



Infrastructure Services

2016 Capital Budget
2017-2020
Capital Budget Outlook



CAPITAL BUDGET SUMMARY

Infrastructure Services

2016 REQUEST	Capital Envelope	Reserves Capital	Reserves Obligatory	Government Funding	Financing Future Years	Third party Recoveries	2016 Base Capital Budget	2015 Capital Budget ¹
Roads / Drainage	\$ 26,010,838	\$ 4,002,040	\$ 850,000	\$ 10,427,119	\$ -	\$ 83,000	\$ 41,372,997	\$ 48,590,038
Water	\$ 12,885,070	\$ 1,798,183	\$ -	\$ -	\$ -	\$ 300,000	\$ 14,984,253	\$ 14,217,422
Wastewater	\$ 10,988,190	\$ 1,665,000	\$ -	\$ 1,960,000	\$ 7,275,000	\$ -	\$ 21,888,190	\$ 16,032,735
Environmental Services	\$ 901,104	\$ 145,521	\$ -	\$ -	\$ -	\$ -	\$ 1,106,625	\$ 3,074,520
TOTAL	\$ 50,845,202	\$ 7,611,744	\$ 850,000	\$ 12,387,119	\$ 7,275,000	\$ 383,000	\$ 79,352,065	\$ 81,914,715
2015 Capital Budget¹	\$ 49,848,238	\$ 10,922,448	\$ 1,873,250	\$ 11,925,966	\$ 5,844,813	\$ 1,500,000	\$ 81,914,715	

1 - Prior year Capital Budget has been restated based on new organizational structure.

Roads / Drainage Summary

CATEGORY DESCRIPTION

(For detailed project listing see attached)

	2016 REQUEST	2017 OUTLOOK	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK
Roads					
Previous Council Approvals	\$ 1,928,000	\$ -	\$ -	\$ -	\$ -
Arterials - New Construction/Widening/Intersection Improvements	\$ 8,584,697	\$ 6,484,697	\$ 7,284,697	\$ 7,284,697	\$ 7,284,697
Arterial - Collector Roads	\$ 12,900,000	\$ 11,370,000	\$ 11,750,000	\$ 11,900,000	\$ 12,250,000
Local Roads	\$ 4,175,000	\$ 4,455,000	\$ 4,021,698	\$ 3,954,395	\$ 4,108,553
Bridges/Culverts	\$ 3,975,000	\$ 4,910,000	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000
Streetlighting	\$ 330,000	\$ 330,000	\$ 350,000	\$ 370,000	\$ 370,000
Traffic - New Lights	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000
Sidewalk/Curb	\$ 500,000	\$ 790,000	\$ 810,000	\$ 830,000	\$ 830,000
Surface Treatment	\$ 1,233,000	\$ 1,025,000	\$ 1,050,000	\$ 1,075,000	\$ 1,075,000
Other Road Programs/Projects	\$ 4,615,000	\$ 5,325,777	\$ 5,372,478	\$ 5,718,715	\$ 5,718,715
Total Roads	\$ 38,740,697	\$ 35,190,474	\$ 36,138,873	\$ 36,632,807	\$ 37,136,965
Drainage					
Previous Council Approvals	\$ 1,200,000	\$ 650,000	\$ 400,000	\$ 400,000	\$ -
Municipal Drainage & Stormwater Management	\$ 1,432,300	\$ 1,917,700	\$ 2,214,000	\$ 2,261,300	\$ 2,709,200
Total Municipal Drainage & Stormwater Management	\$ 2,632,300	\$ 2,567,700	\$ 2,614,000	\$ 2,661,300	\$ 2,709,200
PROJECT COSTS	\$ 41,372,997	\$ 37,758,174	\$ 38,752,873	\$ 39,294,107	\$ 39,846,165
PROJECT FINANCING					
Reserves: Capital	\$ (4,002,040)	\$ (150,000)	\$ (150,000)	\$ (150,000)	\$ (150,000)
Reserves: Obligatory (Subdivision Asphalt)	\$ (850,000)	\$ (850,000)	\$ (850,000)	\$ (850,000)	\$ (850,000)
Reserves: Obligatory - Federal Gas Tax	\$ (8,185,680)	\$ (7,985,680)	\$ (8,449,758)	\$ (8,449,758)	\$ (8,449,758)
Government Grants: Ontario Community Infrastructure Fund (OCIF)	\$ (2,241,439)	\$ (2,241,439)	\$ (2,241,439)	\$ (2,241,439)	\$ (2,241,439)
Third Party Recoveries	\$ (83,000)	\$ -	\$ -	\$ -	\$ -
CAPITAL ENVELOPE (Tax Levy)	\$ 26,010,838	\$ 26,531,055	\$ 27,061,676	\$ 27,602,910	\$ 28,154,968

Priority Setting:

To determine projects in the first four (4) Product Categories (Major Roads, Minor Roads, New Roads, and Bridge Rehabilitation), an Overall Condition Index (OCI) criteria is utilized. The following criteria are used to develop the OCI:

- Condition Rating/Cost Benefit: Roads are physically examined for structural condition, ride smoothness, truck traffic, traffic volumes and drainage. A computerized Pavement Management System (Deighton), which generates recommended rehabilitation strategies and costs by road classification and at pre-established budget scenarios is one of the tools used to develop the OCI.
- Safety: Are there any safety concerns that a project will solve.
- Associated with Water/Wastewater Projects: Where water/wastewater construction or rehabilitation is required, the road will be restored/upgraded if warranted.
- Economic Development Opportunity: Site specific in conjunction with proposed development (commercial and/or residential).
- Environment and Traffic Congestion Issues: It has been demonstrated that reducing bottlenecks and resulting idling can reduce carbon monoxide and carbon dioxide between 50% and 80%.

Roads Detail

PROJECT DESCRIPTION

PROJECT TYPE
R (Renewal)
E (Expansion)
N (New)

PROJECT DESCRIPTION	2016 REQUEST	2017 OUTLOOK	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK
PREVIOUS COUNCIL APPROVALS					
Flood Road from Kathleen Street to Schevchenko Avenue	R \$ 855,000				
Flood Road from Schevchenko Avenue to Burton Avenue	R \$ 500,000				
Durham Green Stairway	R \$ 333,000 ⁵				
Reserve Road	R \$ 240,000				
SUBTOTAL PREVIOUS COUNCIL APPROVALS	\$ 1,928,000	\$ -	\$ -	\$ -	\$ -
Arterials - New Construction/Widening/Intersection Improvements					
Mailey Drive (Contribution to Reserve Fund)	E \$ 2,284,697 ¹	\$ 2,284,697	\$ 2,284,697	\$ 2,284,697	\$ 2,284,697
MR 35 from Notre Dame West to Highway 144 (2 Lanes)	E \$ 5,500,000 ³				
Second Avenue additional costs (Sudbury)	E \$ 800,000				
Barry Downie from Kingsway to Westmount	E \$	\$ 4,200,000			
College Street Underpass	E \$		\$ 5,000,000	\$ 5,000,000	
Various Arterial Roads	E \$				\$ 5,000,000
SUBTOTAL Arterials - New Construction/Widening/Intersection Improvements	\$ 8,584,697	\$ 6,484,697	\$ 7,284,697	\$ 7,284,697	\$ 7,284,697
Arterial - Collector Roads					
Lorne Street from Martindale Road to Logan Avenue	R \$ 5,500,000 ³				
Skead Road (MR 86) from MR 89 to Old Skead Road North	R \$ 3,900,000 ⁴				
Large Asphalt Patches (Various Locations)	R \$ 2,000,000				
Long Lake Road from Hwy 17 to 0.8km South	R \$ 1,500,000 ³	\$ 2,275,000			
MR 84 from Capreol Lake Road to Suez Drive	R \$	\$ 1,750,000			
MR 15 from Bellisle Drive to 2.2km West	R \$	\$ 1,390,000			
Old Hwy 17 (MR 55) from McCharles Lake Road to 1.75km West	R \$	\$ 1,170,000			
Beatty Street from Flood Road to Elm Street	R \$	\$ 1,090,000			
Walford Road from Regent Street to Paris Street	R \$	\$ 900,000			
Elm Street from Ethelbert Street to Big Nickel Mine Road	R \$	\$ 860,000			
Auger Avenue from Hawthorne Drive to Falconbridge Highway	R \$	\$ 525,000			
Power Street from MR 55 to Collins Drive	R \$	\$ 500,000			
Brady Street from Minto Street to Staughnessy Street	R \$	\$ 360,000			
Marler Street from MR 35 to Notre Dame Street	R \$	\$ 275,000			
Elm Street from Flood Road to Elgin Street	R \$	\$ 275,000			
Kelly Lake Road from Copper Street to Sudbury Wastewater Treatment Plant	R \$		\$ 1,950,000		
Kingsway from Barry Downie Road to Falconbridge Highway	R \$		\$ 1,470,000		
Dominion Drive from Elmview Drive to MR 80	R \$		\$ 1,240,000		
Bancroft Drive from Bellevue Avenue to First Avenue	R \$		\$ 1,135,000		
Hill Street from Hwy 17 to 0.9 km South	R \$		\$ 1,100,000		
Adlee Avenue from Gammell Street to LaSalle Boulevard	R \$		\$		
Notre Dame Avenue from Wilma Avenue to 0.6 km North of Cambrian Heights Drive	R \$		\$ 930,000		

