3,105	3,064	73	3,137

<sup>\*</sup> Tangible Capital Assets are stated separately on the Program Summary

Net Program Expenses Per Above	3,137
Less: Tangible Capital Assets	(121)
Net Operating Program Expenses Per Program Summary	3,016

# PROGRAM 4 WATER POLLUTION CONTROL PLANTS AND PUMPING STATIONS



- To treat sanitary sewage and ensure that it meets or exceeds all Ministry of Environment and Climate Change (MOECC) discharge requirements
- To operate and maintain the 52 sanitary sewage pumping stations that service the City of Pickering, Town of Ajax, Town of Whitby, the City of Oshawa, the Municipality of Clarington, and the Townships of Uxbridge, Scugog, and Brock
- To comply with all MOECC Environmental Compliance Approvals as issued for each facility
- To maintain a safe work environment by strictly adhering to all Ministry of Labour and Regional Departmental and Corporate safety policies

### **Description of Program Activities:**

- Operate and maintain the Water Pollution Control Plants and Pumping Stations to treat flows
- Collect and analyze samples
- Administer programs required within the MOECC Environmental Compliance Approval
- Maintain a scheduled cleaning and maintenance program based on each pumping station's flow and needs
- Keep a record of flows and monitor future requirements
- Maintain and upgrade mechanical and electrical equipment as required
- Take samples for lab analysis for the purpose of sewer-use monitoring
- Implement new technology to increase reliability and ensure fail safe operation at all times and to ensure a continued cost effective operation

### **Description of Program Resources:**

2018 Full Time Employees 56.7502017 Full Time Employees 56.750

# PROGRAM 4 WATER POLLUTION CONTROL PLANTS AND PUMPING STATIONS



## 2018 Program Detail

Works - Sanitary Sewerage System

### **Performance Measurements:**

### **Water Pollution Control Plants**

- Cost per megalitre of sanitary sewage treated
- Percentage of flow by-passing secondary treatment
- Number of emergency callouts

### Pumping Stations

- Maintain a scheduled cleaning and maintenance program based on each station's flow and needs
- Keep a record of flows and monitor future requirements
- Maintain and upgrade mechanical and electrical equipment as required
- Take samples for lab analysis for the purpose of sewer use monitoring
- Implement new technology to increase reliability and ensure fail safe operation at all times and to ensure a continued cost effective operation

### **Units of Service**

- a) Sanitary Sewage Treated at all Plants (measured per megalitre)
- b) Percentage of Flow By-passing Secondary Treatment
- c) Number of Emergency Callouts

Target 2017	Proj Actual 2017		Target 2018
58,301	51,214		48,500
0	0.25%	*	0
330	380		330

<sup>\*</sup> Resulting from extreme weather on three days which caused the need to bypass secondary treatment at Harmony Creek WPCP and Corbett Creek WPCP, as the flows exceeded the maximum peak demand of the plants on those days

### **Pumping Stations**

- a) Number of Emergency Callouts
- b) Number of Overflows

Target 2017	Proj Actual 2017	Target 2018
200	180	190
0	0	0

# PROGRAM 4 WATER POLLUTION CONTROL PLANTS AND PUMPING STATIONS

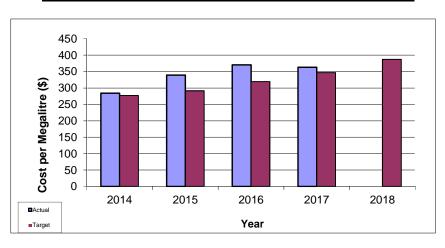


## **2018 Program Detail**

Works - Sanitary Sewerage System

### **Efficiency:**

### Cost per Megalitre of Treated Sanitary Sewerage at WPCPs





# 2018 Program Detail

Works - Sanitary Sewerage System

<b>Detailed Cost of Program:</b>	20	17		2018	
(\$ 000¦a)	Estimated	Approved	Base	Program	Proposed
(\$,000's)	Actuals	Budget	Budget	Change	Budget
Operating Expenses					
Personnel Expenses	7,127	6,782	6,999	21	7,020
Personnel Related	139	171	171	(21)	150
Communications	131	147	147	(27)	120
Supplies	1,041	1,118	1,118	(4)	1,114
Utilities	5,711	7,006	5,028	173	5,201
Medical Care	-	1	1	(1)	-
Chemicals	1,460	1,454	1,455	204	1,659
Computer Maintenance &					
Operations	65	88	88	(16)	72
Materials & Services	187	284	284	(48)	236
Equipment Maintenance &				, ,	
Repairs	510	869	868	(16)	852
Vehicle Operations	268	503	503	(121)	382
Professional Services	35	51	51	(51)	-
Contracted Services	3,388	2,440	2,440	199	2,639
Minor Assets & Equipment	-	-	33	-	33
Major Repairs & Renovations	-	-	-	297	297
Operating Expenses Subtotal	20,062	20,914	19,186	589	19,775
Inter-Departmental Transfers & Recoveries					
Works - SCADA Group Charge Works - Regional Environmental	397	657	683	(9)	674
Lab Charge Works - Sludge Disposal	287	438	438	(33)	405
Charge Works - Biosolids Services	1,147	1,626	1,626	(86)	1,540
Charge Works - Ajax WSP-Labour	228	278	284	(12)	272
Charge	63	39	39	47	86
Recovery DRPS - Maple Grove Pumping Station	(3)	(6)	(6)	-	(6)
Inter-Departmental Transfers &					
Recoveries Subtotal	2,119	3,032	3,064	(93)	2,971
<b>Gross Operating Expenses</b>	22,181	23,946	22,250	496	22,746

# PROGRAM 4 WPCPs AND PUMPING STATIONS



## 2018 Program Detail

Works - Sanitary Sewerage System

<b>Detailed Cost of Program:</b>	20	17		2018	
(\$,000,\$)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget
Tangible Capital Assets					
New	362	362	-	42	42
Replacement	204	204	-	269	269
Total Tangible Capital Assets	566	566		311	311
Total Expenses	22,747	24,512	22,250	807	23,057
Revenues					
Fees & Service Charges	(223)	(158)	(158)	(20)	(178)
Rents	(3)	(3)	(3)	(1)	(4)
Sundry Revenue	(3)	(9)	(9)	(6)	(15)
Total Revenues	(229)	(170)	(170)	(27)	(197)
Net Program Expenses	22,518	24,342	22,080	780	22,860

<sup>\*</sup> Tangible Capital Assets are stated separately on the Program Summary

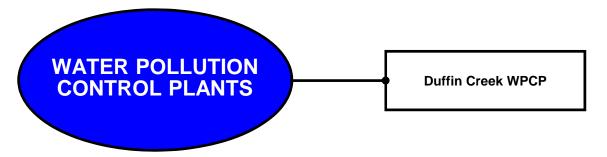
Net Program Expenses Per Above	22,860
Less: Tangible Capital Assets	(311)
Net Operating Program Expenses Per Program Summary	22,549

# PROGRAM 5 DUFFIN CREEK WPCP



2018 Program Detail

Works - Sanitary Sewerage System



### **Purpose:**

 To provide safe and cost effective wastewater treatment for customers in Durham Region (Ajax/Pickering) and customers in York Region which meets or exceeds all Ministry of Environment and Climate Change (MOECC) discharge requirements

### **Description of Program Activities:**

- ◆ To operate and maintain the Duffin Creek WPCP for Durham and York Regions
- The program involves the cost efficient, safe and environmentally responsible operation and maintenance of one of Ontario's largest water pollution control plants
- Administer programs required within the MOECC Certificate of Approval / Environmental Compliance Approval
- To provide training and a safe work environment for staff

### **Description of Program Resources:**

2018 Full Time Employees 81.8602017 Full Time Employees 81.530

Reallocation of resources from Water and Sanitary Sewerage Engineering and Staff Support (0.330 FTE)



## 2018 Program Detail

Works - Sanitary Sewerage System

### **Performance Measurements:**

- Cost per megalitre of sanitary sewage treated
- Number of emergency callouts
- Number of days annually, during which the quality of a measured effluent parameter was superior to the stated objective as identified in the MOECC Certificate of Approval for this facility
- Number of days annually, during which the quality of a measured effluent parameter was superior to the stated compliance limit as identified in the MOECC Certificate of Approval for this facility
- Cost of operation of the facility

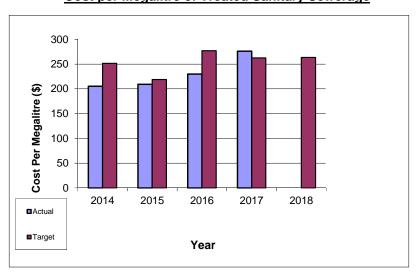
### **Units of Service**

- a) Sanitary Sewage Treated at the Plant (measured per megalitre)
- b) Number of Emergency Callouts

Target 2017	Proj Actual 2017	Target 2018
25,500	22,000	23,500
150	150	150

### **Efficiency:**

### Cost per Megalitre of Treated Sanitary Sewerage



# PROGRAM 5 SUMMARY DUFFIN CREEK WPCP



## 2018 Business Plan

Works - Sanitary Sewerage System

By Program	20	17		2018	
(\$,000's)	<b>Estimated</b>	Approved	Base	Program	Proposed
(ψ,000 3)	Actuals	Budget	Budget	Change	Budget
5 Duffin Creek WPCP	-				
(a) Management Committee	3,206	3,447	3,194	(100)	3,094
(b) Duffin Creek Plant	23,929	27,568	25,741	(10)	25,731
(c) Duffin Creek Tech Support	208	200	207	62	269
(d) Duffin Creek Administration	2,604	2,640	2,682	-	2,682
(e) Duffin Creek Facility	1,967	1,843	1,620	199	1,819
(f) York Contributions	(25,579)	(28,641)	(26,796)	(168)	(26,964)
(g) Phosphorous Reduction					
Field Study (Durham Portion)	103			39	39
Total Duffin Creek WPCP	6,438	7,057	6,648	22	6,670

# PROGRAM 5A DUFFIN CREEK MANAGEMENT COMMITTEE



## 2018 Program Detail

Works - Sanitary Sewerage System

<b>Detailed Cost of Program:</b>	20	17		2018	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
(ψ,000 3)	Actuals	Budget	Budget	Change	Budget
Operating Expenses					
Personnel Expenses	40	42	43	-	43
Personnel Related	3	1	1	1	2
Supplies	-	1	1	(1)	-
Professional Services	38	250	250	(100)	150
Financial Expenses	291	290	297	-	297
Property Taxes	2,852	2,881	2,620	-	2,620
<b>Gross Operating Expenses</b>	3,224	3,465	3,212	(100)	3,112
Revenues					
Rents	(18)	(18)	(18)	-	(18)
Revenue from York	(2,145)	(2,271)	(2,095)	50	(2,045)
Total Revenues	(2,163)	(2,289)	(2,113)	50	(2,063)
Net Program Expenses	1,061	1,176	1,099	(50)	1,049
Net Program Expenses Per A	Above				1,049
Add: Revenue from York					2,045
Net Operating Program Expe		•	3,094		



<b>Detailed Cost of Program:</b>	20	17		2018	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
(\$,000 \$)	Actuals	Budget	Budget	Change	Budget
Operating Expenses					
Personnel Expenses	8,679	8,584	9,074	(20)	9,054
Personnel Related	186	207	207	(33)	174
Communications	59	92	92	(25)	67
Supplies	1,326	1,342	1,343	(22)	1,321
Utilities	8,511	10,952	8,749	-	8,749
Chemicals	3,512	3,680	3,680	(54)	3,626
Materials & Services	1,993	2,125	2,124	273	2,397
Equipment Maintenance &					
Repairs	1,110	1,287	1,287	(7)	1,280
Vehicle Operations	88	. 88	. 88	22	110
Professional Services	132	350	350	28	378
Financial Expenses	356	356	364	_	364
Property Taxes	18	18	18	_	18
Major Repairs & Renovations	125	125	-	_	-
Contribution to Reserve &					
Reserve Funds	400	400	400	_	400
Operating Expenses Subtotal	26,495	29,606	27,776	162	27,938
Inter-Departmental Transfers & Recoveries Works - SCADA Group Charge Works - Regional Environmental	546	620	623	(8)	615
Lab Charge Works - Facilities Management	284	400	400	-	400
Charge Recovery - Works - Sludge	40	40	40	(20)	20
Disposal	(1,586)	(1,626)	(1,626)	85	(1,541)
Inter-Departmental Transfers &					
Recoveries Subtotal	(716)	(566)	(563)	57	(506)
Gross Operating Expenses	25,779	29,040	27,213	219	27,432



<b>Detailed Cost of Program:</b>	20	17		2018	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
(ψ,000 3)	Actuals	Budget	Budget	Change	Budget
Tangible Capital Assets					
New	109	109	-	415	415
Replacement	1,136	1,136	700	-	700
TCA Financing from York	(1,009)	(1,009)	(532)	(320)	(852)
Total Tangible Capital Assets	236	236	168	95	263
Total Expenses	26,015	29,276	27,381	314	27,695
Revenues					
Fees & Service Charges	(1,780)	(1,469)	(1,469)	(156)	(1,625)
Sundry Revenue	(70)	(3)	(3)	(4)	(7)
Phosphorous Reduction Field					
Study Recovery	-	-	-	(69)	(69)
Revenue from York	(19,557)	(22,571)	(21,043)	(6)	(21,049)
Total Revenues	(21,407)	(24,043)	(22,515)	(235)	(22,750)
Net Program Expenses	4,608	5,233	4,866	79	4,945

<sup>\*</sup> Tangible Capital Assets are stated separately on the Program Summary

Net Program Expenses Per Above	4,945
Less: Tangible Capital Assets	(263)
Add: Revenue from York	21,049
Net Operating Program Expenses Per Program Summary	25,731



<b>Detailed Cost of Program:</b>	20	17		2018	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
(\$,000 \$)	Actuals	Budget	Budget	Change	Budget
Operating Expenses					
Personnel Expenses	8,602	8,506	8,993	(21)	8,972
Personnel Related	186	207	207	(33)	174
Communications	59	92	92	(25)	67
Supplies	1,315	1,317	1,318	(17)	1,301
Utilities	7,953	10,151	8,191	-	8,191
Chemicals	3,512	3,680	3,680	(54)	3,626
Materials & Services	1,972	2,100	2,099	158	2,257
Equipment Maintenance &					
Repairs	1,076	1,187	1,187	8	1,195
Vehicle Operations	88	88	88	22	110
Professional Services	132	350	350	28	378
Financial Expenses	356	356	364	-	364
Major Repairs & Renovations	125	125	-	-	-
Contribution to Reserve &					
Reserve Funds	400	400	400	-	400
Operating Expenses Subtotal	25,776	28,559	26,969	66	27,035
Inter-Departmental Transfers &					
Recoveries					
Works - SCADA Group Charge	546	620	623	(8)	615
Works - Regional Environmental	004	400	400		400
Lab Charge	284	400	400	-	400
Recovery - Works - Sludge Disposal	(1,586)	(1,626)	(1,626)	85	(1,541)
Inter-Departmental Transfers &	( , /	( //	( , )		( )- /
Recoveries Subtotal	(756)	(606)	(603)	77	(526)
Gross Operating Expenses	25,020	27,953	26,366	143	26,509
Tangible Capital Assets					
New	109	109	-	415	415
Replacement	961	961	700	(225)	700
TCA Financing from York	(834)	(834)	(532)	(320)	(852)
Total Tangible Capital Assets	236	236	168	95	263
Total Expenses	25,256	28,189	26,534	238	26,772

### PROGRAM 5B1 DUFFIN CREEK PLANT - EXCLUDING IPS



## 2018 Program Detail

<b>Detailed Cost of Program:</b>	2017		2018		
(\$,000's)	<b>Estimated</b>	Approved	Base	Program	Proposed
(\$,000 3)	Actuals	Budget	Budget	Change	Budget
Revenues					
Fees & Service Charges	(1,780)	(1,469)	(1,469)	(156)	(1,625)
Sundry Revenue	(70)	(3)	(3)	(4)	(7)
Phosphorous Reduction Field	,	` ,	. ,	. ,	, ,
Study Recovery	-	-	-	(69)	(69)
Revenue from York	(18,798)	(21,484)	(20,196)	70	(20,126)
Total Revenues	(20,648)	(22,956)	(21,668)	(159)	(21,827)
Net Program Expenses	4,608	5,233	4,866	79	4,945

### PROGRAM 5B2 DUFFIN CREEK PLANT - INFLUENT PUMPING STATION



## 2018 Program Detail

<b>Detailed Cost of Program:</b>	20	17		2018	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
	Actuals	Budget	Budget	Change	Budget
Operating Expenses					
Personnel Expenses	77	78	80	1	81
Supplies	11	25	25	(5)	20
Utilities	558	801	559	-	559
Materials & Services	21	25	25	115	140
Equipment Maintenance &				(1-)	
Repairs	34	100	100	(15)	85
Property Taxes	18	18	18	-	18_
Operating Expenses Subtotal	719	1,047	807	96	903
Inter-Departmental Transfers & Recoveries Works - Facilities Management Charge	40	40	40	(20)	20
Inter-Departmental Transfers &					
Recoveries Subtotal	40	40	40	(20)	20
Gross Operating Expenses	759	1,087	847	76	923
Tangible Capital Assets					
Replacement	175	175	-	-	-
TCA Financing from York	(175)	(175)		-	
Total Tangible Capital Assets				-	
Total Expenses	759	1,087	847	76	923
Revenues					
Revenue from York	(759)	(1,087)	(847)	(76)	(923)
Total Revenues	(759)	(1,087)	(847)	(76)	(923)
Net Program Expenses				-	

### PROGRAM 5C DUFFIN CREEK TECH SUPPORT



# 2018 Program Detail

<b>Detailed Cost of Program:</b>	20	2017		2018	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
(φ,000 3)	Actuals	Budget	Budget	Change	Budget
Operating Expenses			'		
Personnel Expenses	204	200	207	60	267
Personnel Related	4	-	-	2	2
<b>Gross Operating Expenses</b>	208	200	207	62	269
Revenues					
Revenue from York	(168)	(162)	(168)	(51)	(219)
Total Revenues	(168)	(162)	(168)	(51)	(219)
Net Program Expenses	40	38	39	11	50
Not Drogram Evpanaga Dar	Abovo				50
Net Program Expenses Per Add: Revenue from York	Above				50 219
Net Operating Program Exp	enses Per Progr	am Summary			269

# PROGRAM 5D DUFFIN CREEK ADMINISTRATION



# 2018 Program Detail

<b>Detailed Cost of Program:</b>	20	17		2018	
(\$,000's)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget
Inter-Departmental Transfers & Recoveries Works - General Administration					
Charge	2,604	2,640	2,682	-	2,682
Inter-Departmental Transfers &		_			
Recoveries Subtotal	2,604	2,640	2,682	-	2,682
Gross Operating Expenses	2,604	2,640	2,682	-	2,682
Revenues					
Revenue from York	(2,113)	(2,142)	(2,176)	-	(2,176)
Total Revenues	(2,113)	(2,142)	(2,176)	-	(2,176)
Net Program Expenses	491	498	506	_	506
Net Program Expenses Per A	bove				506
Add: Revenue from York					2,176
Net Operating Program Exper	nses Per Progr	am Summary			2,682

### PROGRAM 5E DUFFIN CREEK FACILITY



# 2018 Program Detail

<b>Detailed Cost of Program:</b>	20	17		2018	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
(\$,000 \$)	Actuals	Budget	Budget	Change	Budget
Operating Expenses					
Supplies	23	8	8	7	15
Materials & Services	28	22	21	2	23
<b>Buildings &amp; Grounds Operations</b>	936	795	845	(46)	799
Equipment Maintenance & Repairs	39	45	45	(9)	36
Contracted Services	388	355	355	22	377
Major Repairs & Renovations	315	315	43	236	279
Operating Expenses Subtotal	1,729	1,540	1,317	212	1,529
	,	, , , , , , , , , , , , , , , , , , ,	·		,
Inter-Departmental Transfers & Recoveries					
Works - Facilities Management	238	303	303	(13)	290
Charge	230	303		(13)	290
Inter-Departmental Transfers & Recoveries Subtotal	238	303	303	(13)	290
Noovonoo oubtotal				(10)	
<b>Gross Operating Expenses</b>	1,967	1,843	1,620	199	1,819
Tangible Capital Assets					
New	-	-	-	152	152
Replacement	305	305	613	-	613
TCA Financing from York	(237)	(237)	(489)	(117)	(606)
Total Tangible Capital Assets	68	68	124	35	159
Total Expenses	2,035	1,911	1,744	234	1,978
Revenues					
Revenue from York	(1,596)	(1,495)	(1,314)	(161)	(1,475)
Total Revenues	(1,596)	(1,495)	(1,314)	(161)	(1,475)
Net Program Expenses	439	416	430	73	503

<sup>\*</sup> Tangible Capital Assets are stated separately on the Program Summary

Net Program Expenses Per Above	503
Less: Tangible Capital Assets	(159)
Add: Revenue from York	1,475
Net Operating Program Expenses Per Program Summary	1,819

# PROGRAM 5G PHOSPHOROUS REDUCTION FIELD STUDY (DURHAM PORTION)



## **2018 Program Detail**

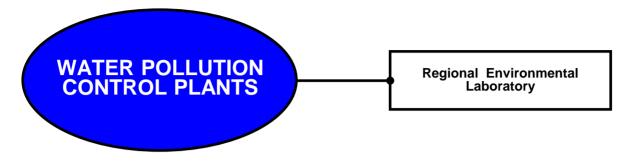
<b>Detailed Cost of Program:</b>	2017		2018		
(\$,000's)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget
Operating Expenses					
Personnel Expenses	23	-	-	12	12
Chemicals	6	-	-	3	3
Materials & Services	46	-	-	10	10
Professional Services	28	-	-	14	14
Net Program Expenses	103	-	-	39	39

# PROGRAM 6 REGIONAL ENVIRONMENTAL LABORATORY



2018 Program Detail

Works - Sanitary Sewerage System



### **Purpose:**

To provide environmental analysis for water and wastewater systems

### **Description of Program Activities:**

- To operate and maintain the Regional Environmental Laboratory for the water and wastewater monitoring needs of the Regions of Durham and York, area municipalities and private clients
- Administer programs required within the Ministry of the Environment and Climate Change (MOECC)
   Certificate of Approvals for wastewater and drinking water licenses
- Plan for changes to environmental regulations that maintain and improve the quality of the Region's water supply and sanitary sewerage systems through ongoing skills development and process monitoring

### **Description of Program Resources:**

2018 Full Time Employees 25.3402017 Full Time Employees 25.340

### **Performance Measurements:**

- Compliance with ISO 17025 standard and accreditation criteria through audits by the Canadian Association for Laboratory Accreditation (CALA). The Regional Environmental Laboratory is fully accredited by CALA and licensed by the MOECC for drinking water testing
- Quality Assurance/Quality Control (QA/QC) program has been established to ensure quality of data
- Approximately 70,000 samples for 250,000 tests are analyzed annually

# PROGRAM 6 REGIONAL ENVIRONMENTAL LABORATORY



## 2018 Program Detail

<b>Detailed Cost of Program:</b>	20	17		2018	
(\$ 000la)	Estimated	Approved	Base	Program	Proposed
(\$,000's)	Actuals	Budget	Budget	Change	Budget
Operating Expenses					
Personnel Expenses	2,632	2,689	2,789	(1)	2,788
Personnel Related	42	63	63	(5)	58
Communications	-	1	2	(1)	1
Supplies	497	548	548	(42)	506
Utilities	13	10	11	-	11
Chemicals	35	35	35	-	35
Computer Maintenance &					
Operations	5	55	55	-	55
Materials & Services	95	108	108	(2)	106
<b>Buildings &amp; Grounds Operations</b>	25	26	26	(8)	18
Equipment Maintenance &					
Repairs	219	128	127	-	127
Vehicle Operations	2	18	18	1	19
Professional Services	6	20	20	(1)	19
Contracted Services	9	13	13	(1)	12
Financial Expenses	2	2	2	-	2
Contribution to Reserve &					
Reserve Funds	125	125	125	-	125
Operating Expenses Subtotal	3,707	3,841	3,942	(60)	3,882
Inter-Departmental Transfers & Recoveries Works - General Administration					
Charge Works - Facilities Management	143	143	143	-	143
Charge Recovery - Works - Regional	30	50	50	(20)	30
Environmental Lab Service	(1,361)	(1,703)	(1,703)	61	(1,642)
Inter-Departmental Transfers & Recoveries Subtotal	(1,188)	(1,510)	(1,510)	41	(1,469)
Gross Operating Expenses	2,519	2,331	2,432	(19)	2,413

# PROGRAM 6 REGIONAL ENVIRONMENTAL LABORATORY



# 2018 Program Detail

Works - Sanitary Sewerage System

<b>Detailed Cost of Program:</b>	20	17	2018			
(\$,000's)	Estimated	Approved	Base	Program	Proposed	
(\$,000 \$)	Actuals	Budget	Budget	Change	Budget	
Tangible Capital Assets						
New	40	40	_	-	-	
Replacement	315	315	480	-	480	
TCA Financing from York	(278)	(278)	(470)	-	(470)	
Total Tangible Capital Assets	77	77	10	-	10	
Total Expenses	2,596	2,408	2,442	(19)	2,423	
Revenues						
Sundry Revenue Revenue from Regional	(600)	(578)	(578)	(247)	(825)	
Environmental Lab Operations	(1,761)	(1,753)	(1,854)	266	(1,588)	
Total Revenues	(2,361)	(2,331)	(2,432)	19	(2,413)	
Net Program Expenses	235	77	10	-	10	

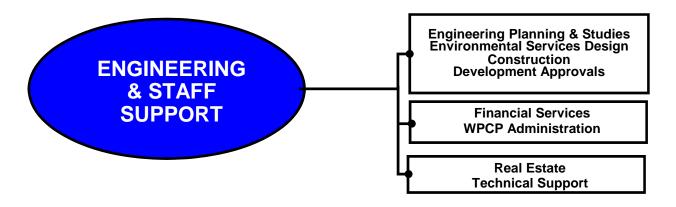
<sup>\*</sup> Tangible Capital Assets are stated separately on the Program Summary

Net Program Expenses Per Above10Less: Tangible Capital Assets(10)Net Operating Program Expenses Per Program Summary-



### 2018 Program Detail

Works - Sanitary Sewerage System



### Purpose:

Represents the portions of various divisions of the Works Department operation that are attributable to the Sanitary Sewerage System including:

### **Engineering Planning and Studies**

 To provide overall leadership and guidance to the various Departments of the Region of Durham which affect long-range planning of the Municipal Water Supply and Distribution Systems and Municipal Wastewater Collection and Treatment Systems; to service existing customers and future customers forecast under the anticipated growth recognized in the Durham Region Official Plan

#### **Environmental Services Design**

 To plan, design and initiate construction of sanitary sewerage infrastructure to provide service for existing and new customers, in compliance with all applicable legislation and regulations. Sanitary sewerage infrastructure includes water pollution control plants, pumping stations and sanitary sewers and appurtenances

#### Construction

To plan, design and construct Regional infrastructure including all roads, sanitary and storm sewers and
associated services, watermains and associated services, bridges, culverts, water supply plants and
associated wells, pumping stations and modifications, water pollution control plants and associated pumping
stations and modifications, all as budgeted for in the current year's business plan including all similar
construction necessitated by emergencies

#### **Development Approvals**

 To assist and facilitate well planned industrial, commercial and residential development proposals within Durham Region by providing cost effective municipal water, sanitary sewerage and Regional road services, while protecting the interests of the Region and the public

#### **Financial Services**

- To provide overall leadership and direction to the various divisions of the Works Department in effectively monitoring and managing expenditures to ensure compliance with approved budgets and policy guidelines Water Pollution Control Plant Administration
- To provide management of the Plant Operations Division including: the co-ordination and monitoring of expenditures, dealing with personnel and administrative issues and planning for the long term operational needs of the division in accordance with policies, guidelines and legislation



### 2018 Program Detail

Works - Sanitary Sewerage System

### Purpose: (continued)

#### Real Estate

 To administer and manage the real estate function for the Region including the rental of properties and the purchase of land to facilitate construction of municipal services

#### **Technical Support**

- A technical working group directing and supporting the following programs:
  - Sewer-Use By-Law Enforcement
  - Water/Wastewater Treatment Operations
  - Maintenance Operations (including landfill monitoring)
  - Water Energy Efficiency Programs
  - Data System Management
  - Source Water Protection

### **Description of Program Activities:**

The duties and services provided are required to comply with all applicable legislation and represent those areas of the Works Department which relate directly to the provision and management of the sanitary sewerage infrastructure. The activities include: engineering planning and studies, detailed design, construction and asset management and ongoing post commissioning support.

