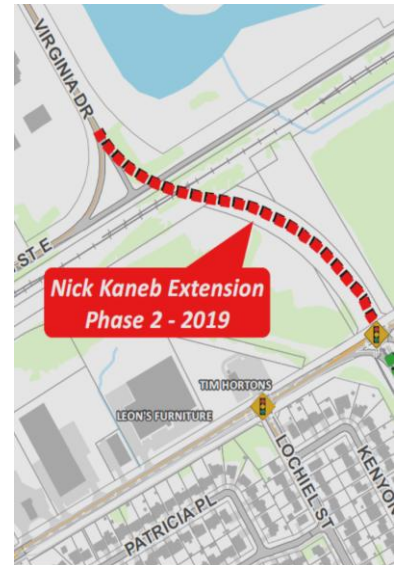


2019 CAPITAL BUDGET



Capital Budget

The capital budget funds the purchase, construction, and rehabilitation of assets. The City has a considerable asset base of \$648 million (excluding water and wastewater) that includes 68 buildings, 272 km of roads, 12 bridges, 101 culverts, 68 traffic signals, 5,127 street lights, 45 km of bike lanes, 190 km of sidewalks, 40 parks and playgrounds, 36 km of recreational paths, and more than 200 vehicles (service support and emergency response vehicles).

Capital assets are the foundation for providing services. Asset management is a municipality's plan for how to manage municipal infrastructure in order to provide services to residents and other users in a way that meets their expectations, and is financially sustainable into the future.

To ensure that the City manages its existing and future assets responsibly and is able to financially support future development, the City uses a risk-based/level of service approach to capital planning that prioritizes and balances the capital requirements in a sustainable manner.

Capital projects are prioritized by departments using various criteria; such as, asset condition, health and safety, to continue to provide satisfactory levels of service to the community. The City also attempts to coordinate capital projects to maximize use of funding and resources and minimize public disruption.

In 2016, the City updated and expanded its AMP to include most City-owned capital assets including for the first time its buildings and fleet assets. The AMP is based on the Ministry of Infrastructure of Ontario's *Building Together: Guide for Municipal Asset Management Plans (2012)*. The AMP is updated each year to continue its 10-year capital planning forecast. The next version of the City's AMP will also include assets, such as: ITT Infrastructure, GSDL equipment/ furnishings, Protective Services' equipment. The full AMP document will undergo an update no later than 2021, and will be extended with an updated 10-year planning forecast.

Many capital projects take more than a single year to plan, design and develop, with the associated capital funding approved in the first year of the project and carried over to the following year(s) through a report approved by Council.

Capital Expenditures

Capital expenditures for municipalities are long-term commitments, which require analysis using a long-term perspective, and should provide benefits for multiple years. A capital expenditure results in the acquisition or increased value of a capital asset (infrastructure, municipal facilities, vehicles, equipment) and usually involves projects with expenditures over a certain amount, that will provide benefits for more than a certain period of time, which is typically one year. The City's current capitalization threshold is \$5,000 or a pooled threshold of \$50,000.

The 2019 capital budget includes \$22.3 million in capital works and asset replacement. This includes \$7 million in roads and transportation (including \$1.8 million for Nick Kaneb Dr. extension), \$1.6 million investment in transit projects, \$5 million for the continuation of the Municipal Works yard redevelopment, almost \$3.4 million for parks, recreation and cultural facility upgrades, and \$2.9 million for phase one for the Fire headquarters and training centre.

The chart on the following page provides a comparison of the 2019 budget submission to the 2019 LTFP for capital works (the LTFP is based on the City's AMP).

The capital submission for the 2019 budget is lower than the LTFP by \$3,349,000. The chart on the right explains this variance by listing the projects that were in the LTFP but not included in the 2019 submission, and the projects included in the 2019 submission but were not in the LTFP for the year 2019.

	Year 2019 LTFP	2019 Submission	Variance to LTFP	Variance in Gross Capital to the LTFP
Capital Funding Sources				
Debt	\$7,517,000	\$12,152,700	\$4,635,700	In LTFP, not included in the budget submission:
Development Charges	\$0	\$2,275,100	\$2,275,100	Soccer Fields -\$6,500,000
Reserves	\$2,875,309	\$1,315,000	-\$1,560,309	Transportation/Environmental -\$1,052,000
United Counties	\$127,500	\$119,700	-\$7,800	ITT Infrastructure -\$450,000
Federal Gas Tax	\$2,951,330	\$2,910,000	-\$41,330	GSDL, Waterfront, Other -\$237,000
Fed/Prov - Soccer Fields	\$4,320,000	\$0	-\$4,320,000	Not in the LTFP 2019, in the 2019 budget submission:
PTIF/ICIP Funding	\$411,000	\$1,065,000	\$654,000	Fire Station (Phase 1) \$2,900,000
Prov/OCIF Funding	\$1,633,000	\$770,000	-\$863,000	Bike Path Retaining Wall \$1,000,000
	\$19,835,139	\$20,607,500	\$772,361	Recreation Facilities \$690,000
				Arts Centre Design \$300,000
Less:				
Gross Capital Costs	\$25,631,000	\$22,282,000	-\$3,349,000	← - \$3,349,000
Total Capital funded by taxation	\$5,795,861	\$1,674,500	-\$4,121,361	

The following chart provides a comparison of the 2019 budget submission compared to the 2018 Council approved budget.

	2018 Budget	2019 Submission	Change from 2018 Budget
Capital Funding Sources			
Debt	\$7,679,000	\$12,152,700	\$4,473,700
Development Charges	\$0	\$2,275,100	\$2,275,100
Reserves	\$2,244,000	\$1,315,000	-\$929,000
United Counties	\$172,950	\$119,700	-\$53,250
Federal Gas Tax	\$3,099,800	\$2,910,000	-\$189,800
PTIF/ICIP Funding	\$283,000	\$1,065,000	\$782,000
Prov/OCIF Funding	\$2,416,300	\$770,000	-\$1,646,300
	\$15,895,050	\$20,607,500	\$4,712,450
Less:			
Gross Capital Costs	\$17,481,900	\$22,282,000	\$4,800,100
Total Capital funded by taxation	\$1,586,850	\$1,674,500	\$87,650

Year-to-year capital financial requirements can change dramatically depending on capital needs. This may put a burden on the tax base if the City does not have other alternate funding sources; such as, development charges, reserves, long-term borrowing (if appropriate) that it can utilize.

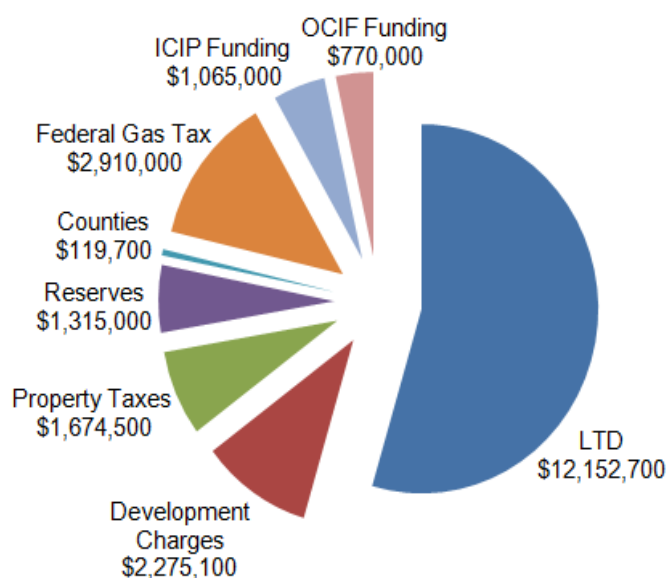
Capital Revenue

The 2019 Capital budget is supported by various funding sources. For the first time in 2019, the City will utilize development charges, a building fee that came into effect in April 2018.