Roads Detail

PROJECT DESCRIPTION

PROJECT TYPE R (Renewal) E (Expansion) N (New)

		2016 REQUEST	2017 OUTLOOK	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK
York Street from Regent Street to Paris Street	R			\$ 830,000		
Main Street East from MR 15 to Railway Tracks	R			\$ 650,000		
Brookside Road from Errington Avenue to St. Onge Street	R			\$ 455,000		
Dell Street from Morin Avenue to Snowden Avenue	R			\$ 410,000		
Melvin Avenue from Kathleen Street to Mabel Street	R			\$ 380,000		
MR15 from 4.6km west of Martin Road to 7.6km west of Martin Road	R				\$ 3,100,000	
Ramps from Big Nickel Road to Lorne Street	R				\$ 2,500,000	
MR55 from MR24 to Eve Street	R				\$ 1,970,000	
Valleyview Road from Martin Road to Evans Road	R				\$ 1,430,000	
MR84 from Cote Blvd to Linden Drive	R				\$ 1,200,000	
MR24 from Caverzan Drive to CPR Tracks	R				\$ 200,000	
Various Arterial and Collector Roads - Removal/Replacement/Rehabilitation	R			\$ 1,200,000	\$ 1,500,000	\$ 12,250,000
SUBTOTAL Arterial - Collector Roads		\$ 12,900,000	\$ 11,370,000	\$ 11,750,000	\$ 11,900,000	\$ 12,250,000
Local Roads						
Gutcher Avenue from Mary Street to Lorne Street	R	\$ 480,000				
Paul Street from Graham Road to Caroline Street	R	\$ 480,000				
Arvo Street from Sparks Street to 0.4 km North	R	\$ 460,000				
St. Nicholas Street from Edinburgh Street to Wembley Drive	R	\$ 410,000				
Clifford Crescent from Percy Avenue to Flake Street	R	\$ 230,000				
Carol Street from MR 80 to Suzanne Street	R	\$ 220,000				
Nicole Street from Arlington Drive to Riverside Drive	R	\$ 220,000				
Second Avenue from Torbay Road to Bayside Crescent	R	\$ 200,000				
Mary Court from Orell Street to Orell Street	R	\$ 190,000				
Normand Avenue from Leonard Avenue North to Arlington Drive	R	\$ 180,000				
Chenier Street from Oscar Street to MR 80	R	\$ 180,000				
Traffic Calming	N	\$ 165,000	\$ 170,000	\$ 175,000	\$ 175,000	\$ 175,000
Barrington Street from Falconbridge Highway to End	R	\$ 150,000				
Rene Street from Addy Crescent to Madetie Street	R	\$ 110,000				
Lamothe Street from Barry Downe Road to Leon Avenue	R	\$ 125,000				
Noble Street from Granite Street to Huron Street	R	\$ 90,000				
Hope Street from Huron Street to Granite Street	R	\$ 90,000				
Aurora Street from Monique Street to 0.1 km East	R	\$ 80,000				
MacLachlan Street from Spruce Street to South End	R	\$ 80,000				
Parkwood Street from Maple Street to North End	R	\$ 35,000				

Roads Detail

PROJECT DESCRIPTION

PROJECT TYPE
R (Renewal)
E (Expansion)
N (New)

	2016 REQUEST	2017 OUTLOOK	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK
Minto Street from Larch Street to Elgin Street	\$	\$ 640,000			
Birch Street, Maple Street and Cedar Street	R	\$	\$ 560,000		
Crescent Avenue from Young Street to Dennis Street	R	\$	\$ 450,000		
First Avenue from Balsam Street to 0.5 km South	R	\$	\$ 350,000		
Hesta Street from Arlington Drive to Riverside Drive	R	\$	\$ 330,000		
Mary Street from Desmarest Street to Gutcher Avenue	R	\$	\$ 300,000		
Talon Street from Will Street to Josephine Street	R	\$	\$ 230,000		
Northway Avenue from LaSalle Boulevard to Palisade Place	R	\$	\$ 220,000		
Trembley Street from Laval Street to Talon Street	R	\$	\$ 210,000		
Coleen Avenue from Gravel Drive to Nan Street	R	\$	\$ 205,000		
Glendale Court from Flake Street W to Flake Street East	R	\$	\$ 190,000		
Carmen Street from LaSalle Boulevard to 0.4 km South	R	\$	\$ 180,000		
Gregg Lane from Martindale Road to Gino Street	R	\$	\$ 140,000		
Mont Adam Street from Lloyd Street to Cochrane Street	R	\$	\$ 120,000		
Rita Street from Wilfred Street to 0.1 km East	R	\$	\$ 80,000		
Bethune Avenue from Randolph Street to Richard Street	R	\$	\$ 80,000		
Danforth Avenue from Fielding Street to Barrington Street	R	\$	\$ 680,000	\$	\$ 680,000
Creighton Road from School Street to Godfrey Drive	R	\$	\$ 445,000	\$	\$ 445,000
O'Neil Drive East from Penman Avenue to Margaret Street South	R	\$	\$ 310,000	\$	\$ 310,000
Strathmore Court from Robinson Drive E to Robinson Dr W	R	\$	\$ 300,000	\$	\$ 300,000
Leonard Street from Hwy 144 to North End	R	\$	\$ 285,000	\$	\$ 285,000
Field Street from Algonquin Road to Larchwood Drive	R	\$	\$ 280,000	\$	\$ 280,000
Bonin Street from Fire Route T to Montee Principal	R	\$	\$ 240,000	\$	\$ 240,000
Lillian Street from Dominion Drive to 0.5 km North	R	\$	\$ 220,000	\$	\$ 220,000
McAllister Avenue from Lasalle Blvd to South End	R	\$	\$ 205,000	\$	\$ 205,000
Loach's Road from Eden Point Drive to Carrell Court	R	\$	\$ 165,000	\$	\$ 165,000
Various Local Roads	R	\$	\$ 716,698	\$	\$ 3,779,395
SUBTOTAL Local Roads	\$ 4,175,000	\$ 4,455,000	\$ 4,021,698	\$ 3,954,395	\$ 3,933,553
Bridges/Culverts					
Various Bridge / Culvert Repairs	R	\$	\$ 3,770,000	\$	\$ 4,800,000
Kalmo Road	R	\$ 1,000,000	\$	\$	\$
Elbow Creek Culvert	R	\$ 1,750,000 ¹	\$	\$	\$
Montpellier Road South Culvert	R	\$ 450,000	\$	\$	\$
Old Soo Road Culvert	R	\$ 300,000	\$	\$	\$
Bridge Inspections / Evaluations	R	\$ 275,000	\$	\$	\$
Kelly Lake Road	R	\$ 200,000	\$	\$	\$ 200,000
Spanish River Bridge	R	\$	\$ 1,800,000	\$	\$
Nickel Basin Road Culvert	R	\$	\$ 1,600,000	\$	\$
Vermillion River Bridge (Moose Mountain)	R	\$	\$ 250,000	\$	\$
Old Soo Road Bridge	R	\$	\$	\$ 600,000	\$
SUBTOTAL Bridges/Culverts	\$ 3,975,000	\$ 4,910,000	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000