#### **Engineering Planning and Studies**

- Develop and implement a comprehensive servicing strategy for the water supply and sanitary sewerage systems throughout the Region through the completion of Official Plan Servicing Studies and providing input into the Development Charges Studies
- Coordinate the use and protection of our valuable groundwater resources through development of wellhead protection areas, review of land-uses within these areas, and liaison with neighbouring municipalities on groundwater management practices
- Complete Environmental Assessments, as required, for water supply and sanitary sewerage capital projects prior to Capital Projects proceeding to detailed design and construction
- Provide technical review of applications for new development and comment on availability of water supply and sanitary sewerage services, oversizing, and ensure that the Region's standards are being met
- Act as Durham Region representative on various internal and external Committees related to water supply and sanitary sewerage servicing

#### Environmental Services Design

Plan and implement the rehabilitation/replacement of existing infrastructure in conjunction with Regional and Area Municipality Road programs and independent of road programs. Conduct Asset Management studies to prioritize deficiencies and optimize use of financing for rehabilitation and replacement of existing sanitary sewerage infrastructure. Design and initiate construction of sanitary sewerage infrastructure to service existing and new development and in response to new regulations

#### Construction

- To provide the administrative services which calculate the budgets for infrastructure projects, develop and award the tenders and oversee the construction projects
- To provide the contract administrative services required to complete the construction activities including the
  processing and executing of all required project documentation, bonding and insurance, and progress
  payments
- Fulfilling contract requirements such as issuing substantial and final completion certificates, maintaining statutory, deficiency, maintenance and finishing holdbacks and final contract releases



### 2018 Program Detail

Works - Sanitary Sewerage System

### **Description of Program Activities: (continued)**

#### Construction (continued)

- To provide required quality control and quality assurance for construction projects, including topographic surveying and layout, sewer and water infrastructure testing (SWAT), construction inspection, commissioning services, as constructed measurements and maintaining all as constructed drawings, testing of construction materials and providing geotechnical investigations and associated services
- To provide asset management services including the management and monitoring of the Region's infrastructure assets

#### **Development Approvals**

- Review and process development applications, including land severances, with minimum delay, ensuring that
  they meet Regional guidelines and standards and services are sized to meet long range Regional servicing
  objectives
- Negotiate and prepare draft servicing, subdivision or front ending agreements that are balanced and fair to ensure no adverse financial impact on the Region
- Assess feasibility, request for funding, coordinate collection charges, issue connection applications and payment agreements and initiate the passage of by-laws for Regional residents who request sewer and/or water service
- Co-ordinate the Development Charge collection process with local municipalities and the Finance
  Department to ensure timely issuance of building permits and adequate cash flow from development for the
  construction of Regional growth related infrastructure
- Control development to balance available capacities or identify required improvements to accommodate the development by coordinating comments and discussing issues with Local Area Municipalities, other Divisions and Departments

#### **Financial Services**

- Coordinate the preparation of the Works Department Annual Operating and Capital Budgets
- Manage and execute transactional items to recover costs from internal programs and divisions as well as outside agencies, developers and other area municipalities related to current and capital programs
- Liaison with the Finance Department and other senior levels of government regarding matters of Budget Management and policy related to funding and expenditures
- Ensure Works staff meet deadlines set by Regional Council and the Finance Department
- Provide clerical and administrative support related to committee reports and official correspondence
- Provide mail and reception services for the Works Department at Regional Headquarters
- Maintain proper inventory of office materials and supplies for staff use

#### Water Pollution Control Plants Administration

- Assist in the preparation of the Plant Operations budget
- Monitor and approve expenditures in accordance with approved budgets, policies and guidelines
- Manage divisional administrative needs in accordance with agreements, policies, guidelines and legislative requirements
- Develop policies, methods and guidelines for the efficient and effective operation of the Region's Water Pollution Control Plant facilities
- Liaise with government, public and private agencies



### 2018 Program Detail

Works - Sanitary Sewerage System

### **Description of Program Activities: (continued)**

#### Real Estate

- Negotiate property agreements for the acquisition of lands and property rights necessary for implementation of Regional programs including the construction of road, sanitary sewerage and water supply projects
- Co-ordinate the expropriation process where necessary
- Locate and negotiate lease agreements for facilities required by various Regional Departments and coordinate leasehold improvements to the facilities in conjunction with the client and with our Facilities Management Division
- Manage the rental of Region owned properties, including the collection of rent and the disposal of properties no longer required by the Region
- Compile and maintain records on all Region owned property including limited interest such as sanitary sewerage and water supply easements, leases, licenses, permission to enter, pipe crossings and encroachments
- Co-ordinate, plan and schedule the re-registration of easements as directed by Provincial legislation
- Provide title information and cost estimates related to land and leasing, to other Divisions and Departments, as required

#### Technical Support

- A technical working group directing and supporting the following programs:
- ◆ Sewer-Use By-Law Enforcement:

Enforcement of the Sewer-Use By-law 55-2013, as amended, to protect the infrastructure and the treatment facilities, to maintain compliance with regulatory requirements through monitoring, investigation, compliance programs and surcharge agreements and to maintain public/staff safety

Water/Wastewater Treatment Operations:

Provide technical support in areas of treatment operations and design, monitoring and reporting for compliance requirements, response and investigation to consumer concerns and enquiries, training of staff, response to adverse water quality issues and related regulatory notifications

Maintenance Operations:

Provide technical support in areas of maintenance operations, including contract administration of maintenance and rehabilitation programs for watermains, sanitary/storm sewers, maintaining CCTV program, budget preparation, review of new infrastructure to meet Regional standards and regulatory requirements

Water Energy Efficiency Programs:

The Water Energy Efficiency Program focuses on education of the public and outreach through newsletters, presentations, schools and the Central Lake Ontario Conservation Authority's (CLOCA) Children's Watershed Festival. This program also undertakes innovative water efficiency field studies through partnerships with area municipalities

The Energy Management Group assists plant operation in energy control, and demand reduction projects, conduct energy audits for major energy using Regional Facilities through power monitoring and energy use reduction projects

Data System Management (GIS Group):

The Data System Management (DSM) program maintains the linear infrastructure data of the existing Water Supply, Sanitary Sewerage and Storm Sewer System using leading edge Geographical Information System (GIS) technology and provides services to inside and outside users for all cartographic or inventory needs. DSM develops and maintains applications for convenient data access to infrastructure data



### 2018 Program Detail

Works - Sanitary Sewerage System

### **Description of Program Resources:**

◆ 2018 Full Time Employees 64.574

◆ 2017 Full Time Employees 64.487 (restated)

One (1) Inspector 3 in Construction to inspect plant projects to ensure adherence to design, review as-built drawings and to provide quality control. This position will be shared with General Tax and Water Supply (0.257 FTE)

Reallocation of resources to Duffin Creek WPCP (-0.170 FTE)

### **Performance Measurements:**

- ◆ Resources to provide staff for administration/engineering support. Also includes general office expenditures such as telephone costs, office supplies and operating costs
- Resource Management through budgeting and forecasting future needs
- Quality control through Construction Inspection and Contract Administration
- Coordination of all related activities including safety, real estate and data management
- Maintenance and replacement of Information Technology assets
- Management of software licenses and upgrades



## 2018 Program Detail

<b>Detailed Cost of Program:</b>	20	17		2018	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
(\$,000 \$)	Actuals	Budget	Budget	Change	Budget
Operating Expenses					
Personnel Expenses	6,751	7,456	7,613	(31)	7,582
Payroll Maintenance					
Management - Recovery	(2,178)	(2,939)	(2,964)	(13)	(2,977)
Net Personnel Expenses	4,573	4,517	4,649	(44)	4,605
Personnel Related	207	240	240	27	267
Communications	59	93	93	(11)	82
Supplies	55	80	80	(7)	73
Computer Maintenance &					
Operations	113	146	146	(17)	129
Materials & Services	335	244	244	64	308
Equipment Maintenance &					
Repairs	134	205	205	_	205
Vehicle Operations	20	29	29	(5)	24
Professional Services	261	288	288	79	367
Bad Debt Expenses	-	2	2	-	2
Financial Expenses	45	45	46	_	46
Minor Assets & Equipment	-	-	3	3	6
Contribution to Reserve &			· ·	· ·	· ·
Reserve Funds	2	8	8	(6)	2
Operating Expenses Subtotal	5,804	5,897	6,033	83	6,116
<b>3</b> process		-,	-,		
Inter-Departmental Transfers &					
Recoveries					
Corporate Communications					
Charge	113	113	132	14	146
Corporate IT Charge	152	153	152	-	152
Corporate HR Charge Works - Regional Environmental	75	75	75	-	75
Lab Charge	137	180	180	(29)	151
Recovery - Works - General Tax	(15)	(15)	(15)	(==)	(15)
Recovery - Regional	(	( )	( /		` /
Environmental Lab	(72)	(57)	(57)	-	(57)
Recovery - Works - Biosolids					
Services	(256)	(278)	(284)	12	(272)
Inter-Departmental Transfers &					
Recoveries Subtotal	134	171	183	(3)	180
Gross Operating Expenses	5,938	6,068	6,216	80	6,296
· - ·					



# 2018 Program Detail

<b>Detailed Cost of Program:</b>	20	17		2018		
(\$,000;s)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget	
Tangible Capital Assets						
New	558	558	-	28	28	
Replacement	100	100	201	-	201	
Total Tangible Capital Assets	658	658	201	28	229	
Total Expenses	6,596	6,726	6,417	108	6,525	
Revenues						
Fees & Service Charges	(252)	(209)	(210)	(27)	(237)	
Sale of Publications	(10)	(11)	(10)	-	(10)	
Sundry Revenue	(266)	(233)	(233)	(21)	(254)	
Total Revenues	(528)	(453)	(453)	(48)	(501)	
Net Program Expenses	6,068	6,273	5,964	60	6,024	

<sup>\*</sup> Tangible Capital Assets are stated separately on the Program Summary

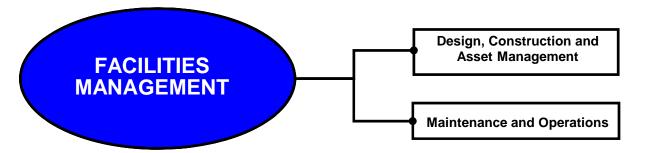
Net Program Expenses Per Above	6,024
Less: Tangible Capital Assets	(229)
Net Operating Program Expenses Per Program Summary	5,795

# PROGRAM 8 FACILITIES MANAGEMENT



### 2018 Program Detail

Works - Sanitary Sewerage System



### **Purpose:**

- Provide overall lifecycle management for Regional facilities including:
  - Detailed design and construction of new facilities and leasehold improvements
  - Lifecycle maintenance planning and replacement strategies
  - Ongoing and preventative maintenance and overall operation of Regional facilities, properties and grounds through Regional and contracted forces
  - · Centralized security services

### **Description of Program Activities:**

The Region has 216 facilities with an estimated total area of 501,080 square metres (5.4 million square feet), which generate a significant number of repair and maintenance requests over the course of a year. Major Regional facilities with complex heating, ventilation and air conditioning systems and a large number of occupants create a unique and challenging environment for facility related work

#### **Design, Construction and Asset Management**

- The Design, Construction and Asset Management unit provides Project management services for all facility capital construction and maintenance projects undertaken by the Region, including those delivered for Social Housing, Long-Term Care and Durham Regional Police Service. The Design, Construction and Asset Management unit is responsible for managing all facets of facility construction projects from their inception through to completion
- Office design and staff relocation are constant demands on any organization. The Design, Construction and Asset Management unit provides expertise to plan, supervise and implement these changes in a timely and professional manner with minimal effect on staff and the delivery of their programs
- As facilities age, a greater amount of time and resources is required to maintain them in an acceptable, reliable operating condition, and retain the inherent asset value. The Design, Construction and Asset Management unit is responsible for the Region wide condition and inspection program, which identifies and prioritizes the work required on Regional facilities, providing a life cycle management approach to prioritize state of good repair investments
- Services provided: Functional Review/Scope of Work determination; Budget estimates; Consultant selection; Council approvals as required; Design review oversight and management; Quotation and Tenders; Construction management; Move/relocation management; Commissioning of facility; Warranty management; Project closeout; Post occupancy review; Leasehold renovations or office design and relocation services; Computer Assisted Drafting and Design (CAD) services; Long and short term accommodation studies; Maintain databases; Accommodation planning; Implementation of interior renovations; Furniture management

# PROGRAM 8 FACILITIES MANAGEMENT



### 2018 Program Detail

Works - Sanitary Sewerage System

### **Description of Program Activities (continued):**

#### **Maintenance and Operations**

- Water Supply and Water Pollution Control Plants and Pumping Stations, Traffic, Maintenance and Transit
  Depots, Solid Waste/Recycling locations, Childcare Centres, Paramedic Stations and leased facilities require
  support, each with special facility maintenance and property needs based on the clientele and use
- All Regional facilities require service contracts to complement the daily operation of the facility so client
  programs may be delivered effectively, such as boiler/heating/air systems, elevators, backflow prevention,
  fire and life safety, ground maintenance and custodial/environmental services
- Services provided: Planned preventative maintenance; Contract administration; Occupant support; 24/7 Emergency response; Custodial services
- In addition to the Region's 216 facilities, the Facilities Management division also looks after the security of the Regional Administration Headquarters building, including access control, security patrol and guard services, and CCTV installation, operation and maintenance
- Services provided: Security access control; Parking management; Response to Emergency Alarm System;
   Key control administration; Photo I.D. cards; 24/7 response to Security Systems Alarms

### **Description of Program Resources:**

◆ 2018 Full Time Employees 23.212

◆ 2017 Full Time Employees 22.676 (restated)

One (1) Policy Analyst to develp and analyze the long term facility needs, and assist in planning for capital work to sustain Regional facility assets. This position is shared with General Tax, Water Supply and Solid Waste Management (0.268 FTE)

One (1) Project Coordinator to provide updated base building drawings and manage As-Built/Record drawings for Regional facilities. This position is shared with General Tax, Water Supply and Solid Waste Management (0.268 FTE)

### **Performance Measurements:**

- Compliance with all building code standards
- Monitoring of costs
- Investigation and resolution of all requests/complaints



<b>Detailed Cost of Program:</b>	20	17		2018	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
(\$,000 \$)	Actuals	Budget	Budget	Change	Budget
Operating Expenses	-				
Personnel Expenses	2,271	2,468	2,534	27	2,561
Payroll Maintenance					
Management - Recovery	(591)	(891)	(891)	116	(775)
Net Payroll Expenses	1,680	1,577	1,643	143	1,786
Personnel Related	52	81	81	(8)	73
Communications	28	31	31	(7)	24
Supplies	66	47	47	(4)	43
Utilities	61	76	62	-	62
Computer Maintenance &					
Operations	6	19	19	(3)	16
Materials & Services	73	74	74	(16)	58
<b>Buildings &amp; Grounds Operations</b>	1,450	1,330	1,305	5	1,310
Equipment Maintenance &					
Repairs	80	95	95	(26)	69
Vehicle Operations	52	58	58	-	58
Professional Services	20	11	11	35	46
Contracted Services	119	128	128	(6)	122
Financial Expenses	858	858	876	47	923
Property Taxes	1,531	1,598	1,538	-	1,538
Major Repairs & Renovations	52	52		224	224
Operating Expenses Subtotal	6,128	6,035	5,968	384	6,352
Inter-Departmental Transfers &					
Recoveries					
Works - General Tax Charge	21	23	23	-	23
Works - Facilities Management Charge	478	498	498	(63)	435
Inter-Departmental Transfers &	470	+30_		(03)	+55
Recoveries Subtotal	499	521	521	(63)	458
	•			, ,	
Gross Operating Expenses	6,627	6,556	6,489	321	6,810
Tangible Capital Assets					
New	25	25	-	523	523
Replacement	434	434	73	1,318	1,391
Total Tangible Capital Assets	459	459	73	1,841	1,914
Total Expenses	7,086	7,015	6,562	2,162	8,724

# PROGRAM 8 FACILITIES MANAGEMENT



## 2018 Program Detail

Works - Sanitary Sewerage System

<b>Detailed Cost of Program:</b>	20	17	2018				
(\$,000's)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget		
Revenues Rents	(5)	(5)	(5)	-	(5)		
Total Revenues	(5) (5)		(5) -				
Net Program Expenses	7,081	7,010	6,557	2,162	8,719		

<sup>\*</sup> Tangible Capital Assets are stated separately on the Program Summary

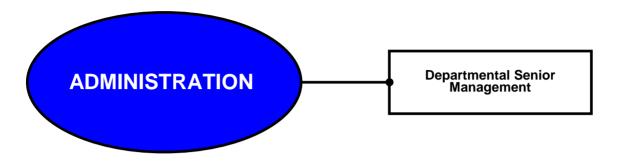
Net Program Expenses Per Above8,719Less: Tangible Capital Assets(1,914)Net Operating Program Expenses Per Program Summary6,805

# PROGRAM 9 ADMINISTRATION



## 2018 Program Detail

Works - Sanitary Sewerage System



### **Purpose:**

- Provide overall direction and strategic planning for the Works Department with respect to Planning,
   Design, Construction, Operation and Maintenance of the Region's Sanitary Sewerage System
- To ensure that all legislated requirements are adhered to and all operations remain in compliance with regulatory bodies

### **Description of Program Activities:**

- Advise Committee of the Whole, Senior Management and Regional Council on all Works Department related matters
- Manage the operations of the Works Department through its divisions: Construction, Compliance,
  Development Approvals, Engineering Planning and Studies, Environmental Services Design, Facilities
  Management, Financial Services, Maintenance Operations, Plants Operations, Transportation Design,
  Transportation Infrastructure, Traffic Engineering and Operations, Real Estate and Waste Management
- Represent the Region's interests with other groups, including Provincial Ministries, other Regions and interest groups
- Provide administrative support to the general operations and special activities of the Works Department
- Coordination of Committee of the Whole reports for presentation to Regional Council related to the Sanitary Sewerage System

### **Description of Program Resources:**

2018 Full Time Employees 1.6002017 Full Time Employees 1.600

### PROGRAM 9 ADMINISTRATION



## **2018 Program Detail**

<b>Detailed Cost of Program:</b>	20	17	2018				
(\$,000's)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget		
Operating Expenses	7100000			011011190			
Personnel Expenses	245	290	296	-	296		
Personnel Related	11	11	11	-	11		
Net Program Expenses	256	301	307	-	307		

# PROGRAM 10 TANGIBLE CAPITAL ASSETS PROGRAM SUMMARY



## 2018 Business Plan

Ву	Program	20	17		2018	
	(\$,000's)	Estimated	Approved	Base	Program	Proposed
	(Φ,000 S)	Actuals	Budget	Budget	Change	Budget
Tan	gible Capital Assets:					
1S	Duffin Creek WPCP - New	109	109	-	566	566
2S	- Replacement	1,441	1,441	1,313	-	1,313
3S	Environmental Lab - New	40	40	-	-	-
4S	- Replacement	315	315	480	-	480
5S	Facilities Management - New	25	25	-	523	523
6S	- Replacement	434	434	73	1,318	1,391
7S	Fleet/Equipment - New	1,022	1,022	-	191	191
8S	- Replacement	304	304	201	269	470
9S	Construction of Municipal					
	Services	19,443	19,443	19,443	516	19,959
	Tangible Capital Assets					
	Subtotal	23,133	23,133	21,510	3,383	24,893
Tan	gible Capital Assets Revenue &	Recoveries:				
	Duffin Creek WPCP -					
	TCA Revenue from York	(1,246)	(1,246)	(1,021)	(437)	(1,458)
11S	Environmental Lab - TCA	,	, ,	,	,	,
	Revenue from York	(78)	(78)	(10)	_	(10)
12S	Environmental Lab - Recovery	,	,	(		,
	Reserve/Reserve Fund	(200)	(200)	(460)	_	(460)
	Tangible Capital Assets		,			
	Revenue & Recoveries					
	Subtotal	(1,524)	(1,524)	(1,491)	(437)	(1,928)
Net Tangible Capital Assets						
Program Expenses		21,609	21,609	21,609 20,019		22,965
				(\$1,590)		
Sur	nmary of Increase (Decrea	se)	<b>—</b>	<b>-7.36%</b>		<b>\$1,356</b>
					<b></b>	6.28%



### **Works - Sanitary Sewerage**

Program Detail Page	Location	Item Description	Item #	Qty	Unit Cost	Gross Total Cost	Sewer Total	Other Financing	Net Sewer
	Oshawa/Whitby								
03. Depot Operations	Depot	Tandem Combination Dump Truck/Snow Plow	113	1	\$ 360,000	\$360,000	\$120,000		\$120,000
	Sunderland								
	Depot	Laptop/Tablet Vehicle Mount	126	1	\$ 2,700	\$2,700	\$900	\$0	\$900
04. WPCPs and Pumping Stations	Nonquon River WPCP	3/4 Ton Van	249	1	\$ 42,000	\$42,000	\$42,000	\$0	\$42,000
	Duffin Creek								
05. B. Duffin Creek - Plant	WPCP	Chlorine Analyzer	177	1	\$ 90,000	\$90,000	\$90,000	(\$73,449)	\$16,551
		Spare Screw for Distribution Conveyor	178	1	\$ 125,000	\$125,000	\$125,000	(\$91,588)	\$33,413
		Storm Catch Basin Improvements	183	1	\$ 200,000	\$200,000	\$200,000	(\$154,880)	\$45,120
05. E. Duffin Creek - Facility	Duffin Creek WPCP	Install suspended platforms for access to supply fans	182	1	\$ 106,000	\$106,000	\$106,000	(\$82,086)	\$23,914
		Office Reconfiguration and additional workstations	185	1	\$ 45,500	\$45,500	\$45,500	(\$35,235)	\$10,265
07. Engineering and Staff Support	Construction	1/2 Ton Pick-up Truck	19	1	\$ 40,000	\$40,000	\$13,333	\$0	\$13,333
	Technical Support	Hydrone RCV Boat with Survey System	263	1	\$ 15,000	\$15,000	. ,	· ·	\$15,000
08. Facilities Management	Ajax Depot	Access Control on Gates	7	1	\$ 96,000	\$96,000	\$32,000	\$0	\$32,000
	All Depots	Keybox	13	1	\$ 114,000	\$114,000	\$38,000	\$0	\$38,000
	Oshawa/Whitby Depot	Install perimeter fencing and gate	118	1	\$ 235,000	\$235,000	\$78,333	\$0	\$78,333
	Port Darlington WPCP	Chemical spill containment and administration building improvements	259	1	\$ 240,000	\$240,000	\$240,000	\$0	\$240,000
	Seaton	Seaton Facility Site Master Plan	142	1	\$ 160,000	\$160,000	\$40,000		\$40,000
	WPCP Pumping Station - Lakeshore SPS	Pave Roadway	286	1	\$ 95,000	\$95,000	\$95,000	\$0	\$95,000
Grand Total		. a.o coamay		· ·	ψ 00,000	\$1,966,200	. ,	·	\$843,828
Orana rotai						ψ1,300,200	Ψ1,201,000	(ψ+31,230)	ψ0-10,020

#### **Tangible Capital Asset Program Summary**

	1,281,066
7S Fleet/Equipment - New	191,233
5S Facilities Management - New	523,333
1S Duffin Creek WPCP - New	566,500



### **Works - Sanitary Sewerage**

Program Detail Page	Location	Item Description	Item #	Qty	Unit Cost	Gross Total Cost	Sewer Total	Other Financing	Net Sewer
04. WPCPs and Pumping Stations	Courtice WPCP	Replace Actuators	166	6	\$ 8,000	\$48,000	\$48,000	\$0	\$48,000
		Scum Pump	167	1	\$ 30,000	\$30,000	\$30,000	\$0	\$30,000
	Water Pollution Control Plants	INTRAC Radio Upgrades	274	10	\$ 4,800	\$48,000	\$48,000	\$0	\$48,000
	WPCP Pumping Station	INTRAC Radio Upgrades	279	11	\$ 3,000	\$33,000	\$33,000	\$0	\$33,000
	WPCP Pumping Station - Anstead SPS	Pump Replacement	287	1	\$ 60,000	\$60,000	\$60,000	\$0	\$60,000
		Pump Replacement	288	1	\$ 50,000	\$50,000	\$50,000	\$0	\$50,000
	Duffin Creek					4		,	
05. B. Duffin Creek - Plant	WPCP	AMS System Upgrade	189	1	\$ 50,000			* * * * * * * * * * * * * * * * * * * *	\$9,195
		Control Equipment and Server Upgrades	187	1	\$ 60,000				\$13,536
		Inline Conveyors For Sludge Cake Pumps	179	1	\$ 150,000	. ,		· ·	\$40,095
		Office Furniture	195	1	\$ 25,000		\$25,000		\$5,640
		Plant Model Upgrade	196	1	\$ 25,000		\$25,000	· ·	\$5,640
		Reactor #1 and #2 Repairs	190	1	\$ 150,000				\$40,095
		Replacement Gator	191	1	\$ 25,000			· ·	\$5,640
		SCADA Networking Infrastructure Upgrade	186	1	\$ 165,000		\$165,000		\$37,224
		SCADA Spares	188	1	\$ 50,000	\$50,000	\$50,000	(\$38,720)	\$11,280
05. E. Duffin Creek - Facility	Duffin Creek WPCP	Building Automation System Upgrades	180	1	\$ 272,000	\$272,000	\$272,000	(\$210,637)	\$61,363
		Replace Variable Frequency Drives for Blower Building 1 & 2	184	1	\$ 341,000	\$341,000	\$341,000	(\$278,290)	\$62,710
06. Regional Environmental Laboratory	Environmental Lab	Hardware Infrastructure Upgrade Liquid Chromatograph Mass Spectrometer / Mass	202	1	\$ 20,000	\$20,000	\$20,000	(\$10,000)	\$10,000
		Spectrometer Spectrometer	201	1	\$ 400,000	\$400,000	\$400,000	(\$400,000)	\$0
		Solid Phase Oil and Grease Extraction System	200	1	\$ 60,000				\$0
		Scanner and Wide Format B&W Printer (Oce	200	<u>'</u>	Ψ 00,000	ψου,σσο	φου,σου	(ψου,σου)	
07. Engineering and Staff Support	Construction	Replacement)	18	1	\$ 65,000	\$65,000	\$21,667	\$0	\$21,667
		Survey Total Station	22	1	\$ 40,000	\$40,000	\$13,333	\$0	\$13,333
	Financial Services	Desktop Computer & Monitor Refresh	136	209	\$ 950	\$198,550	\$54,150	\$0	\$54,150
		Laptop Computer & Monitor Refresh	138	35	\$ 1,729	\$60,500	\$25,500	\$0	\$25,500
		Office Reconfiguration	135	1	\$ 80,000	\$80,000	\$26,667	\$0	\$26,667
		Power Computer & Monitor Refresh	139	19	\$ 2,671	\$50,750	\$14,208	\$0	\$14,208

### **TANGIBLE CAPITAL ASSETS - REPLACEMENT**



### 2018 Program Detail

### **Works - Sanitary Sewerage**

Program Detail Page	Location	Item Description	Item #	Qty	<b>Unit Cost</b>	Gross Total Cost	Sewer Total	Other Financing	Net Sewer
07. Engineering and Staff Support	Services	Power Desktop Computer & Monitor Refresh	137	86	\$ 1,951	\$167,805	\$13,325	\$0	\$13,325
	Water Pollution Control Plants	Fall Arrest and Retrieval Equipment	273	2	\$ 16,000	\$32,000	\$32,000	\$0	\$32,000
08. Facilities Management	All Depots	Digital Video Recorder (DVR) Upgrades	14	1	\$ 30,000	\$30,000	\$10,000	\$0	\$10,000
	Facilities Maintenance & Operations	Renovation & Reconfiguration to accommodate Facilities Maintenance staff	1	1	\$ 2,554,000	\$2,554,000	\$851,333	\$0	\$851,333
	Lake Simcoe WPCP	Boiler Replacement	211	1	\$ 180,000	\$180,000			\$180,000
	Newcastle WPCP	Boiler Replacement	216	1	\$ 132,000	\$132,000	\$132,000	\$0	\$132,000
	Oshawa/Whitby Depot	Fleet Garage Furnace Replacement	115	1	\$ 70,000	\$70,000	\$23,333	\$0	\$23,333
		Replace Hydraulic Cylinders in Hoist #2	117	1	\$ 120,000	\$120,000	\$40,000	\$0	\$40,000
	WPCP Pumping Station - Carruthers								
	Creek SPS	Repave existing asphalt driveway	283	1	\$ 154,000	\$154,000	\$154,000	\$0	\$154,000
Grand Total						\$5,996,605	\$3,653,516	(\$1,490,582)	\$2,162,934

#### **Tangible Capital Asset Program Summary**

Tangible Capital Asset Flogram Summary	
2S Duffin Creek WPCP - Replacement	1,313,000
4S Environmental Lab - Replacement	480,000
6S Facilities Management - Replacement	1,390,666
8S Fleet/Equipment - Replacement	469,850
	3,653,516

# PROGRAM 9S TCA - CONSTRUCTION



# 2018 Program Detail

<b>Detailed Cost of Program:</b>	20	17		2018		
(\$,000;s)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget	
Tangible Capital Assets		_			_	
Capital Fund Contribution	19,443	19,443	19,443	516	19,959	
Total Tangible Capital Assets	19,443	19,443	19,443	516	19,959	

2018 Construction Program - Sanitary Sev	vera	ige											
				Grant/ Subsidy/ Other	Cost Expenditure Attribution (\$ 000's)								
Project Description	DC Item No.	EA Land Design Const.	Gross Cost		Benefit to Existing	evenue Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges	New Industrial Charges	Asset Management Reserve Fund		
A LINEAR INFRASTRUCTURE			Α	В	С	U		F	G	Н			
Regional Road Program													
* 7 R.R. 59 (Gibb St.) from Stevenson Rd. to Simcoe St., Oshawa		D	80	0.000	80.000	80.000	0.000	0.000	0.000	0.000	0.000		
Sub-total Sub-total			80	0.000	80.000	80.000	0.000	0.000	0.000	0.000	0.000		
Area Municipality Road Programs													
11A City of Pickering Road Program		D,C	50	0.000	50.000	50.000	0.000	0.000	0.000	0.000	0.000		
11B Town of Ajax Road Program		D,C	400	0.000	400.000	400.000	0.000	0.000	0.000	0.000	0.000		
11C Town of Whitby Road Program		D,C	1,200	0.000	1,200.000	1,200.000	0.000	0.000	0.000	0.000	0.000		
11D City of Oshawa Road Program		D,C	250	0.000	250.000	250.000	0.000	0.000	0.000	0.000	0.000		
11E Municipality of Clarington Road Program		D,C	600 50	0.000	600.000	600.000	0.000	0.000	0.000	0.000	0.000		
11F Township of Scugog Road Program 11G Township of Uxbridge Road Program		D,C D,C	250	0.000	50.000 250.000	50.000 250.000	0.000	0.000	0.000	0.000	0.000		
11H Township of Brock Road Program		D,C D,C	250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Allowance for unknown Sanitary Sewerage requirements in conjunction with area municipality road programs in various locations		D,C	213	0.000	212.500	212.500	0.000	0.000		0.000	0.000		
Sub-total MTO & GO Transit projects			3,013	0.000	3,012.500	3,012.500	0.000	0.000	0.000	0.000	0.000		
13 Allowance for works in conjunction with MTO - Brock St Bridge, Whitby		D,C	600	0.000	600.000	600.000	0.000	0.000	0.000	0.000	0.000		
Sub-total			600	0.000	600.000	600.000	0.000	0.000	0.000	0.000	0.000		
Betterments/Replacements													
14 Wastewater works independent of road programs in various locations		D,C	750	0.000	750.000	750.000	0.000	0.000	0.000	0.000	0.000		
15 Central Duffin Collector (CDC) Replacement, Pickering		D,C	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000		
16 YDSS – Rehabilitation of the trunk sanitary sewer		D	700	560.000	140.000	140.000	0.000	0.000	0.000	0.000	0.000		
17 Replacement of TSS on Harwood Ave. S and Edward St., Ajax		D,C	1,700	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1,700.000		
26 Replacement of sewer on Athol St from Centre to Albert, Oshawa 27 Replacement of sewer on Simcoe St. from John St. to Elm St., Oshawa		D,C	210 560	0.000	0.000	0.000	0.000	0.000	0.000	0.000	210.000 560.000		
Sub-total		D,C	4,070	560.000	1,040.000	1,040.000	0.000	0.000	0.000	0.000	2,470.000		
System Expansion													
* 33 Twinning of forcemain from Liverpool SSPS to Duffin Plant	105	С	6,500.00000	0.00000	5,070.000	5,070.000	82.999	1,062.750	11.385	272.866	0.00000		
35 Church St. from Harrisview St. to Hurst Dr., Ajax	108	С	650	0.000	0.000	0.000	37.700	482.950	5.200	124.150	0.000		
54 Southwest Courtice Trunk Sanitary Sewer, Courtice	209		300	0.000									
59 Foster Creek Trunk Sanitary sewer, Newcastle	311	С	2,000	0.000	0.000	0.000	116.000	1,486.000					
61 Wilmot Trunk Sewer Rudell Rd to King St , Newcastle Sub-total	313	D	300 9,750	0.000	0.000 5,070.000	0.000 5,070.000	17.400 271.499	222.900 3,477.500					
B BUILDINGS						·							
64 Regional Environmental Laboratory Upgrades, Pickering	708	С	3,100	1,550.000	0.000	0.000	89.900	1,151.650	12.400	296.050	0.000		
* 65 Seaton - Sanitary Sewage Pumping Station 4 and forcemains		D	200	0.000	200.000	200.000	0.000	0.000		0.000	0.000		
69 Carruthers Sanitary Sewage Pumping Station - Chemical evaluation		D	400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	400.000		
73 Corbett Creek WPCP - Primary Sludge Control Improvements		D,C	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000		