The Capital budget is funded through:

- Long-term debt (54.5%)
- Government grants (21.4%)
- Development charges (10.2%)
- Property taxes (7.5%)
- Reserves (5.9%)
- Counties – GSDL (0.5%)

It is important to note that while debt is a funding source for capital, that debt charges (principal and interest) have an impact on future operating budgets.



ICIP – Investing in Canada Infrastructure Program
OCIF – Ontario Community Infrastructure Fund

The following chart provides a summary of the 2019 budget submission compared to the 2018 budget by department.

Department	2018 Gross Capital	2019 Gross Capital	FUNDING SOURCE						
			GRANTS	COUNTIES	FINANCING	GAS TAX	DCs	RESERVES	TAXATION
Infrastructure Planning	8,348.8	6,980.0	770.0		1,056.5	2,860.0	1,643.5	75.0	575.0
Municipal Works	2,975.0	5,938.0			5,352.4		256.6	175.0	154.0
Transit Services	835.0	1,590.0	1,065.0		525.0				
Waste Management	1,390.0	300.0							300.0
Parks & Recreation Services	1,220.0	3,375.0			2,650.0	50.0	43.8	315.0	316.2
Building and Bylaw	-	50.0							50.0
Financial Services	898.0	-							
Fire Services	60.0	2,990.0			2,568.8		331.2	90.0	
Paramedic Services	1,052.0	660.0						660.0	
Glen Stor Dun Lodge	576.5	399.0		119.7					279.3
Waterfront	126.6	-							
Taxation Subtotal	17,481.9	22,282.0	1,835.0	119.7	12,152.7	2,910.0	2,275.1	1,315.0	1,674.5
2019 Long Term Financial Plan		25,631.0	6,364.0	127.5	7,517.0	2,951.3	-	2,875.3	5,795.8

* This Capital section includes all City departments (excluding Police Services and the Library).

2019 DEPARTMENT SUBMISSION BUDGET SUMMARY

**CAPITAL BUDGET SUMMARY
FOR THE YEAR 2019**

*Please note all figures are in 000s of dollars

DESCRIPTION	Page #	2018 Gross	2019 Gross	EXTERNAL FUNDING			RESERVES			2019 TAX BASE
				Grants / Other	Counties	Financing	Gas Tax	Development Charges	Specific Reserve	
ROADWAYS & STRUCTURES										
<u>Road Network</u>										
Asphalt Resurfacing on Various City Streets	C-7	3,000.0	3,000.0	770.0			2,140.0			90.0
<u>Transportation Capacity</u>										
Nick Kaneb Dr. Extension - Marleau Ave. to Industrial Park	C-8	1,800.0	1,800.0			156.5		1,643.5		
Lemay St. Upgrades and Extension	C-9	540.0	500.0			500.0				
Traffic Analysis – Brookdale Ave. & Ninth St. Extension	C-10		75.0						75.0	
<u>Intersections</u>										
Centretown - Water St./Montreal Rd Intersections	C-11	67.8	30.0							30.0
<u>Structures</u>										
Culvert Replacement - Fly Creek at Mack Drive	C-12		350.0							350.0
Small Diameter Culvert Replacement	C-13	75.0	75.0							75.0
Bi-Annual Structure Inspections	C-14		30.0							30.0
Structure Improvements - Boundary/CN Overpass		300.0								
Structure Improvements - Water St. Retaining Wall		600.0								
Culvert Replacement - McConnell Ave to South Branch of Raisin River		866.0								
ACTIVE TRANSPORTATION										
Active Transportation (Sidewalk Infrastructure)	C-15	200.0	330.0				330.0			
Active Transportation (Bicycle Infrastructure)	C-16	500.0	390.0				390.0			
TRAFFIC SIGNALS AND STREETLIGHTING										
<u>Traffic Signals</u>										
Traffic Signal Upgrades	C-21	300.0	300.0			300.0				
<u>Street Lighting</u>										
Pole Replacement Program	C-22	100.0	100.0			100.0				
MUNICIPAL WORKS FACILITIES & EQUIPMENT										
<u>MW Equipment</u>										
Municipal Works Fleet Renewal Program	C-25	795.0	654.0			654.0				
<u>MW Yard Redevelopment</u>										
Salt Management Facility	C-26	1,000.0	2,500.0			2,370.6		129.4		
Noise Remediation	C-27		875.0			829.7		45.3		
Standby Power Generator	C-28	30.0	900.0			853.4		46.6		
Employee Parking Lot	C-29		230.0			218.0		12.0		
Design of New Administration Building	C-30		450.0			426.7		23.3		
Rerouting of Utilities		400.0								
<u>MW Facilities</u>										
Parking Lot Rehabilitation - St Columban's	C-31		45.0							45.0
Justice Building Courtyard Repairs	C-32		175.0						175.0	
Parking Lot Rehabilitation - Optimist Park	C-33		30.0							30.0
Woodhouse Museum Repairs	C-34		50.0							50.0
Renovations at Various Municipal Buildings	C-35	160.0	29.0							29.0
Justice Building HVAC Replacement		450.0								
Justice Building Interior Repairs		30.0								
Justice Building HVAC Design		80.0								
Arc Flash Risk Analysis		30.0								
TRANSIT										
Purchase of 2 Conventional Buses	C-40	510.0	1,160.0	846.0		314.0				
Purchase of a Handi-Transit Buses	C-41	250.0	200.0	146.0		54.0				
Transit Cube Van Replacement	C-42		80.0			80.0				
Vehicle Hoist Repair and Safety	C-43		50.0			50.0				
Passenger Counter / Web Applications	C-44		100.0	73.0		27.0				
Video Surveillance Security System		50.0								
Tire Balancer		25.0								
WASTE MANAGEMENT										
Landfill Leachate and Gas Collection Systems Upgrades	C-47	1,290.0	200.0							200.0
Landfill Site - Public Service Area Infrastructure Upgrades	C-48	50.0	40.0							40.0
Waste Management Diversion Review and Program Implementation	C-49	50.0	10.0							10.0
Landfill Expansion / Alternative Disposal ECA	C-50		50.0							50.0
SUMMARY SUBTOTAL (Page 1)		13,548.8	14,808.0	1,835.0	-	6,933.9	2,860.0	1,900.1	250.0	1,029.0