Roads Detail

PROJECT DESCRIPTION

PROJECT TYPE
R (Renewal)
E (Expansion)
N (New)

	2016 REQUEST	2017 OUTLOOK	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK
Streetlighting					
Miscellaneous Streetlight Upgrades	\$ 275,000	\$ 275,000	\$ 280,000	\$ 305,000	\$ 305,000
New Streetlights	\$ 55,000	\$ 55,000	\$ 60,000	\$ 65,000	\$ 65,000
SUBTOTAL Streetlighting	\$ 330,000	\$ 330,000	\$ 350,000	\$ 370,000	\$ 370,000
Traffic - New Lights					
Traffic System Improvements	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000
SUBTOTAL Traffic - New Lights	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000
Sidewalk/Curb					
Various Projects	\$ 500,000	\$ 790,000	\$ 810,000	\$ 830,000	\$ 830,000
SUBTOTAL Sidewalk/Curb	\$ 500,000	\$ 790,000	\$ 810,000	\$ 830,000	\$ 830,000
Surface Treatment					
Single surface treatment various locations	\$ 300,000				
MR4 (2.5 km)	\$ 238,000				
Morgan Road (1.9 km)	\$ 180,000				
Hill Street (1.0 km)	\$ 95,000				
Moxam Landing (1.0 km)	\$ 95,000				
Southview Drive (1.0 km)	\$ 95,000				
Demarais Road (0.9 km)	\$ 86,000				
Therault Road (0.4 km)	\$ 38,000				
Bradley Road (0.3 km)	\$ 29,000				
Forestview (0.3km)	\$ 29,000				
Mill Road (0.3km)	\$ 29,000				
Willow (0.2km)	\$ 19,000				
Various Locations	\$ 1,025,000	\$ 1,025,000	\$ 1,050,000	\$ 1,075,000	\$ 1,075,000
SUBTOTAL Surface Treatment	\$ 1,233,000	\$ 1,025,000	\$ 1,050,000	\$ 1,075,000	\$ 1,075,000

Roads Detail

PROJECT DESCRIPTION

PROJECT TYPE R (Renewal) E (Expansion) N (New)

	2016 REQUEST	2017 OUTLOOK	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK
Other Road Programs/Projects					
Development Subdivision Surface Asphalt	\$ 1,000,000 ^{1,2}	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000
Cycling Infrastructure	\$ 800,000	\$ 800,000	\$ 800,000	\$ 800,000	\$ 800,000
Railway Crossings	\$ 370,000	\$ 370,000	\$ 370,000	\$ 250,000	\$ 250,000
Crack Sealing	\$ 300,000	\$ 350,000	\$ 300,000	\$ 300,000	\$ 300,000
Consulting Services - Future Projects	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000
Guide Rail Installations	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000
Rockfall Program	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000
Depot Yard Cleanup	\$ 250,000				
Automatic Vehicle Locators (AVL) and software development	\$ 200,000				
Surveys and Land Transfers	\$ 100,000				
GIS	\$ 45,000				
Pavement Management Updates	\$ 200,000	\$ 200,000	\$ 1,852,478	\$ 2,118,715	\$ 200,000
Contingency	\$ 500,000	\$ 1,555,777	\$ 1,852,478	\$ 2,118,715	\$ 2,118,715
SUBTOTAL Other Road Programs/Projects	\$ 4,615,000	\$ 5,325,777	\$ 5,372,478	\$ 5,718,715	\$ 5,718,715
PROJECT COSTS	\$ 38,740,697	\$ 35,190,474	\$ 36,138,873	\$ 36,632,807	\$ 37,136,965

Notes:

1) Capital Financing Reserve Fund - Roads

Malley Drive
Kaino Road Bridge
Surface Asphalt Costs (Which Exceed Developer's Surface Asphalt Deposit)
Gutcher Avenue from Mary Street to Lorne Street

2) Obligatory Reserves

Developer's Subdivision Surface Asphalt Deposits

3) Federal Gas Tax Funding

MR 35 from Notre Dame West to Highway 144 (2 Lanes)
Lorne Street from Martindale Road to Logan Avenue
Long Lake Road from Hwy 17 to 0.8km South

4) OCIF Funding

Skead Road (MR 86) from MR 89 to Old Skead Road North

5) Third Party Funding

Durham Green Stairway includes estimated funding from external parties subject to final approval. If not approved, a reallocation will come from existing capital projects.

Incremental Operating Costs

MR35	\$ 7,559
Flood	\$ 413
Skead Road	\$ 7,886
Long Lake	\$ 2,336
Kaino Bridge	\$ 188
Lorne	\$ 3,421
Railroad Crossings	\$ 808
Guiderail	\$ 5,075
Sidewalk/Curb	\$ 4,728
	<u>\$ 32,393</u>

\$ 2,084,697	
\$ 1,750,000	
\$ 150,000	
\$ 17,343	
\$ 4,002,040	
\$ 850,000	
\$ 3,900,000	
\$ 3,200,000	
\$ 1,085,680	
\$ 8,185,680	
\$ 2,241,438	



Unfunded Capital Projects

Roads

PROJECT DESCRIPTION	PROJECT TYPE	COST
	R (Renewal)	
	E (Expansion)	
	N (New)	
Maley Drive ¹	N/E	\$ 105,150,000
MR 35 Widening from Azilda to Chelmsford	E	\$ 29,150,000
Kingsway Realignment	N	\$ 24,600,000
New University Link	N	\$ 15,800,000
Notre Dame Widening - Lasalle to Kathleen	E	\$ 15,450,000
Lasalle Barry Downe Intersection Improvements	E	\$ 5,100,000
Depot Upgrades ²	R	TBD
TOTAL UNFUNDED PROJECTS		\$ 195,250,000
TBD - To be determined		

Notes:

- 1) Unfunded portion above represents additional costs beyond the funding approved by Council in prior years and as well as funding within this Capital Budget.
- 2) Depot Needs Study will identify future needs with estimated costs for upgrades to various depots.

Drainage Detail

PROJECT DESCRIPTION	PROJECT TYPE		2016 REQUEST	2017 OUTLOOK	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK
	R (Renewal)	E (Expansion)					
	N (New)						
PREVIOUS COUNCIL APPROVALS							
Paquette Whitson Stormwater Facility (Contribution to Reserve Fund)	N	\$	650,000				
Mountain Street Storm Outlet	N	\$	550,000	650,000	400,000	400,000	
SUBTOTAL PREVIOUS COUNCIL APPROVALS			1,200,000	650,000	400,000	400,000	-
Municipal Drainage & Stormwater Management							
East Branch Junction Creek Stormwater Management	N	\$	600,000	350,000	450,000	200,000	300,000
Dominion Park Drain Culvert	N	\$	215,000				
Miscellaneous Storm Sewer Improvements	N	\$	100,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Forest Court Outlet	N	\$	60,000				
Dominion Drive/Concorde Stormsewer Outlet	N	\$	55,000				
Miscellaneous Consulting Fees	N	\$	50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
John Street Stormsewer Outlet	N	\$	45,000				
Bonaventure Drain Culvert	N	\$	40,000				
Trillium Municipal Drain Stormwater Management (Azilda)	N	\$	17,300	\$ 45,700	\$ 154,000	\$ 300,000	\$ 500,000
Upper Whitson River Flood Control	N			\$ 465,000	\$ 300,000	\$ 525,000	\$ 500,000
Countryside Pong	N			\$ 203,600			
Capreol Storm Drainage Improvements - Phase 1	N			\$ 200,000	\$ 240,000	\$ 250,000	\$ 250,000
Lavallee Drain F Subdrain	N			\$ 150,000			
Josephine Street Outlet Stormsewer Oversizing (Val Caron)	N			\$ 65,000			
Whitson River Tributary 3 Stormwater Management (Chelmsford)	N			\$ 48,000	\$ 165,000	\$ 215,000	\$ 300,000
Paul Street Stormsewer Outlet (Azilda)	N			\$ 22,400			
Jacobson - Cavarzan Storm Sewer	N			\$ 18,000	\$ 17,900	\$ 18,300	\$ 21,200
David Street Storm Outlet Treatment Station	N				\$ 250,000	\$ 125,000	\$ 200,000
Bancroft Stormwater Management Facility	N				\$ 50,000	\$ 50,000	\$ 50,000
Still Lake Stormwater Management Improvement	N				\$ 50,000	\$ 50,000	\$ 50,000
Rodgers Road Storm Water Management	N				\$ 50,000	\$ 40,000	\$ 50,000
Rheal Stormwater Management Facility	N				\$ 50,000	\$ 50,000	\$ 50,000
Trillium Trunk Storm Sewer (West Azilda)	N				\$ 47,100	\$ 48,000	\$ 48,000
Upper Korpela Creek Stormwater Management Facility	N				\$ 40,000	\$ 40,000	\$ 40,000
Subwatershed Planning (Contribution to Reserve Fund)	N	\$	250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000
SUBTOTAL Municipal Drainage & Stormwater Management			\$ 1,432,300	\$ 1,917,700	\$ 2,214,000	\$ 2,261,300	\$ 2,709,200
PROJECT COSTS			\$ 2,632,300	\$ 2,567,700	\$ 2,614,000	\$ 2,661,300	\$ 2,709,200