			Gross Cost A	Grant/ Subsidy/ Other B	Cost Expenditure Attribution (\$ 000's)							
		EA			User Revenue				Now	None	Asset	
Project Description	DC Item No.	Land Design Const.			Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Management Reserve Fund I	
74 Brooklin Sanitary Diversion Strategy - Thickson SSPS & FM	202	EA	1,000	0.000	0.000	0.000	58.000	743.000	8.000	191.000	0.00	
75 Harmony Creek WPCP - Plant No. 2 Upgrades		С	3,000	0.000	3,000.000	3,000.000	0.000	0.000	0.000	0.000	0.00	
78 Proposed Conlin Rd. Sanitary Sewerage Pumping Station, Oshawa	206	EA	500	0.000	0.000	0.000	29.000	371.500	4.000	95.500	0.00	
86 Port Newcastle SSPS and FM (oversizing), Newcastle	310	D,C	1,300	0.000	0.000	0.000	75.400	965.900	10.400	248.300	0.00	
91 Sunderland WPCP - Lagoons Environmental Assessment	600	EA	500	0.000	0.000	0.000	52.500	266.500		174.000	0.00	
92 Sunderland WPCP - Retrofit exfiltration lagoon		D.C	1,000	0.000	1,000.000	1,000.000	0.000	0.000	0.000	0.000	0.00	
93 Cannington WPCP - Lagoons Environmental Assessment	601	EA	500	0.000	0.000	0.000	52.500	266.500	7.000	174.000	0.00	
	601											
94 Cannington WPCP - lagoon system improvements		D,C	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.00	
Sub-total  MACHINERY AND EQUIPMENT			12,000	1,550.000	4,200.000	4,200.000	357.300	3,765.050	48.800	1,178.850	900.00	
99 Duffin Creek WPCP - Resource Recovery Feasibility Study		D	500	387.500	112.500	112.500	0.000	0.000	0.000	0.000	0.00	
101 Duffin Creek WPCP - Sludge Blending Tanks		С	12,000	9,000.000	3,000.000	3,000.000	0.000	0.000	0.000	0.000	0.00	
105 Corbett Creek WPCP - MCC and equipment replacement		D.C	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.00	
106 Breakwater SSPS overflow chamber retrofit		D,C	500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	500.00	
107 Michael Blvd SSPS - MCC replacement		D,C	400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	400.00	
108 Courtice WPCP - inlet chamber by-pass		D.C	160	0.000	0.000	0.000	0.000	0.000	0.000	0.000	160.00	
110 Courtice WPCP - Aeration blower replacement		D,C	900	0.000	0.000	0.000	0.000	0.000	0.000	0.000	900.00	
112 Lake Simcoe WPCP - Diffused Air System		Ċ	950	0.000	0.000	0.000	0.000	0.000	0.000	0.000	950.00	
113 Lake Simcoe WPCP - replacement of clairifier mechanism		D,C	320	0.000	0.000	0.000	0.000	0.000	0.000	0.000	320.00	
114 Fuel Tank Compliance		C	1,100	0.000	1,100.000	1,100.000	0.000	0.000	0.000	0.000	0.00	
Sub-total Sub-total			17,130	9,387.500	4,212.500	4,212.500	0.000	0.000	0.000	0.000	3,530.00	
D IT INFRASTRUCTURE												
Sub-total			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	
ALLOWANCES AND OTHER PROVISIONS											1	
117 Inflow/infiltration studies in various locations		D,C	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.00	
122 Allowance for acquisition of easements		Ĺ	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.00	
123 Allowance for engineering studies		D	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.00	
125 Preliminary Engineering		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.00	
126 Allowance for sundry extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000	0.000	0.000	0.00	
127 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.00	
128 Allowance for Regional share for works in conjunction with residential subdivision development	707	D,C	1,460	0.000	0.000	0.000	84.680	1,084.780	11.680	278.860	0.00	
129 Allowance for Regional share for works in conjunction with non-residential development	705	D,C	400	0.000	0.000	0.000	23.200	297.200	3.200	76.400	0.00	
Sub-total			2,875	0.000	1,015.000	1,015.000	107.880	1,381.980	14.880	355.260	0.00	
Total Cost Attribution			49,517.5000	11,497.500	19,230.000	19,230.000	736.679	8,624.530	101.065	2,427.726	6,900.00	

veraç	ge			Cost Expenditure Attribution (\$ 000's)							
DC Item No.	EA Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	User R Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Asset Management Reserve Fund I	
					728.791			101.065	627.726		
			560.000 1,550.000 387.500 9,000.000		40.050.=0.1	700 0-00	0.004.5000	0.055	4 200 555	6,900.0000	
	DC Item	DC Land Item Design	EA DC Land Item Design Gross No. Const. Cost	EA DC Land Item Design Gross Subsidy/ No. Const. Cost A  State of the process of	EA User R  DC Land ltem Design Gross Cost A B C  Subsidy/ Other Existing C  560.000 1,550.000 387.500 9,000.000	EA	Cost   Cost	EA Land Item Design No. Const. Cost A B B C D Existing Const. A B Cost Expenditure Att (\$ 000's)    Cost Expenditure Att (\$ 000's)	EA Land Item Design No. Const. Cost A B Const. A Subsidy/Other B C D Commercial Charges C D E F G C D E F G C Cost Sisting Charges C Cha	EA Land Item Design No. Const. Cost A Benefit to Const. A Benefit to Benefit to Benefit to Const. A Benefit to Const. A Total Benefit to Const. A Total Benefit to Existing Benefit to Charges B C D Total Commercial Charges F G H  Total User Revenue Charges F G H  Total Development Charges F G H  Total Development Charges F G H  Total Development Charges F G H  Total Development Charges F G H  Total Development Charges F G H  Total Development Charges F G H  Total Development Charges F G H  Total Development Charges F G H  Total Development Charges F G H  Total Development Charges F G H  Total Development Charges F G H  Total Development Charges F G H  Total Development Charges F G H  Total Development Charges F G H  Total Development Charges F G H  Total Development Charges F G H  Total Development Charges F G H  Total Development Charges F G H	

<sup>\*</sup> Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

## 2019 Construction Program - Sanitary Sewerage

							Cost Ex	penditure Attrib (\$ 000's)	ution		
		EA			User Re	venue					Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Management Reserve Fund I
A LINEAR INFRASTRUCTURE											
Regional Road Program											
1 R.R.14 (Liberty St.) from Baseline Rd. to King St., Bowmanville		D	350	0.000	350.000	350.000	0.000	0.000	0.000	0.000	0.000
* 2 R.R. 22 (Victoria St.) from S. Blair to Thickson Rd., Whitby		С	920	0.000	920.000	920.000		0.000	0.000	0.000	0.000
6 R.R.57 (Martin Rd.) from Baseline Rd to Nash Rd., Bowmanville		С	2,300	0.000	0.000	0.000		1,708.900	18.400	439.300	0.000
* 7 R.R. 59 (Gibb St.) from Stevenson Rd. to Simcoe St., Oshawa		С	220	0.000	220.000	220.000		0.000	0.000	0.000	0.000
9 Hwy 12 (Brock St) from Manning Rd. to Rossland Rd., Whitby		С	320	0.000	320.000	320.000		0.000	0.000	0.000	0.000
10 Allowance for Sanitary sewers in conjuction with Regional Roads		D,C	1,400	0.000	1,400.000	1,400.000		0.000	0.000	0.000	0.000
Sub-total  Area Municipality Road Programs			5,510	0.000	3,210.000	3,210.000	133.400	1,708.900	18.400	439.300	0.000
11A City of Pickering Road Program		D,C	235	0.000	235.000	235.000		0.000	0.000	0.000	0.000
11B Town of Ajax Road Program		D,C	385	0.000	385.000	385.000		0.000	0.000	0.000	0.000
11C Town of Whitby Road Program		D,C	600	0.000	600.000	600.000		0.000	0.000	0.000	0.000
11D City of Oshawa Road Program		D,C	1,100	0.000	1,100.000	1,100.000		0.000	0.000	0.000	0.000
11E Municipality of Clarington Road Program		D,C	300	0.000	300.000	300.000		0.000	0.000	0.000	0.000
11F Township of Scugog Road Program		D,C D.C	75 340	0.000	75.000 340.000	75.000 340.000		0.000	0.000	0.000	0.000
11G Township of Uxbridge Road Program  11H Township of Brock Road Program		D,C	120	0.000	120.000	120.000		0.000	0.000	0.000	0.000
11i Allowance for unknown requirements in conjunction		D,C	200	0.000	200.000	200.000		0.000	0.000	0.000	0.000
with area municipality road programs		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
Sub-total			3,355	0.000	3,355.000	3,355.000	0.000	0.000	0.000	0.000	0.000
MTO & GO Transit projects			0,000	0.000	3,333.000	0,000.000	0.000	0.000	0.000	0.000	0.000
* 12 Allowance for works in conjunction with MTO		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Sub-total			100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Betterments/Replacements											
14 Works independent of road programs in various locations		D,C	650	0.000	650.000	650.000		0.000	0.000	0.000	0.000
16 YDSS – Rehabilitation of the trunk sanitary sewer		D,C	5,500	4,400.000	1,100.000	1,100.000		0.000	0.000	0.000	0.000
22 Replacement of sewer on Highland Rd from Gliddon Ave to Athol St, Osha	awa	С	50	0.000	0.000	0.000		0.000	0.000	0.000	50.000
24 Replacement of sewer on Centre St from King St to Brock St, Oshawa		С	825	0.000	0.000	0.000		0.000	0.000	0.000	825.000
28 Replacement of sanitary sewers in various locations		D,C	1,482	0.000	0.000	0.000		0.000	0.000	0.000	1,481.920
29 Allowance for construction of services in unserviced areas		D,C	200	0.000	200.000	200.000		0.000	0.000	0.000	0.000
Sub-total		i l	8.707	4,400.000	1.950.000	1.950.000	0.000	0.000	0.000	0.000	2,356.920

## 2019 Construction Program - Sanitary Sewerage

							Cost Ex	xpenditure Attribution (\$ 000's)					
		EA			User Re	wanua					Asset		
	DC	Land		Grant/	User Re	Total	Commercial	Residential	New	New	Management		
Project Description	Item	Design	Gross	Subsidy/	Benefit to	User	Development	Development	Institutional	Industrial	Reserve		
The second secon	No.	Const.	Cost	Other	Existing	Revenue	Charges	Charges	Charges	Charges	Fund		
			Α	В	С	D	Е	F	G	Н	I		
System Expansion													
30 Central Duffin Collector Trunk Sanitary Sewer, Pickering	2	D,C	1,860	1,549.380	310.620	310.620	0.000	0.000	0.000	0.000	0.000		
31 Central Duffin Collector Trunk Sanitary Sewer, Pickering	3	D.C	9,900		3,405.600	3,405.600	0.000	0.000	0.000		0.000		
48 Conlin Rd. FM from Ritson Rd. to Harmony Rd., Oshawa	220	D	600		0.000	0.000	34.800	445.800	4.800		0.000		
52 Courtice Trunk Sanitary Sewer Phase 3, Courtice	210	D,C	25,310		0.000	0.000	1,467.980		202.480		0.000		
54 Southwest Courtice Trunk Sanitary Sewer, Courtice	209	Ċ	3,100		0.000	0.000	179.800		24.800		0.000		
59 Foster Creek Trunk Sanitary sewer, Newcastle	311	C	1,200		0.000	0.000	69.600		9.600		0.000		
61 Wilmot Trunk Sewer Rudell Rd to King St , Newcastle	314	С	2,900	0.000	0.000	0.000	168.200	2,154.700	23.200		0.000		
Sub-total Sub-total			44,870	8,043.780	3,716.220	3,716.220	1,920.380	24,600.730	264.880	6,324.010	0.000		
B BUILDINGS													
65 Seaton - Sanitary Sewage Pumping Station 4 and forcemains		С	4,000	3,900.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000		
67 Proposed Harwood Ave SSPS and FM, Ajax	104	D	600	0.000	0.000	0.000	34.800	445.800	4.800	114.600	0.000		
68 Carruthers SSPS and Standby power, Ajax	102	С	1,700	0.000	0.000	0.000	98.600	1,263.100	13.600	324.700	0.000		
69 Carruthers Sanitary Sewage Pumping Station - Chemical evaluation		С	1,000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1,000.000		
70 Corbett Creek WPCP - works to rectify existing deficiences, Whitby	19	D	1,300	0.000	728.000	728.000	58.916	372.970	124.592	15.522	0.000		
76 Harmony Creek WPCP - Demolition Plant No. 1		С	2,100		2,100.000	2,100.000	0.000		0.000		0.000		
80 Simcoe St. SSPS - replacement of building and FM, Oshawa	203	С	760	0.000	760.000	760.000	0.000	0.000	0.000		0.000		
84 Newcastle WPCP - Capacity Re-rating	308	С	4,600		0.000	0.000	483.000	,	64.400		0.000		
87 Decommission Rudell Rd., Newcastle		С	600		600.000	600.000	0.000		0.000		0.000		
89 Uxbridge WPCP - Optimization Study and upgrades	500	С	2,500		0.000	0.000	262.500		35.000		0.000		
90 Water St. SSPS - upgrades	401	D,C	3,442		0.000	0.000	4.745		0.651	15.600	3,360.080		
Sub-total			22,602	3,900.000	4,288.000	4,288.000	942.561	5,927.093	243.043	2,941.222	4,360.080		
MACHINERY AND EQUIPMENT													
97 Duffin Creek WPCP - Digest mixing improvements & MCC		С	6,700		1,755.400	1,755.400	0.000	0.000	0.000	0.000	0.000		
98 Duffin Creek WPCP - replacement of Reactor 1 & 2, Pickering		С	10,000		2,620.000	2,620.000	0.000	0.000	0.000		0.000		
100 Duffin Creek WPCP - Process Study		D	1,550		406.100	406.100	0.000	0.000	0.000		0.000		
102 Bayly St SSPS - Bar Screen Replacement		С	2,350		2,350.000	2,350.000	0.000	0.000	0.000		0.000		
103 Cloveridge SSPS - Bar Screen Replacement & MCC review		D	500	0.000	500.000	500.000	0.000	0.000	0.000		0.000		
104 Madawaska Pumping Station - stand by power, Oshawa		С	1,200		1,200.000	1,200.000	0.000	0.000	0.000		0.000		
111 Port Darlington WPCP- Major Maintenance Replacement work		D	625	0.000	0.000	0.000	0.000	0.000	0.000		625.000		
Sub-total  IT INFRASTRUCTURE			22,925	13,468.500	8,831.500	8,831.500	0.000	0.000	0.000	0.000	625.000		
			-										
Sub-total			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		

## 2019 Construction Program - Sanitary Sewerage

				_	Cost Expenditure Attribution (\$ 000's)							
Project Description	DC Item No.	EA Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	User Re Benefit to Existing C	venue Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Asset Management Reserve Fund I	
E ALLOWANCES AND OTHER PROVISIONS												
117 Inflow/infiltration studies in various locations		D,C	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.000	
118 Emergency Planning updating		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000	
119 Asset Condition Assessments - Report		D	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.000	
120 Asset Condition Assessment/Investigation TSS Systems		D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000	
121 Master planning energy management		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000	
122 Allowance for acquisition of easements		L	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000	
123 Allowance for engineering studies		D	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000	
125 Preliminary Engineering		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000	
126 Allowance for sundry extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000	0.000	0.000	0.000	
127 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000	
128 Allowance for Regional share for works in conjunction with residential subdivision development	707	D,C	1,460	0.000	0.000	0.000	84.680	1,084.780	11.680	278.860	0.000	
129 Allowance for Regional share for works in conjunction with non-residential development	705	D,C	400	0.000	0.000	0.000	23.200	297.200	3.200	76.400	0.000	
Sub-total			3,675	0.000	1,315.000	1,315.000	107.880	1,381.980	14.880	355.260	500.000	
Total Cost Attribution			111,744	29,812.280	26,765.720	26,765.720	3,104.221	33,618.703	541.203	10,059.792	7,842.000	

<sup>\*</sup> Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

							Cost Ex	penditure Attrib (\$ 000's)	oution		
		EA			User Re	venue					Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Management Reserve Fund I
A LINEAR INFRASTRUCTURE											
Regional Road Program											
4 R.R.43 (Cochrane St.) from Ferguson St to Bonacord Ave, Whitby		С	640	0.000	640.000	640.000	0.000	0.000		0.000	0.000
6 R.R.57 (Martin Rd.) from Baseline Rd to Nash Rd., Bowmanville		С	450	0.000	450.000	450.000	0.000	0.000		0.000	0.000
Sub-total Sub-total			1,090	0.000	1,090.000	1,090.000	0.000	0.000	0.000	0.000	0.000
Area Municipality Road Programs											
11A City of Pickering Road Program		D,C	235	0.000	235.000	235.000	0.000	0.000		0.000	0.000
11B Town of Ajax Road Program		D,C	365	0.000	365.000	365.000	0.000	0.000	0.000	0.000	0.000
11C Town of Whitby Road Program		D,C	600	0.000	600.000	600.000	0.000	0.000		0.000	0.000
11D City of Oshawa Road Program		D,C	1,100	0.000	1,100.000	1,100.000	0.000	0.000		0.000	0.000
11E Municipality of Clarington Road Program		D,C	300	0.000	300.000	300.000	0.000	0.000		0.000	0.000
11F Township of Scugog Road Program		D,C	75	0.000	75.000	75.000	0.000	0.000		0.000	0.000
11G Township of Uxbridge Road Program		D,C	340	0.000	340.000	340.000	0.000	0.000		0.000	0.000
11H Township of Brock Road Program		D,C	120	0.000	120.000	120.000	0.000	0.000		0.000	0.000
11i Allowance for unknown requirements in conjunction		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
with area municipality road programs Sub-total			3,335	0.000	3,335.000	3,335.000	0.000	0.000	0.000	0.000	0.000
MTO & GO Transit projects			·		ŕ						
* 12 Allowance for works in conjunction with MTO		D,C	100	0.000	100.000	100.000	0.000	0.000		0.000	0.000
Sub-total  Betterments/Replacements			100	0.000	100.000	100.000	0.000	0.000		0.000	0.000
14 Works independent of road programs in various locations		D,C	650	0.000	650.000	650.000	0.000	0.000		0.000	0.000
28 Replacement of sanitary sewers in various locations		D,C	2,316	0.000	0.000	0.000	0.000	0.000		0.000	2,315.780
29 Allowance for construction of services in unserviced areas		С	200	0.000	200.000	200.000	0.000	0.000		0.000	0.000
Sub-total  System Expansion			3,166	0.000	850.000	850.000	0.000	0.000	0.000	0.000	2,315.780
* 32 Duffin Creek - YDSS primary trunk sewer twinning, Pickering	105	EA	6,000	4,800.000	0.000	0.000	69.600	891.600	9.600	229.200	0.000
* 41 Brooklin TSS on easement from Anderson to Thickson SSPS, W	227	D	880	0.000	0.000	0.000	51.040	653.840	7.040	168.080	0.000
* 43 Conlin Rd. W TSS on W/O Boundary to Conlin SSPS, Whitby	218	D	800	0.000	0.000	0.000	46.400	594.400	6.400	152.800	0.000
<ul> <li>45 Twinning of NW branch of Harmony Creek trunk sewer, Oshawa</li> </ul>	801	С	2,050	0.000	2,050.000	2,050.000	0.000	0.000	0.000	0.000	0.000
<ul> <li>* 46 North Oshawa Creek (East Branch) TSS, Oshawa</li> </ul>	802		870	0.000	0.000	0.000		646.410			
<ul> <li>47 Twinning of Oshawa Creek TSS from Gibb to Greenwood, Oshawa</li> </ul>	215		250	0.000	0.000	0.000	14.500	185.750			
* 48 Conlin Rd. FM from Ritson Rd. to Harmony Rd., Oshawa	220	С	5,450	0.000	0.000	0.000	316.100	4,049.350			
* 49 Harmony Rd. Sub Trunk Conlin Rd. to 1500 m Northernly, Oshawa		D,C	4,200	0.000	0.000	0.000	243.600	3,120.600		802.200	
* 50 North Oshawa Creek West Branch TSS, Oshawa	216		500	0.000	0.000	0.000	29.000	371.500		95.500	
* 51 North Oshawa Creek West Branch TSS, Oshawa	217	EA	500	0.000	0.000	0.000	29.000	371.500		95.500	
* 55 Baseline Rd. TSS from Simpson to Bennett Rd., Bowmanville	304	D	1,400	0.000	0.000	0.000	81.200	1,040.200		267.400	
* 56 Port Darlington Rd. TSS from Baseline Rd. to easement, Bowmanville	307	D	1,700	0.000	0.000	0.000	98.600	1,263.100	13.600	324.700	0.000

							Cost Ex	penditure Attrik (\$ 000's)	oution		
		EA			User Re	venue					Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Management Reserve Fund I
* 60 Foster Creek Trunk Sanitary sewer, Newcastle	312	D	500	0.000	0.000	0.000	29.000	371.500	4.000	95.500	0.000
* 62 Wilmot Trunk Sewer on King St to Hwy 115/35, Newcastle	314	D	300	0.000	0.000	0.000	17.400	222.900	2.400	57.300	0.000
Sub-total			25,400	4,800.000	2,050.000	2,050.000	1,075.900	13,782.650	148.400	3,543.050	0.000
B BUILDINGS											
* 70 Corbett Creek WPCP - works to rectify existing deficiences, Whitby	19	С	5,500	0.000	3,080.000	3,080.000	249.260	1,577.950	527.120	65.670	0.000
78 Proposed Conlin Rd. SSPS - expansion, Oshawa	206	D	1,000	0.000	0.000	0.000	58.000	743.000		191.000	0.000
90 Water St. SSPS - upgrades	401	С	3,100	0.000	0.000	0.000	4.274	54.870	0.586	14.050	3,026.220
* 95 Septage receiving station, Region Wide		D	250	0.000	250.000	250.000	0.000	0.000	0.000	0.000	0.000
Sub-total			9,850	0.000	3,330.000	3,330.000	311.534	2,375.820	535.706	270.720	3,026.220
C MACHINERY AND EQUIPMENT											
* 98 Duffin Creek WPCP - replacement of Reactor 1 & 2, Pickering		С	21,000	15,498.000	5,502.000	5,502.000	0.000	0.000	0.000	0.000	0.000
* 103 Cloveridge SSPS - Bar Screen Replacement & MCC review		С	2,100	0.000	2,100.000	2,100.000	0.000	0.000	0.000	0.000	0.000
* 109 Courtice WPCP - Plant upgrades		D	350	0.000	350.000	350.000	0.000	0.000	0.000	0.000	0.000
* 111 Port Darlington WPCP- Major Maintenance Replacement work		С	2,000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2,000.000
Sub-total  D IT INFRASTRUCTURE			25,450	15,498.000	7,952.000	7,952.000	0.000	0.000	0.000	0.000	2,000.000
Sub-total  E ALLOWANCES AND OTHER PROVISIONS			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
117 Inflow/infiltration studies in various locations	+	D,C	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.000
119 Asset Condition Assessments - Report	+	D,C D	300	0.000	0.000	0.000	0.000	0.000		0.000	300.000
120 Asset Condition Assessment/Investigation TSS Systems	+	D	200	0.000	0.000	0.000	0.000	0.000		0.000	200.000
122 Allowance for acquisition of easements	1	L	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
123 Allowance for engineering studies		D	150	0.000	150.000	150.000	0.000	0.000		0.000	0.000
125 Preliminary Engineering	1	D	100	0.000	100.000		0.000	0.000		0.000	0.000
126 Allowance for sundry extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000		0.000	0.000
127 Allowance for unknown requirements	1	D,C	100	0.000	100.000	100.000	0.000	0.000		0.000	0.000
128 Allowance for Regional share for works in conjunction with residential subdivision development	707	D,C	1,460	0.000	0.000	0.000	84.680	1,084.780		278.860	0.000
129 Allowance for Regional share for works in conjunction with non-residential development	705	D,C	400	0.000	0.000	0.000	23.200	297.200	3.200	76.400	0.000
Sub-total			3,375	0.000	1,015.000	1,015.000	107.880	1,381.980	14.880	355.260	500.000
Total Cost Attribution			71,766	20,298.000	19,722.000	19,722.000	1,495.314	17,540.450	698.986	4,169.030	7,842.000

<sup>\*</sup> Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

							Cost	Expenditure Att (\$ 000's)	ribution		
		EA			User R	evenue					Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Management Reserve Fund I
A LINEAR INFRASTRUCTURE											
Regional Road Program											
1 R.R.14 (Liberty St.) from Baseline Rd. to King St., Bowmanville		С	1,400	0.000	1,400.000	1,400.000	0.000	0.000	0.000	0.000	0.00
5 R.R.53 (Stevenson Rd.) from Bond St. to Rossland Rd., Oshawa		D	275	0.000	275.000	275.000	0.000	0.000	0.000	0.000	0.00
Sub-total			1,675	0.000	1,675.000	1,675.000	0.000	0.000	0.000	0.000	0.00
Area Municipality Road Programs											
11A City of Pickering Road Program		D.C	235	0.000	235.000	235.000	0.000	0.000	0.000	0.000	0.00
11B Town of Ajax Road Program		D.C	365	0.000	365.000	365.000	0.000	0.000	0.000	0.000	0.00
11C Town of Whitby Road Program		D,C	600	0.000	600.000	600.000	0.000	0.000	0.000	0.000	0.00
11D City of Oshawa Road Program		D,C	1,100	0.000	1,100.000	1,100.000	0.000	0.000	0.000	0.000	0.00
11E Municipality of Clarington Road Program		D,C	300	0.000	300.000	300.000	0.000	0.000	0.000	0.000	0.00
11F Township of Scugog Road Program		D,C	75	0.000	75.000	75.000	0.000	0.000	0.000	0.000	0.00
11G Township of Uxbridge Road Program		D,C	340	0.000	340.000	340.000	0.000	0.000	0.000	0.000	0.00
11H Township of Brock Road Program		D,C	120	0.000	120.000	120.000	0.000	0.000	0.000	0.000	0.00
11i Allowance for unknown requirements in conjunction		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.00
with area municipality road programs											
Sub-total			3,335	0.000	3,335.000	3,335.000	0.000	0.000	0.000	0.000	0.00
MTO & GO Transit projects											
12 Allowance for works in conjunction with MTO		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.00
Sub-total Sub-total			100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.00
Betterments/Replacements											
14 Works independent of road programs in various locations		D,C	650	0.000	650.000	650.000	0.000	0.000	0.000	0.000	0.00
25 Replacement of sewer on RR 22 from Cubert St to Oxford St, Oshawa	ı	D,C	270	0.000	0.000	0.000	0.000	0.000	0.000	0.000	270.00
28 Replacement of sanitary sewers in various locations		D,C	5,072	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5,072.00
29 Allowance for construction of services in unserviced areas		С	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.00
Sub-total			6,192	0.000	850.000	850.000	0.000	0.000	0.000	0.000	5,342.00
System Expansion											
38 Twinning of Harbour TSS from Water St to Breakwater SSPS, W	221	D	400	0.000	0.000	0.000	23.200	297.200	3.200	76.400	0.00
44 Farewell Creek TSS on easement west of Grandview, Oshawa	214	D	500	0.000	0.000	0.000	29.000	371.500	4.000	95.500	0.00
46 North Oshawa Creek (East Branch) TSS, Oshawa	219	С	3,500	0.000	0.000	0.000	203.000	2,600.500	28.000	668.500	0.00
47 Twinning of Oshawa Creek TSS from Gibb to Greenwood, Oshawa	215	С	975	0.000	0.000	0.000		724.425	7.800	186.225	0.00
52 Courtice Sanitary Trunk Sewer Phase 4, Courtice	211	C	38,200	0.000	0.000	0.000	,	28,382.600	305.600	7,296.200	0.00
60 Foster Creek Trunk Sanitary sewer, Newcastle	312	С	2,000	0.000	0.000	0.000	116.000	1,486.000	16.000	382.000	0.00
62 Wilmot Trunk Sewer on King St to Hwy 115/35, Newcastle	314	С	1,100	0.000	0.000	0.000		817.300	8.800	210.100	0.00
Sub-total Sub-total	1		46,675	0.000	0.000	0.000	2,707.150	34,679.525	373.400	8,914.925	0.00

							Cost	Expenditure Att (\$ 000's)	ribution		
		EA			User R	evenue					Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Management Reserve Fund I
B BUILDINGS											
* 63 Duffin Creek WPCP - New or expanded outfall	100	С	240,000	203,712.000	28,128.000	28,128.000	859.200	4,348.800	115.200	2,836.800	0.000
* 67 Harwood Ave SSPS and FM, Ajax	104	С	3,450	0.000	0.000	0.000	200.100	2,563.350	27.600	658.950	0.000
* 71 Corbett Creek WPCP - New Headworks Building		С	4,900	0.000	4,900.000	4,900.000	0.000	0.000	0.000	0.000	0.000
* 74 Proposed Thickson Rd SSPS and FM, Whitby	202	D	1,500	0.000	0.000	0.000	87.000	1,114.500	12.000	286.500	0.000
88 Decommission Sunset SSPS , Newcastle		D,C	600	0.000	600.000	600.000	0.000	0.000	0.000	0.000	0.000
* 95 Septage receiving station, Region Wide		Ć	1,500	0.000	1,500.000	1,500.000	0.000	0.000	0.000	0.000	0.000
Sub-total			251,950	203,712.000	35,128.000	35,128.000	1,146.300	8,026.650	154.800	3,782.250	0.000
C MACHINERY AND EQUIPMENT											
* 98 Duffin Creek WPCP - replacement of Reactor 1 & 2, Pickering		С	52,000	38,376.000	13,624.000	13,624.000	0.000	0.000	0.000	0.000	0.000
* 109 Courtice WPCP - Plant upgrades		D	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.000
* 111 Port Darlington WPCP- Major Maintenance Replacement work		С	2,000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2,000.000
Sub-total			54,500	38,376.000	14,124.000	14,124.000	0.000	0.000	0.000	0.000	2,000.000
D IT INFRASTRUCTURE											
Sub-total											
E ALLOWANCES AND OTHER PROVISIONS											
117 Inflow/infiltration studies in various locations		D,C	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.000
119 Asset Condition Assessments - Report		D	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.000
120 Asset Condition Assessment/Investigation TSS Systems		D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000
122 Allowance for acquisition of easements		L	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
123 Allowance for engineering studies		D	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
125 Preliminary Engineering		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
126 Allowance for sundry extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000	0.000	0.000	0.000
127 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
128 Allowance for Regional share for works in conjunction with residential subdivision development	707	D,C	1,460	0.000	0.000	0.000	84.680	1,084.780	11.680	278.860	0.000
129 Allowance for Regional share for works in conjunction with non-residential development	705	D,C	400	0.000	0.000	0.000	23.200	297.200	3.200	76.400	0.000
Sub-total			3,375	0.000	1,015.000	1,015.000	107.880	1,381.980	14.880	355.260	500.000
Total Cost Attribution			367,802	242,088.000	56,227.000	56,227.000	3,961.330	44,088.155	543.080	13,052.435	7,842.000