2019 DEPARTMENT SUBMISSION BUDGET SUMMARY

**CAPITAL BUDGET SUMMARY
FOR THE YEAR 2019**

***Please note all figures are in 000s of dollars**

DESCRIPTION	Page #	2018 Gross	2019 Gross	EXTERNAL FUNDING			RESERVES			2019 TAX BASE
				Grants / Other	Counties	Financing	Gas Tax	Development Charges	Specific Reserve	
RECREATION SERVICES										
Facility Upgrades										
Arc Flash Analysis	C-53		125.0						125.0	
Aquatic Centre Ventilation Improvements and UV Disinfection	C-54		500.0			500.0				
Brian Tardif Field Lighting	C-55		85.0							85.0
Brian Tardif Field Netting	C-56		55.0							55.0
Civic Complex and Benson Centre LED Arena Lighting	C-57		550.0			550.0				
Benson Centre Arena Duct Work	C-58		80.0						80.0	
Upgrade Outdoor Pool Filter System	C-59		55.0							55.0
Art Centre Design	C-60		300.0			300.0				
Recreation Master Plan Update	C-61		60.0					43.8		16.2
Civic Complex Floors in Dressing Rooms	C-62	55.0	55.0							55.0
Civic Complex Arena Spectator Seat Replacement	C-63		55.0						55.0	
King George Park Washroom	C-64	25.0	25.0							25.0
Aquatic Centre Pool Lighting		80.0								
Benson Centre - CN Land Acquisition		230.0								
Civic Complex Parking Lot, Exterior Stairs, and Walkway Improvements		125.0								
Civic Complex Main Concourse Renovations		75.0								
Parks / Playgrounds										
Bikepath Retaining Wall Structure Replacement	C-65		1,000.0			1,000.0				
Emerald Ash Borer	C-66	300.0	300.0			300.0				
Bicycle Path Repairs	C-67	50.0	50.0				50.0			
Docks at RCAF and Guindon Park	C-68	80.0	80.0							80.0
Guindon Park Road Improvements		50.0								
Playground Structure Replacement		120.0								
Arts in the Park Improvements and Art Display Infrastructure		30.0								
BUILDING AND BYLAW										
Software Upgrade - CityView	C-72		50.0							50.0
FINANCIAL SERVICES										
Upgrade Accounting Systems	C-74		90.0							
Microsoft Office Upgrade			40.0							
SharePoint Implementation			355.0							
Corporate Email Replacement			73.0							
Desktop Virtualization			340.0							
FIRE										
Fire Headquarters and Training Centre	C-78		2,900.0			2,568.8		331.2		
Rescue Boat	C-79		90.0						90.0	
Training Centre - Site Preparation		60.0								
CORNWALL SDG PARAMEDIC & EMERGENCY MANAGEMENT SERVICES										
Ambulance Replacement	C-82	783.0	525.0							525.0
Toughbook Computers	C-83	58.0	58.0							58.0
Defibrillators	C-84		29.0							29.0
PAD Program (Defibrillators)	C-85	141.0	17.0							17.0
PAD Vehicle Replacement	C-86		31.0							31.0
Automatic CPR Devices		70.0								
GLEN STOR DUN LODGE										
Flooring Replacement - Third Floor	C-89	150.0	100.0		30.0					70.0
Resident Equipment	C-90	65.0	55.0							16.5
Building Requirements - Various	C-91		48.0							14.4
Kitchen Equipment	C-92	75.0	50.0							15.0
Building Requirements - Air Conditioning Units	C-93	15.0	44.0							13.2
Building Requirements - Elevators	C-94		60.0							18.0
Building Requirements - Lighting	C-95		42.0							12.6
Building Requirements - Building Management Upgrades		70.5								
Building Requirements - Exterior		50.0								
Building Requirements - Retaining Wall, Fencing, and Lattice		96.0								
Building Requirements - Furniture		55.0								
WATERFRONT COMMITTEE										
Waterfront Development		80.0								
Way Finding Signage		46.6								
SUMMARY SUBTOTAL (Page 2)		3,933.1	7,474.0	-	119.7	5,218.8	50.0	375.0	1,065.0	645.5
GRAND TOTAL		17,481.9	22,282.0	1,835.0	119.7	12,152.7	2,910.0	2,275.1	1,315.0	1,674.5

2019 CAPITAL SUBMISSION

**CAPITAL BY BUSINESS UNIT
FOR THE YEAR 2019**

*Please note all figures are in 000s of dollars

DESCRIPTION	Page #	2018 GROSS BUDGET	2019 GROSS SUBMISSION	EXTERNAL FUNDING		RESERVES			2019 TAX BASE
				GRANTS	FINANCING	DEV. CHARGES	GAS TAX	SPECIFIC RESERVE	
INFRASTRUCTURE PLANNING									
Road Network									
Asphalt Resurfacing on Various City Streets	C-7	3,000.0	3,000.0	770.0			2,140.0		90.0
Transportation Capacity									
Nick Kaneb Dr. Extension - Marleau Ave. to Industrial Park	C-8	1,800.0	1,800.0		156.5	1,643.5			
Lemay St. Upgrades and Extension	C-9	540.0	500.0		500.0				
Traffic Analysis – Brookdale Ave. & Ninth St. Extension	C-10		75.0					75.0	
Intersections									
Centretown - Water St./Montreal Rd Intersections	C-11	67.8	30.0						30.0
Structures									
Culvert Replacement - Fly Creek at Mack Drive	C-12		350.0						350.0
Small Diameter Culvert Replacement	C-13	75.0	75.0						75.0
Bi-Annual Structure Inspections	C-14		30.0						30.0
Structure Improvements - Boundary/CN Overpass		300.0							
Structure Improvements - Water St. Retaining Wall		600.0							
Culvert Replacement - McConnell Ave to South Branch of Raisin River		866.0							
Active Transportation (Sidewalks)									
Various Locations	C-15	200.0	330.0				330.0		
Active Transportation (Bicycle Infrastructure)									
Various Locations	C-16	500.0	390.0				390.0		
Infrastructure Planning		7,948.8	6,580.0	770.0	656.5	1,643.5	2,860.0	75.0	575.0

**COUNCIL APPROVED CAPITAL BUDGETS
FROM PRIOR YEARS**

DESCRIPTION	GROSS SUBMISSION	EXTERNAL FUNDING		RESERVES			TAX BASE
		GRANTS	FINANCING	DEV. CHARGES	GAS TAX	SPECIFIC RESERVE	
2018 Council Approved Capital	7,948.8	2,416.3	1,529.0		3,049.8	600.0	353.7
2017 Council Approved Capital	6,312.5	3,495.5			2,222.0	530.0	65.0
2016 Council Approved Capital	6,722.5	1,997.5	1,500.0		2,750.0		475.0

Infrastructure Planning

Project Name: Asphalt Resurfacing on Various City Streets

Funding: \$2,140,000 Federal Gas Tax
770,000 OCIF Formula Component
90,000 Tax Base
\$3,000,000

The Asphalt Paving Program reflects the needs which have been established in accordance with the City's Pavement Management System. In addition to those established needs, this program reflects our continued efforts to improve the road network throughout the City integrated with the overall strategy for lineal infrastructure improvements.

Based on MTO pavement design and rehabilitation methods as well as the municipal road evaluation experience of City staff, it is recommended that the following pavement condition rating (PCR) triggers be used in the evaluation and selection of streets for asphalt resurfacing/rehabilitation:

- Arterial Streets: less than 70
- Collector Streets: less than 60
- Local Streets: less than 50

Traffic volumes using Annual Average Daily Traffic (AADT) counts and posted speed limits are also important factors in the consideration for pavement rehabilitation. The City must also be mindful of the Ontario Regulation 239/02 Minimum Maintenance Standards for Municipal Highways and the associated requirements of the varying classification of highways (Class 1 to 6). In addition, comments and recommendations from Municipal Works maintenance personnel, buried infrastructure, as well as public sentiment must also be considered and factored into the decision making for pavement renewal.



Infrastructure Planning

Project Name: Transportation Capacity-Nick Kaneb Dr. Extension - Marleau Ave. to Industrial Park

Funding: \$1,643,500 Development Charges
156,500 Financing
\$1,800,000

The City has undertaken several Environmental Assessments (EA) and construction projects in the east end of the City in order to accommodate increased development and traffic volumes:

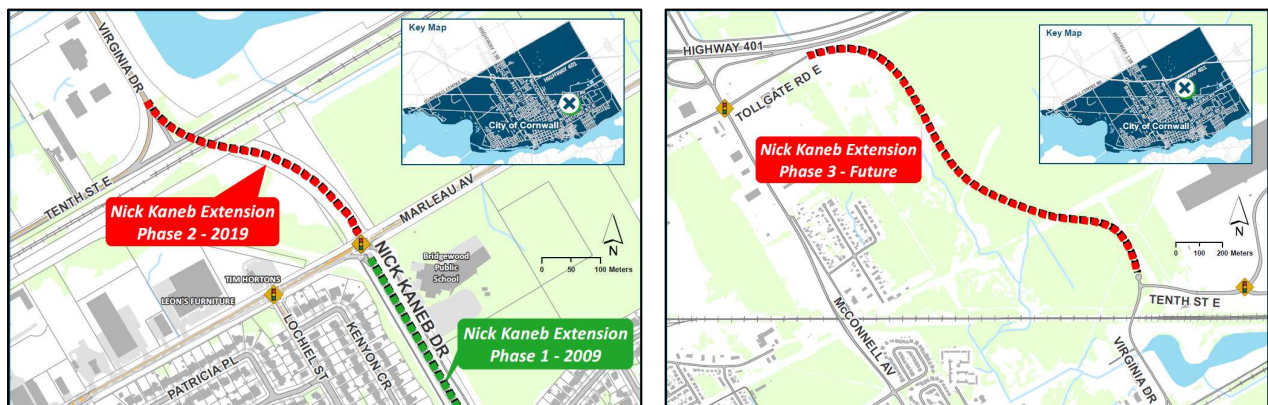
1. Nick Kaneb Dr. Extension from Second St. to Marleau Ave (Construction - 2009).
2. Marleau Ave Widening and Improvements EA from Marlborough St. to Glenview Bl., (EA - 2012).
3. Industrial Park Dr. Extension (Construction - 2012).
4. Cornwall Business Park Transportation Master Plan (EA - 2013).
5. Marleau Ave. widening at Ninth St. (Construction - 2017).