Unfunded Capital Projects

Drainage

PROJECT DESCRIPTION	PROJECT TYPE		COST
	R (Renewal)		
	E (Expansion)		
	N (New)		
Lake Ramsey West Watershed Stormwater Management	N	\$	25,000,000
East Branch Junction Creek Stormwater Management Study& Improvements	N	\$	10,000,000
Whitson River Tributary 3 Stormwater Management Control	N	\$	6,000,000
Whitewater Lake Stormwater Management	N	\$	5,500,000
Rodgers Road Storm Water Management	N	\$	5,000,000
Upper Whitson River Flood Control Radar Hill Site	N	\$	5,000,000
Upper Whitson River Flood Control Tributary 10 Site	N	\$	2,300,000
Capreol Storm Drainage Improvements - Phase 1	N	\$	2,200,000
Upper Whitson River Flood Control Falconbridge Branch Site	N	\$	2,000,000
Ida Street Algonquin Watershed Stormwater Pond	N	\$	1,800,000
Trillium Trunk Stormsewer (West Azilda)	N	\$	1,800,000
Still Lake Stormwater Management Improvement	N	\$	1,600,000
Upper Korpela Creek Stormwater Facility	N	\$	1,600,000
Regent Street Loach's Road Storm Sewer Outlet	N	\$	1,500,000
Bancroft Road Stormwater Management Facility	N	\$	1,400,000
Rheal Street Stormwater Management Facility	N	\$	1,250,000
Trillium Drain Stormwater Pond/Channel Improvement	N	\$	1,200,000
Mountain Street Storm Outlet	N	\$	1,150,000
Bancroft/Second Ave. Stormwater Treatment Station	N	\$	1,000,000
Green Avenue Stormwater Treatment Centre	N	\$	1,000,000
Jacobson-Cavarzan Stormsewer Outlet	N	\$	875,000
Lake Nepahwin Stormwater Treatment Tank # 10	N	\$	800,000
Jack Nicholas Stormwater Management	N	\$	500,000
Madison Nickeldale Stormwater Pond	N	\$	500,000
Mallard's Pond Refit/Rehabilitation	R	\$	500,000
Valleystream Stormwater Management	N	\$	500,000
David Street Stormwater Treatment Station	N	\$	525,000
TOTAL UNFUNDED PROJECTS		\$	82,500,000



Water Summary

CATEGORY DESCRIPTION

(For detailed project listing see attached)

	2016 REQUEST	2017 OUTLOOK	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK
Previous Council Approvals	\$ 1,486,753	\$ 1,359,368	\$ 700,738	\$ -	\$ -
Water Distribution					
Condition Assessment - Watermains	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Watermain Replacement / Rehabilitation	\$ 1,100,000	\$ 1,400,000	\$ 1,400,000	\$ 1,400,000	\$ 1,400,000
Watermain Priority Projects	\$ 7,200,000	\$ 5,440,903	\$ 6,062,388	\$ 6,166,239	\$ 6,639,714
Network Looping	\$ -	\$ -	\$ 2,750,000	\$ 250,000	\$ 250,000
Distribution System - Other	\$ 125,000	\$ 490,000	\$ 490,000	\$ 490,000	\$ 490,000
Water Plants					
Plants - Water Treatment Plants	\$ 2,325,000	\$ 450,000	\$ 2,250,000	\$ 450,000	\$ 450,000
Plants - Wells	\$ 1,400,000	\$ 2,600,000	\$ 2,200,000	\$ 1,500,000	\$ 1,500,000
Plants - Reservoirs / Tanks / Booster Stations	\$ 150,000	\$ 300,000	\$ -	\$ -	\$ 300,000
Plants - System Wide	\$ 125,000	\$ 525,000	\$ 475,000	\$ 540,000	\$ 540,000
Water Works - Strategic Initiatives	\$ 972,500	\$ 677,500	\$ 677,500	\$ 677,500	\$ 677,500

PROJECT COSTS	\$ 14,984,253	\$ 13,342,771	\$ 17,105,626	\$ 11,573,739	\$ 12,347,214
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PROJECT FINANCING

Reserves: Capital	\$ (1,799,183)	\$ -	\$ -	\$ -	\$ -
Recovery from Others	\$ (300,000)	\$ -	\$ -	\$ -	\$ -
Capital Envelopes: Future Years or Debt Financing	\$ -	\$ (200,000)	\$ (3,700,000)	\$ 2,100,000	\$ 1,600,000

CAPITAL ENVELOPE (W/WW User Fees)	\$ 12,885,070	\$ 13,142,771	\$ 13,405,626	\$ 13,673,739	\$ 13,947,214
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Priority Setting:

Watermain priority projects are determined based on a review of:

A) Condition: The database of watermain breaks is ranked according to number and frequency of breaks per section of pipe. This ranking is combined with the pipe age, material and diameter to determine priority sections for replacement, either as a watermain priority project or in conjunction with a roads priority project.

B) Capacity /Security of Supply: Fire flows and pressures are analyzed for anticipated future developments, as well as opportunities for looping or upsizing the watermains, to improve the security of supply.

When a roads or sanitary sewer priority project is identified, all of the above criteria are reviewed to determine if associated watermain replacement / upgrades are required.

The following is the criteria considered for Prioritizing Water and Wastewater Facilities :

- Legislation / Compliance
- Health & Safety
- Protecting Public Health
- Maintenance / Renewal / Replacement of Existing Capital Assets
- Enhancing Productivity
- Protection of the Environment