<sup>\*</sup> Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

							Cost E	Expenditure Attr (\$ 000's)	ibution		
		EA			User Ro	evenue					Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Management Reserve Fund I
A LINEAR INFRASTRUCTURE							_	-			-
Regional Road Program											
* 8 R.R. 59 (Gibb St.)/ Olive Ave. interconnection, Oshawa		D	40	0.000	40.000	40.000	0.000	0.000	0.000	0.000	0.000
10 Allowance for Sanitary sewers in conjuction with Regional Roads		D,C	1,965	0.000	1,965.000	1,965.000	0.000	0.000	0.000	0.000	0.000
Sub-total Sub-total			2,005	0.000	2,005.000	2,005.000	0.000	0.000	0.000	0.000	0.000
Area Municipality Road Programs											
11A City of Pickering Road Program		D,C	235	0.000	235.000	235.000	0.000	0.000	0.000	0.000	0.000
11B Town of Ajax Road Program		D,C	365	0.000	365.000	365.000	0.000	0.000	0.000	0.000	0.000
11C Town of Whitby Road Program		D,C	600	0.000	600.000	600.000		0.000	0.000	0.000	0.000
11D City of Oshawa Road Program		D,C	1,100	0.000	1,100.000	1,100.000		0.000	0.000	0.000	0.000
11E Municipality of Clarington Road Program		D,C	300	0.000	300.000	300.000		0.000	0.000	0.000	0.000
11F Township of Scugog Road Program		D,C	75	0.000	75.000	75.000		0.000	0.000	0.000	0.000
11G Township of Uxbridge Road Program  11H Township of Brock Road Program		D,C D,C	340 120	0.000	340.000 120.000	340.000 120.000	0.000	0.000	0.000	0.000	0.000
11i Allowance for unknown requirements in conjunction		D,C	200	0.000	200.000	200.000		0.000	0.000	0.000	0.000
with area municipality road programs		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
Sub-total			3,335	0.000	3,335.000	3,335.000	0.000	0.000	0.000	0.000	0.000
MTO & GO Transit projects											
* 12 Allowance for works in conjunction with MTO		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Sub-total			100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
Betterments/Replacements											
14 Works independent of road programs in various locations		D,C	650	0.000	650.000	650.000	0.000	0.000	0.000	0.000	0.000
18 Replacement of sanitary sewer on Maria St., Whitby		D,C	475	0.000	0.000	0.000		0.000	0.000	0.000	475.000
19 Replacement of sewer on Orchard Crt from St Lawrence to W/L, Whitby		D,C	165	0.000	0.000	0.000		0.000	0.000	0.000	165.000
20 Replacement of sewer on Simcoe St from Quebec St to Gibb St, Oshawa		D,C	150	0.000	0.000	0.000		0.000	0.000	0.000	150.000
28 Replacement of sanitary sewers in various locations		D,C	5,552	0.000	0.000	0.000		0.000	0.000	0.000	5,552.000
29 Allowance for construction of services in unserviced areas Sub-total		С	200 7,192	0.000	200.000 850.000	200.000 850.000		0.000	0.000	0.000	0.000 6,342.000
System Expansion			7,192	0.000	830.000	650.000	0.000	0.000	0.000	0.000	0,342.000
* 32 Duffin Creek - YDSS primary trunk sewer twinning, Pickering	108	D	15,000	12,000.000	0.000	0.000	174.000	2,229.000	24.000	573.000	0.000
36 Church St. from Hydro Right Way to Taunton Rd., Ajax		D	100	0.000	0.000	0.000		74.300		19.100	0.000
* 38 Twinning of Harbour TSS from Water St to Breakwater SSPS, W	226	С	1,560	0.000	0.000	0.000		1,159.080		297.960	0.000
* 40 West Whitby sub trunk on Dundas St. fr Coronation Rd to Halls Rd.		D	400	0.000	0.000	0.000	23.200	297.200		76.400	0.000
* 41 Brooklin TSS on easement from Anderson to Thickson SSPS, W	232	С	3,520	0.000	0.000	0.000		2,615.360		672.320	0.000
<ul> <li>43 Conlin Rd. W TSS on W/O Boundary to Conlin SSPS, Whitby</li> </ul>	222	С	5,700	0.000	0.000	0.000		4,235.100			
* 50 North Oshawa Creek West Branch TSS, Oshawa	219	D	500	0.000	0.000	0.000		371.500		95.500	0.000
* 51 North Oshawa Creek West Branch TSS, Oshawa	221	D	1,500	0.000	0.000	0.000		1,114.500		286.500	0.000
<ul> <li>55 Baseline Rd. TSS from Simpson to Bennett Rd., Bowmanville</li> </ul>	304	С	5,600	0.000	0.000	0.000	324.800	4,160.800	44.800	1,069.600	0.00

2022 Construction Program - Sanitary Sev	vera	ge		Ţ							
							Cost I	Expenditure Attr (\$ 000's)	ibution		
		EA			Hoor D						Accet
	DC	Land		Grant/	User Ro	Total	Commercial	Residential	New	New	Asset Management
Project Description	No.	Design Const.	Gross Cost A	Subsidy/ Other B	Benefit to Existing C	User Revenue D	Development Charges E	Development Charges F	Institutional Charges G	Industrial Charges H	Reserve Fund I
* 56 Port Darlington Rd. TSS from Baseline Rd. to easement, Bowmanville	305	С	7,100	0.000	0.000	0.000	411.800	5,275.300	56.800	1,356.100	0.000
Sub-total			40,980	12,000.000	0.000	0.000	1,680.840	21,532.140	231.840	5,535.180	0.000
B BUILDINGS											
78 Conlin Rd. SSPS - expansion, Oshawa	207	С	66,000	0.000	0.000	0.000		49,038.000			0.000
Sub-total			66,000	0.000	0.000	0.000	3,828.000	49,038.000	528.000	12,606.000	0.000
C MACHINERY AND EQUIPMENT											
* 98 Duffin Creek WPCP - replacement of Reactor 1 & 2, Pickering		С	21,000	15,498.000	5,502.000	5,502.000		0.000	0.000	0.000	0.000
* 109 Courtice WPCP - Plant upgrades		D	500	0.000	500.000	500.000	0.000	0.000		0.000	0.000
Sub-total			21,500	15,498.000	6,002.000	6,002.000	0.000	0.000	0.000	0.000	0.000
D IT INFRASTRUCTURE											
115 SCADA System replacement and master plan		D	1,000	0.000	0.000	0.000		0.000	0.000	0.000	1,000.000
Sub-total  E ALLOWANCES AND OTHER PROVISIONS			1,000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1,000.000
116 Regional Sewerage Master Planning Study		D,C	800	0.000	0.000	0.000	46.400	594.400	6.400	152.800	0.000
117 Inflow/infiltration studies in various locations		D,C	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.000
119 Asset Condition Assessments - Report		D	300	0.000	0.000	0.000		0.000		0.000	300.000
120 Asset Condition Assessment/Investigation TSS Systems		D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000
122 Allowance for acquisition of easements		L	150	0.000	150.000	150.000		0.000	0.000	0.000	0.000
123 Allowance for engineering studies		D	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
124 Phosphorus Reduction Study for plants North		D	250	0.000	250.000	250.000	0.000	0.000		0.000	0.000
125 Preliminary Engineering	1	D	100	0.000	100.000	100.000		0.000		0.000	0.000
126 Allowance for sundry extensions as per council policy	-	D,C	15 100	0.000	15.000 100.000	15.000		0.000	0.000	0.000	0.000
127 Allowance for unknown requirements 128 Allowance for Regional share for works in conjunction with	707	D,C D,C	1,460	0.000	0.000	100.000 0.000		1,084.780	0.000 11.680		0.000
residential subdivision development	107	D,C	1,400	0.000	0.000	0.000	04.000	1,004.700	11.000	210.000	0.000
129 Allowance for Regional share for works in conjunction with	705	D,C	400	0.000	0.000	0.000	23.200	297.200	3.200	76.400	0.000
non-residential development Sub-total			4,425	0.000	1,265.000	1,265.000	154.280	1,976.380	21.280	508.060	500.000
Sub-total			7,720	0.000	1,200.000	1,200.000	104.200	1,010.000	21.200	300.000	300.000
Total Cost Attribution			146,537	27,498.000	13,557.000	13,557.000	5,663.120	72,546.520	781.120	18,649.240	7,842.000

<sup>\*</sup> Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

### 2023 Construction Program - Sanitary Sewerage **Cost Expenditure Attribution** (\$ 000's) EΑ **User Revenue** Asset DC Land Grant/ **Total** Commercial Residential New New Management **Project Description** Design Subsidy/ Benefit to User Development Institutional Industrial Item Gross Development Reserve **Existing** Charges No. Const. Cost Other Revenue Charges Charges Charges **Fund** Ε Н G LINEAR INFRASTRUCTURE Regional Road Program 10 Allowance for Sanitary sewers in conjuction with Regional Roads D,C 2,000 0.000 2,000.000 2,000.000 0.000 0.000 0.000 0.000 0.000 2,000 0.000 2,000.000 2,000.000 0.000 0.000 0.000 0.000 0.000 **Area Municipality Road Programs** 11A City of Pickering Road Program D,C 235 0.000 235.000 235.000 0.000 0.000 0.000 0.000 0.000 11B Town of Ajax Road Program D,C 365 0.000 365.000 365.000 0.000 0.000 0.000 0.000 0.000 11C Town of Whitby Road Program D,C 600 0.000 600.000 600.000 0.000 0.000 0.000 0.000 0.000 11D City of Oshawa Road Program D,C 1,100 0.000 1,100.000 1,100.000 0.000 0.000 0.000 0.000 0.000 11E Municipality of Clarington Road Program D,C 300 0.000 300.000 300.000 0.000 0.000 0.000 0.000 0.000 11F Township of Scugog Road Program D,C 75 0.000 75.000 75.000 0.000 0.000 0.000 0.000 0.000 11G Township of Uxbridge Road Program D,C 340 0.000 340.000 340.000 0.000 0.000 0.000 0.000 0.000 120 11H Township of Brock Road Program D,C 0.000 120.000 120.000 0.000 0.000 0.000 0.000 0.000 11i Allowance for unknown requirements in conjunction D.C 200 0.000 200.000 200.000 0.000 0.000 0.000 0.000 0.000 with area municipality road programs 3,335.000 0.000 0.000 Sub-total 3,335 0.000 3,335.000 0.000 0.000 0.000 MTO & GO Transit projects 12 Allowance for works in conjunction with MTO D,C 100 0.000 100.000 100.000 0.000 0.000 0.000 0.000 0.000 Sub-total 100 0.000 100.000 100.000 0.000 0.000 0.000 0.000 0.000 Betterments/Replacements 14 Works independent of road programs in various locations D,C 650 0.000 650.000 650.000 0.000 0.000 0.000 0.000 0.000 19 Replacement of sewer on Walnut St from Euclid St to Kent St, Whitby D,C 180 0.000 0.000 0.000 0.000 0.000 0.000 0.000 180.000 23 Replacement of sewer on Olive Ave from Court St. to Ritson Rd., Oshawa D,C 825 0.000 0.000 0.000 0.000 0.000 0.000 0.000 825.000 28 Replacement of sanitary sewers in various locations D,C 5,337 0.000 0.000 0.000 0.000 0.000 0.000 0.000 5,337.000 29 Allowance for construction of services in unserviced areas С 200 0.000 200.000 200.000 0.000 0.000 0.000 0.000 0.000 6,342.000 Sub-total 7,192 0.000 850.000 850.000 0.000 0.000 0.000 0.000 System Expansion 36 Church St. from Hydro Right Way to Taunton Rd., Ajax С 500 0.000 0.000 0.000 29.000 371.500 4.000 95.500 0.000 С 40 West Whitby sub trunk on Dundas St. fr Coronation Rd to Halls Rd. 1,700 0.000 0.000 0.000 98.600 1,263.100 13.600 324.700 0.000 44 Farewell Creek TSS on easement west of Grandview, Oshawa 217 С 2.400 0.000 0.000 0.000 139.200 1,783.200 19.200 458,400 0.000 52 Courtice TSS - Phase 5, Courtice С 14,200 0.000 0.000 0.000 823.600 10,550.600 113.600 2,712.200 0.000 Sub-total 18,800 0.000 0.000 0.000 1,090.400 13,968.400 150.400 3,590.800 0.000 **BUILDINGS** 74 Proposed Thickson Rd SSPS and FM, Whitby 202 С 24,000 0.000 0.000 0.000 1,392.000 17,832.000 192.000 4,584.000 0.000 96 Water Pollution Control Plant Assessments D,C 5,000 0.000 5,000.000 5,000.000 0.000 0.000 0.000 0.000 0.000 Sub-total 29,000 0.000 5,000.000 1,392.000 17,832.000 192.000 4,584.000 5,000.000 0.000

							Cost E	xpenditure Attr (\$ 000's)	ibution		
		EA			User Re	venue					Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Management Reserve Fund I
MACHINERY AND EQUIPMENT											
109 Courtice WPCP - Plant upgrades		С	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000
Sub-total			2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.000
IT INFRASTRUCTURE											
115 SCADA System replacement and master plan		D	1,000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1,000.000
Sub-total Sub-total			1,000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1,000.000
ALLOWANCES AND OTHER PROVISIONS											
117 Inflow/infiltration studies in various locations		D,C	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.000
119 Asset Condition Assessments - Report		D	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.000
120 Asset Condition Assessment/Investigation TSS Systems		D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000
122 Allowance for acquisition of easements		L	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
123 Allowance for engineering studies		D	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
125 Preliminary Engineering		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
126 Allowance for sundry extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000	0.000	0.000	0.000
127 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
128 Allowance for Regional share for works in conjunction with residential subdivision development	707	D,C	1,460	0.000	0.000	0.000	84.680	1,084.780	11.680	278.860	0.00
129 Allowance for Regional share for works in conjunction with non-residential development	705	D,C	400	0.000	0.000	0.000	23.200	297.200	3.200	76.400	0.000
Sub-total			3,375	0.000	1,015.000	1,015.000	107.880	1,381.980	14.880	355.260	500.00

<sup>\*</sup> Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

### 2024 Construction Program - Sanitary Sewerage **Cost Expenditure Attribution** (\$ 000's) EΑ **User Revenue** Asset DC Land Grant/ Total Commercial Residential New New Management **Project Description** Subsidy/ Benefit to Development Item Design Gross User Development Institutional Industrial Reserve Existing Charges No. Const. Cost Other Revenue Charges Charges Charges Fund Α D Ε Н LINEAR INFRASTRUCTURE **Regional Road Program** 3 R.R. 36 (Hopkins St) from Consumers Dr to Dundas St, Whitby D 0.000 215.000 215.000 0.000 0.000 0.000 215 0.000 0.000 5 R.R.53 (Stevenson Rd.) from Bond St. to Rossland Rd., Oshawa С 1,105 0.000 1,105.000 1,105.000 0.000 0.000 0.000 0.000 0.000 8 R.R. 59 (Gibb St.)/ Olive Ave. interconnection, Oshawa С 135 0.000 135.000 135.000 0.000 0.000 0.000 0.000 0.000

Area Municipality Road Program	Area Municipality Road Programs	10 Allowance for Sanitary sewers in conjuction with Regional Roads		D,C	1,000	0.000	1,000.000	1,000.000	0.000	0.000	0.000	0.000	0.000
11A City of Pickering Road Program	11A City of Picketing Road Program	Sub-total Sub-total			2,455	0.000	2,455.000	2,455.000	0.000	0.000	0.000	0.000	0.000
111	11A City of Pickering Road Program												
118   Town of Ajax Road Program	118   Town of Ajax Road Program	Area Municipality Road Programs											
11   Town of Ajax Road Program	11   Town of Ajax Road Program												
11C Trown of Whitby, Road Program	110 City of Oshawa Road Program			, -									0.000
Title   City of Oshawa Road Program   D.C   1,100   0,000   1,100,000   1,100,000   0,000	11   Diry of Oshawa Road Program												0.000
11	11												0.000
11   Township of Scugag Road Program	11   Township of Sugog Road Program				1,100	0.000	1,100.000		0.000	0.000	0.000	0.000	0.000
11   Township of Usbridge Road Program	11   Township of Ubridge Road Program												0.000
111 Township of Brock Road Program	111 Township of Brock Road Program					0.000	75.000						0.000
111   Allowance for unknown requirements in conjunction with area municipality road programs   3,335   0,000   200,000   200,000   0	111   Allowance for unknown requirements in conjunction with area municipality road programs   D,C   200   0.000   200.000   200.000   0.000					0.000	340.000		0.000		0.000	0.000	0.000
With area municipality road programs   3,335   0.000   3,335.000   3,335.000   0.000	With area municipality road programs   3,335   0.000   3,335.000   0	11H Township of Brock Road Program		D,C	120	0.000	120.000	120.000	0.000	0.000	0.000	0.000	0.000
Sub-total   Sub-	Sub-total   Sub-	11i Allowance for unknown requirements in conjunction		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
** 12 Allowance for works in conjunction with MTO	MTO & GO Transit projects         12 Allowance for works in conjunction with MTO         D,C         100         0.000         100.000         100.000         0.000<	with area municipality road programs											
12 Allowance for works in conjunction with MTO	12 Allowance for works in conjunction with MTO	Sub-total			3,335	0.000	3,335.000	3,335.000	0.000	0.000	0.000	0.000	0.000
12 Allowance for works in conjunction with MTO	12 Allowance for works in conjunction with MTO												
Sub-total   100   0.000   100.000   100.000   0.000	Sub-total	MTO & GO Transit projects											
Sub-total   100   0.000   100.000   100.000   0.000	Sub-total	* 12 Allowance for works in conjunction with MTO		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
14 Works independent of road programs in various locations	14 Works independent of road programs in various locations				100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
14 Works independent of road programs in various locations	14 Works independent of road programs in various locations  D.C 650 0.000 650.000 0.												
14 Works independent of road programs in various locations	14 Works independent of road programs in various locations	Betterments/Replacements											
28 Replacement of sanitary sewers in various locations  D,C  7,342  0.000  0.00	28 Replacement of sanitary sewers in various locations  D,C 7,342 0.000	, , , , , , , , , , , , , , , , , , ,											
29 Allowance for construction of services in unserviced areas	29 Allowance for construction of services in unserviced areas   C   200   0.000   200.000   200.000   0.000	14 Works independent of road programs in various locations		D,C	650	0.000	650.000	650.000	0.000	0.000	0.000	0.000	0.000
29 Allowance for construction of services in unserviced areas   C   200   0.000   200.000   200.000   0.000	29 Allowance for construction of services in unserviced areas   C   200   0.000   200.000   200.000   0.000	28 Replacement of sanitary sewers in various locations		D,C	7,342	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7,342.000
System Expansion	System Expansion			Ċ	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.000
* 32 Duffin Creek - YDSS primary trunk sewer twinning, Pickering	* 32 Duffin Creek - YDSS primary trunk sewer twinning, Pickering 105 C 218,600 174,880.000 0.000 0.000 2,535.760 32,483.960 349.760 8,350.520 0.000 0.	Sub-total			8,192	0.000	850.000	850.000	0.000	0.000	0.000	0.000	7,342.000
* 32 Duffin Creek - YDSS primary trunk sewer twinning, Pickering	* 32 Duffin Creek - YDSS primary trunk sewer twinning, Pickering 105 C 218,600 174,880.000 0.000 0.000 2,535.760 32,483.960 349.760 8,350.520 0.000 0.												
**         50 North Oshawa Creek West Branch TSS, Oshawa         216         C         3,700         0.000         0.000         0.000         214.600         2,749.100         29.600         706.700         0.00           * 51 North Oshawa Creek West Branch TSS, Oshawa         217         C         14,200         0.000         0.000         0.000         823.600         10,550.600         113.600         2,712.200         0.00           * 53 Courtice TSS - Phase 6, Courtice         C         12,400         0.000         0.000         0.000         719.200         9,213.200         99.200         2,368.400         0.00           Sub-total         248,900         174,880.000         0.000         0.000         4,293.160         54,996.860         592.160         14,137.820         0.00           * 82 Baseline Rd SSPS, Courtice         207         D         350         0.000         182.000         182.000         9.695         124.810         1.295         32.200         0.00           * 96 Water Pollution Control Plant Assessments         D,C         5,000         0.000         5,000.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000	* 50 North Oshawa Creek West Branch TSS, Oshawa 216 C 3,700 0.000 0.000 0.000 214.600 2,749.100 29.600 706.700 0.000 1.000 214.600 2,749.100 29.600 706.700 0.000 1.000 0.000 0.000 0.000 1.000 0.000 1.0550.600 113.600 2,712.200 0.000 1.0550.600 113.600 2,712.200 0.000 0.	System Expansion											
**         50 North Oshawa Creek West Branch TSS, Oshawa         216         C         3,700         0.000         0.000         0.000         214.600         2,749.100         29.600         706.700         0.00           * 51 North Oshawa Creek West Branch TSS, Oshawa         217         C         14,200         0.000         0.000         0.000         823.600         10,550.600         113.600         2,712.200         0.00           * 53 Courtice TSS - Phase 6, Courtice         C         12,400         0.000         0.000         0.000         719.200         9,213.200         99.200         2,368.400         0.00           Sub-total         248,900         174,880.000         0.000         0.000         4,293.160         54,996.860         592.160         14,137.820         0.00           * 82 Baseline Rd SSPS, Courtice         207         D         350         0.000         182.000         182.000         9.695         124.810         1.295         32.200         0.00           * 96 Water Pollution Control Plant Assessments         D,C         5,000         0.000         5,000.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000	* 50 North Oshawa Creek West Branch TSS, Oshawa 216 C 3,700 0.000 0.000 0.000 214.600 2,749.100 29.600 706.700 0.000 1.000 214.600 2,749.100 29.600 706.700 0.000 1.000 1.000 0.000 1.000												
**         50 North Oshawa Creek West Branch TSS, Oshawa         216         C         3,700         0.000         0.000         0.000         214.600         2,749.100         29.600         706.700         0.00           * 51 North Oshawa Creek West Branch TSS, Oshawa         217         C         14,200         0.000         0.000         0.000         823.600         10,550.600         113.600         2,712.200         0.00           * 53 Courtice TSS - Phase 6, Courtice         C         12,400         0.000         0.000         0.000         719.200         9,213.200         99.200         2,368.400         0.00           Sub-total         248,900         174,880.000         0.000         0.000         4,293.160         54,996.860         592.160         14,137.820         0.00           * 82 Baseline Rd SSPS, Courtice         207         D         350         0.000         182.000         182.000         9.695         124.810         1.295         32.200         0.00           * 96 Water Pollution Control Plant Assessments         D,C         5,000         0.000         5,000.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000	* 50 North Oshawa Creek West Branch TSS, Oshawa 216 C 3,700 0.000 0.000 0.000 214.600 2,749.100 29.600 706.700 0.000 1.000 214.600 2,749.100 29.600 706.700 0.000 1.000 1.000 0.000 1.000	* 32 Duffin Creek - YDSS primary trunk sewer twinning, Pickering	105	С	218,600	174,880.000	0.000	0.000	2,535.760	32,483.960	349.760	8,350.520	0.000
* 53 Courtice TSS - Phase 6, Courtice C 12,400 0.000 0.000 0.000 719.200 9,213.200 99.200 2,368.400 0.00 Sub-total 248,900 174,880.000 0.000 0.000 0.000 4,293.160 54,996.860 592.160 14,137.820 0.00 B BUILDINGS  * 82 Baseline Rd SSPS, Courtice 207 D 350 0.000 182.000 182.000 9.695 124.810 1.295 32.200 0.00 96 Water Pollution Control Plant Assessments D,C 5,000 0.000 5,000.000 5,000.000 0.000 0.000 0.000 0.000 0.000 0.000	* 53 Courtice TSS - Phase 6, Courtice C 12,400 0.000 0.000 0.000 719.200 9,213.200 99.200 2,368.400 0 0.000 Sub-total 248,900 174,880.000 0.000 0.000 0.000 4,293.160 54,996.860 592.160 14,137.820 0 0.000	* 50 North Oshawa Creek West Branch TSS, Oshawa	216	С	3,700	0.000	0.000	0.000	214.600	2,749.100	29.600	706.700	0.000
* 53 Courtice TSS - Phase 6, Courtice C 12,400 0.000 0.000 0.000 719.200 9,213.200 99.200 2,368.400 0.00 Sub-total 248,900 174,880.000 0.000 0.000 0.000 4,293.160 54,996.860 592.160 14,137.820 0.00 B BUILDINGS  * 82 Baseline Rd SSPS, Courtice 207 D 350 0.000 182.000 182.000 9.695 124.810 1.295 32.200 0.00 96 Water Pollution Control Plant Assessments D,C 5,000 0.000 5,000.000 5,000.000 0.000 0.000 0.000 0.000 0.000 0.000	* 53 Courtice TSS - Phase 6, Courtice C 12,400 0.000 0.000 0.000 719.200 9,213.200 99.200 2,368.400 0 0.000 Sub-total 248,900 174,880.000 0.000 0.000 0.000 4,293.160 54,996.860 592.160 14,137.820 0 0.000	* 51 North Oshawa Creek West Branch TSS, Oshawa	217	С	14,200	0.000	0.000	0.000	823.600	10,550.600	113.600	2,712.200	0.000
B         BUILDINGS         BUILDI	B         BUILDINGS         #         82 Baseline Rd SSPS, Courtice         207         D         350         0.000         182.000         182.000         9.695         124.810         1.295         32.200         0.000           *         96 Water Pollution Control Plant Assessments         D,C         5,000         0.000         5,000.000         0.000	* 53 Courtice TSS - Phase 6, Courtice		С	12,400	0.000	0.000	0.000	719.200	9,213.200			0.000
* 82 Baseline Rd SSPS, Courtice 207 D 350 0.000 182.000 9.695 124.810 1.295 32.200 0.000   * 96 Water Pollution Control Plant Assessments D,C 5,000 0.000 5,000.000 5,000.000 0.000 0.000 0.000 0.000	* 82 Baseline Rd SSPS, Courtice 207 D 350 0.000 182.000 9.695 124.810 1.295 32.200 ( * 96 Water Pollution Control Plant Assessments D,C 5,000 0.000 5,000.000 5,000.000 0.000 0.000 0.000 0.000	Sub-total			248,900	174,880.000	0.000	0.000	4,293.160	54,996.860	592.160	14,137.820	0.000
* 82 Baseline Rd SSPS, Courtice 207 D 350 0.000 182.000 9.695 124.810 1.295 32.200 0.000   * 96 Water Pollution Control Plant Assessments D,C 5,000 0.000 5,000.000 5,000.000 0.000 0.000 0.000 0.000	* 82 Baseline Rd SSPS, Courtice 207 D 350 0.000 182.000 9.695 124.810 1.295 32.200 ( * 96 Water Pollution Control Plant Assessments D,C 5,000 0.000 5,000.000 5,000.000 0.000 0.000 0.000 0.000					•			·	·		•	
*         82 Baseline Rd SSPS, Courtice         207 D         350 0.000         182.000 182.000         9.695 124.810         1.295 32.200 0.00           *         96 Water Pollution Control Plant Assessments         D,C         5,000 0.000 5,000.000         5,000.000 0.000 0.000         0.000 0.000 0.000         0.000 0.000	*         82 Baseline Rd SSPS, Courtice         207         D         350         0.000         182.000         182.000         9.695         124.810         1.295         32.200         0.000           *         96 Water Pollution Control Plant Assessments         D,C         5,000         0.000         5,000.000         5,000.000         0.000	B BUILDINGS											
* 96 Water Pollution Control Plant Assessments D,C 5,000 0.000 5,000.000 0.000 0.000 0.000 0.000 0.000 0.000	* 96 Water Pollution Control Plant Assessments D,C 5,000 0.000 5,000.000 0.000 0.000 0.000 0.000 0.000												
* 96 Water Pollution Control Plant Assessments D,C 5,000 0.000 5,000.000 0.000 0.000 0.000 0.000 0.000 0.000	* 96 Water Pollution Control Plant Assessments D,C 5,000 0.000 5,000.000 0.000 0.000 0.000 0.000 0.000	* 82 Baseline Rd SSPS, Courtice	207	D	350	0.000	182.000	182.000	9,695	124.810	1.295	32,200	0.000
													0.000
1 Sup-total 1 1 1 5,3501 0,0001 5,182,0001 9,6951 124,8101 1,2951 32,2001 0.00				,-									0.000
3,555 3					5,550	3.300	3,.32.300	3,.32.330	3.300	.2	00	32.230	2.500
		I	ı	ı l	I	1	I	ı	I	1	I	ı	
	261					204							

### 2024 Construction Program - Sanitary Sewerage Cost Expenditure Attribution (\$ 000's) EΑ **User Revenue** Asset DC Land Grant/ Total Commercial Residential New New Management **Project Description** Design Subsidy/ Benefit to User Development Development Institutional Industrial Reserve Item Gross No. Const. Cost Other Existing Revenue Charges Charges Charges Charges Fund D Ε н Α MACHINERY AND EQUIPMENT 98 Duffin Creek WPCP - replacement of Reactor 1&2, Pickering С 52.000 38.376.000 13.624.000 13.624.000 0.000 0.000 0.000 0.000 0.000 0.000 109 Courtice WPCP - Plant upgrades D,C 2,000.000 2,000.000 0.000 0.000 0.000 2,000 0.000 0.000 15,624.000 Sub-total 54,000 38,376.000 15,624.000 0.000 0.000 0.000 0.000 0.000 IT INFRASTRUCTURE 0.000 0.000 Sub-total 0.000 0.000 0.000 0.000 0.000 0.000 ALLOWANCES AND OTHER PROVISIONS

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84.680

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278.860

76.400

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707

705

500

300

200

200

150

150

100

15

100

400

3,575

325,907

1,460

117 Inflow/infiltration studies in various locations

120 Asset Condition Assessment/Investigation TSS Systems

126 Allowance for sundry extensions as per council policy

128 Allowance for Regional share for works in conjunction with

129 Allowance for Regional share for works in conjunction with

119 Asset Condition Assessments - Report

121 Master planning energy management

127 Allowance for unknown requirements

residential subdivision development

123 Allowance for engineering studies

non-residential development

**Total Cost Attribution** 

125 Preliminary Engineering

Sub-total

122 Allowance for acquisition of easements

<sup>\*</sup> Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

							Cos	t Expenditure Att (\$ 000's)	ribution	,	
		EA			User Re	evenue					Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Management Reserve Fund I
A LINEAR INFRASTRUCTURE											
Regional Road Program											
10 Allowance for Sanitary sewers in conjuction with Regional Roads		D,C	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.00
Sub-total			2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.00
Area Municipality Road Programs											
11A City of Pickering Road Program		D,C	235	0.000	235.000	235.000	0.000	0.000	0.000	0.000	0.00
11B Town of Ajax Road Program		D,C	365	0.000	365.000	365.000	0.000	0.000	0.000	0.000	0.00
11C Town of Whitby Road Program		D,C	600	0.000	600.000	600.000	0.000	0.000	0.000	0.000	0.00
11D City of Oshawa Road Program		D,C	1,100	0.000	1,100.000	1,100.000	0.000	0.000	0.000	0.000	0.00
11E Municipality of Clarington Road Program		D,C	300	0.000	300.000	300.000	0.000	0.000	0.000	0.000	0.00
11F Township of Scugog Road Program		D,C	75	0.000	75.000	75.000	0.000	0.000	0.000	0.000	0.00
11G Township of Uxbridge Road Program		D,C	340	0.000	340.000	340.000	0.000	0.000	0.000	0.000	0.00
11H Township of Brock Road Program		D,C	120	0.000	120.000	120.000	0.000	0.000	0.000	0.000	0.00
11i Allowance for unknown requirements in conjunction		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.00
with area municipality road programs											
Sub-total			3,335	0.000	3,335.000	3,335.000	0.000	0.000	0.000	0.000	0.00
MTO & GO Transit projects											
12 Allowance for works in conjunction with MTO		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.00
Sub-total  Betterments/Replacements			100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.00
Bottomonto											
14 Works independent of road programs in various locations		D,C	650	0.000	650.000	650.000	0.000	0.000	0.000	0.000	0.00
28 Replacement of sanitary sewers in various locations		D,C	7,342	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7,342.00
29 Allowance for construction of services in unserviced areas		С	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.00
Sub-total  System Expansion			8,192	0.000	850.000	850.000	0.000	0.000	0.000	0.000	7,342.00
39 Corbett TSS on easement from Wentworth to Corbett WPCP, W	224	EA	270	0.000	0.000	0.000	15.660	200.610	2.160	51.570	0.00
42 Ash TSS from Consumers Dr/Green Rd to Ash Crk TSS, Whitby	223	EA	1,180	0.000	0.000	0.000	68.440	876.740	9.440	225.380	0.00
58 Soper Creek TSS on Mearns Ave and Concession Rd 3. Bowmanvill	306	D	200	0.000	0.000	0.000	11.600	148.600	1.600	38.200	0.00
Sub-total			1,650	0.000	0.000	0.000	95.700	1,225.950	13.200	315.150	0.00
B BUILDINGS											
66 Proposed Pickering SSPS and forcemain, Pickering	103	EA	500	0.000	0.000	0.000	29.000	371.500	4.000	95.500	0.00
77 Harmony Creek SSPS - expansion and forcemain, Oshawa	205	EA	600	0.000	0.000	0.000	34.800	445.800	4.800	114.600	
79 Harbour Rd. S SSPS and forcemain replacement, Oshawa	204	D	270	0.000	0.000	0.000	15.660	200.610	2.160	51.570	
82 Baseline Rd SSPS, Courtice	207	С	3,400	0.000	1,768.000		94.180	1,212.440	12.580	312.800	
96 Water Pollution Control Plant Assessments		D,C	5,000	0.000	5,000.000	5,000.000	0.000	0.000	0.000	0.000	
Sub-total	1		9,770	0.000	6,768.000	6,768.000	173.640	2,230.350	23.540	574.470	0.00