This project will provide for the extension of Nick Kaneb Dr. from Marleau Ave. northerly to the Tenth St./Virginia Dr. intersection (Business Park) and provide an additional north-south link for all modes of travel in the eastern portion of the City.

The EA for this project was undertaken in 2013 and was completed in March 2014. As a part of the consultation process of the EA, stakeholder and public feedback proposed a quick project implementation. The extension will provide critical arterial road relief and redundancy for McConnell Ave./Ninth St. intersection, as well as providing emergency vehicles with an expeditious access to the business park. The traffic warrants on Marleau Ave. and McConnell Ave. have identified this as a key link. This project is also a key link to the Business Park.

The extension of Nick Kaneb Dr. to Tenth St./Virginia Dr. is required prior to the next phases of Marleau Ave. In 2016/2017, Marleau Ave. from Marlborough St. to Alice St. was reconstructed. The reconstruction of Marleau Ave. was to continue easterly as per the EA; however, the extension of Nick Kaneb Dr. must be completed first in order to provide a suitable traffic detour during construction.

In 2018, the City budgeted \$600K of the \$2.4M project. The \$600K previously budgeted was to serve as the municipal component of a Federal/Provincial funding opportunity should such a program become available. As no suitable funding program was available, the City is budgeting the remaining \$1.8M.



Infrastructure Planning

Project Name: Transportation Capacity - Lemay St. Upgrades and Extension

Funding: \$500,000 Financing

The City's Official Plan and 2006 Critical Infrastructure identified the need to extend Lemay St. to provide additional east-west capacity and improve access to Municipal Works Yard on Ontario St.

An Environmental Assessment (EA) to widen Lemay Street, extend Lemay Street easterly to McConnell Ave., and improve the intersections of Lemay St. at both Sydney St. and McConnell Ave, was completed in September 2016. The preferred design selected involved a straight connection between the two sections of Lemay St. as well as cycling lanes and sidewalks. Two intersections will be converted to full access roundabouts: at Thirteenth St. E./Reneal St./Lemay St./Sydney St. and at Lemay St./McConnell Ave.

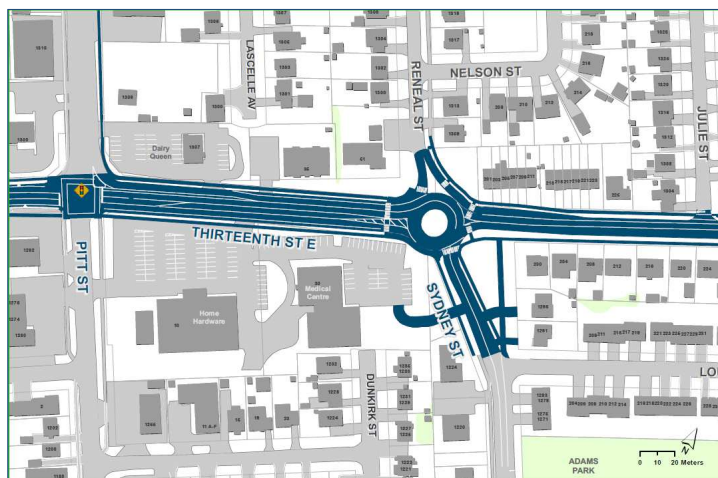
The proposed design satisfied the project's needs and opportunities by improving traffic operations at the intersection of Thirteenth/Lemay St. at Sydney St. and improved the accessibility to the Municipal Works Yard. It also provides residents of Cornwall with more connectivity in the east-west direction, improves emergency response time and enhances connectivity for active transportation with the addition of cycling lanes and sidewalks.



The reconstruction of Lemay St. from St. Michel Ave. to Sydney St. (Phase 1) was completed in 2017. Phase 2 will be completed in 2018/2019, and includes construction of Lemay St. through the proposed road allowance from St. Michel Ave. to the east limits of the Municipal Works Yard. Phase 2 will further accommodate the Municipal Works Yard Redevelopment project, in particular the Salt Storage Shed.

Phase 3 is comprised of the reconstruction of Lemay St. from Pitt St. to Sydney St. which includes the proposed roundabout at the Lemay St./Sydney St./Reneal St./Thirteenth St. intersection. It is currently proposed to fund Phase 3 of Lemay St. over the course of two (2) years beginning in 2019.

The \$500K included in the 2019 Budget would fund the following: 1) Engineering Design Services for both Phase 3 & 4 (incl. roundabouts), 2) Geotechnical Investigations for both Phase 3 & 4, 3) Various minor property acquisitions required for Phase 3, 4) The Right-of-Way land acquisition required for Phase 4, 5) Legal/Survey/Realtor costs associated with the necessary property acquisitions, etc. The remaining \$1.5M required to fund the construction of Phase 3 would be included in the 2020 Budget. Furthermore, the \$500K contribution in 2019, would act as the municipal component of any applicable Federal/Provincial funding should it become available.



Infrastructure Planning

Project Name: Transportation Capacity - Traffic Analysis – Brookdale Ave. & Ninth St. Extension

Funding: \$75,000 Road Infrastructure Reserve

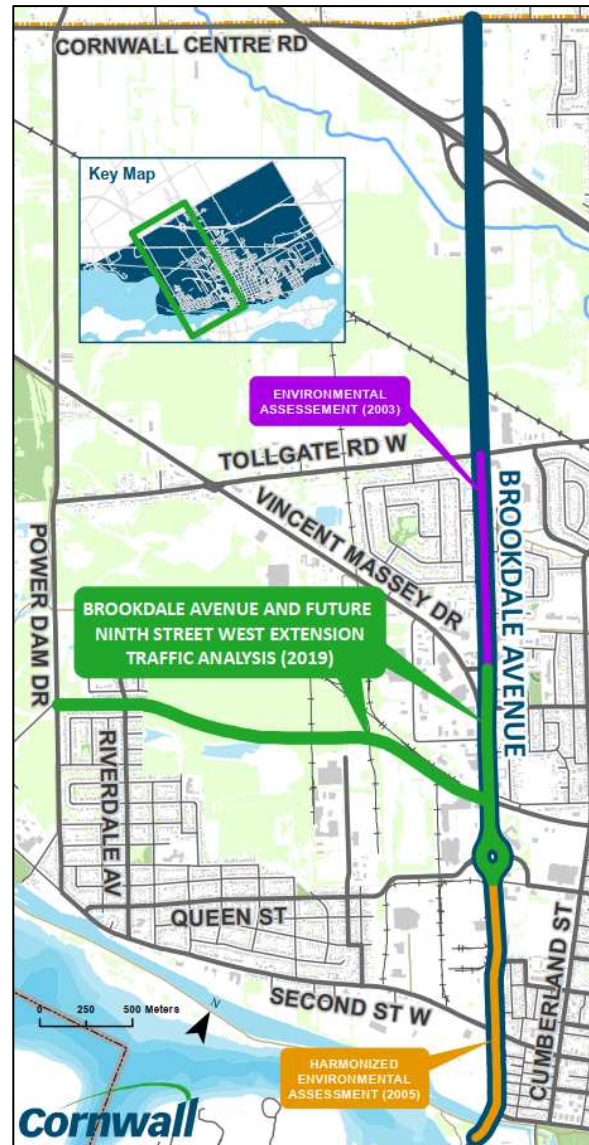
The reconstruction of Brookdale Avenue from Water Street to Seventh Street West was completed in 2016 in partnership between the City of Cornwall and the Federal Bridge Corporation. Additionally, the former North Channel Bridge which connected to Brookdale Avenue near Seventh Street West was demolished in 2014.