Water Detail

PROJECT DESCRIPTION	PROJECT TYPE R (Renewal) E (Expansion) N (New)	2016 REQUEST	2017 OUTLOOK	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK
PREVIOUS COUNCIL APPROVALS						
Wanapitae WTP Phase 2 Loan Repayment (2015-2018)	R	\$ 816,753	\$ 816,753	\$ 700,738		
New Valley Wells (Internal Financing - \$3,500,000 (2013-2017))	N	\$ 670,000	\$ 542,615			
SUBTOTAL PREVIOUS COUNCIL APPROVALS		\$ 1,486,753	\$ 1,359,368	\$ 700,738	\$ -	\$ -
Condition Assessment - Watermains						
Condition Assessment	R	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
SUBTOTAL - Condition Assessment - Watermains		\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Watermain Replacement / Rehabilitation						
Watermain Rehabilitation (Lining)	R	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000
Consultant Services (Inspection & Contract Administration) for Lining Projects	R	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Watermain Valve Replacement	R		\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Water Service Replacement	R		\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Watermain Air Release Valve Installation & Replacement	R		\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
SUBTOTAL - Watermain Replacement / Rehabilitation		\$ 1,100,000	\$ 1,400,000	\$ 1,400,000	\$ 1,400,000	\$ 1,400,000
Watermain Priority Projects						
Lorne Street from Martindale Road to Logan Avenue	R,N	\$ 1,500,000 ²				
Gutcher Avenue from Mary Street to Lorne Street	R	\$ 675,000				
First Avenue (Coniston) from Balsam Street to 0.5 km South	R	\$ 550,000				
Roger Street from Mildred Street to 255m North	R	\$ 650,000				
Arvo Street from Sparks Street to 0.4 km North	R	\$ 525,000				
MR 35 from Notre Dame West to Hwy 144	R	\$ 525,000				
Second Avenue (Coniston) - Additional Funding	R	\$ 425,000				
St. Jerome Easement (behind Notre Dame Avenue)	R	\$ 375,000				
MacLachlan Street from Spruce Street to South End	R	\$ 325,000				
Mary Court (Garson) from Orell Street to Orell Street	R	\$ 275,000				
Dundas Street from Hargreaves Avenue to 75 m South West	R	\$ 225,000				
St. Nicholas Street from Edinburgh Street to Wembley Street	R	\$ 150,000				
Wahnapiitae Trunk Watermain	R	\$ 125,000				
Lamothe Street (rebudgeted as was cancelled for Ash / Alder Emergency)	R	\$ 125,000				
Parkwood Street from Maple Street to North End	R	\$ 125,000				
Maley Drive Watermain Replacement - Consultant Fees (Inspection & CA)	R	\$ 100,000				
Yorkshire Drive - Watermain Replacement Under Culvert	R	\$ 100,000				
Preliminary Design for Subsequent Year Projects (Geotech, Surveys, Consultant Fees)	N,R	\$ 50,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Elgin Street Water System Improvements - Elm to Larch	R	\$ 50,000 ²				
Leslie Street - Watermain Replacement Under Culvert	R	\$ 50,000				
Carmen Street from Lasalle Blvd to Roland Street	R	\$ 25,000				



Water Detail

PROJECT DESCRIPTION

PROJECT TYPE R (Renewal) E (Expansion) N (New)

	2016 REQUEST	2017 OUTLOOK	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK
Barrydowne - Westmount to Kingsway (rebudgeted as was cancelled for Ash / Adler Street Emergency) & Additional Funding		\$ 1,000,000			
Fairburn Street - Barry Downe Road to East End		\$ 485,000			
West End Trunk Watermain Replacement		\$ 400,000	\$ 1,100,000		
Lively - Backyard and Small Diameter W/M Replacement		\$ 400,000			
Craigton Road (Copper Cliff) - School to Godfrey		\$ 400,000			
Leslie Street - Myles to bridge		\$ 350,000			
Maple Street (Ethelbert Street to East End)		\$ 250,000			
Maple (Parkwood to West End)		\$ 250,000			
Laberge Lane - North End to Bancroft Drive		\$ 210,000			
System Improvements (Development Related)		\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
Avalon Road - Bancroft Drive to South End		\$ 165,000			
Maple Street (Between Reginald & Ethelbert)		\$ 150,000			
Lorne Street (Easement) - Dean to Sutherland (Combine with Dean)		\$ 150,000			
Margaret - Second Avenue to East End		\$ 150,000			
Bellisle - MR15 to End		\$ 130,000			
Rita Street - Wilfred Street to Grace Street		\$ 130,000			
Kelly Lake Road - Watermain with Culvert Replacement		\$ 100,000			
Mont Adam - Lloyd to Cochrane		\$ 100,000			
Stanley Street (Ash Street to 25 m South)		\$ 50,000			
Dean - Lorne Easement		\$ 50,000			
MR15 from Bellisle Drive to 2.2 km west - Hydrant Relocation		\$ 25,000			
Various Watermain with Roads Priority Projects			\$ 3,500,000	\$ 3,000,000	\$ 3,000,000
Various Watermain Priority Projects			\$ 500,000	\$ 2,000,000	\$ 2,250,000
Replacement / Relocation of Backyard Watermain (Various Locations)			\$ 400,000	\$ 500,000	\$ 500,000
Replacement of 2" Watermain (Various Locations)			\$ 130,000	\$ 200,000	\$ 400,000
Contingency - Watermain Priority Projects	\$ 250,000 ²	\$ 270,903	\$ 207,388	\$ 241,239	\$ 284,714
SUBTOTAL - Watermain Priority Projects	\$ 7,200,000	\$ 5,440,903	\$ 6,062,388	\$ 6,166,239	\$ 6,639,714
Network Looping					
Valley Water System Looping - Construction (Four Contracts)			\$ 2,500,000		
Funding from Future Year Envelopes (2019-2020)			\$ (2,000,000)	\$ 800,000	\$ 1,200,000
Valley Water System Looping - Financing in Budget Year			\$ 500,000	\$ 800,000	\$ 1,200,000
Water System Looping (Various Areas)			\$ 250,000	\$ 250,000	\$ 250,000
SUBTOTAL - Network Looping			\$ 2,750,000	\$ 250,000	\$ 250,000



Water Detail

PROJECT DESCRIPTION	PROJECT TYPE R (Renewal) E (Expansion) N (New)	2016 REQUEST	2017 OUTLOOK	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK
Distribution System - Other						
Large Water Meter Replacement	R	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Distribution Health & Safety Equipment (Lock Out / Tag Out / Trench Box/ Confined Space Entry / Depot Improvements)	N	\$ 25,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Distribution System Operational Optimization (incl. non-revenue water reduction)	R		\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000
Distribution Support - Contract Support	R	\$ 125,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
SUBTOTAL - Distribution System - Other			\$ 490,000	\$ 490,000	\$ 490,000	\$ 490,000
Plants - Water Treatment Plants						
Wanapitei WTP Reactivator Upgrades (Construction 2016)	R	\$ 1,500,000				
Wanapitei WTP - Transformer Upgrade	R	\$ 300,000				
Vermilion WTP - Capital Contribution to Vale (contribution to reserve fund)	R	\$ 325,000	\$ 325,000	\$ 325,000	\$ 325,000	\$ 325,000
Wanapitei WTP - Filter Media Replacement	R	\$ 125,000				
Wanapitei WTP - Various Plant Repairs / Equipment Replacement	R	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000
David Street WTP - Various Plant Repairs / Equipment Replacement	R		\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Wanapitei WTP - Phase 3 Design & Contract Administration / Inspection Funding from Future Year Envelopes (2019)	R			\$ 1,800,000	\$ 900,000	\$ 900,000
Wanapitei WTP - Phase 3 - Financing in Budget Year				\$ 900,000	\$ 900,000	
SUBTOTAL - Plants - Water Treatment Plants		\$ 2,325,000	\$ 450,000	\$ 2,250,000	\$ 450,000	\$ 450,000
Plants - Wells						
Well Building Repairs / Upgrades - Design & Construction	R	\$ 1,250,000	\$ 2,600,000	\$ 1,300,000	\$ 1,500,000	\$ 1,500,000
Cracking Wells - Corrosion Control Upgrades	R	\$ 150,000				
Wells Inspection / Rehabilitation	R			\$ 900,000	\$ 300,000	\$ 600,000
Funding from Future Year Envelopes (2019-2020)				\$ 900,000	\$ 300,000	\$ 600,000
Wells Inspection / Rehabilitation - Financing in Budget Year					\$ 300,000	\$ 600,000
SUBTOTAL - Plants - Wells		\$ 1,400,000	\$ 2,600,000	\$ 2,200,000	\$ 1,500,000	\$ 1,500,000
Plants - Reservoirs / Tanks / Booster Stations						
Storage Tank Inspection / Cathodic Protection / Rehab - Various Tanks	R	\$ 150,000	\$ 300,000			\$ 300,000
Funding from Future Year Envelopes (2018-2019)			\$ (200,000)	\$ 100,000	\$ 100,000	\$ (200,000)
Storage Tank Inspection / Cathodic Protection / Rehab - Financing in Budget Year			\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
SUBTOTAL - Plants - Reservoirs / Tanks / Booster Stations		\$ 150,000	\$ 300,000	\$ -	\$ -	\$ 300,000



Water Detail

PROJECT DESCRIPTION

PROJECT TYPE
R (Renewal)
E (Expansion)
N (New)