2025 Construction Program - Sanitary Se	ewe	rage									
							Cos	t Expenditure Att (\$ 000's)	ribution		
		EA			User Re	venue					Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Management Reserve Fund I
C MACHINERY AND EQUIPMENT											
* 109 Courtice WPCP - Plant upgrades		D,C	4,000	0.000	4,000.000	4,000.000	0.000	0.000	0.000	0.000	0.000
Sub-total Sub-total		,	4,000	0.000	4,000.000	4,000.000	0.000	0.000	0.000	0.000	0.000
D IT INFRASTRUCTURE											
Sub-total			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E ALLOWANCES AND OTHER PROVISIONS											
117 Inflow/infiltration studies in various locations		D,C	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.000
119 Asset Condition Assessments - Report		D	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.000
120 Asset Condition Assessment/Investigation TSS Systems		D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000
122 Allowance for acquisition of easements		L	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
123 Allowance for engineering studies		D	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
125 Preliminary Engineering		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
126 Allowance for sundry extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000	0.000	0.000	0.000
127 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
128 Allowance for Regional share for works in conjunction with residential subdivision development	707	D,C	1,460	0.000	0.000	0.000	84.680	1,084.780	11.680	278.860	0.000

0.000

0.000

0.000

0.000

1,015.000

18,068.000

0.000

1,015.000

18,068.000

23.200

107.880

377.220

297.200

1,381.980

4,838.280

3.200

14.880

51.620

76.400

355.260

1,244.880

0.000

500.000

7,842.000

705 D,C

400

3,375

32,422

129 Allowance for Regional share for works in conjunction with

non-residential development

**Total Cost Attribution** 

Sub-total

<sup>\*</sup> Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

### 2026 Construction Program - Sanitary Sewerage **Cost Expenditure Attribution** (\$ 000's) **User Revenue** EΑ Asset DC Land Grant/ Total Commercial Residential New New Management **Project Description** Design Subsidy/ Benefit to User Development Development Institutional Industrial Reserve Item Gross No. Const. Cost Other Existing Revenue Charges Charges Charges Charges Fund D Н Α LINEAR INFRASTRUCTURE **Regional Road Program** 6 R.R.57 (Martin Rd.) from Baseline Rd to Nash Rd., Bowmanville С 1,200 0.000 0.000 0.000 69.600 891.600 9.600 229.200 0.000 2,000.000 10 Allowance for Sanitary sewers in conjuction with Regional Roads D,C 2,000 0.000 2,000.000 0.000 0.000 0.000 0.000 0.000 Sub-total 3.200 0.000 2.000.000 2.000.000 69.600 891.600 9.600 229.200 Area Municipality Road Programs 11A City of Pickering Road Program D,C 235 0.000 235.000 235.000 0.000 0.000 0.000 0.000 0.000 11B Town of Ajax Road Program 365 0.000 D,C 0.000 365.000 365.000 0.000 0.000 0.000 0.000 11C Town of Whitby Road Program 600.000 D.C 600 0.000 600.000 0.000 0.000 0.000 0.000 0.000 11D City of Oshawa Road Program D,C 1.100 0.000 1,100.000 1,100.000 0.000 0.000 0.000 0.000 0.000 11E Municipality of Clarington Road Program D,C 300 0.000 300.000 300.000 0.000 0.000 0.000 0.000 0.000 75.000 11F Township of Scugog Road Program D,C 75 0.000 0.000 0.000 0.000 0.000 0.000 75.000 11G Township of Uxbridge Road Program D.C 340 0.000 340.000 340.000 0.000 0.000 0.000 0.000 0.000 11H Township of Brock Road Program D,C 120 0.000 120.000 120.000 0.000 0.000 0.000 0.000 0.000 11i Allowance for unknown requirements in conjunction D.C 200 0.000 200.000 200.000 0.000 0.000 0.000 0.000 0.000 with area municipality road programs Sub-total 3,335 0.000 3,335.000 3,335.000 0.000 0.000 0.000 0.000 0.000 MTO & GO Transit projects 12 Allowance for works in conjunction with MTO D,C 100 0.000 100.000 100.000 0.000 0.000 0.0000.000 0.000 Sub-total 100 0.000 100.000 100.000 0.000 0.000 0.000 0.000 0.000 Betterments/Replacements 14 Works independent of road programs in various locations D.C 650 0.000 650,000 650.000 0.000 0.000 0.000 0.000 0.000 7,342.000 28 Replacement of sanitary sewers in various locations D,C 7,342 0.000 0.000 0.000 0.000 0.000 0.000 0.000 29 Allowance for construction of services in unserviced areas С 200 0.000 200.000 200.000 0.000 0.000 0.000 0.000 0.000 Sub-total 8.192 0.000 850.000 850.000 0.000 0.000 0.000 0.000 7,342.000 **System Expansion** 34 Twinning of Monarch Ave. TSS, Ajax 250 0.000 0.000 0.000 14.500 185.750 2.000 47.750 0.000 D 57 Twinning of Spry TSS from Baseline Rd. to N/L Spry, Bowmanville 303 EΑ 320 0.000 0.000 0.000 18.560 237.760 2.560 61.120 0.000 Sub-total 0.000 0.000 0.000 33.060 423.510 4.560 108.870 0.000 BUILDINGS 66 Proposed Pickering SSSP and forcemain, Pickering 103 D 500 0.000 0.000 0.000 29.000 371.500 4.000 95.500 0.000 72 Corbett Creek WPCP - expansion 200 EA,D 1,250 0.000 990.250 990.250 27.250 138.500 3.625 90.375 0.000 81 Courtice WPCP - Plant expansion 201 EΑ 1.000 0.000 0.000 0.000 105.000 533.000 14.000 348,000 0.000 83 Northeast SSPS, Bowmanville 302 EΑ 600 0.000 0.000 0.000 34.800 445.800 4.800 114,600 0.000 1,050 212.310 85 Newcastle WPCP - Plant expansion and outfall 308 EΑ 0.000 651.630 651.630 41.895 5.565 138.600 0.000 96 Water Pollution Control Plant Assessments D,C 5,000 0.000 5,000.000 5,000.000 0.000 0.000 0.000 0.000 0.000

6.641.880

6,641.880

237.945

1,701.110

31.990

787.075

0.000

0.000

9,400

Sub-total

							Cos	t Expenditure Att (\$ 000's)	ribution		
		EA			User Re	venue					Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Management Reserve Fund I
C MACHINERY AND EQUIPMENT											
* 109 Courtice WPCP - Plant upgrades		D,C	4,000	0.000	4,000.000	4,000.000	0.000	0.000	0.000	0.000	0.000
Sub-total			4,000	0.000	4,000.000	4,000.000	0.000	0.000	0.000	0.000	0.000
D IT INFRASTRUCTURE											
Sub-total			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E ALLOWANCES AND OTHER PROVISIONS											
117 Inflow/infiltration studies in various locations		D,C	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.000
119 Asset Condition Assessments - Report		D	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.000
120 Asset Condition Assessment/Investigation TSS Systems		D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000
122 Allowance for acquisition of easements		L	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
123 Allowance for engineering studies		D	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
125 Preliminary Engineering		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
126 Allowance for sundry extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000	0.000	0.000	0.000
127 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
128 Allowance for Regional share for works in conjunction with residential subdivision development	707	, -	1,460	0.000	0.000	0.000	84.680	1,084.780	11.680	278.860	0.000
129 Allowance for Regional share for works in conjunction with non-residential development	705	D,C	400	0.000	0.000	0.000	23.200	297.200	3.200	76.400	0.000
Sub-total			3,375	0.000	1,015.000	1,015.000	107.880	1,381.980	14.880	355.260	500.000
Total Cost Attribution			32,172	0.000	17,941.880	17,941.880	448.485	4,398.200	61.030	1,480.405	7,842.000

<sup>\*</sup> Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

							Cos	t Expenditure Att (\$ 000's)	ribution		
		EA			User Re	venue					Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Management Reserve Fund I
A LINEAR INFRASTRUCTURE											
Regional Road Program											
10 Allowance for Sanitary sewers in conjuction with Regional Roads		D,C	2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.00
Sub-total			2,000	0.000	2,000.000	2,000.000	0.000	0.000	0.000	0.000	0.00
Area Municipality Road Programs											
11A City of Pickering Road Program		D,C	235	0.000	235.000	235.000	0.000	0.000	0.000	0.000	0.00
11B Town of Ajax Road Program		D,C	365	0.000	365.000	365.000	0.000	0.000	0.000	0.000	0.00
11C Town of Whitby Road Program		D,C	600	0.000	600.000	600.000	0.000	0.000	0.000	0.000	0.00
11D City of Oshawa Road Program		D,C	1,100	0.000	1,100.000	1,100.000	0.000	0.000	0.000	0.000	0.00
11E Municipality of Clarington Road Program		D,C	300	0.000	300.000	300.000	0.000	0.000	0.000	0.000	0.00
11F Township of Scugog Road Program		D,C	75	0.000	75.000	75.000	0.000	0.000	0.000	0.000	0.00
11G Township of Uxbridge Road Program		D,C	340	0.000	340.000	340.000	0.000	0.000	0.000	0.000	0.00
11H Township of Brock Road Program		D,C	120	0.000	120.000	120.000	0.000	0.000	0.000	0.000	0.00
11i Allowance for unknown requirements in conjunction		D,C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.00
with area municipality road programs Sub-total			3,335	0.000	3,335.000	3,335.000	0.000	0.000	0.000	0.000	0.00
MTO & GO Transit projects											
* 12 Allowance for works in conjunction with MTO		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.00
Sub-total  Betterments/Replacements			100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.00
14 Works independent of road programs in various locations		D,C	650	0.000	650.000	650.000	0.000	0.000	0.000	0.000	0.00
28 Replacement of sanitary sewers in various locations	1	D,C	7,342	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7,342.00
29 Allowance for construction of services in unserviced areas		C	200	0.000	200.000	200.000	0.000	0.000	0.000	0.000	0.00
Sub-total			8,192	0.000	850.000	850.000	0.000	0.000	0.000	0.000	7,342.00
System Expansion											
* 37 Twinning of Duffin Creek TSS from Bayly St. to Hwy 401, Ajax	107	D	1,200	0.000	0.000	0.000	69.600	891.600	9.600	229.200	0.00
Sub-total			1,200	0.000	0.000	0.000	69.600	891.600	9.600	229.200	0.00
B BUILDINGS											
* 66 Proposed Pickering SSSP and forcemain, Pickering	103		10,732	0.000	0.000	0.000	622.456	7,973.876	85.856	2,049.812	0.00
* 79 Harbour Rd. S SSPS and forcemain replacement, Oshawa	204	С	2,480	0.000	0.000	0.000	143.840	1,842.640	19.840	473.680	0.00
* 96 Water Pollution Control Plant Assessments		D,C	5,000	0.000	5,000.000	5,000.000	0.000	0.000	0.000	0.000	0.00
Sub-total			18,212	0.000	5,000.000	5,000.000	766.296	9,816.516	105.696	2,523.492	0.00
C MACHINERY AND EQUIPMENT											
Sub-total			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00

							Cos	t Expenditure Att (\$ 000's)	ribution		
		EA			User Re	venue					Asset
Project Description	DC Item No.	Land Design Const.	Gross Cost A	Grant/ Subsidy/ Other B	Benefit to Existing C	Total User Revenue D	Commercial Development Charges E	Residential Development Charges F	New Institutional Charges G	New Industrial Charges H	Management Reserve Fund I
D IT INFRASTRUCTURE											
Sub-total			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E ALLOWANCES AND OTHER PROVISIONS											
116 Regional Sewerage Master Planning Study		D,C	800	0.000	0.000	0.000	46.400	594.400	6.400	152.800	0.000
117 Inflow/infiltration studies in various locations		D,C	500	0.000	500.000	500.000	0.000	0.000	0.000	0.000	0.000
119 Asset Condition Assessments - Report		D	300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	300.000
120 Asset Condition Assessment/Investigation TSS Systems		D	200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	200.000
122 Allowance for acquisition of easements		L	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
123 Allowance for engineering studies		D	150	0.000	150.000	150.000	0.000	0.000	0.000	0.000	0.000
125 Preliminary Engineering		D	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
126 Allowance for sundry extensions as per council policy		D,C	15	0.000	15.000	15.000	0.000	0.000	0.000	0.000	0.000
127 Allowance for unknown requirements		D,C	100	0.000	100.000	100.000	0.000	0.000	0.000	0.000	0.000
128 Allowance for Regional share for works in conjunction with residential subdivision development	707	D,C	1,460	0.000	0.000	0.000	84.680	1,084.780	11.680	278.860	0.000
129 Allowance for Regional share for works in conjunction with non-residential development	705	D,C	400	0.000	0.000	0.000	23.200	297.200	3.200	76.400	0.000
Sub-total			4,175	0.000	1,015.000	1,015.000	154.280	1,976.380	21.280	508.060	500.000
Total Cost Attribution			37,214	0.000	12,300.000	12,300.000	990.176	12,684.496	136.576	3,260.752	7,842.000

<sup>\*</sup> Indicates Capital project requires prior and/or future funding commitments. Refer to Construction of Municipal Services detail sheet.

### ITEM NO. 7

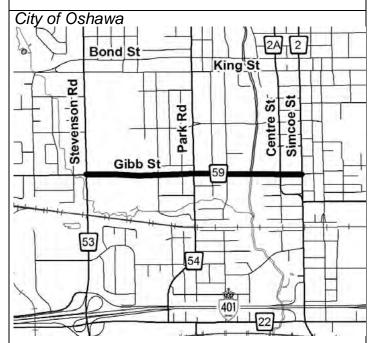
### REGIONAL ROAD PROGRAM

R.R. 59 (Gibb St.) from Stevenson Rd. to Simcoe St., Oshawa

Project No.: R0604

### RELATED PROJECTS

2018 Water Supply Capital Budget Item No.: 11



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

				Four Year	Forecast		
	Budget Prior to 2018	2018 CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		80.000					80.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			220.000				220.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	80.000	220.000	0.000	0.000	0.000	300.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		80.000	220.000				300.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	80.000	220.000	0.000	0.000	0.000	300.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

ITEM NO. 11A

### **Area Municipality Road Programs**

CITY OF PICKERING ROAD PROGRAM (1 Project)

Refer to Construction of Municipal Services summary for list of streets

Project No.: P1899

2018 Water Supply Capital Budget Item No. 17A

### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		50.000	40.000	40.000	40.000	40.000	210.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			195.000	195.000	195.000	195.000	780.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	50.000	235.000	235.000	235.000	235.000	990.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		50.000	235.000	235.000	235.000	235.000	990.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	50.000	235.000	235.000	235.000	235.000	990.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

Replacement of deficient sanitary sewers and/or construction of new works in conjunction with road reconstruction proposed by the City of Pickering.

### **SANITARY SEWERAGE SYSTEM**

### **PROJECT LOCATION & DESCRIPTION**

ITEM NO. 11B

### Area Municipality Road Programs

TOWN OF AJAX ROAD PROGRAM (5 Projects)

Refer to Construction of Municipal Services summary

for list of streets Project No.: A1899

2018 Water Supply Capital Budget Item No. 17B

### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		65.000	60.000	45.000	45.000	45.000	260.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		335.000	325.000	320.000	320.000	320.000	1,620.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	400.000	385.000	365.000	365.000	365.000	1,880.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		400.000	385.000	365.000	365.000	365.000	1,880.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	400.000	385.000	365.000	365.000	365.000	1,880.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

Replacement of deficient sanitary sewers and/or construction of new works in conjunction with road reconstruction proposed by the Town of Ajax

### **SANITARY SEWERAGE SYSTEM**

### PROJECT LOCATION & DESCRIPTION

ITEM NO. 11C

### Area Municipality Road Programs

TOWN OF WHITBY ROAD PROGRAM (1 Project)

Refer to Construction of Municipal Services summary

for list of streets Project No.: W1899

2018 Water Supply Capital Budget Item No. 17C

### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		200.000	70.000	70.000	70.000	70.000	480.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		1,000.000	530.000	530.000	530.000	530.000	3,120.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	1,200.000	600.000	600.000	600.000	600.000	3,600.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		1,200.000	600.000	600.000	600.000	600.000	3,600.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	1,200.000	600.000	600.000	600.000	600.000	3,600.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

Replacement of deficient sanitary sewer and/or construction of new works in conjunction with road reconstruction proposed by the Town of Whitby.

### **SANITARY SEWERAGE SYSTEM**

### PROJECT LOCATION & DESCRIPTION

ITEM NO. 11D

### Area Municipality Road Programs

CITY OF OSHAWA ROAD PROGRAM (4 Projects)

Refer to Construction of Municipal Services summary

for list of streets Project No.: O1899

2018 Water Supply Capital Budget Item No. 17D

### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	r Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		40.000	152.000	152.000	152.000	152.000	648.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		210.000	948.000	948.000	948.000	948.000	4,002.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	250.000	1,100.000	1,100.000	1,100.000	1,100.000	4,650.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		250.000	1,100.000	1,100.000	1,100.000	1,100.000	4,650.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	250.000	1,100.000	1,100.000	1,100.000	1,100.000	4,650.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

Replacement of deficient sanitary sewer and/or construction of new works in conjunction with road reconstruction proposed by the City of Oshawa.

### **SANITARY SEWERAGE SYSTEM**

### PROJECT LOCATION & DESCRIPTION

ITEM NO. 11E

### Area Municipality Road Programs

MUNICIPALITY OF CLARINGTON ROAD PROGRAM (4 Projects)

Refer to Construction of Municipal Services summary for list of streets

Project No.: C1899

2018 Sanitary Sewerage Capital Budget Item No. 17E

### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		80.000	40.000	40.000	40.000	40.000	240.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		520.000	260.000	260.000	260.000	260.000	1,560.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	600.000	300.000	300.000	300.000	300.000	1,800.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		600.000	300.000	300.000	300.000	300.000	1,800.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	600.000	300.000	300.000	300.000	300.000	1,800.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

Replacement of deficient sanitary sewer and/or construction of new works in conjunction with road reconstruction proposed by the Municipality of Clarington.

### **SANITARY SEWERAGE SYSTEM**

### **PROJECT LOCATION & DESCRIPTION**

ITEM NO. 11F

### Area Municipality Road Programs

TOWNSHIP OF SCUGOG ROAD PROGRAM (1 Project)

Refer to Construction of Municipal Services summary

for list of streets Project No.: S1899

2018 Water Supply Capital Budget Item No. 17F

### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		50.000	10.000	10.000	10.000	10.000	90.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			65.000	65.000	65.000	65.000	260.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	50.000	75.000	75.000	75.000	75.000	350.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		50.000	75.000	75.000	75.000	75.000	350.000
OTHER							0.000
ASSET MGMT RESERVE FUND		_					0.000
TOTAL ATTRIBUTION	0.000	50.000	75.000	75.000	75.000	75.000	350.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

Replacement of deficient sanitary sewer and/or construction of new works in conjunction with road reconstruction proposed by the Township of Scugog.

### **SANITARY SEWERAGE SYSTEM**

### **PROJECT LOCATION & DESCRIPTION**

ITEM NO. 11G

### Area Municipality Road Programs

TOWNSHIP OF UXBRIDGE ROAD PROGRAM (2 Projects)

Refer to Construction of Municipal Services summary

for list of streets Project No.: U1899

2018 Water Supply Capital Budget Item No. 17G

### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		40.000	50.000	50.000	50.000	50.000	240.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		210.000	290.000	290.000	290.000	290.000	1,370.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	250.000	340.000	340.000	340.000	340.000	1,610.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		250.000	340.000	340.000	340.000	340.000	1,610.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	250.000	340.000	340.000	340.000	340.000	1,610.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

Replacement of deficient sanitary sewer and/or construction of new works in conjunction with road reconstruction proposed by the Township of Uxbridge.

### **SANITARY SEWERAGE SYSTEM**

### PROJECT LOCATION & DESCRIPTION

ITEM NO. 11H

### Area Municipality Road Programs

TOWNSHIP OF BROCK ROAD PROGRAM (0 Projects)

Refer to Construction of Municipal Services summary

for list of streets Project No.: -

2018 Water Supply Capital Budget Item No. 17H

No works proposed in 2018

### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING			20.000	20.000	20.000	20.000	80.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			100.000	100.000	100.000	100.000	400.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	0.000	120.000	120.000	120.000	120.000	480.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES			120.000	120.000	120.000	120.000	480.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	0.000	120.000	120.000	120.000	120.000	480.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

Replacement of deficient sanitary sewer and/or construction of new works in conjunction with road reconstruction proposed by the Township of Brock.

### **SANITARY SEWERAGE SYSTEM**

### PROJECT LOCATION & DESCRIPTION

ITEM NO. 11i

### Area Municipality Road Programs

ALLOWANCE FOR UNKNOWN SANITARY SEWER REQUIREMENTS IN CONJUNCTION WITH AREA MUNICIPALITY ROAD PROGRAMS

Refer to Construction of Municipal Services summary

for list of streets Project No.: M1803

2018 Water Supply Capital Budget Item No. 17i

### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		20.000	20.000	20.000	20.000	20.000	100.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		192.500	180.000	180.000	180.000	180.000	912.500
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	212.500	200.000	200.000	200.000	200.000	1,012.500
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		212.500	200.000	200.000	200.000	200.000	1,012.500
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	212.500	200.000	200.000	200.000	200.000	1,012.500

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

This allowance is to provide for unanticipated sanitary sewer works in conjunction with area municipality road programs in various locations (Items 11A to 11H)

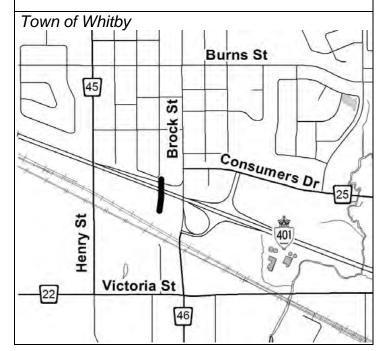
### ITEM NO. 13

### MTO & GO TRANSIT PROJECTS:

Sanitary Sewer replacement in conjunction with the MTO's bridge work and ramp realignment at Brock St., Whitby

Project No.: D1737

### **RELATED PROJECTS**



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	100.000						100.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		600.000					600.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	100.000	600.000	0.000	0.000	0.000	0.000	700.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	100.000	600.000					700.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	100.000	600.000	0.000	0.000	0.000	0.000	700.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

# PROJECT LOCATION & DESCRIPTION ITEM NO. 14 BETTERMENTS/ REPLACEMENTS Wastewater works to rectify identified system deficiencies independent of road programs in various locations Project No.: M1899 RELATED PROJECTS

### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		120.000	100.000	100.000	100.000	100.000	520.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		630.000	550.000	550.000	550.000	550.000	2,830.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	750.000	650.000	650.000	650.000	650.000	3,350.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		750.000	650.000	650.000	650.000	650.000	3,350.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	750.000	650.000	650.000	650.000	650.000	3,350.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPLANATION OF PROJECT	T

### **SANITARY SEWERAGE SYSTEM**

### **PROJECT LOCATION & DESCRIPTION**

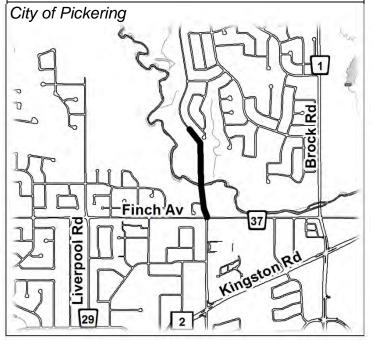
ITEM NO. 15

### BETTERMENTS/ REPLACEMENTS

Replacement of Central Duffin Collector (CDC) siphon on Valley Farm Rd. 670 m North of Finch Ave., Pickering

Project No.: D1501

### **RELATED PROJECTS**



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	300.000						300.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	350.000	150.000					500.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	650.000	150.000	0.000	0.000	0.000	0.000	800.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	650.000	150.000					800.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	650.000	150.000	0.000	0.000	0.000	0.000	800.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

Asset Management Project - siphon has reached the end of its useful life.

### **SANITARY SEWERAGE SYSTEM**

### **PROJECT LOCATION & DESCRIPTION**

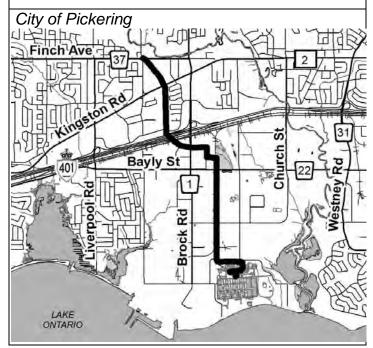
### ITEM NO. 16

### BETTERMENTS/ REPLACEMENTS

YDSS - Rehabilitation of the trunk sanitary sewer from the intersection of Valley Farm Rd. & Finch Ave. to the Duffin Creek Water Pollution Control Plant splitting chamber

Project No.: Y1501

### **RELATED PROJECTS**



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	1,037.600		100.000				1,137.600
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	300.000	700.000	5,400.000				6,400.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	1,337.600	700.000	5,500.000	0.000	0.000	0.000	7,537.600
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	150.000	140.000	1,100.000				1,390.000
OTHER	1,187.600	560.000	4,400.000				6,147.600
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	1,337.600	700.000	5,500.000	0.000	0.000	0.000	7,537.600

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

Cost sharing with York Region.

### **SANITARY SEWERAGE SYSTEM**

### **PROJECT LOCATION & DESCRIPTION**

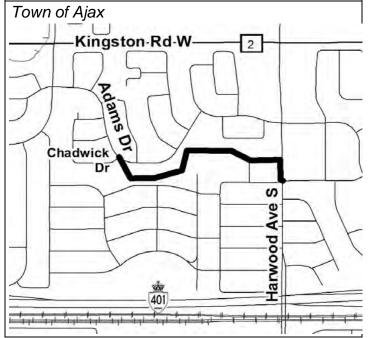
**ITEM NO.: 17** 

### BETTERMENTS/ REPLACEMENTS

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 Rd., Ajax

Project No.: A1706

### **RELATED PROJECTS**



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	5.000	240.000					245.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		1,460.000					1,460.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	5.000	1,700.000	0.000	0.000	0.000	0.000	1,705.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	5.000						5.000
OTHER							0.000
ASSET MGMT RESERVE FUND		1,700.000					1,700.000
TOTAL ATTRIBUTION	5.000	1,700.000	0.000	0.000	0.000	0.000	1,705.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### **NEED/EXPLANATION OF PROJECT**

Asset Management Project - Sanitary sewer has reached the end of its useful service life.

### **SANITARY SEWERAGE SYSTEM**

### PROJECT LOCATION & DESCRIPTION

### ITEM NO. 26

### BETTERMENTS/ REPLACEMENTS

Replacement of sanitary sewer on Athol St. E. from Centre St. to Albert St. Oshawa

Project No.: O1710

### **RELATED PROJECTS**

2018 Water Supply Capital Budget Item No. 41

### City of Oshawa



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget Prior to 2018	2018		Four Year	Forecast		
		CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		30.000					30.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		180.000					180.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	210.000	0.000	0.000	0.000	0.000	210.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
OTHER							0.000
ASSET MGMT RESERVE FUND		210.000					210.000
TOTAL ATTRIBUTION	0.000	210.000	0.000	0.000	0.000	0.000	210.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### **NEED/EXPLANATION OF PROJECT**

Asset Management Project - Sanitary sewer has reached the end of its useful service life.

### **SANITARY SEWERAGE SYSTEM**

### **PROJECT LOCATION & DESCRIPTION**

**ITEM NO.: 27** 

### BETTERMENTS/ REPLACEMENTS

Replacement of sanitary sewer on Simcoe St. from Lloyd St. to John St., Oshawa

Project No.: O1602

### **RELATED PROJECTS**

2018 Water Supply Capital Budget Item No.: 45

### City of Oshawa



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	135.000						135.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	230.000	560.000					790.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	365.000	560.000	0.000	0.000	0.000	0.000	925.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
OTHER							0.000
ASSET MGMT RESERVE FUND	365.000	560.000					925.000
TOTAL ATTRIBUTION	365.000	560.000	0.000	0.000	0.000	0.000	925.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### **NEED/EXPLANATION OF PROJECT**

Asset Management Project - Sanitary sewer has reached the end of its useful service life.