The current traffic volumes along Brookdale Avenue are substantial with an average 20,000 vehicles per day and continuing to rise. The traffic volumes along Brookdale Avenue from Seventh Street to Fourteenth Street often meet or exceed the volume of traffic along the Highway 401 corridor adjacent to the City. Furthermore, the asphalt/pavement condition rating (PCR) along the Brookdale Avenue corridor continues to deteriorate, nearing levels which will require substantial investment in the near future.

Prior to the asphalt resurfacing and reconstruction work being completed, a Traffic Analysis for the corridor is proposed in order to assess the existing and future transportation system deficiencies along the corridor. This analysis will also identify the improvements needed to ensure safe and efficient traffic flow. The Traffic Analysis will take into consideration the existing high traffic volumes along Brookdale Avenue as well as evaluate the impacts of future development along the corridor.

The goal of the Traffic Analysis will be to improve the Brookdale Avenue transportation network for vehicles, cyclists and pedestrians. The analysis will take into consideration the concerns of City residents as well as local Brookdale Avenue business and property owners.

Additionally, in order to properly address the Brookdale Ave. corridor, the warrants and impacts of the future Ninth St. W. extension from Brookdale Ave. to Power Dam Dr. must be evaluated. The extension of Ninth St. W. is dependent upon future growth and development in the Riverdale area.



Infrastructure Planning

Project Name: Centretown - Water St./Montreal Rd. Intersections

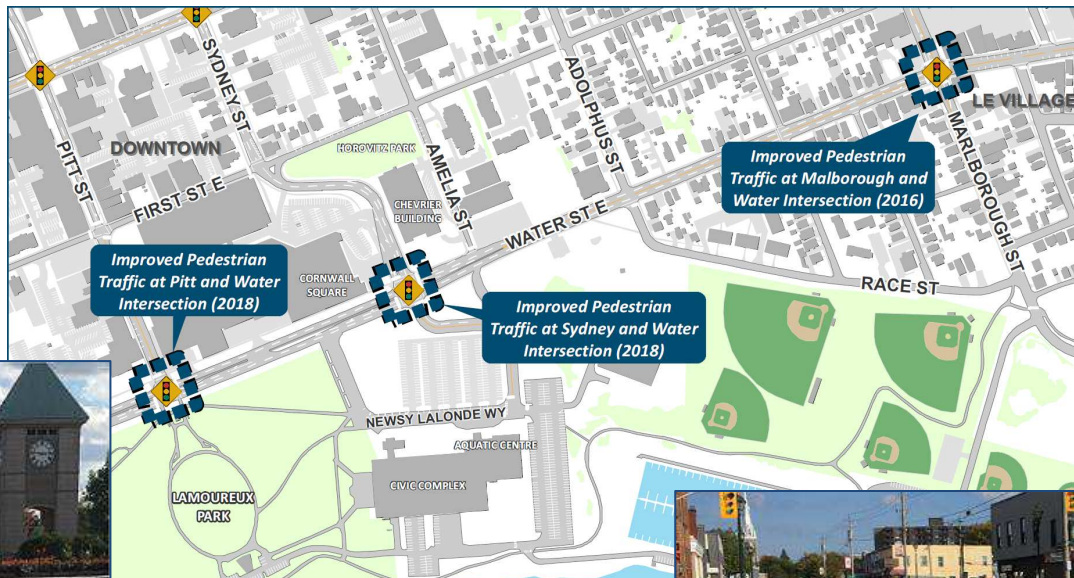
Funding: \$30,000 Tax Base

Heart of the City (HOTC) has initiated a Centretown Streetscape Revitalization Strategy and Implementation Plan, with assistance from EDA Collaboration Inc. together with Sierra Planning and Management. The objective of the plan is to provide aesthetic and functional links between Le Village and The Downtown areas. The concept was finalized in late 2012, with additional design developed during the summers of 2013 and 2014. The project was awarded as a co-winner of The Active Mobility and Complete Streets category at the 51st International Making Cities Liveable conference in Portland, Oregon, in June 2014.

The plan addressed intersection upgrades, sidewalk continuity, parking, lighting, streetscaping elements, landscaping and 'gateway' treatments, primarily along the Water St./Montreal Rd. corridor. It is expected that upgrades will be coordinated with City initiated capital projects. The plan was endorsed by PAC at the November 26th, 2012, meeting.

Inclusion of this project in the 2019 budget is for the purpose of establishing funding over a period of years for the installation of brick pavers at crosswalks as Water St. continues to be resurfaced and reconstructed.

In 2018, the City utilized the accumulated funds in the account to fund the crosswalks installed at the Water St./Pitt St. and Water St./Sydney St. intersections. In 2019, the City will continue to contribute to this account in order to fund future crosswalks along Water St./Montreal Rd.



Water St. & Pitt St.



Water St. & Sydney St.



Water St. & Marlborough St.