	2016 REQUEST	2017 OUTLOOK	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK
Plants - System Wide					
Various Plant Repairs / Equipment Upgrades	\$ 75,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Operating Manuals & As-Builts	\$ 25,000	\$ 75,000	\$ 50,000	\$ 50,000	\$ 50,000
Health and Safety Inspections and Upgrades (includes Prestart Health & Safety)	\$ 25,000	\$ 75,000	\$ 50,000	\$ 50,000	\$ 50,000
Annual SCADA / Communications Upgrades, All Facilities	\$ -	\$ 250,000	\$ 250,000	\$ 315,000	\$ 315,000
Security Improvements (Surveillance, Fencing, Alarms, Keys)	\$ -	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
SUBTOTAL - Plants - System Wide	\$ 125,000	\$ 525,000	\$ 475,000	\$ 540,000	\$ 540,000
Water Works - Strategic Initiatives					
AMR (Automatic Meter Reading) Water Meters (Contribution to Reserve Fund)	\$ 795,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000
Contribution to Current (Locates Program Staff & Equipment - Capital Costs)	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Source Protection Plan (incl. Modeling Scenarios)	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Backflow Cross-Connection Reduction	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000
GIS - Various Equipment & Software	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Contribution to Operating (Benchmarking and Water Festival)	\$ 32,500	\$ 32,500	\$ 32,500	\$ 32,500	\$ 32,500
SUBTOTAL - Water Works - Strategic Initiatives	\$ 972,500	\$ 677,500	\$ 677,500	\$ 677,500	\$ 677,500
PROJECT COSTS	\$ 14,984,253	\$ 13,342,771	\$ 17,105,826	\$ 11,573,739	\$ 12,347,214

Notes:

- 1) Project is to be funded 100% by Hydro One.
- 2) Capital Financing Reserve Fund - Water
 - Lorne Street - Merindale Road to Logan Avenue
 - Elgin Street Water System Improvements - Elm to Larch
 - Contingency

\$ 1,500,000
\$ 49,183
\$ 250,000
\$ 1,799,183



Unfunded Capital Projects

Water

PROJECT DESCRIPTION	PROJECT TYPE	COST
	R (Renewal)	
	E (Expansion)	
	N (New)	
Wanapitei WTP Alternate Trunk Watermain - Multiple Phases	N	\$ 37,000,000
Fielding Road Watermain Servicing	E	\$ 8,250,000
Well Building Repairs/Upgrades - Design & Construction	R	\$ 6,500,000
Watermain Replacement / Rehabilitation (to accommodate Roads Priority Projects in 2016/2017) (refer to Note 1 below)	R	\$ 16,500,000
Mailey Drive Extension - Watermain	E	\$ 3,900,000
Valley Water Looping	N	\$ 2,000,000
Ramsey Lake South Shore Servicing (Construction)	E	\$ 1,900,000
Kingsway Realignment	R	\$ 800,000
Falconbridge Water Tower Replacement Design / Contract Administration and Inspection	R	\$ 550,000
Water Meters (AMRs)	R	\$ 2,000,000
TOTAL UNFUNDED PROJECTS		\$ 79,400,000
Note 1 - Listing of watermain replacement / rehabilitation projects for 2016/2017 only:		
Various 2017 Roads Resurfacing (watermain lining in advance)**		
MR35 - Elizabeth to Berleau (upsize)*		\$ 2,750,000
Carmen - Lasalle to S. End (1958 CI)*		\$ 400,000
Mary Street - Demorest to Gitcher (1953 CI)*		\$ 385,000
Minto - Larch to Elgin (1955 CI)*		\$ 350,000
Lamothe Street - Barrydowne to Leon (additional loop to improve hydraulics) *		\$ 325,000
Carol Street - MR80 to Suzanne (1950 CI) *		\$ 280,000
Chenier - Oscar to MR80 (1950 CI) *		\$ 250,000
Northway - Lasalle to Palisade (1955 CI) *		\$ 240,000
Barrington - Falconbridge to end (1958 CI) *		\$ 180,000
Rene - Addy to Mererle (1950 CI) *		\$ 165,000
Aurore - Monique to 100m East (1950 CI) *		\$ 130,000
Noble Street - Granite to Huron (1945 CI) *		\$ 100,000
Hope - Huron to Granite (1945 CI) *		\$ 100,000
Roger Street - watermain lining - Bancroft to 100m South		\$ 50,000
		\$ 3,055,000

* - included in Roads Capital Budget as to be completed in 2016

** - included in Roads Capital Budget as to be completed in 2017

"CI" represents cast iron watermain

Wastewater Summary

CATEGORY DESCRIPTION

(For detailed project listing see attached)

	2016 REQUEST	2017 OUTLOOK	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK
Previous Council Approvals	\$ 3,412,563	\$ 462,563	\$ 462,563	\$ 462,563	\$ 462,563
Wastewater Collection					
Condition Assessment - Sewer System	\$ 700,627	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000
Sewer System Rehabilitation	\$ 1,325,000	\$ 1,325,000	\$ 1,325,000	\$ 1,225,000	\$ 1,125,000
Sewer Priority Projects	\$ 2,710,000	\$ 11,044,507	\$ 3,725,066	\$ 1,487,440	\$ 1,444,970
Collection System - Other	\$ -	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000
Wastewater Plants					
Wastewater Treatment Plants - North	\$ 2,350,000	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Plants - South	\$ 10,435,000	\$ 5,435,000	\$ 18,085,000	\$ 185,000	\$ 185,000
Plants - Lift Stations	\$ 500,000	\$ 9,220,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000
Plants - System Wide	\$ 100,000	\$ 950,000	\$ 930,000	\$ 930,000	\$ 930,000
Wastewater General					
Wastewater - Strategic Initiatives	\$ 355,000	\$ 230,000	\$ 215,000	\$ 215,000	\$ 215,000
PROJECT COSTS	\$ 21,888,190	\$ 29,417,070	\$ 26,692,629	\$ 6,255,003	\$ 6,112,533
PROJECT FINANCING					
Reserves: Capital	\$ (1,665,000)	\$ -	\$ -	\$ -	\$ -
Reserves: Gas Tax	\$ (1,960,000)	\$ (1,960,000)	\$ (1,960,000)	\$ (1,960,000)	\$ (1,960,000)
Capital Envelopes: Future Years or Debt Financing	\$ (7,275,000)	\$ (16,249,116)	\$ (13,300,516)	\$ 7,365,752	\$ 7,741,437
CAPITAL ENVELOPE (WWW User Fees)	\$ 10,988,190	\$ 11,207,954	\$ 11,432,113	\$ 11,660,755	\$ 11,893,970

Priority Setting:

Sanitary sewer priority projects are determined based on a review of:

A) Condition: Camera inspections of the sanitary sewers are conducted to determine pipes that are in need of repair / replacement.

B) Operational Issues: Groundwater infiltration into aging infrastructure and sagged systems of sewer that require frequent maintenance are prioritized for repair / replacement.

C) Capacity: Flow capacity is analysed for new and future growth conditions and upsizing is completed as required.

When a roads or watermain priority project is identified, all of the above criteria are reviewed to determine if associated sanitary sewer replacement / upgrades are required.