### ITEM NO. 33

### SYSTEM EXPANSION

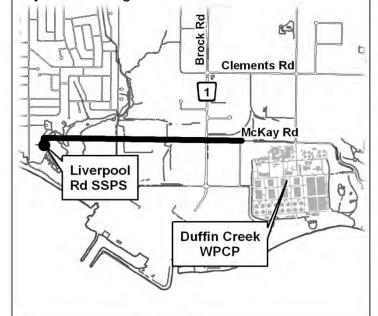
Twinning of the forcemain from the Liverpool Road Sanitary Sewage Pumping Station to the Duffin Creek Water Polllution Control Plant, Pickering

Project No.: P0503

### **RELATED PROJECTS**

2013 Sanitary Sewerage Capital Budget Item No. 41 2015 Sanitary Sewerage Capital Budget Item No. 39

### City of Pickering



### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	2,300.000						2,300.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	6,788.000	6,500.000					13,288.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	9,088.000	6,500.000	0.000	0.000	0.000	0.000	15,588.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES	1,306.110	1,062.750					2,368.860
NEW COMMERCIAL DEVELOPMENT CHARGES*	112.600	82.999					195.599
USER REVENUES	7,451.290	5,081.385					12,532.675
NEW INDUSTRIAL DEV. CHGS.		272.866					272.866
OTHER	218.000						218.000
TOTAL ATTRIBUTION	9,088.000	6,500.000	0.000	0.000	0.000	0.000	15,588.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

ITEM NO. 35

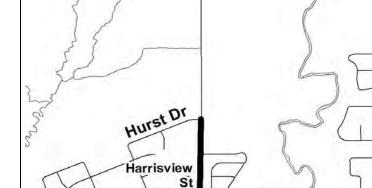
SYSTEM EXPANSION

Church St. from Harrisview St. to Hurst Dr., Ajax

Project No.: A1704

Town of Ajax

**RELATED PROJECTS** 



š

Rossland Rd

### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	50.000	50.000					100.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		600.000					600.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	50.000	650.000	0.000	0.000	0.000	0.000	700.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES		482.950					482.950
NEW COMMERCIAL DEVELOPMENT CHARGES*		37.700					37.700
USER REVENUES	50.000	5.200					55.200
NEW INDUSTRIAL DEV. CHGS.		124.150					124.150
OTHER							0.000
TOTAL ATTRIBUTION	50.000	650.000	0.000	0.000	0.000	0.000	700.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

ITEM NO.: 54

### SYSTEM EXPANSION

Southwest Courtice Trunk Sanitary Sewer on Baseline Rd. from Trulls Rd. to 650 m west of Trulls Rd., Courtice

Project No.: D1821

### **RELATED PROJECTS**

# Municipality of Clarington (Courtice) Bloor St Baseline Rd LAKE ONTARIO

### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018		2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		300.000	200.000				500.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			2,900.000				2,900.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	300.000	3,100.000	0.000	0.000	0.000	3,400.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES		222.900	2,303.300				2,526.200
NEW COMMERCIAL DEVELOPMENT CHARGES*		17.400	179.800				197.200
USER REVENUES		59.700	616.900				676.600
NEW INDUSTRIAL DEV. CHGS.							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	300.000	3,100.000	0.000	0.000	0.000	3,400.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

### NEED/EXPLANATION OF PROJECT

Required to service new development.

ITEM NO. 59

#### SYSTEM EXPANSION

Foster Creek Trunk Sanitary Sewer on Sunset Blvd./Lakeview Rd. from Rudell St. to Church St., Newcastle

Project No.: C1002

#### **RELATED PROJECTS**

2010 Sanitary Sewerage Capital Budget Item No. 50

#### Municipality of Clarington (Newcastle)



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	331.400	175.000					506.400
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		1,825.000	1,200.000				3,025.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	331.400	2,000.000	1,200.000	0.000	0.000	0.000	3,531.400
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES	241.922	1,486.000	891.600				2,619.522
NEW COMMERCIAL DEVELOPMENT CHARGES*	28.500	116.000	69.600				214.100
USER REVENUES	60.978	16.000	238.800				315.778
NEW INDUSTRIAL DEV. CHGS.		382.000					382.000
OTHER							0.000
TOTAL ATTRIBUTION	331.400	2,000.000	1,200.000	0.000	0.000	0.000	3,531.400

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

Required to service new development.

#### ITEM NO. 61

#### SYSTEM EXPANSION

Wilmot Creek Trunk Sanitary Sewer on easement (through future development) from Rudell Rd. to King Ave., Newcastle

Project No.: D1822

#### **RELATED PROJECTS**

#### Municipality of Clarington (Newcastle)



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		300.000	140.000				440.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			2,760.000				2,760.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	300.000	2,900.000	0.000	0.000	0.000	3,200.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES		222.900	2,154.700				2,377.600
NEW COMMERCIAL DEVELOPMENT CHARGES*		17.400	168.200				185.600
USER REVENUES		59.700	577.100				636.800
NEW INDUSTRIAL DEV. CHGS.							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	300.000	2,900.000	0.000	0.000	0.000	3,200.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

Required to service new development.

#### ITEM NO. 64

#### **BUILDINGS**

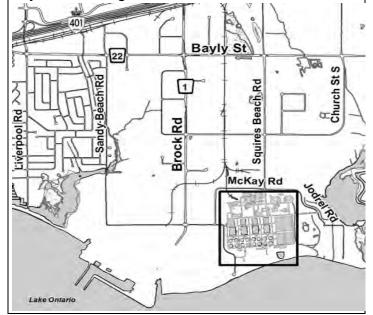
Regional Environmental Laboratory Upgrades and ventilation associated works, Pickering

Project No.: Y1602

#### RELATED PROJECTS

2016 Sanitary Sewerage Capital Budget Item No. 76 2018 Water Supply Capital Budget Item No. 109

#### City of Pickering



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	450.000						450.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		3,100.000					3,100.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	450.000	3,100.000	0.000	0.000	0.000	0.000	3,550.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES	167.175	1,151.650					1,318.825
NEW COMMERCIAL DEVELOPMENT CHARGES*	13.050	89.900					102.950
USER REVENUES	44.775	12.400					57.175
NEW INDUSTRIAL DEV. CHGS.		296.050					296.050
OTHER	225.000	1,550.000					1,775.000
TOTAL ATTRIBUTION	450.000	3,100.000	0.000	0.000	0.000	0.000	3,550.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

Cost sharing with York Region.

#### ITEM NO. 65

#### **BUILDINGS**

Seaton - Sanitary Sewage Pumping Station 4 and forcemain Pickering

Project No.: D1710

City of Pickering

#### **RELATED PROJECTS**

# Seaton SSPS 4 & Forcemain

Taunton Rd

#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2040		Four Year	Forecast		
	Budget Prior to 2018	2018 CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	500.000	200.000					700.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			4,000.000				4,000.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	500.000	200.000	4,000.000	0.000	0.000	0.000	4,700.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	100.000	200.000	100.000				400.000
NEW INDUSTRIAL DEV. CHGS.							0.000
OTHER	400.000		3,900.000				4,300.000
TOTAL ATTRIBUTION	500.000	200.000		0.000	0.000	0.000	4,700.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

Durham to oversee the detailed design and construction of the vertical infrastructure required for the development of the Seaton Community.

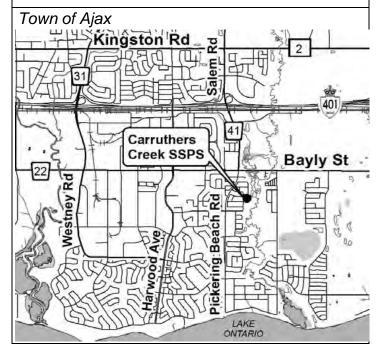
**ITEM NO.: 69** 

#### **BUILDINGS**

Carruthers Creek Sanitary Sewage Pumping Station - Chemical evaluation for odour control

Project No.: D1735

#### **RELATED PROJECTS**



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	45.000	400.000					445.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION			1,000.000				1,000.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	45.000	400.000	1,000.000	0.000	0.000	0.000	1,445.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	45.000						45.000
NEW INDUSTRIAL DEV. CHGS.							0.000
ASSET MGMT RESERVE FUND		400.000	1,000.000				1,400.000
TOTAL ATTRIBUTION	45.000	400.000	1,000.000	0.000	0.000	0.000	1,445.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

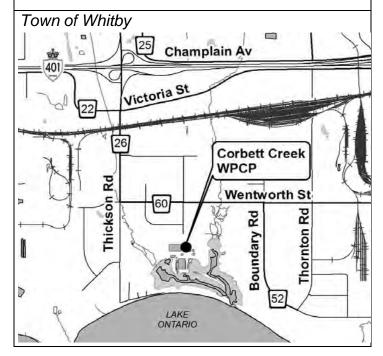
#### ITEM NO. 73

#### **BUILDINGS**

Corbett Creek Water Pollution Control Plant - Primary Sludge Control Improvements, Whitby

Project No.: D1823

#### **RELATED PROJECTS**



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		40.000					40.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		160.000					160.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	200.000	0.000	0.000	0.000	0.000	200.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
NEW INDUSTRIAL DEV. CHGS.							0.000
ASSET MGMT RESERVE FUND		200.000					200.000
TOTAL ATTRIBUTION	0.000	200.000	0.000	0.000	0.000	0.000	200.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

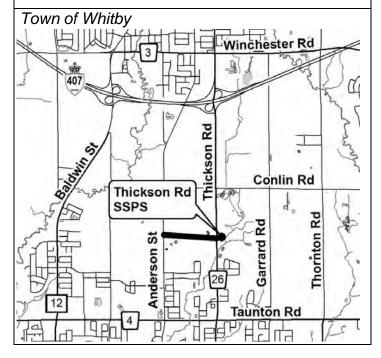
#### ITEM NO. 74

#### **BUILDINGS**

Brooklin Sanitary Diversion Strategy - Proposed Thickson Rd. Sanitary Sewage Pumping Station and forcemain, Whitby

Project No.: D1824

#### **RELATED PROJECTS**



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT		1,000.000					1,000.000
ENGINEERING					1,500.000		1,500.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	1,000.000	0.000	0.000	1,500.000	0.000	2,500.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES		743.000			1,114.500		1,857.500
NEW COMMERCIAL DEVELOPMENT CHARGES*		58.000			87.000		145.000
USER REVENUES		8.000			298.500		306.500
NEW INDUSTRIAL DEV. CHGS.		191.000					191.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	1,000.000	0.000	0.000	1,500.000	0.000	2,500.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

## **PROJECT LOCATION & DESCRIPTION** ITEM NO. 75 **BUILDINGS** Harmony Creek Water Pollution Control Plant No. 2 upgrades, Oshawa Project No.: D1523 **RELATED PROJECTS** City of Oshawa Bloor St Rd **Harmony Creek** Ritson WPCP Wentworth St

#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	1,600.000						1,600.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	18,566.564	3,000.000					21,566.564
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	20,166.564	3,000.000	0.000	0.000	0.000	0.000	23,166.564
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	20,166.564	3,000.000					23,166.564
NEW INDUSTRIAL DEV. CHGS.							0.000
OTHER							0.000
TOTAL ATTRIBUTION	20,166.564	3,000.000	0.000	0.000	0.000	0.000	23,166.564

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

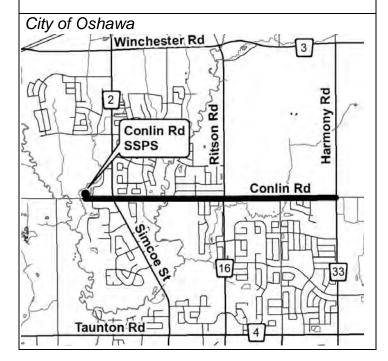
#### ITEM NO. 78

#### **BUILDINGS**

Expansion of the Conlin Road Sanitary Sewage Pumping Station and twinning of the forcemain, Oshawa

Project No.: D1825

#### **RELATED PROJECTS**



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT		500.000					500.000
ENGINEERING				1,000.000		7,500.000	8,500.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION						58,500.000	58,500.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	500.000	0.000	1,000.000	0.000	66,000.000	67,500.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES		371.500		743.000		49,038.000	50,152.500
NEW COMMERCIAL DEVELOPMENT CHARGES*		29.000		58.000		3,828.000	3,915.000
USER REVENUES		99.500		199.000		13,134.000	13,432.500
NEW INDUSTRIAL DEV. CHGS.							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	500.000	0.000	1,000.000	0.000	66,000.000	67,500.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### ITEM NO. 86

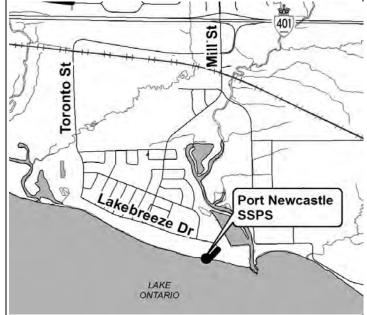
#### **BUILDINGS**

Port Newcastle Sanitary Sewage Pumping Station and forcemain Oversizing, Newcastle

Project No.: D1411

#### **RELATED PROJECTS**

#### Municipality of Clarington (Newcastle)



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	100.000	100.000					200.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		1,200.000					1,200.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	100.000	1,300.000	0.000	0.000	0.000	0.000	1,400.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES	74.300	965.900					1,040.200
NEW COMMERCIAL DEVELOPMENT CHARGES*	5.800	75.400					81.200
USER REVENUES	19.900	10.400					30.300
NEW INDUSTRIAL DEV. CHGS.		248.300					248.300
OTHER							0.000
TOTAL ATTRIBUTION	100.000	1,300.000	0.000	0.000	0.000	0.000	1,400.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### ITEM NO. 91

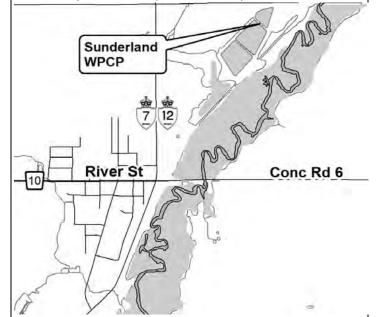
#### **BUILDINGS**

Sunderland Water Pollution Control Plant - Lagoon System Environmental Assessment

Project No.: D1826

#### **RELATED PROJECTS**

#### Township of Brock (Sunderland)



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT		500.000					500.000
ENGINEERING							0.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	500.000	0.000	0.000	0.000	0.000	500.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES		266.500					266.500
NEW COMMERCIAL DEVELOPMENT CHARGES*		52.500					52.500
USER REVENUES		7.000					7.000
NEW INDUSTRIAL DEV. CHGS.		174.000					174.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	500.000	0.000	0.000	0.000	0.000	500.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

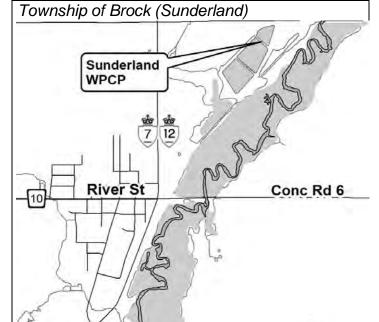
#### ITEM NO. 92

#### **BUILDINGS**

Sunderland Water Pollution Control Plant - Lagoon System Retrofit exfiltration lagoon

Project No.: D1827

#### **RELATED PROJECTS**



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		150.000					150.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		850.000					850.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	1,000.000	0.000	0.000	0.000	0.000	1,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		1,000.000					1,000.000
NEW INDUSTRIAL DEV. CHGS.							0.000
OTHER							0.000
TOTAL ATTRIBUTION	0.000	1,000.000	0.000	0.000	0.000	0.000	1,000.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### ITEM NO. 93

#### **BUILDINGS**

Cannington Water Pollution Control Plant - Lagoon System Environmental Assessment

Project No.: D1828

#### **RELATED PROJECTS**

## Township of Brock (Cannington)



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT		500.000					500.000
ENGINEERING							0.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	500.000	0.000	0.000	0.000	0.000	500.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES		266.500					266.500
NEW COMMERCIAL DEVELOPMENT CHARGES*		52.500					52.500
USER REVENUES		69.366					69.366
NEW INDUSTRIAL DEV. CHGS.		111.634					111.634
OTHER							0.000
TOTAL ATTRIBUTION	0.000	500.000	0.000	0.000	0.000	0.000	500.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

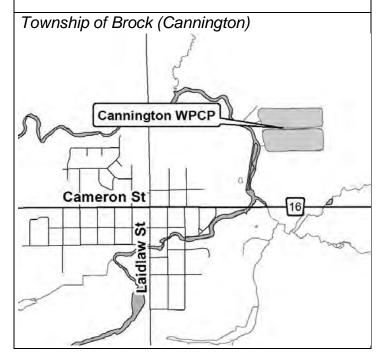
#### ITEM NO. 94

#### **BUILDINGS**

Cannington Water Pollution Control Plant - Lagoon System Improvements

Project No.: D1829

#### **RELATED PROJECTS**



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		40.000					40.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		260.000					260.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	300.000	0.000	0.000	0.000	0.000	300.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
NEW INDUSTRIAL DEV. CHGS.							0.000
ASSET MGMT RESERVE FUND		300.000					300.000
TOTAL ATTRIBUTION	0.000	300.000	0.000	0.000	0.000	0.000	300.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

#### ITEM NO. 99

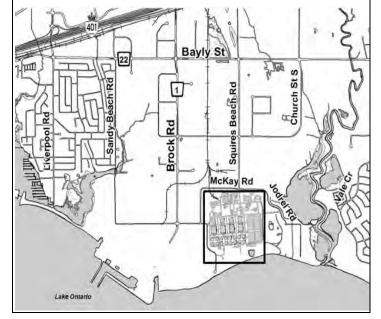
#### MACHINERY AND EQUIPMENT

Duffin Creek Water Pollution Control Plant - Resource Recovery Feasiblity Study

Project No.: Y1801

#### **RELATED PROJECTS**

#### City of Pickering



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		500.000					500.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	500.000	0.000	0.000	0.000	0.000	500.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL							0.000
DEVELOPMENT CHARGES*							0.000
USER REVENUES		112.500					112.500
OTHER		387.500					387.500
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	500.000	0.000	0.000	0.000	0.000	500.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

Cost sharing with York Region

#### **SANITARY SEWERAGE SYSTEM**

#### PROJECT LOCATION & DESCRIPTION

#### **ITEM NO. 101**

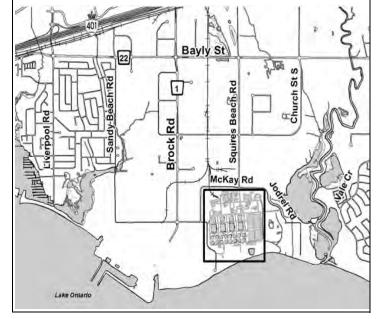
#### MACHINERY AND EQUIPMENT

Duffin Creek Water Pollution Control Plant - Sludge Blending Tanks - Restoration, Pickering

Project No.: Y1605

#### **RELATED PROJECTS**

#### City of Pickering



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		1,700.000					1,700.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		10,300.000					10,300.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	12,000.000	0.000	0.000	0.000	0.000	12,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		3,000.000					3,000.000
OTHER		9,000.000					9,000.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	12,000.000	0.000	0.000	0.000	0.000	12,000.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016. Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

Cost Sharing with York Region

#### **SANITARY SEWERAGE SYSTEM**

#### **PROJECT LOCATION & DESCRIPTION**

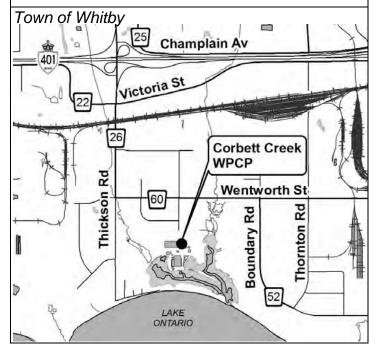
#### **ITEM NO. 105**

#### MACHINERY AND EQUIPMENT

Corbett Creek Water Pollution Control Plant - replacement of the Motor Control Centre (MCC) and controls

Project No.: D1830

#### **RELATED PROJECTS**



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		40.000					40.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		260.000					260.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	300.000	0.000	0.000	0.000	0.000	300.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
OTHER							0.000
ASSET MGMT RESERVE FUND		300.000					300.000
TOTAL ATTRIBUTION	0.000	300.000	0.000	0.000	0.000	0.000	300.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

#### **SANITARY SEWERAGE SYSTEM**

#### **PROJECT LOCATION & DESCRIPTION**

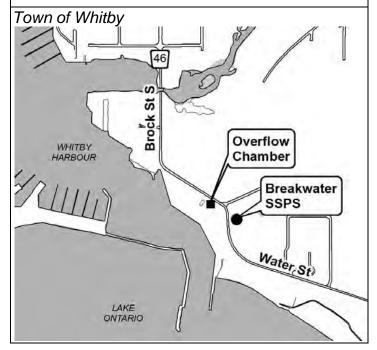
**ITEM NO. 106** 

#### MACHINERY AND EQUIPMENT

Breakwater Sanitary Sewage Pumping Station - Overflow Chamber Drive Replacement, Pickering

Project No.: D1831

#### **RELATED PROJECTS**



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		70.000					70.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		430.000					430.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	500.000	0.000	0.000	0.000	0.000	500.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
OTHER							0.000
ASSET MGMT RESERVE FUND		500.000					500.000
TOTAL ATTRIBUTION	0.000	500.000	0.000	0.000	0.000	0.000	500.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

#### SANITARY SEWERAGE SYSTEM

#### PROJECT LOCATION & DESCRIPTION

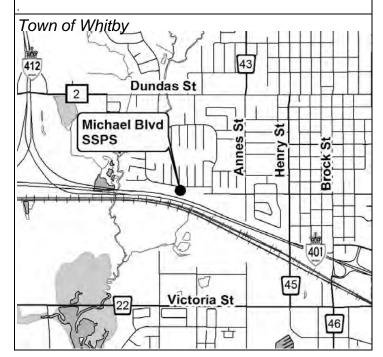
**ITEM NO. 107** 

#### MACHINERY AND EQUIPMENT

Michael Blvd. Sanitary Sewage Pumping Station - replacment of the Motor Control Centre (MCC) and controls

Project No.: D1832

#### **RELATED PROJECTS**



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		50.000					50.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		350.000					350.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	400.000	0.000	0.000	0.000	0.000	400.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
OTHER							0.000
ASSET MGMT RESERVE FUND		400.000					400.000
TOTAL ATTRIBUTION	0.000	400.000	0.000	0.000	0.000	0.000	400.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### **NEED/EXPLANATION OF PROJECT**

#### **SANITARY SEWERAGE SYSTEM**

#### PROJECT LOCATION & DESCRIPTION

**ITEM NO. 108** 

MACHINERY AND EQUIPMENT

Coutice Water Pollution Control Plant - Inlet Chamber By-pass

Project No.: D1833

**RELATED PROJECTS** 

#### Municipality of Clarington (Courtice)



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		24.000					24.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		136.000					136.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	160.000	0.000	0.000	0.000	0.000	160.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
OTHER							0.000
ASSET MGMT RESERVE FUND		160.000					160.000
TOTAL ATTRIBUTION	0.000	160.000	0.000	0.000	0.000	0.000	160.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

#### **SANITARY SEWERAGE SYSTEM**

#### **PROJECT LOCATION & DESCRIPTION**

**ITEM NO. 110** 

#### MACHINERY AND EQUIPMENT

Courtice Water Pollution Control Plant - Replacement of the Aeration

Project No.: D1834

#### **RELATED PROJECTS**



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		130.000					130.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		770.000					770.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	900.000	0.000	0.000	0.000	0.000	900.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
OTHER							0.000
ASSET MGMT RESERVE FUND		900.000					900.000
TOTAL ATTRIBUTION	0.000	900.000	0.000	0.000	0.000	0.000	900.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

#### **SANITARY SEWERAGE SYSTEM**

#### **PROJECT LOCATION & DESCRIPTION**

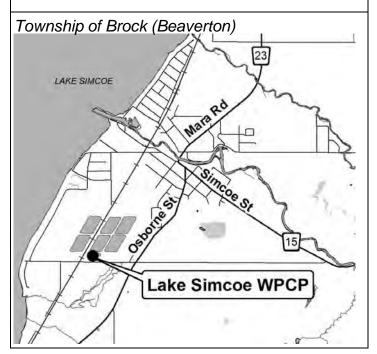
**ITEM NO. 112** 

#### MACHINERY AND EQUIPMENT

Lake Simcoe Water Pollution Control Plant - Diffused Air System Replacement, Beaverton

Project No.: D1716

**RELATED PROJECTS** 



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	230.000						230.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	390.000	950.000					1,340.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	620.000	950.000	0.000	0.000	0.000	0.000	1,570.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
OTHER							0.000
ASSET MGMT RESERVE FUND	620.000	950.000					1,570.000
TOTAL ATTRIBUTION	620.000	950.000	0.000	0.000	0.000	0.000	1,570.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

#### **SANITARY SEWERAGE SYSTEM**

#### **PROJECT LOCATION & DESCRIPTION**

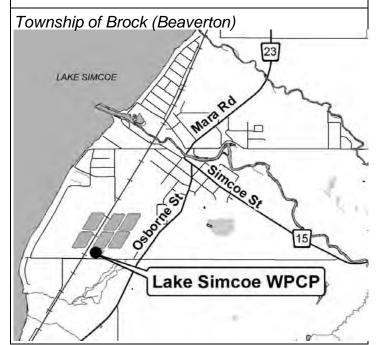
**ITEM NO. 113** 

#### MACHINERY AND EQUIPMENT

Lake Simcoe Water Pollution Control Plant - Replacement of Clarifier Mechanisms, Beaverton

Project No.: D1835

**RELATED PROJECTS** 



#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		45.000					45.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY		275.000					275.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	320.000	0.000	0.000	0.000	0.000	320.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES							0.000
OTHER							0.000
ASSET MGMT RESERVE FUND		320.000					320.000
TOTAL ATTRIBUTION	0.000	320.000	0.000	0.000	0.000	0.000	320.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

#### **SANITARY SEWERAGE SYSTEM**

#### PROJECT LOCATION & DESCRIPTION

**ITEM NO. 114** 

MACHINERY AND EQUIPMENT

Fuel Tank Compliance

Project No.: D1613

RELATED PROJECTS

2017 Sanitary Sewerage Capital Budget No. 115

#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

	Budget	2018		Four Year	Forecast		
	Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	650.000						650.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	2,550.000	1,100.000					3,650.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	3,200.000	1,100.000	0.000	0.000	0.000	0.000	4,300.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	3,200.000	1,100.000					4,300.000
OTHER					İ		0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	3,200.000	1,100.000	0.000	0.000	0.000	0.000	4,300.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

Allowance for fuel tank inspections and required upgrades in various locations in the Region.

#### **SANITARY SEWERAGE SYSTEM**

#### PROJECT LOCATION & DESCRIPTION

**ITEM NO. 117** 

ALLOWANCES AND OTHER PROVISIONS

Inflow/ infiltration studies and required remedial works in various locations

Project No.: D0606

RELATED PROJECTS

#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING	50.000	70.000	70.000	70.000	70.000	70.000	400.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION	350.000	430.000	430.000	430.000	430.000	430.000	2,500.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	400.000	500.000	500.000	500.000	500.000	500.000	2,900.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES	400.000	500.000	500.000	500.000	500.000	500.000	2,900.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	400.000	500.000	500.000	500.000	500.000	500.000	2,900.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

Studies to identify areas of excessive infiltration into sanitary sewers and construction of required remedial works.

#### **SANITARY SEWERAGE SYSTEM**

#### PROJECT LOCATION & DESCRIPTION

**ITEM NO. 122** 

ALLOWANCES AND OTHER PROVISIONS

Allowance for acquisition of easements

Project No.: M1801

RELATED PROJECTS

2018 Water Supply Capital Budget Item No. 183

#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING							0.000
LAND ACQUISITION		150.000	150.000	150.000	150.000	150.000	750.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	150.000	150.000	150.000	150.000	150.000	750.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		150.000	150.000	150.000	150.000	150.000	750.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	150.000	150.000	150.000	150.000	150.000	750.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

A number of sanitary sewer are located on easements to which the Region does not have a clear title. This allowance is for acquisition of easement for existing sanitary sewers in various locations.

#### **SANITARY SEWERAGE SYSTEM**

# PROJECT LOCATION & DESCRIPTION ITEM NO. 123 ALLOWANCES AND OTHER PROVISIONS Allowance for engineering studies Project No.: M1807 RELATED PROJECTS 2018 Water Supply Capital Budget Item No. 184

#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.00
ENGINEERING		150.000	150.000	150.000	150.000	150.000	750.00
LAND ACQUISITION							0.00
UTILITY RELOCATION							0.00
CONSTRUCTION							0.00
CONTINGENCY							0.000
OTHER							0.00
TOTAL EXPENDITURES	0.000	150.000	150.000	150.000	150.000	150.000	750.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		150.000	150.000	150.000	150.000	150.000	750.00
OTHER							0.00
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	150.000	150.000	150.000	150.000	150.000	750.00

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EXPL	ANATION	OF I	PRO.	JECT

#### **SANITARY SEWERAGE SYSTEM**

#### PROJECT LOCATION & DESCRIPTION

**ITEM NO. 125** 

ALLOWANCES AND OTHER PROVISIONS

Preliminary Engineering

Project No.: 66143

RELATED PROJECTS

2018 Water Supply Capital Budget Item No. 186

#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		100.000	100.000	100.000	100.000	100.000	500.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION							0.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	100.000	100.000	100.000	100.000	100.000	500.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		100.000	100.000	100.000	100.000	100.000	500.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	100.000	100.000	100.000	100.000	100.000	500.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

Allowance for preliminary engineering carried out in advance of budget provision.

#### **SANITARY SEWERAGE SYSTEM**

#### PROJECT LOCATION & DESCRIPTION

**ITEM NO. 126** 

ALLOWANCES AND OTHER PROVISIONS

Allowance for sundry extensions as per Council policy

Project No.: M1808

RELATED PROJECTS

2018 Water Supply Capital Budget Item No. 187

#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast			
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL	
EXPENDITURES:								
ENVIRONMENTAL ASSESSMENT							0.00	
ENGINEERING		15.000	15.000	15.000	15.000	15.000	75.00	
LAND ACQUISITION							0.00	
UTILITY RELOCATION							0.00	
CONSTRUCTION							0.00	
CONTINGENCY							0.00	
OTHER							0.00	
TOTAL EXPENDITURES	0.000	15.000	15.000	15.000	15.000	15.000	75.00	
ATTRIBUTION:								
SUBSIDY/GRANTS							0.00	
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000	
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000	
USER REVENUES		15.000	15.000	15.000	15.000	15.000	75.00	
OTHER							0.00	
ASSET MGMT RESERVE FUND							0.00	
TOTAL ATTRIBUTION	0.000	15.000	15.000	15.000	15.000	15.000	75.00	

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NEED/EYDI	ANATION OF	

Regional share for sundry extensions.

#### **SANITARY SEWERAGE SYSTEM**

## PROJECT LOCATION & DESCRIPTION ITEM NO. 127 ALLOWANCES AND OTHER PROVISIONS Allowance for unknown requirements Project No.: M1809 RELATED PROJECTS

2018 Water Supply Capital Budget Item No. 188

#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.00
ENGINEERING		100.000	100.000	100.000	100.000	100.000	500.00
LAND ACQUISITION							0.00
UTILITY RELOCATION							0.00
CONSTRUCTION							0.00
CONTINGENCY							0.000
OTHER							0.00
TOTAL EXPENDITURES	0.000	100.000	100.000	100.000	100.000	100.000	500.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES							0.000
NEW COMMERCIAL DEVELOPMENT CHARGES*							0.000
USER REVENUES		100.000	100.000	100.000	100.000	100.000	500.00
OTHER							0.00
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	100.000	100.000	100.000	100.000	100.000	500.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

NIEED/EVDI	$\Lambda$ NIATIONI O	F PROJECT
NEED/EAPL	AINA HON O	FROJECI

Allowance for unanticipated works.

#### **SANITARY SEWERAGE SYSTEM**

#### PROJECT LOCATION & DESCRIPTION

**ITEM NO. 128** 

ALLOWANCES AND OTHER PROVISIONS

Allowance for Regional share for works in conjunction with residential subdivision development.