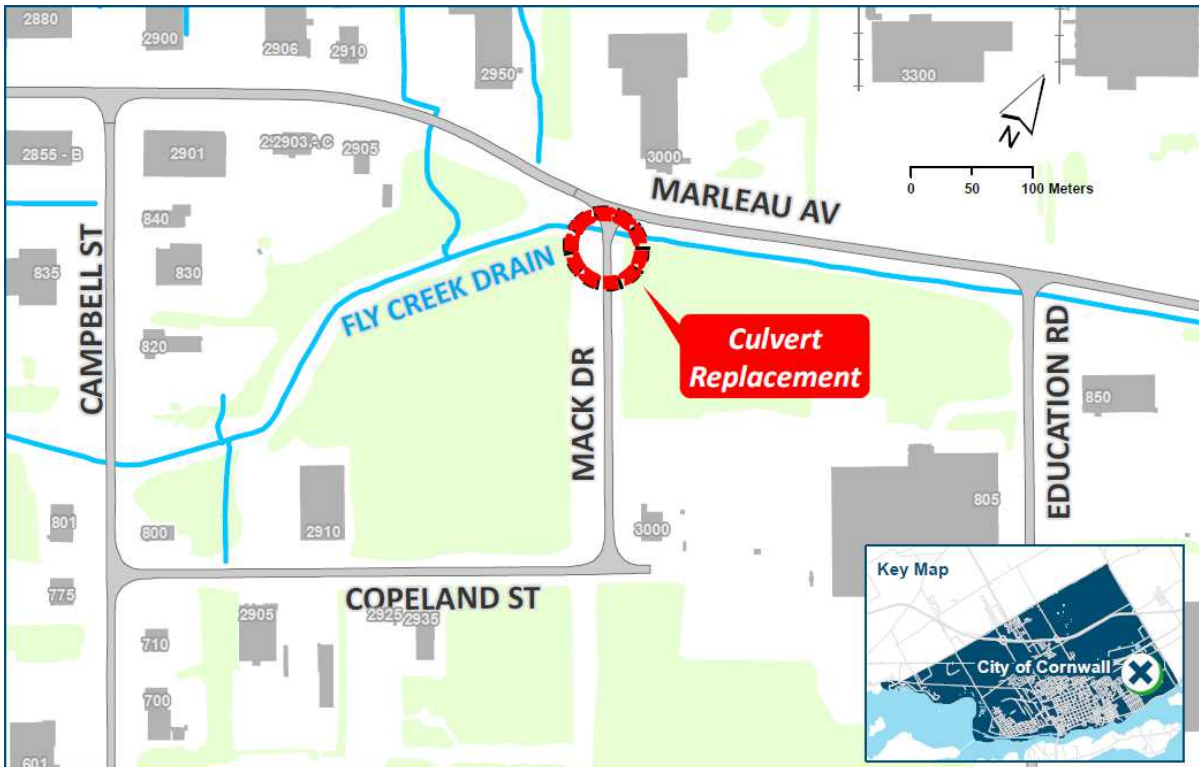
Infrastructure Planning

Project Name: Culvert Replacement - Fly Creek at Mack Drive

Funding: \$350,000 Tax Base

The bi-annual structure inspections are undertaken to evaluate the condition of bridges, large culverts, and retaining walls. The Fly Creek at Mack Drive culvert, identified as Structure B16 in the 2017 OSIM report, consists of a 3.6m X 2.2m Steel Plate Corrugated Steel Pipe (SPCSP) culvert which was installed in 1980. The 2017 OSIM inspections identified that the culvert has severe perforations in the barrel and has reached the end of its lifespan; therefore, immediate replacement is required.

The Fly Creek at Mack Drive Culvert Replacement project includes: the removal of the existing large diameter SPCSP culvert and guide rail system, installation of a suitably sized concrete box culvert, the restoration of the embankments, the reinstatement of the roadway and the installation of an approved guiderail system.



Infrastructure Planning

Project Name: Small Diameter Culvert Replacement

Funding: \$75,000 Tax Base

The City has several locations in which small diameter Corrugated Steel Pipe (CSP) culverts, ranging from 400mm diameter to 900mm diameter, are in need of replacement.

These culverts are typically located in road corridors that have been constructed to rural road standards with roadside ditches and culverts. The replacement of these culverts will occur in various locations throughout the City.

The small diameter culvert replacement priorities are as follows:

1. 900mm diameter CSP culvert – Second St. E. between Anderson Dr. & Billington Dr.
2. 600mm diameter CSP culvert – Loyalist St. between Campbell St. & Education Rd.
3. 900mm diameter CSP culvert – Service Rd. between McConnell Av. & Boundary Rd.
4. 600mm diameter CSP culvert – Cornwall Centre Rd. between Brookdale Av. & Northdale Dr.



Infrastructure Planning

Project Name: Bi-Annual Structure Inspections

Funding: \$30,000 Tax Base

The City is required to complete bi-annual structural inspections of bridges, large culverts, retaining walls as well as other structures. The structural inspections must be completed in accordance with the Ontario Structure Inspection Manual (OSIM), published by the Ministry of Transportation (O. Reg. 161/02, s.2(2)).

A visual inspection of all City structures is completed in order to assess the condition and structural integrity of each structure. The consulting Engineer provides the City with a detailed inspection report for each structure complete with recommendations following the inspections. The OSIM report(s) form a component of the City's Asset Management Plan.

The last OSIM inspection was completed in 2017; therefore, an inspection is required in 2019 as per MTO guidelines.



Infrastructure Planning

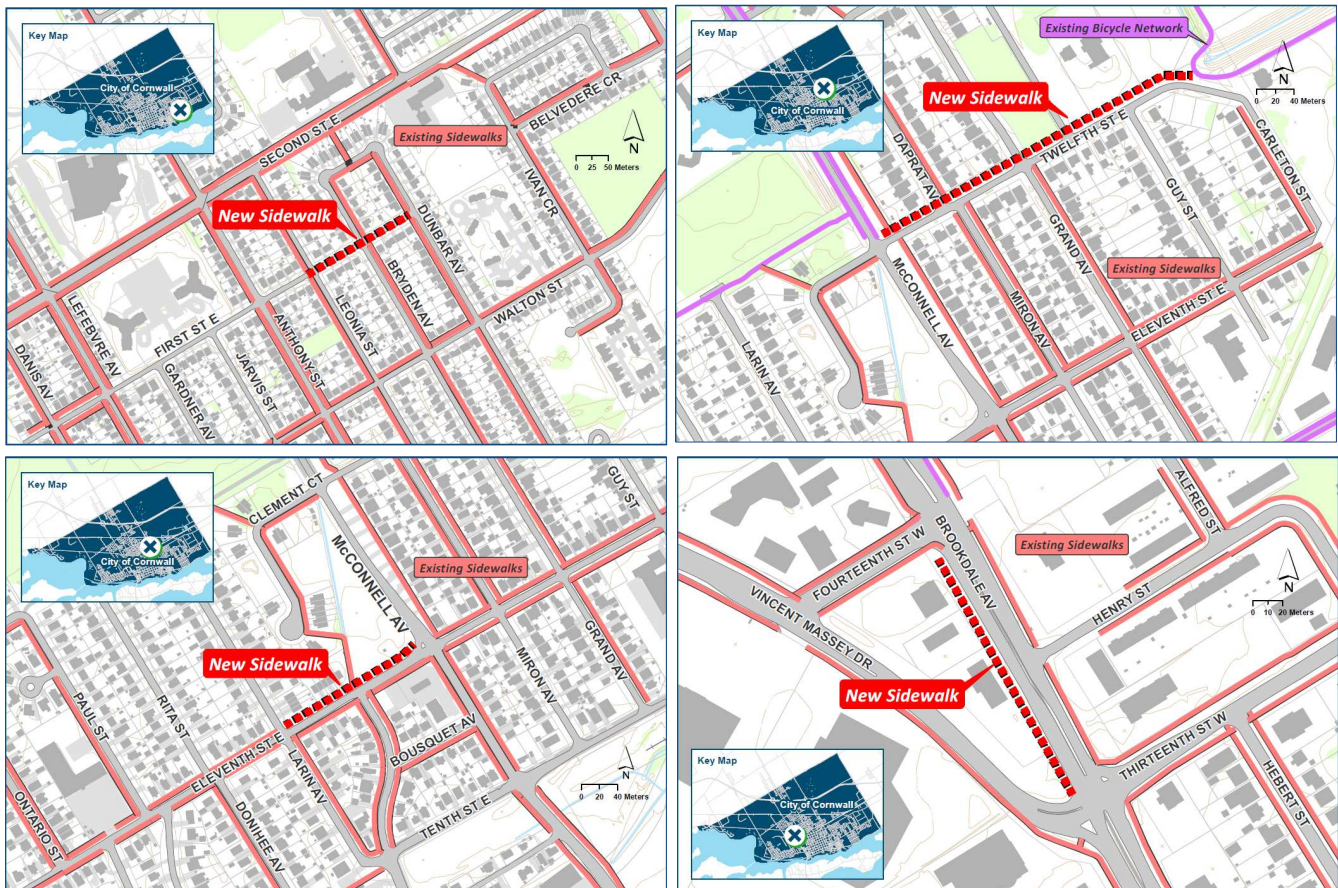
Project Name: Active Transportation – Sidewalk Infrastructure

Funding: \$330,000 Gas Tax

The Bicycle and Pedestrian Master Plan completed by IBI and the City in 2010 recommended an annual investment in Active Transportation projects, such as Bicycle and Pedestrian related infrastructure. Stakeholders such as Transitions Cornwall + and the active lifestyle groups have supported the implementation of this plan.