The following is the basis for prioritizing Water and Wastewater Facility Projects:

- Legislation / Compliance
- Health & Safety
- Protecting Public Health
- Maintenance / Renewal / Replacement of Existing Capital Assets
- Enhancing Productivity
- Protection of the Environment



Wastewater Detail

PROJECT DESCRIPTION		PROJECT TYPE		2016 REQUEST	2017 OUTLOOK	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK
		R (Renewal)	E (Expansion)					
		N (New)						
PREVIOUS COUNCIL APPROVALS								
Copper Cliff Wastewater System Upgrades (Design, Contract Administration and Inspection)	R, N	\$		1,600,000				
Gatchell Outfall Sewer - (Design, Contract Administration, Inspection & Property Acquisition)	R	\$		1,000,000				
Sudbury WWTP Upgrades - Headhouse Construction & Standby Power Design (\$4,000,000 Internal Financing 2015 to 2023)	N,R,E	\$		462,563	\$	462,563	\$	462,563
Chelmsford WWTP - UV Disinfection System Replacement	R	\$		300,000				
Computerized Maintenance Management System (CMMS) Contribution - Corporate Initiative	N	\$		50,000				
SUBTOTAL PREVIOUS COUNCIL APPROVALS				\$ 3,412,563	\$ 462,563	\$ 462,563	\$ 462,563	\$ 462,563
Condition Assessment - Sewer System								
Sewer Inspection Program (Closed-Circuit Television, Zoom Camera, Cleaning)	R	\$		500,000 ²	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000
Inflow / Infiltration Assessment (Reduction)	R	\$		100,627		\$ 200,000		
Sanitary Rock Tunnel Inspections	R			100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
SUBTOTAL - Condition Assessment - Sewer System				\$ 700,627	\$ 600,000	\$ 800,000	\$ 600,000	\$ 600,000
Sewer System Rehabilitation								
Sanitary Sewer System Rehabilitation (Lining) and Repair (3 Year Contracts)	R	\$		1,125,000 ²	\$ 1,125,000	\$ 1,125,000	\$ 1,125,000	\$ 1,025,000
Consultant Services (Inspection & Contract Administration) for Rehabilitation Projects (3 Year Contracts)	R	\$		100,000 ²	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Rock Tunnel Maintenance & Repair	R	\$		100,000 ²	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
SUBTOTAL - Sewer System Rehabilitation				\$ 1,325,000	\$ 1,325,000	\$ 1,325,000	\$ 1,225,000	\$ 1,125,000
Sewer Priority Projects								
Lorne Street from Martindale Road to Logan Avenue	R	\$		500,000 ¹				
Arvo Street from Sparks Street to 0.4 km North	R	\$		425,000 ¹				
Gutcher Avenue from Mary Street to Lorne Street	R	\$		285,000 ¹				
St. Jerome Easement (behind Notre Dame Avenue)	R	\$		275,000 ¹				
Lamothe Street from Barry Downs Road to Leon Avenue	R	\$		225,000 ¹				
MacLachlan Street from Spruce Street to South End	R	\$		200,000 ¹				
First Avenue (Coniston) from Balsam Street to 0.5 km South	R	\$		125,000 ¹				
Loach's Road from Eden Point to 300 m North (Lining in 2016)	R	\$		100,000 ¹				
Creighton Road from School Street to Godfrey Drive (Lining in 2016)	R	\$		100,000 ¹				
Carmen Street from Laselle Blvd to 0.4km South	R	\$		85,000 ¹				
Mary Court (Garson) from Orrell Street to Orrell Street	R	\$		75,000 ¹				



Wastewater Detail

PROJECT DESCRIPTION

PROJECT TYPE R (Renewal) E (Expansion) N (New)

	2016 REQUEST	2017 OUTLOOK	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK
Rita Street from Wilfred to Gracia (Lining in 2016)	\$ 65,000				
Parkwood Street from Maple to North End	\$ 50,000				
Roger Street from Mildred Street to 255m North	\$ 50,000				
St. Nicholas Street from Edinburgh Street to Wembley Drive	\$ 50,000				
Preliminary Design for Subsequent Years	\$ 50,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Dundas Street from Hargreaves Avenue to 75 m South West	\$ 25,000				
Mont Adam Street from Lloyd Street to Cochran Street (Lining in 2016)	\$ 25,000				
Gatchell Outfall Sewer - (Construction)	\$ 6,000,000				
Funding from Future Year Envelopes (2019-2020)	\$ (3,350,000)				
Gatchell Outfall Sewer (Construction) - Financing in Budget Year	\$ 2,650,000			\$ 1,000,000	\$ 2,350,000
Algonquin Road Sewer Upgrades (Construction) (includes upsizing)	\$ 1,000,000				
Funding from Future Years Envelopes (2018)	\$ (764,000)				
Algonquin Road Sewer - Financing in Budget Year	\$ 238,000				
Lively Sanitary Sewer Upgrades - Construction	\$ 3,052,800				
Funding from Future Year Envelopes (2018-2019)	\$ (3,052,800)				
Lively Sanitary Sewer - Financing in Budget Year	\$ -			\$ 1,267,800	\$ 1,785,000
Lively Force Main				\$ 1,267,800	\$ 1,785,000
Funding from Future Year Envelopes (2020)				\$ (1,800,000)	\$ -
Lively Force Main Financing in Current Year				\$ 438,720	\$ -
System Improvements (Development Related)				\$ 300,000	\$ 300,000
Combined Sewer Investigation				\$ 100,000	\$ 100,000
Leslie Street - Myles to Bridge	\$ 300,000				
Maple (Ethelbert to East End)	\$ 100,000				
Maple (Parkwood to West End)	\$ 50,000				
West End Trunk Watermain Replacement (associated sanitary sewer work)	\$ 75,000				
Margaret - Second Avenue to East End	\$ 75,000				
Avalon Road - Bancroft Drive to South End	\$ 200,000				
Contingency - Sewer with Watermain Priority Projects	\$ 50,000				
Various Sewer with Watermain and Roads Priority Projects	\$ 40,000				
SUBTOTAL - Sewer Priority Projects	\$ 51,707	\$ 11,044,507	\$ 3,725,066	\$ 1,487,440	\$ 1,444,970
Collection System - Other					
Collection Support - Contract Support		\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000
SUBTOTAL - Collection System - Other	\$ -	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000
Wastewater Treatment Plants - North					
Azilda WWTP Rehabilitation (Engineering & Construction)	\$ 1,450,000				
Valley East WWTP Upgrades - Contract Administration and Inspection	\$ 450,000				
Chelmsford WWTP Upgrades	\$ 450,000				
SUBTOTAL - Wastewater Treatment Plants - North	\$ 2,350,000	\$ -	\$ -	\$ -	\$ -



Wastewater Detail

PROJECT DESCRIPTION	PROJECT TYPE		2016 REQUEST	2017 OUTLOOK	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK		
	R (Renewal) E (Expansion)								
	N (New)								
Wastewater Treatment Plants - South									
Copper Cliff Wastewater System Upgrades - Construction	R, N	\$	8,400,000						
Funding from Future Year Envelopes (2017-2023)		\$	(7,275,000)	\$	1,167,684	\$	1,167,684		
Copper Cliff Wastewater System Upgrades - Financing in Budget Year		\$	1,125,000	\$	1,167,684	\$	1,167,684		
Walden WWTP - Rehabilitation	R	\$	1,300,000						
Lively WWTP - Rehabilitation	R	\$	500,000						
Wanapitei Lagoon - Cell #1 Cleaning	R	\$	150,000						
Copper Cliff Sewage Treatment Plant - Capital									
Contribution to Vale (Contribution to Reserve Fund)	R	\$	85,000	\$	85,000	\$	85,000		
Sudbury WWTP Upgrades -Standby Power/Parking Lot/RV									
Dump Station - Construction	R, N			\$	5,100,000				
Funding from Future Year Envelopes				\$	(3,250,000)	\$	1,950,000		
Sudbury WWTP Upgrades -Standby Power Construction -				\$	1,850,000	\$	1,300,000		
Financing in Budget Year				\$	1,300,000	\$	1,950,000		
Sudbury WWTP - Unit Process Audit - for Compliance	R			\$	150,000				
Sudbury WWTP Equipment Upgrades (Tank Cleaning, Equipment Failure)	R			\$	100,000	\$	100,000		
Walden WWTP Expansion - Construction	N,R,E				\$	17,775,000			
Funding from Future Envelopes					\$	(500,000)	\$	500,000	
Funding from Future Year Envelopes (2020-2033)					\$	(16,500,000)	\$	1,460,685	
Walden WWTP Expansion Construction - Financing in Budget Year					\$	775,000	\$	1,460,685	
Sudbury WWTP - Decking Rehabilitation	R				\$	125,000			
SUBTOTAL - Wastewater Treatment Plants - South		\$	10,435,000	\$	5,435,000	\$	18,085,000	\$	185,000
Plants - Lift Stations									
Lift Station Upgrades / Standby Power - Various Locations	N	\$	500,000	\$	1,220,000	\$	1,000,000	\$	1,000,000
St. Charles Lift Station Upgrades (Construction)	R, N			\$	8,000,000				
Funding from Future Envelopes (2018)				\$	(1,000,000)	\$	1,000,000		
Funding from Future Year Envelopes (2019-2025)				\$	(6,000,000)			\$	963,068
St. Charles Lift Station Upgrades (Construction) - Financing in Budget Year				\$	1,000,000	\$	1,000,000	\$	963,068
SUBTOTAL - Plants - Lift Stations		\$	500,000	\$	9,220,000	\$	1,000,000	\$	1,000,000
Plants - System Wide									
Various Plant Repairs / Equipment Upgrades / Operational Support	R	\$	100,000	\$	350,000	\$	350,000	\$	350,000
Annual SCADA/Communication Upgrades	R,N	\$	-	\$	270,000	\$	270,000	\$	270,000
Upgrading Primary Systems (Lagoons) to Secondary Treatment	N	\$	-	\$	100,000	\$	100,000	\$	100,000
Operating Manuals & Facility As-Built Updates	R,N	\$	-	\$	80,000	\$	80,000	\$	80,000
Roofing and Fencing	R	\$	-	\$	50,000	\$	30,000	\$	30,000
Security Improvements (Card Access, Surveillance etc.)	N	\$	-	\$	50,000	\$	50,000	\$	50,000
Health and Safety Inspections and Upgrades (Pre-Start Health & Safety Reviews)	R	\$	-	\$	50,000	\$	50,000	\$	50,000
SUBTOTAL - Plants - System Wide		\$	100,000	\$	950,000	\$	930,000	\$	930,000