Project No.: M1810

#### RELATED PROJECTS

2018 Water Supply Capital Budget Item No. 189

#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	r Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		200.000	200.000	200.000	200.000	200.000	1,000.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		1,260.000	1,260.000	1,260.000	1,260.000	1,260.000	6,300.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	1,460.000	1,460.000	1,460.000	1,460.000	1,460.000	7,300.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES		1,084.780	1,084.780	1,084.780	1,084.780	1,084.780	5,423.900
NEW COMMERCIAL DEVELOPMENT CHARGES*		84.680	84.680	84.680	84.680	84.680	423.400
USER REVENUES		290.540	290.540	290.540	290.540	290.540	1,452.700
OTHER				•			0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	1,460.000	1,460.000	1,460.000	1,460.000	1,460.000	7,300.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

Regional share for sanitary sewers related to existing, new residential and new non-residential development, in conjunction with new residential subdivisions.

#### **SANITARY SEWERAGE SYSTEM**

#### PROJECT LOCATION & DESCRIPTION

**ITEM NO. 129** 

ALLOWANCES AND OTHER PROVISIONS

Allowance for Regional share for works in conjunction with non residential development.

Project No.: M1811

#### RELATED PROJECTS

2018 Water Supply Capital Budget Item No. 190

#### **BUDGET PROVISION AND COST ATTRIBUTION (\$000's)**

		2018		Four Year	Forecast		
	Budget Prior to 2018	CAPITAL BUDGET	2019	2020	2021	2022	TOTAL
EXPENDITURES:							
ENVIRONMENTAL ASSESSMENT							0.000
ENGINEERING		57.200	57.200	57.200	57.200	57.200	286.000
LAND ACQUISITION							0.000
UTILITY RELOCATION							0.000
CONSTRUCTION		342.800	342.800	342.800	342.800	342.800	1,714.000
CONTINGENCY							0.000
OTHER							0.000
TOTAL EXPENDITURES	0.000	400.000	400.000	400.000	400.000	400.000	2,000.000
ATTRIBUTION:							
SUBSIDY/GRANTS							0.000
NEW RESIDENTIAL DEVELOPMENT CHARGES		297.200	297.200	297.200	297.200	297.200	1,486.000
NEW COMMERCIAL DEVELOPMENT CHARGES*		23.200	23.200	23.200	23.200	23.200	116.000
USER REVENUES		79.600	79.600	79.600	79.600	79.600	398.000
OTHER							0.000
ASSET MGMT RESERVE FUND							0.000
TOTAL ATTRIBUTION	0.000	400.000	400.000	400.000	400.000	400.000	2,000.000

Under the Council approved Development Charge By-law #16-2013, the Region approved full Commercial and Institutional Development Charges, effective July 1, 2013. As well, the Region approved full Industrial Development Charge which is being phased in by July 1, 2016.

Any shortfall in the Commercial, Institutional or Industrial Development Charge Reserve Funding financing will be funded from user revenues.

#### NEED/EXPLANATION OF PROJECT

Allowance for possible Regional share in design and construction of sanitary sewers for non-residential development.

#### CONSTRUCTION OF MUNICIPAL SERVICES

			BUDGET	2018				Nin	e Year Forecast						
ITEM No.	PROJECT DESCRIPTION	Project No.	PRIOR TO 2018	CAPITAL BUDGET	2019	2020	2021	2022	2023	2024	2025	2026	2027	TOTAL	REMARKS
	CONSTRUCTION OF MUNICIPAL SERVICES ROAD RELATED PROJECTS				-5.1							-5			
Α	LINEAR INFRASTRUCTURE														Replacement of deficient sanitary sewers and/or construction of required works in
	Regional Road Program														conjunction with the Regional Road Program
1	R.R. 14 (Liberty St.) from Baseline Rd. to King St., Bowmanville Detailed Design Construction Total	R0503			350,000		1,400,000							350,000 1,400,000 1,750,000	
2	R.R. 22 (Victoria St.) from South Blair St. to east of Thickson Rd., Whitby (Realignment) Detailed Design Construction Total	T4011	180,000		920,000									180,000 920,000 1,100,000	
3	R.R. 36 (Hopkins St.) from Consumers Dr. to Dundas St., Whitby Detailed Design									215,000				215,000	Construction beyond forecast.
4	R.R. 43 (Cochrane St.) from Ferguson St. to Bonacord Ave., Whitby Detailed Design Construction Total	R1519	50,000			640,000								50,000 640,000 690,000	
5	R.R. 53 (Stevenson Rd.) from Bond St. to Rossland Rd., Oshawa Detailed Design Construction Total						275,000			1,105,000				275,000 1,105,000 1,380,000	
6	R.R. 57 (Martin Rd.) from Baseline Rd. to Nash Rd., Bowmanville Detailed Design Construction Total	R1309	400,000		2,300,000	450,000						1,200,000		3,950,000	Phase 1 - Intersection improvements Hwy 2 and Stevens Rd. Phase 2 - Baseline Rd. to Hwy No. 2 Phase 3 - Stevens Rd. to Nash Rd. (beyond forecast)
7	R.R. 59 (Gibb St.) from Stevenson Rd. to Simcoe St., Oshawa Detailed Design Construction Total	R0604		80,000	220,000									80,000 220,000 300,000	
8	R.R. 59 (Gibb St.)/Olive Ave. Interconnection from Simcoe St. to Ritson Rd., Oshawa Detailed Design Construction Total							40,000		135,000				40,000 135,000 175,000	
9	Highway 12 (Brock St.) from Manning Rd. to Rossland Rd., Whitby Detailed Design Construction Total	R1523	30,000		320,000									30,000 320,000 350,000	
10	Allowance for sanitary sewers in conjunction with the Regional Road Program				1,400,000			1,965,000	2,000,000	1,000,000	2,000,000	2,000,000	2,000,000	12,365,000	
	Sub-total Regional road program		660,000	80,000	5,510,000	1,090,000	1,675,000	2,005,000	2,000,000	2,455,000	2,000,000	3,200,000	2,000,000	22,675,000	
11	Area Municipality Roads Programs														
	The repair and replacement of deficient sanitary sewers are proposed to be carried out both in conjunction with area municipality road programs (filem No. \$114 to 11i), 18 projects and independent of road programs in various locations (ttem No.14) 6 projects. Total 24 projects.														
11A	City of Pickering Road Program (1 Project) Sandy Beach Rd. from 300 m north of Alyssum St. to 212 m south of Alyssum St.	P1899		50,000											Replacement of deficient sanitary sewers and/or construction of required works in conjunction with the City of Pickering road program.
	Works forecast for 2019 to 2027				235,000	235,000	235,000	235,000	235,000	235,000	235,000	235,000	235,000	2,115,000	

#### REGION OF DURHAM, WORKS DEPARTMENT

#### CONSTRUCTION OF MUNICIPAL SERVICES

11B <u>To</u> ( <u>5</u> Mil La Fa Dr	ROJECT DESCRIPTION  own of Ajax Road Program  Projects)  lis Rd. from Station St. to Hunt St.	Project No.	PRIOR TO 2018	CAPITAL BUDGET											
( <u>5</u> Mil La Fa Dr Gr	Projects) ills Rd. from Station St. to Hunt St.	A1899		DODOL.	2019	2020	2021	2022	2023	2024	2025	2026	2027	TOTAL	REMARKS
w	akeview Blvd. from Poplar Ave. to Maple Ave. aarley Ct. from Dreyer Dr. to dead-end reyer Dr. from Harwood Ave to Pickering Beach Rd. raham Crt. from Dreyer Dr. to dead-end	711000		400,000	385,000	205.000	365.000	365,000	365.000	365.000	365,000	205 000	205 000		Replacement of deficient sanitary sewers and/or construction of required works in conjunction with the Town of Ajax road program.
11C <u>To</u>	orks forecast for 2019 to 2027  own of Whitby Road Program  Project)	W1899		1,200,000	385,000	365,000	365,000	365,000	365,000	365,000	365,000	365,000	365,000		Replacement of deficient sanitary sewers and/or construction of required works in conjunction with the Town of Whitby road program.
	Property entre St. from Miller St. to Dunlop St.														Replacement of deficient sanitary sewers
11D <b>Ci</b>	orks forecast for 2019 to 2027 ity of Oshawa Road Program	O1899		250,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	5,400,000 250,000	and/or construction of required works in conjunction with the City of Oshawa
Os Ve Gr	.Projects) shawa Blvd. from Eulalie Ave. to Gliddon Ave. srdun Rd. from Eulalie Ave. to Gliddon Ave. srenfell St. from Elmgrove Ave to Pine Ave. sliside Ave. from Laval Dr. to Park Rd. S.														
	orks forecast for 2019 to 2027 unicipality of Clarington Road Program	C1899		600,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	9,900,000	Replacement of deficient sanitary sewers
Pro Se Ve	Projects)  Projects)  rospect St. from Odell St. to Fourth St., Bowmanville  scond St. from Prospect St. to Lambs Lane, Bowmanville  sterans Ave. from Prospect St. to Lambs Lane, Bowmanville  berty Place and Alexander Blvd. from Liberty St. to W/L, Bowmanville	01033		000,000											naphacentarior of required works in conjunction with the Municipality of Clarington road program.
	forks forecast for 2019 to 2027				300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000		Replacement of deficient sanitary sewers
(1	ownship of Scugog Road Program Project) randell St. from Scugog St. to Queen St.	S1899		50,000											and/or construction of required works in conjunction with the Township of Scugog road program.
1G <u>To</u>	orks forecast for 2019 to 2027	U1899		250,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000		Replacement of deficient sanitary sewers
Pla	.Projects) anks Lane from Main St. to Third Ave. ollins St. from Victoria Dr. to west limits														and/or construction of required works in conjunction with the Township of Uxbridge road program.
1H <u>To</u>	torks forecast for 2019 to 2027 ownship of Brock Road Program Projects)				340,000	340,000	340,000	340,000	340,000	340,000	340,000	340,000	340,000		Replacement of deficient sanitary sewers and/or construction of required works in conjunction with the Township of Brock road program.
W	forks forecast for 2019 to 2027				120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	1,080,000	
wit va	lowance for unknown sanitary sewerage requirements in conjunction th area municipality road programs in prious locations	M1803		212,500	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	2,012,500	Allowance to provide for unanticipated sanitary sewerage works in conjunction with area municipality road programs in various locations (items No. 11A to 11H)
an in e	ub-total works to rectify identified deficiencies d/or construction of required works conjunction with area municipality road programs ems 11A to 11i)			3,012,500	3,355,000	3,335,000	3,335,000	3,335,000	3,335,000	3,335,000	3,335,000	3,335,000	3,335,000	33,047,500	
	TO AND GO Transit Projects				100,000	100,000	100,000	100.000	100,000	100,000	100,000	100,000	100,000	900,000	
M7	lowance for sanitary sewers in conjunction with the TO & Go Transit projects anitary sewer replacement in conjunction with the MTO's bridge work dr amp realignment at Brock St., Whitby	D1737	100,000	600,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	,	Allowance for sanitary sewer conflicts and potential relocation.

#### REGION OF DURHAM, WORKS DEPARTMENT

#### CONSTRUCTION OF MUNICIPAL SERVICES

			DUDGET	2040				Ni-	V F						
ITEM	PROJECT DESCRIPTION	Project No.	BUDGET PRIOR TO 2018	2018 CAPITAL BUDGET	2019	2020	2021	2022	ne Year Forecast 2023	2024	2025	2026	2027	TOTAL	REMARKS
No.	Sub-total works in conjunction with MTO and GO-Transit projects	NO.	100,000	600,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,600,000	
	Betterment/Replacement														
14	Wastewater works to rectify identified system deficiencies independent of road programs in various locations (6 projects)	M1899		750,000										750,000	Provision for replacement and/or rehabilitation of deficient sanitary sewers independent of road programs in various locations.
	Erosion protection for sanitary sewers in various locations	M1815													
	Krosno Creek Crossing - Trunk Sanitary Sewer erosion protection														
	Harmony Creek at Knights of Columbus Park Trunk Sanitary Sewer erosion protection														
	Allowance for final restoration for remedial works constructed in prior years	M1816													
i	Remedial works in various locations (Locations and priorities under review)	M1818													
i	Preliminary engineering/ surveys for future construction of remedial works	M1817													
	Future remedial works in various locations				650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	650,000	5,850,000	
	PICKERING/ AJAX SYSTEM														
15	Replacement of Central Duffin Collector (CDC) siphon on Valley Farm Rd. 670 m North of Finch Ave., Pickering Preliminary works/Detailed Design Construction Total	D1501	300,000 350,000	150,000										300,000 500,000 800,000	
16	YDSS – Rehabilitation of the trunk sanitary sewer from the intersection of Valley Farm Rd. & Finch Ave. to the Duffin Creek Water Pollution Control Plant chamber Preliminary works Construction	Y1501	1,037,600 300,000	700,000	100,000 5,400,000									1,137,600 6,400,000	
	Total													7,537,600	,
17	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 Preliminary works/Detailed design Construction Total	A1706	5,000	240,000 1,460,000										245,000 1,460,000 1,705,000	
	WHITBY / OSHAWA / CLARINGTON (COURTICE)														
18	SYSTEM  Replacement of sanitary sewer on Maria St. from Annes St. to  Frances St., Whitby							475,000						475,000	Asset Management Project - sanitary sewer has reached the end of its useful service life.
19	Replacement of a sanitary sewer on Walnut St. from Euclid St. to Kent St., Whitby								180,000					180,000	Asset Management Project - sanitary sewer has reached the end of its useful service life.
20	Replacement of a sanitary sewer on Orchard Crt from							165,000						165,000	Asset Management Project - sanitary sewer
	St. Lawrence St. to west limit, Whitby							450.000						450.00	has reached the end of its useful service life.
21	Replacement of a sanitary sewer on Simcoe St. S. from Quebec St. to Gibb St., Oshawa	04500	500,000		50,000			150,000							Asset Management Project - sanitary sewer has reached the end of its useful service life.
22	Replacement of a sanitary sewer on Highland Ave. from Gliddon Ave. to Athol St., Oshawa	O1508	500,000		50,000										Asset Management Project - sanitary sewer has reached the end of its useful service life.
23	Replacement of sanitary sewer on Olive Ave. from Court St. to Ritson Rd., Oshawa								825,000					825,000	Asset Management Project - sanitary sewer has reached the end of its useful service life.
24	Replacement of sanitary sewer on RR 2A (Centre St.) from King St. W. to Brock St. W., Oshawa	O1503	100,000		825,000									925,000	Asset Management Project - sanitary sewer has reached the end of its useful service life.
25	Replacement of sanitary sewer on RR 22 (Bloor St.) from Cubert St. to Oxford St., Oshawa						270,000							270,000	Asset Management Project - sanitary sewer has reached the end of its useful service life.
26	Replacement of sanitary sewer on Athol St. E. from Centre St. to Albert St., Oshawa Detailed Design Construction Total	O1710		30,000 180,000										30,000 180,000 210,000	
27	Replacement of sanitary sewer on Simcoe St. from John St. to Elm St. & Llyod St. from Centre St. to Simcoe St., Oshawa Detailed Design Construction Total	O1602	135,000 230,000	560,000										135,000 790,000 925,000	

#### CONSTRUCTION OF MUNICIPAL SERVICES

		BUDGET 2018 Nine Year Forecast													
ITEM No.	PROJECT DESCRIPTION	Project No.	PRIOR TO	CAPITAL BUDGET	2019	2020	2021	2022	2023	2024	2025	2026	2027	TOTAL	REMARKS
28	Replacement of sanitary sewer in various locations				1,481,920	2,315,780	5,072,000	5,552,000	5,337,000	7,342,000	7,342,000	7,342,000	7,342,000	49,126,700	Asset Management Project - sanitary sewer has reached the end of its useful service life.
	CONSTRUCTION OF SERVICES IN UNSERVICED AREAS IN RESPONSE TO REQUESTS OR PETITIONS														
29	Allowance for construction of services in unserviced areas in response to requests or petitions				200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000		Allowance for construction of sanitary sewers in unserviced areas in response to requests or petitions.
	Sub-total construction of services in unserviced areas			0	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,800,000	
	Sub-total Betterments/Replacement		2,957,600	4,070,000	8,706,920	3,165,780	6,192,000	7,192,000	7,192,000	8,192,000	8,192,000	8,192,000	8,192,000	83,421,900	
	System Expansion														
30	PICKERING / AJAX SYSTEM  Central Duffin Collector (CDC) Trunk Sanitary Sewer from Concession Rd. 4 to Taunton Rd., Pickering Detailed Design Construction Total	D1707	200,000		160,000 1,700,000										Linear infrastructure required for the development of the Seaton Community.
31	Central Duffin Collector (CDC) Brock Rd. Trunk Sanitary Sewer - Taunton Rd. to South of the employment lands Detailed Design Construction Total	D1708	1,000,000		500,000 9,400,000									1,500,000 9,400,000 10,900,000	Linear infrastructure required for the development of the Seaton Community.
32	York/Durham Sewage System - Primary Trunk Sanitary Sewer Twirning, Pickering Environmental Assessment Detailed Design Construction Total					6,000,000		15,000,000		218,600,000				6,000,000 15,000,000 218,600,000 239,600,000	Cost sharing with York Region
33	Twinning of the forcemain from the Liverpool Road Sanitary Sewage Pumping Station to the Duffin Creek Water Pollution Control Plant, Pickering Detailed Design Construction Total	P0503	2,300,000 6,788,000	6,500,000										į.	Twinning of the trunk sanitary sewer is required primarily to provide system security and provide increased capacity.
34	Twinning of Monarch Ave. Trunk Sanitary sewer on easement from Bayly St. Mackenzie Ave., Ajax Detailed Design											250,000		250,000	Twinning of the trunk sanitary sewer is required primarily to provide system security and provide increased capacity. Construction beyond forecast
35	Sanitary sewer on Church St. from Harrisview St. to Hurst Dr., Ajax Detailed Design Construction Total	A1704	50,000	50,000 600,000										100,000 600,000 700,000	Required to service new development.
36	Sanitary sewer on Church St. from Hydro Right of way to Taunton Rd., Ajax Detailed Design Construction Total							100,000	500,000					100,000 500,000 600,000	Required to service new development.
37	Twinning of Duffin Creek Trunk Sanitary Sewer on easement from Bayly St. SSPS to Hwy 401, Ajax Detailed Design												1,200,000		Twinning of the trunk sanitary sewer is required to provide system security and increased capacity. Construction beyond forecast
	WHITBY / OSHAWA / CLARINGTON (COURTICE) SYSTEM														
38	Twinning Harbour St. Trunk Sanitary Sewer from 400 m north of Water St. to Breakwater Sanitary Sewage Pumping Station, Whitby Detailed Design Construction Total						400,000	1,560,000							Twinning of the trunk sanitary sewer is required primarily to provide system security and provide increased capacity.
39	Corbett Trunk Sanitary Sewer on easement from Wentworth St. to Corbett Creek WPCP, Whitby Environmental Assessment										270,000			270,000	Required to service new development. Timing of construction dependent on rate of development. Detailed design and construction beyond forecast.
40	West Whitby sub trunk on Dundas St. from Coronation Rd. to Halls Rd., Whitby Detailed Design Construction Total							400,000	1,700,000						Required to service new development. Timing of construction dependent on rate of development.

### CONSTRUCTION OF MUNICIPAL SERVICES

			BUDGET 2018				Nin	e Year Forecast						
No.	PROJECT DESCRIPTION	Project No.	PRIOR TO CAPITAL 2018 BUDGET	2019	2020	2021	2022	2023	2024	2025	2026	2027	TOTAL	REMARKS
11	Brooklin Trunk Sanitary Sewer on easement from Anderson St. to Thickson Rd. Sanitary Sewage Pumping Station, Whitby Detailed Design Construction Total				880,000		3,520,000						880,000 3,520,000 4,400,000	
2	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 Environmental Assessment									1,180,000			1,180,000	Detailed design and construction beyond forecast.
3	Conlin Rd. W. Trunk Sanitary Sewer on Conlin Rd. from Whitby/ Oshawa Boundary to Conlin Rd. Sanitary Sewage Pumping Station, Whitby/Oshawa Detailed Design Construction Total				800,000		5,700,000						800,000 5,700,000 6,500,000	
1	Farewell Creek Trunk Sanitary Sewer twinning on easement west of Grandview St., Oshawa Environmental Assessment and Detailed Design Construction Total					500,000		2,400,000					500,000 2,400,000 2,900,000	Required to service new development. Timing of construction dependent on rate of development.
5	Twinning of northwest branch of Harmony Creek Sub-Trunk Sanitary Sewer from 200m south of Beatrice St. to Rison Rd., Oshawa Detailed Design Construction Total	O9835	350,000		2,050,000									Replacement of existing surcharged sanitary trunk sewer. Design and land acquisition completed. Construction forecast in 2019, depending on flow monitoring results.
6	North Oshawa Creek (East branch) Trunk Sanitary Sewer on easement from Britannia Rd. to Winchester Rd., Oshawa Detailed Design Construction Total				870,000	3,500,000							870,000 3,500,000 4,370,000	
,	Twinning of Oshawa Creek Trunk Sanitary Sewer from Gibb St. to Greenwood Ave., Oshawa Detailed Design Construction Total				250,000	975,000							250,000 975,000 1,225,000	
В	Forcemain on Conlin Rd. from Ritson Rd. to Harmony Rd., Oshawa Detailed Design Construction Total			600,000	5,450,000								600,000 5,450,000 6,050,000	
9	Harmony Rd. Sub Trunk Sanitary Sewer on Harmony Rd. from Conlin Rd to approximately 1500 m Northernly, Oshawa				4,200,000								4,200,000	D Required to service new development. Timing of construction dependent on rate of development.
0	North Oshawa Creek (West Branch) Trunk Sanitary Sewer from Conlin Rd. Sanitary Sewage Pumping Station to Britannia Rd., Oshawa Environmental Assessment and land Detailed Design Construction Total				500,000		500,000		3,700,000				500,000 500,000 3,700,000 4,700,000	
ı	North Oshawa Creek (West Branch) Trunk Sanitary Sewer from south side of hydro corridor to Columbus Rd., Oshawa Environmental Assessment Detailed Design Construction Total				500,000		1,500,000		14,200,000				500,000 1,500,000 14,200,000 16,200,000	
2	Courtice Trunk Sanitary Sewer Environmental Assessment and Detailed Design Phase 1:400 m South of Energy Dr. to 100 m North of Energy Dr. Phase 2:100 m North of Energy Dr. to the intersection of Baseline Rd. and Courtice Rd.	C0702	3,639,000 2,800,000 21,100,000										2,800,000 21,100,000	
	Phase 3: Baseline Rd. from Courtice Rd. to Trulls Rd. and Trulls Rd. from Baseline Rd. to Bloor St. Phase 4: Trulls Rd. from Bloor St. to Future Adelaide Ave. Ext. Phase 5: Adelaide Ave. Extension from Trulls Rd. to Town			25,310,000		38,200,000		14,200,000					25,310,000 38,200,000 14,200,000 105,249,000	
3	Courtice Trunk Sanitary Sewer - Phase 6 Townline Rd. from Adelaide Ave. to Coldstream Dr., Oshawa / Courtice Detailed Design Construction Total	C1406	535,000 14,865,000						12,400,000					Required to service new development. Timing of construction dependent on rate of development. Stage 1: Beatrice St. to Coldstream Dr. Stage 2: Adelaide Ave. to Beatrice St
54	Southwest Courtice Trunk Sanitary Sewer on Baseline Rd. from Trulls Rd. to 650 m west of Trulls Rd., Courtice Detailed Design Construction Total	D1821	300,0	200,000 2,900,000									500,000 2,900,000 3,400,000	

### CONSTRUCTION OF MUNICIPAL SERVICES

								NO.							
ITEM		Project	BUDGET PRIOR TO	2018 CAPITAL					ne Year Forecast						
No.	PROJECT DESCRIPTION	No.	2018	BUDGET	2019	2020	2021	2022	2023	2024	2025	2026	2027	TOTAL	REMARKS
55	CLARINGTON (BOWMANVILLE) SYSTEM  Baseline Rd. Trunk Sanitary Sewer from  Simpson Ave. to Bennett Rd., Bowmanville  Detailed Design  Construction  Total					1,400,000		5,600,000						1,400,000 5,600,000 7,000,000	)
56	Port Darlington Rd. Trunk Sanitary Sewer from Baseline Rd. to to existing easement, Bowmanville Detailed Design Construction Total					1,700,000		7,100,000						1,700,000 7,100,000 8,800,000	
57	Twinning of Spry Ave. Trunk Sanitary Sewer from Baseline Rd. to N/L of Spry Ave., Bowmanville Environmental Assessment											320,000		320,000	Required to service new development. Timing of construction dependent on rate of development. Detailed design and construction beyond forecast.
58	Soper Creek Trunk Sanitary Sewer on Mearns Ave. from Freeland Ave. to Concession Rd. 3 and on Concession Rd. 3 from Mearns Ave. to 480 m west of Mearns Ave. Detailed Design										200,000				Required to service new development. Timing of construction dependent on rate of development. Construction beyond forecast
59	CLARINGTON (NEWCASTLE) SYSTEM  Foster Creek Trunk Sanitary Sewer on Sunset Blvd./ Lakeview Rd. from Rudell Rd. to Church St., Newcastle Environmental Assessment / Detailed Design Construction Total	C1002	331,400	175,000 1,825,000	1,200,000										Required to allow Sunset Blvd. SSPS to be taken off-line and decommissioned. Timing of construction dependent on rate of development.
60	Foster Creek Trunk Sanitary Sewer on North St. from north side of CPR to Concession Rd. 3, Newcastle Detailed Design Construction Total					500,000	2,000,000							500,000 2,000,000 2,500,000	)
61	Wilmot Creek Trunk Sanitary Sewer on easement (through future development) from Rudell Rd. to King Ave., Newcastle Detailed Design Construction Total	D1822		300,000	140,000 2,760,000									440,000 2,760,000 3,200,000	
62	Wilmot Creek Trunk Sanitary Sewer on easement (through future development) from King Ave. to Hwy 115/35, Newcastle Detailed Design Construction Total					300,000	1,100,000							300,000 1,100,000 1,400,000	Required to service new development. Timing of construction dependent on rate of development and system security.
	Sub-total System Expansion		53,958,400	9,750,000	44,870,000	25,400,000	46,675,000	40,980,000	18,800,000	248,900,000	1,650,000	570,000	1,200,000	492,753,400	
В	BUILDINGS PICKERING / AJAX SYSTEM														
63	Class Environmental Assessment to address the outfall limitations at Duffin Creek Water Pollution Control Plant, Pickering Environmental Assessment Phosphorus Optimization & Field Study Construction Total	Y0802	5,991,989 2,263,011				240,000,000							5,991,989 2,263,011 240,000,000 248,255,000	
64	Regional Environmental Laboratory Upgrades and ventilation associated works, Pickering Preliminary work/Detailed Design Construction Total	Y1602	450,000	3,100,000										450,000 3,100,000 3,550,000	)
	Seaton - Sanitary Sewage Pumping Station 4 and forcemain Pickering Detailed Design Construction Contract Administration Total	D1710	500,000	200,000	4,000,000									700,000	
66	Proposed Pickering Sanitary Sewage Pumping Station and forcemain Pickering Environmental Assessment Detailed Design Construction Total										500,000	500,000	10,732,000	500,000 500,000 10,732,000 11,732,000	

### REGION OF DURHAM, WORKS DEPARTMENT

### CONSTRUCTION OF MUNICIPAL SERVICES

			BUDGET	2018				Nii	ne Year Forecast						
ITEM No.	PROJECT DESCRIPTION	Project No.	PRIOR TO 2018	CAPITAL BUDGET	2019	2020	2021	2022	2023	2024	2025	2026	2027	TOTAL	REMARKS
67	Proposed Harwood Sanitary Sewage Pumping Station and forcemain	D1408													Timing of construction dependent on rate of
	Ajax Environmental Assessment Detailed Design Construction Total		200,000		600,000		3,450,000							200,000 600,000 3,450,000 4,250,000	
68	Carruthers Sanitary Sewage Pumping Station pump addition and Standby power, Ajax Detailed Design Construction Total	D1116	260,000		1,700,000									260,000 1,700,000 1,960,000	
69	Carruthers Sanitary Sewage Pumping Station - Chemical evaluation for odour control Study Conceptual /Detailed Design Construction Total	D1735	45,000	400,000	1,000,000									45,000 400,000 1,000,000 1,445,000	
	WHITBY / OSHAWA / CLARINGTON (COURTICE) SYSTEM														
70	Corbett Creek Water Pollution Control Plant - works to rectify existing deficiencies Detailed Design Construction Total				1,300,000	5,500,000								1,300,000 5,500,000 6,800,000	
71	Corbett Creek Water Pollution Control Plant - New headworks building Conceptual Design/Detailed Design Construction Total	D1409	800,000				4,900,000							800,000 4,900,000 5,700,000	Work will commence once the deficiencies project has been completed.
72	Expansion of Corbett Creek Water Pollution Control Plant from 84 MLD to 109 MLD Environmental Assessment and Detailed Design											1,250,000		1,250,000	Expansion to provide capacity for new development. Construction beyond forecast.
73	Corbett Creek Water Pollution Control Plant - Primary Sludge Control Improvements Detailed Design Construction Total	D1823		40,000 160,000										40,000 160,000 200,000	)
74	Brooklin Sanitary Diversion Strategy - Proposed Thickson Rd. Sanitary Sewage Pumping Station and forcemain, Whitby Environmental Assessment Detailed Design Construction	D1824		1,000,000			1,500,000		24,000,000					1,000,000 1,500,000 24,000,000 26,500,000	
75	Harmony Creek Water Pollution Control Plant No. 2 upgrades Oshawa Detailed Design Construction Total	D1523	1,600,000 18,566,564	3,000,000										1,600,000 21,566,564 23,166,564	Į .
76	Harmony Creek Water Pollution Control Plant No. 1 demolition, Oshawa Detailed Design Construction Total		1,000,000		2,100,000									3,100,000	The demolition of Plant No. 1 will commence once all upgrades on plant 2 are completed.
77	Harmony Creek Sanitary Sewage Pumping Station - expansion and forcemain twinning Environmental Assessment										600,000			600,000	Timing of construction dependent on rate of development. Detailed design and construction beyond forecast.
78	Expansion of the Conlin Rd. Sanitary Sewage Pumping Station and twinning of the forcemain, Oshawa Environmental Assessment Detailed Design Construction	D1825		500,000		1,000,000		7,500,000 58,500,000						500,000 8,500,000 58,500,000 67,500,000	
79	Harbour Rd. South Sanitary Sewage Pumping Station and forcemain, Oshawa Detailed Design Construction Total										270,000		2,480,000	270,000 2,480,000 2,750,000	)