The sidewalk construction candidates in 2019 are along the following streets:

- New Sidewalk – First St. from Leonia St. to Dunbar Ave. (\$50,000)
- New Sidewalk – Twelfth St. E. from McConnell Ave. to Bike Path (\$130,000)
- New Sidewalk – Eleventh St. E. from Larin Ave. to McConnell Ave. (\$60,000)
- New Sidewalk – Brookdale Ave. from Thirteenth St. W. to Fourteenth St. W. (\$90,000)



Infrastructure Planning

Project Name: Active Transportation - Bicycle Infrastructure

Funding: \$390,000 Gas Tax

The Bicycle and Pedestrian Master Plan completed by IBI and the City in 2010 recommended an annual investment in Active Transportation projects, such as Bicycle and Pedestrian related infrastructure. Stakeholders such as Transitions Cornwall + and the active lifestyle groups have supported the implementation of this plan.

The bicycle infrastructure projects planned for 2019 are:

New Bike Lanes & Off-Road Bike Path - Boundary Rd. from Montreal Rd. to Fly Creek (\$140,000)



New Bike Lanes - Tollgate Rd. from Pitt St. to Brookdale Ave. (\$250,000)



2019 TEN YEAR CAPITAL FORECAST

CAPITAL FORECAST FOR THE YEARS 2019 - 2028

ACTIVE TRANSPORTATION (Bicycle Infrastructure) "APPENDIX A"

		EXPENDITURE									
		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
1	Boundary Rd.	140									
2	Tollgate Rd	250									
3	Education		140								
4	Power Dam		80								
5	Power Dam		60								
6	Brookdale Ave			200							
7	Tollgate Rd		106								
8	Vincent Massey				310						
9	Vincent Massey					225					
10	Twelfth St.					50					
11	South Branch						320				
12	Haulage Rd						30				
13	Power Dam							300			
14	Second ST. East (widening)								360		
15	Pitt St. (widening curbs)									450	
16	TBD										500
BICYCLE INFRASTRUCTURE SUBTOTAL		390	280	306	310	275	350	300	360	450	500

APPENDIX 'A'

2019 TEN YEAR CAPITAL FORECAST

CAPITAL FORECAST FOR THE YEARS 2019 - 2028

ACTIVE TRANSPORTATION (Sidewalk Infrastructure) "APPENDIX B"

	LOCATION	SIDE	FROM	TO	EXPENDITURE												
					2019	2020	2021	2022	2023	2024	2025	2026	2027	2028			
1	First St.	N	Leonia St	Dunbar Ave.	50												
2	Twelfth	N	McConnell Ave	Bike Path	130												
3	Eleventh	N	Larin	McConnell	60												
4	Brookdale	W	Thirteenth St W	Fourteenth St W	90												
5	Balmoral / Station Rd.	N&W	Pitt St.	CNR Station		50											
6	Joyce St.	N	Surgenor	Boyd		25											
7	Joyce St.	E	Boyd	Dover Rd.		90											
8	Surgenor St.	E	Charles St.	Boyd		35											
9	Joyce St.	N	Pescod	Surgenor		45											
10	Joyce St.	N	Riverdale Ave.	Pescod		40											
11	First St.	N	Lefebvre Ave	Leonia St			100										
12	Tenth	N	Sydney St.	Adolphus			85										
13	Adolphus	W	Eleventh	Tenth			45										
14	Hoople St.	one	Leonard Ave.	Queen St.			35										
15	Tollgate Rd.	one	Vincent Massey	Power Dam			102										
16	Cline Ave.	one	Cumberland St.	Meadowvale Cres				50									
17	Meadowvale Cres	N	Cline Ave.	Brookdale Ave				55									
18	Cobble Hill	N	Brookdale	Meadowvale Cres				20									
19	Ross Ave.	N	Cornwall Centre Rd	McKenzie St.				130									
20	Westmooreland Ave.	one	Second St.	Dover Rd.						56							
21	McKenzie St.	one	Ross Ave.	Pitt St.						47							
22	Third St.	S	Sydney St.	Amelia St.							24						
23	TBD										100						
SIDEWALKS SUBTOTAL					330	285	367	255	203	224	250	250	250	250	250	250	250

APPENDIX "B"

2019 CAPITAL SUBMISSION

**CAPITAL BY BUSINESS UNIT
FOR THE YEAR 2019**

*Please note all figures are in 000s of dollars

DESCRIPTION	Page #	2018 GROSS BUDGET	2019 GROSS SUBMISSION	EXTERNAL FUNDING		RESERVES			2019 TAX BASE
				GRANTS	FINANCING	DEV. CHARGES	GAS TAX	SPECIFIC RESERVE	
TRAFFIC SIGNALS Traffic Signal Upgrades - Sydney St. and Fourth St. E. - Pitt St. and Ninth St. E	C-21	300.0	300.0		300.0				
STREETLIGHTING Pole Replacement Program	C-22	100.0	100.0		100.0				
TRAFFIC SIGNALS AND STREETLIGHTING		400.0	400.0	-	400.0	-	-	-	-

**COUNCIL APPROVED CAPITAL BUDGETS
FROM PRIOR YEARS**

DESCRIPTION	GROSS SUBMISSION	EXTERNAL FUNDING		RESERVES			TAX BASE
		GRANTS	FINANCING	DEV. CHARGES	GAS TAX	SPECIFIC RESERVE	
2018 Council Approved Capital	400.0		400.0				
2017 Council Approved Capital	400.0				350.0		50.0
2016 Council Approved Capital	555.0				155.0		400.0

Municipal Works – Roads Division

Project Name: Traffic Signal Upgrades

Funding: \$300,000 Financing

The City currently operates and maintains 69 existing traffic signal locations. The City is mandated to comply with Provincial minimum maintenance standard legislation for traffic signals. With proper maintenance, the average life expectancy of City traffic signals is typically 30 years before requiring complete replacement.

The proposed project includes upgrades to existing traffic signals at two intersections which will address aging and non-conforming infrastructure. Older intersections/traffic signals require upgrades and need to be updated to meet current standards in order to reduce the risk of failure.

For 2019, the following intersections are proposed:

- Sydney St. and Fourth St. E. (\$135,000)
- Pitt St. and Ninth St. E. (\$165,000)

The proposed traffic signal upgrade at Sydney St. and Fourth St. E. would be completed in conjunction with the Sydney St. Reconstruction project from Water St. E. to Fourth St. E. which was included in the 2019 Water & Sewer budget (Second St. E to Fourth St. E) and the 2019 Asphalt Resurfacing budget (Water St. E. to Second St. E.).



2018 Traffic Signal Upgrades – Water St. E & Sydney St.

Municipal Works – Roads Division

Project Name: Pole Replacement Program

Funding: \$100,000 Financing

The City undertakes a street light condition assessment on a bi-annual basis which provides an overall condition grade of street light poles. Furthermore, the condition assessment identifies deficiencies and establishes priorities for pole replacements.

Several City street light poles are aging and cracking, posing a significant potential liability to the City. This capital project targets the replacement of poles that are cracking and/or no longer structurally sound.

In 2018, the City replaced 22 poles along Vincent Massey Drive between Tollgate Road W and Power Dam Drive. In 2019, the City will replace the remaining 11 poles. The proposed pole replacements for will complete the project along Vincent Massey Dr.

Any remaining funds from the 2019 Pole Replacement Budget will be used for other various locations throughout the City.

The City owns and maintains approximately 1,400 streetlight poles throughout the City.