Wastewater Detail

PROJECT DESCRIPTION	PROJECT TYPE R (Renewal) E (Expansion) N (New)	2016 REQUEST	2017 OUTLOOK	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK
Wastewater - Strategic Initiatives						
Energy Saving Initiatives / Process Optimization (Collection System)	R	\$ 150,000				
Energy Optimization Implementation (Facilities)	R	\$ 115,000				
Contribution to Operating (Locates Program for Staffing & Equipment - Capital Costs)	R	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Benchmarking (Contribution to Operating)	R	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Community Spills Management Fund	R	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000
Demand - Side Management (Wet Weather Flow Reduction)	N	\$ -	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
GIS - Various Equipment & Software	N	\$ -	\$ 40,000	\$ 25,000	\$ 25,000	\$ 25,000
SUBTOTAL - Wastewater - Strategic Initiatives		\$ 355,000	\$ 230,000	\$ 215,000	\$ 215,000	\$ 215,000
PROJECT COSTS		\$ 21,885,190	\$ 29,417,070	\$ 28,692,629	\$ 6,255,003	\$ 6,112,533

Notes:

1) Federal Gas Tax Reserve Fund:

Lorne Street - Martindale Road to Logan Avenue	\$ 400,000
Arvo Street - Sparks Street to 0.4 km North	\$ 310,500
Gutcher Avenue - Mary Street to Lorne Street	\$ 198,500
St. Jerome Easement	\$ 182,500
Lamothe	\$ 157,500
MacLachlan - Spruce to South End	\$ 140,000
First Avenue (Corlison) - Balsam to 0.5 km South	\$ 87,500
Loach's Road - Eden Point to 300 m North (Lining in 2016)	\$ 70,000
Craigton Road - Sewer Lining	\$ 70,000
Carmen - Lassalle to 0.4km South	\$ 59,500
Mary Court (Garson) - Orell Street to Orell Street	\$ 52,500
Rita Street - Willfred to Grace (Line Sewer in 2016)	\$ 45,500
Parkwood - Maple to North End	\$ 35,000
Roger Street - Mildred to 255m North	\$ 35,000
St. Nicholles - Edinburgh to Wembley	\$ 35,000
Preliminary Design for Subsequent Years	\$ 35,000
Dundas Street - Hargreaves Avenue to 75 m South West	\$ 17,500
Mont Adam - Lloyd to Cochrane Lining	\$ 17,500
	\$ 1,960,000

2) Capital Financing Reserve Fund - Wastewater:

Sanitary Sewer System Rehabilitation	\$ 1,125,000
Sanitary Sewer System Rehabilitation Consultant Services	\$ 100,000
Rock Tunnel Maintenance & Repair	\$ 100,000
Sewer Inspection Program	\$ 340,000
	\$ 1,665,000



Unfunded Capital Projects

Wastewater

PROJECT DESCRIPTION	PROJECT TYPE	COST
	R (Renewal)	
	E (Expansion)	
	N (New)	
Fielding Road Sewer Servicing and Walden WWTP Upgrades	E	\$ 9,250,000
Ramsey Lake South Shore Servicing (Construction)	E	\$ 3,000,000
Valley East WWTP Upgrades (2018)	R	\$ 3,000,000
Maley Drive Extension - Sanitary Sewer	R	\$ 1,500,000
TOTAL UNFUNDED PROJECTS		\$ 16,750,000



Environmental Services

PROJECT DESCRIPTION		PROJECT TYPE		2016 REQUEST	2017 OUTLOOK	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK					
		R (Renewal)	E (Expansion)										
		N (New)											
Previous Council Approvals - Sudbury Landfill Site - Landfill Gas Collection System & Leachate Collection System Projects Scales, Guards & Scale Houses - Miscellaneous Repairs Landfill - Cover & Hydroseeding Landfill Scales - Sandblasting and Coating Household Hazardous Waste Depot - Fire Suppression System Transfer Station - Kiosks & Site Repairs Hammer Landfill - Processing Pad & Signs Azilda Landfill - Processing Pad & Signs Litter Containers - Equipment Azilda Landfill - Internal Access Road Recycling Centre - Heating System Sudbury Landfill - TSSA Landfill Gas Update Waste Management System Master Plan - Commence in 2021 ¹ Various Solid Waste Sites - Assessments/Plans/Reports Landfills - Wells & Fixtures Azilda Landfill - Cell Closure Sudbury Landfill - NW Stormwater Ponds Sudbury Landfill - Leachate Control Basins Co-Collection Vehicles - Cold Weather Protection Hauled Sewage Site Closure Sudbury Landfill - Internal Access Road Hammer Landfill - Internal Access Road Sudbury Landfill - Portion of Perimeter Road East Monitoring, Contingencies & Miscellaneous	R/E	\$	541,625	\$	403,188								
	R	\$	148,000 ²										
	R	\$	75,000	\$	75,000	\$	75,000	\$	75,000				
	R	\$	60,000	\$	60,000	\$	60,000	\$	60,000				
	R	\$	42,000										
	R/N	\$	38,000										
	R/N	\$	30,000										
	R/N	\$	30,000										
	R/N	\$	24,000	\$	24,000	\$	24,000	\$	24,000				
	R/N	\$	20,000										
	R	\$	18,000										
	R	\$		240,592									
	R	\$		34,866	\$	75,000	\$	95,000	\$	95,000			
	R	\$		32,680	\$	20,203	\$	11,543					
	R/N	\$		30,000	\$		\$	30,000					
	R	\$			\$	875,000							
	R	\$			\$	312,920							
	R	\$			\$	73,296							
	R	\$			\$	39,628							
	R						\$	115,000					
R						\$	50,000						
R/N						\$	20,000						
E								\$	456,919				
R	\$	80,000	\$	80,000	\$	80,000	\$	163,801	\$	80,000			
PROJECT COSTS				\$	1,106,625	\$	980,326	\$	1,635,047	\$	644,344	\$	790,919
PROJECT FINANCING													
Reserves: Capital				\$	(145,521)	\$	-	\$	(10,114)	\$	-	\$	-
Capital Envelopes: Future Years					\$		-	\$	(625,000)	\$	375,588	\$	249,412
CAPITAL ENVELOPE (Tax Levy)				\$	961,104	\$	980,326	\$	999,933	\$	1,019,932	\$	1,040,331

Notes:

- 1) Contribution to Project Only - Cost will be subject to scope of work - TBD
- 2) Capital Financing Reserve Fund - Environmental Services

Priority Setting:

Priority is based on need or initiatives.