REGION OF DURHAM, WORKS DEPARTMENT

### CONSTRUCTION OF MUNICIPAL SERVICES

80 81 82	PROJECT DESCRIPTION  Simcoe St. South Sanitary Sewage Pumping Station and forcemain replacement, Oshawa Detailed Design Construction Total	Project No. D1710	BUDGET PRIOR TO 2018	2018 CAPITAL BUDGET	2019	2020			ine Year Forecast						
80 81 82	Simcoe St. South Sanitary Sewage Pumping Station and forcemain replacement, Oshawa Detailed Design Construction	D1710					2021	2022	2023	2024	2025	2026	2027	TOTAL	REMARKS
82			150,000 138,000		760,000										Replacement of the existing sanitary sewage pumping station.
	Expansion of Courtice Water Pollution Control Plant from 68 MLD to 136 MLD Environmental Assessment Total											1,000,000			Expansion to provide capacity for new development.  Detailed design and construction beyond forecast.
	Baseline Rd. Sanitary Sewage Pumping Station and forcemain, Courtice Detailed Design Construction Total  CLARINGTON (BOWMANVILLE) SYSTEM									350,000	3,400,000			350,000 3,400,000 3,750,000	
83	Proposed Northeast Sanitary Sewage Pumping Station and forcemain Bowmanville Environmental Assessment											600,000		600,000	Detailed design and construction beyond forecast.
84	CLARINGTON (NEWCASTLE) SYSTEM  Newcastle Water Pollution Control Plant - Capacity Re-rating 4 MLD to 7 MLD to include sludge storage Optimization Study Detailed Design Construction Total	D1117	200,000 500,000 3,000,000		4,600,000									500,000	Potential for additional capacity through an optimization study and modification to the plant. Possible plant expansion deferred beyond forecast. Allowance for potential upgrades subject to optimization study.
85	Expansion of Newcastle Water Pollution Control Plant from 7 MLD to 14 MLD and outfall Environmental Assessment											1,050,000		1,050,000	Detailed design and construction beyond forecast.
86	Port Newcastle Sanitary Sewage Pumping Station and forcemain (oversizing) Detailed Design Construction Total	D1411	100,000	100,000 1,200,000										200,000 1,200,000 1,400,000	
87	Rudell Rd. Sanitary Sewage Pumping Station - decommissioning				600,000									600,000	
88	Sunset Sanitary Sewage Pumping Station - decommissioning						600,000							600,000	
	UXBRIDGE (UXBRIDGE) SYSTEM  Uxbridge Water Pollution Control Plant - Optimization Study and upgrades	D1204	600,000		2,500,000									3,100,000	Allowance for potential upgrades subject to optimization study
	SCUGOG (PORT PERRY) SYSTEM  Water St. Sanitary Sewage Pumping Station - upgrading Evaluation / Environmental Assessment / Detailed Design Construction Total	D1304	908,350		3,442,000	3,100,000								908,350 6,542,000 7,450,350	Asset Management Project - project budget to be confirmed and updated upon the completion of the environmental assessment.
	BROCK (SUNDERLAND) SYSTEM  Sunderland Water Pollution Control Plant - Lagoon System Environmental Assessment	D1826		500,000										500,000	Future capital funding subject to the outcome of the class environmental assessment
92	Sunderland Water Pollution Control Plant -retrofit exfitration lagoon Detailed Design Construction Total	D1827		150,000 850,000											Excavate and replace the sand bottom in the exfiltration lagoon. Asset has reached the end of it's useful life.
	BROCK (CANNINGTON) SYSTEM  Cannington Water Pollution Control Plant - Lagoon System Environmental Assessment	D1828		500,000										500,000	Future capital funding subject to the outcome of the class environmental assessment
94	Cannington Water Pollution Control Plant - Lagoon System Improvements Detailed Design Construction Total	D1829		40,000 260,000										40,000 260,000 300,000	

			DUDGET	2040				Ni	V F						
ITEM No.	PROJECT DESCRIPTION	Project No.	BUDGET PRIOR TO 2018	2018 CAPITAL BUDGET	2019	2020	2021	2022	ne Year Forecast	2024	2025	2026	2027	TOTAL	REMARKS
140.	REGION WIDE (WASTEWATER) SYSTEM	140.	2010	BODGET	2013	2020	2021	2022	2023	2024	2023	2020	2021	TOTAL	KEMAKKO
95	Septage receiving stations					250,000	1,500,000							1,750,000	Required to accommodate increasing volumes of septage delivered by truck to the Region's Water Pollution Control Plants.
96	Water Pollution Control Plant - Asset Management								5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	25,000,000	Allowance for the future replacement/rehabilitation of assets at the water pollution control plants. Based on site specific condition assessments.
	Sub-total Buildings		37,272,914	12,000,000	22,602,000	9,850,000	251,950,000	66,000,000	29,000,000	5,350,000	9,770,000	9,400,000	18,212,000	471,406,914	4
С	MACHINERY AND EQUIPMENT														
	PICKERING / AJAX SYSTEM														7. 8
97	Duffin Creek Water Pollution Control Plant - Digester mixing improvements and Motor Control Centre Replacement, Pickering	Y1502	7,000,000		6,700,000									13,700,000	The Regions are required to upgrade Cost sharing with York Region
98	Duffin Creek Water Pollution Control Plant - Replacement of Reactor No. 1 & 2, Pickering Conceptual Design Detailed Design Construction Total	Y1503	1,000,000 14,000,000		10,000,000	21,000,000	52,000,000	21,000,000		52,000,000				1,000,000 14,000,000 156,000,000 171,000,000	
99	Duffin Creek Water Pollution Control Plant - Resource Recovery Feasibility Study	Y1801		500,000										500,000	Cost sharing with York Region
100	Duffin Creek Water Pollution Control Plant -Phosphorous Optimization Study/ Process Study				1,550,000									1,550,000	Cost sharing with York Region
101	Duffin Creek Water Pollution Control Plant -Sludge Blending Tanks - Restoration Detailed Design Construction Total	Y1605		1,700,000 10,300,000										1,700,000 10,300,000 12,000,000	
102	Bayly St. Sanitary Sewage Pumping Station - Bar Screen Replacement and Motor Control Centre review & upgrades, Ajax Preliminary works/Detailed Design Construction Total	D1714	350,000		2,350,000									350,000 2,350,000 2,700,000	
103	Cloverridge Sanitary Sewage Pumping Station - Bar Screen Replacement and reviewlupgrades to the Motor Control Centre, Ajax Preliminary works/Detailed Design Construction				500,000	2,100,000								500,000 2,100,000 2,600,000	
	WHITBY / OSHAWA / CLARINGTON (COURTICE) SYSTEM														
104	Madawaska Sanitary Sewage Pumping Station New disel genset, enclosure and associated works, Oshawa Preliminary work/Detailed Design Construction Total	D1118	200,000		1,200,000									200,000 1,200,000 1,400,000	
105	Corbett Creek Water Pollution Control Plant - replacement of Motor Control Center (MCC) and electrical equipment Detailed Design Construction Total	D1830		40,000 260,000										40,000 260,000 300,000	
106	Breakwater Sanitary Sewage Pumping Station - overflow chamber retrofit Detailed Design Construction Total	D1831		70,000 430,000										70,000 430,000 500,000	
107	Michael Blvd. Sanitary Sewage Pumping Station - replacement of Motor Control Center (MCC) and Controls Detailed Design Construction Total	D1832		50,000 350,000										50,000 350,000 400,000	
108	Courtice Water Pollution Control Plant - inlet chamber by-pass Detailed Design Construction Total	D1833		24,000 136,000										24,000 136,000 160,000	
109	Courtice Water Pollution Control Plant - upgrades					350,000	500,000	500,000	2,000,000	2,000,000	4,000,000	4,000,000			Allowance for Courtice WPCP upgrades - requirements to be confirmed once the condition assessment has been completed.

REGION OF DURHAM, WORKS DEPARTMENT

### CONSTRUCTION OF MUNICIPAL SERVICES

			BUDGET	2018				Nir	ne Year Forecast						
ITEM No.	PROJECT DESCRIPTION	Project No.	PRIOR TO 2018	CAPITAL BUDGET	2019	2020	2021	2022	2023	2024	2025	2026	2027	TOTAL	REMARKS
	Courtice Water Pollution Control plant - Aeration blower replacement Detailed Design Construction Total	D1834		130,000 770,000											Asset Management Project - has reached the end of its useful service life
111	CLARINGTON (BOWMANVILLE) SYSTEM  Port Darlington Water Pollution Control Plant - Major Maintenance replacement work, Bowmanville Detailed design Construction Total				625,000	2,000,000	2,000,000							625,000 4,000,000 4,625,000	Asset Management Project - Plant No. 1 has reached the end of its useful service life
112	BROCK (BEAVERTON) SYSTEM  Lake Simcoe Water Pollution Control Plant - Diffused Air System replacement  Detailed Design  Construction  Total	D1716	230,000 390,000	950,000											Asset Management Project - has reached the end of its useful service life
	Lake Simcoe Water Pollution Control Plant - Replacement of Clarifier Mechanisms Detailed Design Construction Total	D1835		45,000 275,000										45,000 275,000 320,000	
	REGION WIDE Fuel Tank Compliance Inspection/Detailed design Construction Total	D1613	650,000 2,550,000	1,100,000										650,000 3,650,000 4,300,000	
	Sub-total Machinery and Equipment		26,370,000	17,130,000	22,925,000	25,450,000	54,500,000	21,500,000	2,000,000	54,000,000	4,000,000	4,000,000	0	231,875,000	
	IT INFRASTRUCTURE SCADA System Master Plan for the sanitary sewage pumping stations and implementation requirements							1,000,000	1,000,000					2,000,000	Allowance for SCADA project.
	Sub-total IT Infrastructure			0	0	0	0	1,000,000	1,000,000	0	0	0	0	2,000,000	
E	ALLOWANCES AND OTHER PROVISIONS														
116	Regional Sewage Master planning study for the Regional Official Plan Review	D1421	800,000					800,000					800,000	2,400,000	
117	Inflow/infiltration studies and required remedial works in various locations	D0606	400,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	5,400,000	Studies to identify areas of excessive infiltration into sanitary sewers and construction of required remedial works.
118	Emergency Planning Updating Requirements	D1307	175,000		100,000									275,000	Allowance for updating required to ensure optimal performance during an emergency.
119	Asset Condition Assessments - Reports for the Vertical Assets	D1419	1,003,350		300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	3,703,350	Provincial requirement to assess condition of all assets and develop a rehabilitation strategy.
120	Asset Condition Assessment/ investigation on trunk sanitary sewer system	D1420	609,000		200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	2,409,000	Allowance for assessment of large trunk sanitary sewers.
121	Master planning energy management				200,000					200,000				400,000	Study to identify a long term strategy for implementation of an efficient and effective energy policy.
122	Allowance for acquisition of easements	M1801		150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,500,000	Allowance for acquisition of easements for existing sanitary sewers.
123	Allowance for engineering studies	M1807		150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,500,000	Allowance for miscellaneous engineering studies.
124	Phosphorus Reduction Study for Lake Simcoe Water Pollution Control Plants.							250,000						250,000	Potential study for Lake Simcoe Phosphorus Reduction Strategy identified future requirements for improvements to effluent quality at WPCPs. Durham's 4 WPCPs in the Lake Simcoe basin will need to be evaluated.
125	Preliminary engineering	66143		100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,000,000	Allowance for preliminary engineering carried out in advance of budget provision.
	Allowance for sundry extensions as per Council policy	M1808		15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000		Regional share for sundry extensions.
27	Allowance for unknown requirements	M1809	l l	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,000,000	Allowance for unanticipated works.

REGION OF DURHAM, WORKS DEPARTMENT
SANITARY SEWERAGE SYSTEM

CONSTRUCTION OF MUNICIPAL SERVICES

			BUDGET	2018				Nir	ne Year Forecast						
No.	PROJECT DESCRIPTION	Project No.	PRIOR TO 2018	CAPITAL BUDGET	2019	2020	2021	2022	2023	2024	2025	2026	2027	TOTAL	REMARKS
128	Allowance for Regional share for works in conjunction with residential subdivision development	M1810		1,460,000	1,460,000	1,460,000	1,460,000	1,460,000	1,460,000	1,460,000	1,460,000	1,460,000	1,460,000		Regional share for sanitary sewers related to existing, new residential and new non-residential development, in conjunction with new residential subdivisions.
129	Allowance for Regional share for works in conjunction with non-residential development	M1811		400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000		Allowance for possible Regional share in design and construction of sanitary sewers for non-residential development.
	Sub-total Improvement/expansion of existing facilities		2,987,350	2,875,000	3,675,000	3,375,000	3,375,000	4,425,000	3,375,000	3,575,000	3,375,000	3,375,000	4,175,000	38,587,350	
	TOTAL GROSS EXPENDITURE		124,306,264	49,517,500	111,743,920	71,765,780	367,802,000	146,537,000	66,802,000	325,907,000	32,422,000	32,172,000	37,214,000	1,377,367,064	

### **TABLE OF CONTENTS**

### **2018 BUSINESS PLANS & BUDGETS**

### **UTILITY FINANCE**

# NOTE: On this page, just click on the particular Section and you will be linked to the corresponding page

	Page Number
PROGRAM SUMMARY	333
EXPLANATION OF PROGRAM CHANGES	334
PROGRAM DETAILS	
1. Customer Services	335
2. Billing and Analysis	340
3. Tangible Capital Assets - Replacement	345



# 2018 Business Plan

## **Utility Finance**

By Program	20	17		2018	
(\$,000's)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget
Expense Programs	\$	<u> </u>	\$	\$	<u> </u>
Operating:					
1 Customer Services	2,171	2,323	2,409	196	2,605
2 Billing and Analysis	3,341	3,493	3,575	386	3,961
Headquarters Shared Cost	308	308	315	-	315
Operating Subtotal	5,820	6,124	6,299	582	6,881
Tangible Capital Assets:					
3 Replacement	314	314	14	-	14
Tangible Capital Assets					
Subtotal	314	314	14	-	14
Total Program Expenses	6,134	6,438	6,313	582	6,895
Revenue Programs					
Fees and Charges	(1,173)	(1,144)	(1,141)	(195)	(1,336)
Total Revenue Programs	(1,173)	(1,144)	(1,141)	(195)	(1,336)
Net Program Expenses	4,961	5,294	5,172	387	5,559
Summary of Increase (Decrease	se)		(\$122) -2.30%		\$265 5.00%

## **Summary of Base Budget Changes**

	\$	Comments
Salaries & Benefits	167	Economic increases
Operating Expenses	1	Inflationary increases
Operating Expenses	7	Headquarters shared cost
Tangible Capital Assets - Replacement	(300)	Remove one-time item (billing software)
Revenue - Fees and Charges	3	Inflationary adjustment

### **EXPLANATION OF PROGRAM CHANGES**



# **2018 Program Changes**

# **Utility Finance**

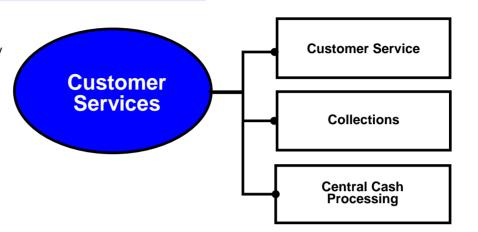
	\$(000's)
Customer Services	
<ul> <li>Increase in Salaries and Benefits for temporary staffing due to customer information system replacement.</li> </ul>	196
	196
Billing and Analysis	
<ul> <li>Increase in Salaries and Benefits for temporary staffing due to customer information system replacement.</li> </ul>	386
	386
Revenues	
◆ Increase in Late Payment Charges revenue.	(100)
◆ Increase in Revenues from Program Fees.	(75)
◆ Increase in Occupancy Charges.	(20)
	(195)
	387



## **Utility Finance**

### **Purpose:**

 To collect water and sanitary sewer user rate revenues and provide an efficient and effective customer service operation that meets the needs of our customers and maintains the Region's positive image.



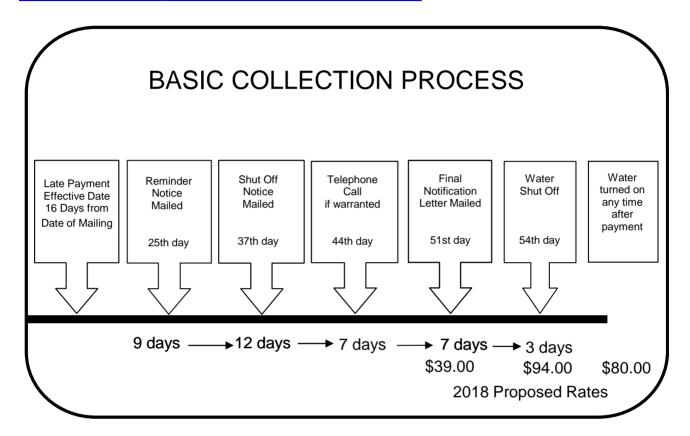
### **Description of Program Activities:**

- Customer Service Respond to water/sanitary sewer customer inquiries (telephone, letter, fax, e-mail, or in person).
- Provide effective customer service to approximately 175,000 water/sanitary sewer customers, respond to over 110,000 telephone inquiries, over 10,000 e-mails and over 4,400 customer inquiries made in person. Review and take action on over 7,800 lawyer's letters regarding change of ownership.
- Operate dedicated call centre for customer service inquiries and collections.
- Collections Collection of outstanding balances related to water and sanitary sewer accounts. Collect
  approximately \$205 million annually in water/sanitary sewer revenues (keeping overall write-offs very low
  at 0.05% of revenues).
- Send collection notices, place collection calls, negotiate and monitor payment arrangements, transfer arrears to local municipal taxation offices, utilize collection agency and shut-off services as a last resort for non-payment of account. Handle collections related to power of sale notifications.
- Field collection staff visit premises for on-site collection and shut-off of services where necessary.
- Central Cash Processing Receipt and deposit activity related to water/sanitary sewer payments and other Regional payments (social housing, childcare, police, long-term care homes, landfill, and other miscellaneous services and revenues).
- Provide front counter cashier services for payment of all Regional services consisting of water and sanitary sewer accounts and other Regional services. Sell transit fare media to approximately 2,300 customers annually.
- ◆ Receive, deposit and record approximately 763,000 water/sanitary sewer payments:
  - a) Electronic Payment 723,000 payments
  - b) Mail 26,500 payments
  - c) Counter (in person) 8,600 payments
  - d) Drop Boxes 4,600 payments
  - e) Other 300 payments



## **Utility Finance**

### **Description of Program Activities (Continued):**



### **Description of Program Resources:**

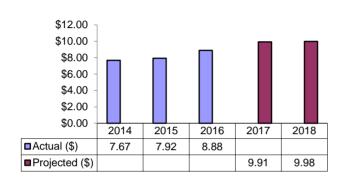
2018 Full Time Staff = 21.75
 2017 Full Time Staff = 21.75



## **Utility Finance**

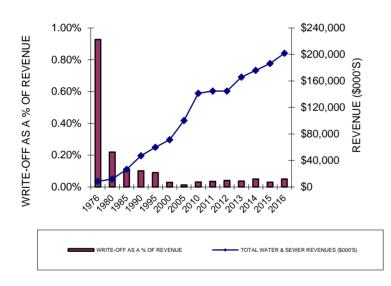
### **Performance Measurements:**

### **EFFICIENCY**



### Cost of Incoming Queue Call per Customer Services Call Centre Rep

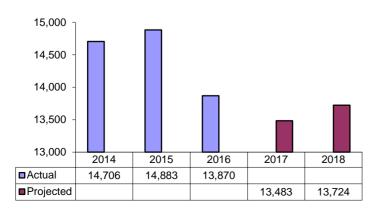
Customer Service reps handle about 110,000 in-bound calls, as well as making collection calls and performing other customer inquiry and collection activities.



# Total Revenues and Write-offs as a Percentage of Total Revenue

Some of the water and sanitary sewer billings are uncollectible. Currently, the value of write-offs as a percentage of revenue is a very respectable 0.05% of revenues and is expected to remain at this level.

### **EFFECTIVENESS**



### **Accounts/Customer Service Staff**

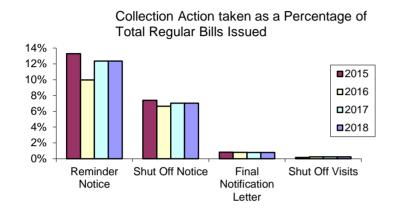
Despite the increasing call volume, the number of accounts per customer service staff ratio is anticipated to remain at approximately the same level as the prior year.



## **Utility Finance**

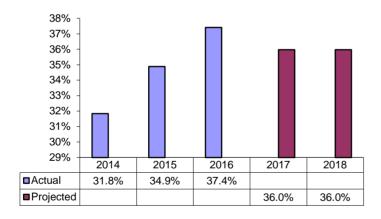
**Performance Measurements (Continued):** 

### **EFFECTIVENESS (CONTINUED)**



### **Collection Activities**

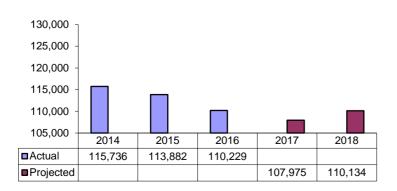
Collection activity is expected to remain about the same as prior years, with only an estimated 2% increase in the number of accounts.



### **Abandoned Call Rate**

Higher call volumes, the complexity of queries, and growth in the number of customers have resulted in call wait times and abandoned calls remaining high.

### **COMMUNITY IMPACT**



### <u>Calls Answered by Customer</u> <u>Services</u>

Complex customer inquiries take longer to answer in a satisfactory manner.

# PROGRAM 1 CUSTOMER SERVICES



# **2018 Program Detail**

## **Utility Finance**

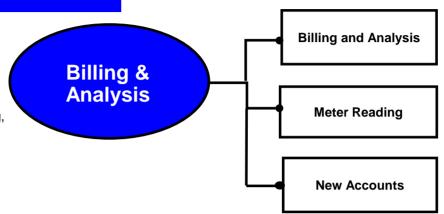
<b>Detailed Cost of Program:</b>	20	17	2018						
(\$,000's)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget				
Operating Expenses									
Personnel Expenses	1,895	2,055	2,141	196	2,337				
Personnel Related	5	12	12	-	12				
Communications	80	90	90	-	90				
Supplies	32	34	34	-	34				
Materials & Services	13	12	12	-	12				
Equipment Maintenance &									
Repairs	6	9	9	-	9				
Vehicle Operations	4	7	7	-	7				
Professional Services	85	50	50	-	50				
Financial Expenses	31	31	31	-	31				
Minor Assets & Equipment	-	3	3	-	3				
Major Repairs & Renovations	20	20	20	-	20				
Gross Operating Expenses	2,171	2,323	2,409	196	2,605				



## **Utility Finance**

### **Purpose:**

◆ To promptly invoice customers for water and sanitary sewer services provided by the Region of Durham as well as controlling all meter reading, accounting transactions, revenue analysis and reporting requirements.



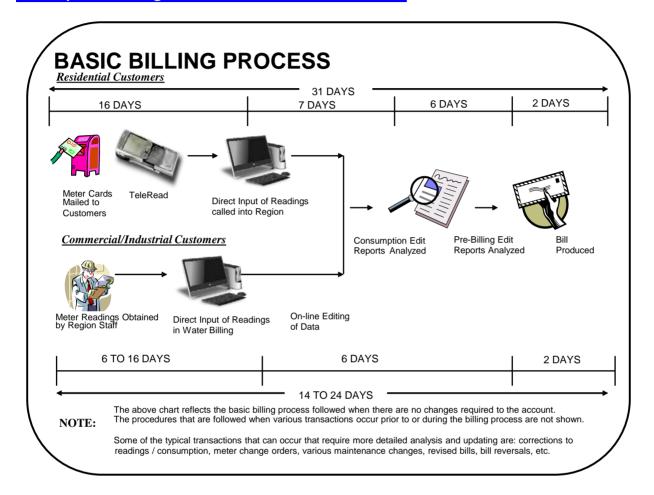
### **Description of Program Activities:**

- Billing & Analysis Control the production and issuance of water/sewer bills and manage all accounting activity, revenue forecasting and reporting requirements.
- Issue over 700,000 water/sewer bills (approximately \$205 million in revenue) annually for almost 175,000 water and sewer customers (including 170,000 residential customers and over 4,700 industrial, commercial and institutional (ICI) customers).
- Meter Reading responsible for obtaining water meter readings associated with residential, ICI, and Final (Customer moves) accounts, as well as investigating and assisting customers to identify water consumption problems.
- Residential Readings (quarterly)
- a) Customer Meter Card Program 3 mailed cards per year (over 370,000 readings). 93% of all returned customer readings are submitted through the TeleRead program (7% mailed backed).
- b) Region Meter Reads 1 time per year/customer (over 170,000 readings).
- c) Customer Site Investigations Assist customers in resolving high consumption issues (over 7,000 site investigations annually).
- ◆ ICI Readings bi-monthly meter readings obtained by Regional meter readers (around 28,000 reads annually).
- Final Readings almost 14,000 annual readings coordinated with customers when they move.
- Meter Reading Assistance Program Obtain meter readings for those customers who find it difficult to read the meters (almost 20,000 readings annually for 4,975 customers).
- New Accounts Control and set up of all new customer accounts (approximately 1,900 new accounts set up in 2017).



## **Utility Finance**

### **Description of Program Activities Continued:**



### **Description of Program Resources:**

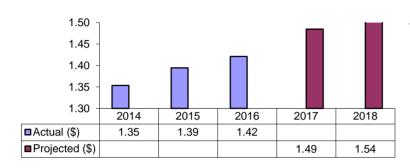
2018 Full Time Staff = 19.75
 2017 Full Time Staff = 19.75



## **Utility Finance**

### **Performance Measurements:**

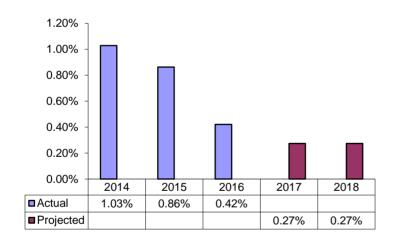
### **EFFICIENCY**



### Cost per Bill

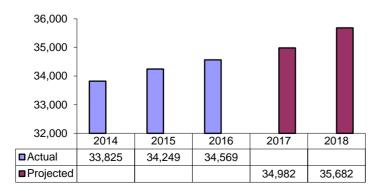
The cost per bill is expected to show a marginal increase in 2018.

### **EFFECTIVENESS**



# Percentage of Accounts With 4 or More Consecutive Estimates

Due to dedicated work being done in recent years via meter reading visits to properties, increased remote reading capabilities and customer contacts, a dramatic decrease in the number of accounts with 4 or more consecutive estimates has been obtained, despite the increase in the number of accounts. Receiving actual reads results in more accurate bills and highlights consumption problems faster.



### **Billing Staff/Accounts Ratio**

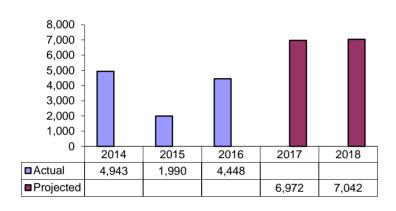
The number of accounts handled by each staff member is expected to increase yearly due to customer growth.



## **Utility Finance**

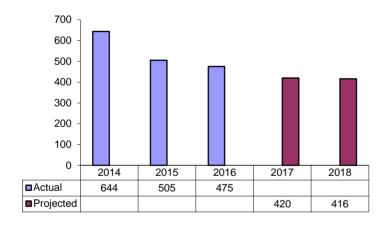
**Performance Measurements (Continued):** 

### **COMMUNITY IMPACT**



### **General Meter Reading Site Visits**

General meter reading site visits are expected to continue to be high over the next few years as we concentrate on reducing our estimated accounts (with more frequent site visits). Planned site visits in 2018 are marginally higher than 2017. Site visits dipped in 2015 due to staff turnover.



### Scheduled Customer Meter Reading Appointments

Scheduled meter reading appointments are made to assist customers in locating plumbing problems. As the number of accounts with multiple estimates decreases, the number of meter reading appointments is expected to decrease.

### PROGRAM 2 BILLING AND ANALYSIS



# **2018 Program Detail**

## **Utility Finance**

<b>Detailed Cost of Program:</b>	20	17		2018	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
(ψ,000 S)	Actuals	Budget	Budget	Change	Budget
Operating Expenses					
Personnel Expenses	1,754	1,886	1,967	386	2,353
Personnel Related	6	13	13	-	13
Communications	1,112	1,154	1,154	-	1,154
Supplies	135	135	135	-	135
Materials & Services	13	15	15	-	15
Equipment Maintenance &					
Repairs	6	9	9	-	9
Vehicle Operations	34	20	20	-	20
Professional Services	86	60	60	-	60
Contracted Services	160	165	165	-	165
Financial Expenses	3	2	3	-	3
Minor Assets & Equipment	-	2	2	-	2
Major Repairs & Renovations	20	20	20	-	20
Contribution to Reserve &					
Reserve Funds	12	12	12	-	12
Gross Operating Expenses	3,341	3,493	3,575	386	3,961

# PROGRAM 3 TANGIBLE CAPITAL ASSETS - REPLACEMENT



# 2018 Program Detail

## **Utility Finance**

	Description	Qty	Unit Cost	Total
			\$	\$
Cust	<u>omer Service - Program 1</u>			
1	Desktop Computers	8	700	5,600
2	Laptop Computer	1	1,500	1,500
			_	7,100
Billin	g and Analysis - Program 2		_	
3	Meter Reading Devices		7,000	7,000
			_	7,000
			_	
			=	14,100

### **TABLE OF CONTENTS**

### **2018 BUSINESS PLANS & BUDGETS**

# REGIONAL CORPORATE COSTS FOR WATER AND SEWER

# NOTE: On this page, just click on the particular Section and you will be linked to the corresponding page

corresponding page	Page Number
REGIONAL CORPORATE COSTS FOR WATER	
PROGRAM SUMMARY	347
REGIONAL CORPORATE COSTS FOR SEWER	
PROGRAM SUMMARY	348



# 2018 Business Plan

Regional Corporate Costs for Water

By Program	20	17		2018	
(\$,000's)	Estimated	Approved	Base	Program	Proposed
Expense Programs	Actuals \$	Budget \$	Budget \$	Change \$	Budget \$
<u>Expense Frograms</u>	Ψ	Ψ	Ψ	φ	Ψ
Advertising	19	21	21	-	21
Audit Fees	25	25	25	-	25
Contribution to Reserve Funds	610	610	635	-	635
Contribution to Capital Fund	612	612	728	-	728
Debt Issuance Expense	10	24	24	-	24
Insurance	416	416	424	-	424
Interest Expense	163	176	176	-	176
Bad Debt Expense	30	34	34	-	34
Allocation of Admin Charges	4,064	4,064	4,280	-	4,280
Net Program Expenses	5,949	5,982	6,347	-	6,347
Summary of Increase (Decrea	se)		\$365 6.10%		\$365 6.10%

## **Summary of Base Budget Changes**

	Comments	\$	
	Economic Increase	216	Allocation of Admin Charges
i	Inflationary Increases	149	Other Services
		0.05	
		365	
j	Inflationary Increases	<u>365</u>	Other Services



# 2018 Business Plan

Regional Corporate Costs for Sewer

By Program	20	17		2018	
(\$,000's)	Estimated Actuals	Approved Budget	Base Budget	Program Change	Proposed Budget
Expense Programs	\$	\$	\$	\$	\$
Advertising	19	21	21	-	21
Audit Fees	22	22	22	-	22
Contribution to Reserve Funds	611	611	635	-	635
Contribution to Capital Fund	652	652	793	-	793
Debt Issuance Expense	15	25	25	-	25
Insurance	543	543	554	-	554
Interest Expense	136	109	115	-	115
Bad Debt Expense	38	47	47	-	47
Allocation of Admin Charges	3,508	3,508	3,682	-	3,682
Net Program Expenses	5,544	5,538	5,894	-	5,894
			\$356		
Summary of Increase (Decrea	ıse)		6.43%		\$356
•	3			<b></b>	6.43%

## **Summary of Base Budget Changes**

	\$	Comments
Allocation of Admin Charges	174	Economic Increase
Other Services	182	Inflationary Increases
	356	