2019 TEN YEAR CAPITAL FORECAST

CAPITAL FORECAST FOR THE YEARS 2019 - 2028

TRAFFIC SIGNALS AND STREETLIGHTING

LOCATION	FROM	TO	EXPENDITURE											
			2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
TRAFFIC SIGNALS 1 Traffic Signal Upgrades: - Sydney St. and Fourth St. - Pitt St. and Ninth St. E.			135	300	300	300	300	300	300	300	300	300	300	300
			165											
STREETLIGHTING 1 Pole Replacement Program 2 Montreal Road/Conduits 3 Street System Upgrade			100	100	50	50	50	50	50	50	50	50	50	50
	various		125	125	125	125	125	125	125	125	125	125	125	125
	Alice	Marlborough												
TRAFFIC SIGNALS AND STREETLIGHTING SUBTOTAL			400	525	475	475	475	350	350	350	350	350	350	350

2019 CAPITAL SUBMISSION

**CAPITAL BY BUSINESS UNIT
FOR THE YEAR 2019**

*Please note all figures are in 000s of dollars

DESCRIPTION	Page #	2018 GROSS BUDGET	2019 GROSS SUBMISSION	EXTERNAL FUNDING		RESERVES			2019 TAX BASE
				GRANTS	FINANCING	DEV. CHARGES	GAS TAX	SPECIFIC RESERVE	
MW Equipment									
Municipal Works Fleet Renewal Program	C-25	795.0	654.0		654.0				
MW Yard Redevelopment									
Salt Management Facility	C-26	1,000.0	2,500.0		2,370.6	129.4			
Noise Remediation	C-27		875.0		829.7	45.3			
Standby Power Generator	C-28	30.0	900.0		853.4	46.6			
Employee Parking Lot	C-29		230.0		218.0	12.0			
Design of New Administration Building	C-30		450.0		426.7	23.3			
Rerouting of Utilities		400.0							
MW Facilities									
Parking Lot Rehabilitation - St Columban's	C-31		45.0						45.0
Justice Building Courtyard Repairs	C-32		175.0					175.0	
Parking Lot Rehabilitation - Optimist Park	C-33		30.0						30.0
Woodhouse Museum Repairs	C-34		50.0						50.0
Renovations at Various Municipal Buildings	C-35	160.0	29.0						29.0
Justice Building HVAC Replacement		450.0							
Justice Building HVAC Design		80.0							
Justice Building Interior Repairs		30.0							
Arc Flash Risk Analysis		30.0							
MW Facilities		2,975.0	5,938.0	0.0	5,352.4	256.6	0.0	175.0	154.0

DESCRIPTION	Page #	2018 GROSS BUDGET	2019 GROSS SUBMISSION	EXTERNAL FUNDING		RESERVES			2019 TAX BASE
				GRANTS	FINANCING	DEV. CHARGES	GAS TAX	SPECIFIC RESERVE	
For Council Consideration									
Locomotive Refurbishment Plan	C-36		152.0					152.0	

**COUNCIL APPROVED CAPITAL BUDGETS
FROM PRIOR YEARS**

DESCRIPTION	GROSS SUBMISSION	EXTERNAL FUNDING		RESERVES			TAX BASE
		GRANTS	FINANCING	DEV. CHARGES	GAS TAX	SPECIFIC RESERVE	
2018 Council Approved Capital	2,975.0		2,225.0			697.0	53.0
2017 Council Approved Capital	2,526.0		1,796.0			560.0	170.0
2016 Council Approved Capital	1,738.0		1,293.0			360.0	85.0

Municipal Works Division

Project Name: Municipal Works Fleet Renewal Program

Funding: \$654,000 Financing

The Municipal Works (MW) Division maintains a Ten Year plan for the replacement of approximately 300 corporate vehicle and equipment units. The replacement strategy is to sustain a high level of reliability on the most critical pieces of equipment; such as, snow plough trucks, pay loaders, sidewalk snow clearing machines (articulating tractors), and service trucks. In general, proper planning dictates to replace vehicles and equipment at the most opportune time, considering both its reliability and its residual value.

Specifications for replacement of vehicles and equipment are developed with participation from various department representatives to ensure the departmental needs are accurately met.



The following equipment is to be replaced in 2019:

- Unit #2 - \$28,000 budgeted to replace a 2006 small car (which will be disposed) and replaced with a pick-up truck to be utilized by Parks & Landscaping.
- Unit #20 - \$30,000 budgeted to replace a 2012 small car with a mini-van to be utilized by City Clerks office for mail delivery and other corporate multi-use purposes. The 2012 small car will not be disposed at this point, but will be repurposed for use by the Senior Weed Inspector at Parks & Landscape. This will eliminate the need for a short-term lease vehicle.
- Unit #81 - \$45,000 budgeted to replace a 2008 Service Truck utilized by the Public Property section.
- Unit #100 - \$87,000 budgeted to replace a 2010 five tonne multi-use truck utilized by MW for curb and sidewalk cement work, towing of asphalt transporter (trailer mounted unit with asphalt hot box used for pot hole patching) and salt spreading of municipal parking lots.
- Unit #161 - \$275,000 budgeted to replace a 2009 Plow Truck w/attachments utilized by the Roads Section.
- Unit #456 - \$145,000 budgeted to replace a 2001 Articulating Tractor w/attachments utilized by MW during the winter for sidewalk snow clearing.
- Unit #979 - \$7,000 budgeted to replace a 1991 Equipment Trailer utilized by MW to transport duel drum compacting roller.
- Unit #988 - \$10,000 budgeted to replace a 2004 Equipment Trailer utilized by Parks & Landscaping as a multi use trailer.
- Unit #989 - \$12,000 budgeted to replace a 2004 Packer Trailer utilized by MW crews to transport two large one tonne packers to and from roadway and boulevard restoration and repair areas.
- Unit #991 - \$15,000 budgeted to replace a 2006 Pavement Roller Trailer utilized to transport a ride-on pavement roller to and from pavement repair areas.

Municipal Works Division

Project Name: Municipal Works Yard Redevelopment - Salt Management Facility

Funding: \$2,370,600 Financing
 129,400 Development Charges
 \$2,500,000

The Municipal Works (MW) Yard Redevelopment Environmental Assessment (EA) completed in 2016 has proposed a multi-year project to reconfigure and reconstruct all of the MW Yard facilities in order to meet the City's municipal works service requirements for the foreseeable fifty-year growth period. The estimated total budget of \$32 million for the MW Yard Redevelopment Plan (2018 – 2025) has been endorsed by Council and accounted for within the City's Long Term Financial Plan.



The EA also makes reference to the City's 2009 Salt Management Plan (SMP). As a consequence of severely inadequate storage capacity, road salt is ordered and delivered in 400 tonne increments throughout the winter control season. Salt is delivered by 40 tonne transport trucks from depots located in Morrisburg and/or Prescott. The delivery process is inefficient and precarious as reorders for replenishment of salt stock most often occur during a snowfall and/or freezing rain event when stocks are being depleted by MW de-icing operations. In order to ensure that salt is available to meet the demand during a winter event, travel is often risky for the trucks delivering the salt. Additionally, MW equipment is diverted away from addressing the winter event in order to push salt into the existing salt sheds.

In terms of replacement classification, the EA has categorized the two existing salt storage sheds as "critical" recommending that they be replaced as soon as feasibly possible. The SMP indicates that the City's salt storage facilities are undersized and open to the elements. The existing facilities are inadequate for the current and future operations and leads to excessive salt use and inefficient operations. Salt is delivered and unloaded outdoors and then pushed into the storage sheds. Furthermore, salt spreaders are all loaded outdoors. Both of these handling activities result in salt loss (airborne salt dust and spillage) into the environment where it could negatively impact vegetation, ground water and surface water.

Construction of a new modern Salt Management Facility (SMF) with a storage capacity of 6,000 tonnes would allow delivery and storage of enough road salt to address an entire winter season. All salt would be delivered within a two week period in early Fall, well before Winter events commence. Such a facility would allow the City to comply with current environmental standards as well as all SMP recommendations. In addition, the salt would stored in a much dryer condition (having not have been exposed to unfavourable weather causing clumping of salt). This is conducive to salt spreading operations, as the dry salt spreads without clumps and thus reduces waste.

As part of the 2017 Capital Budget, Council approved the commissioning of an engineering consultant to provide design and building supervision associated with the construction of a new modern SMF. An artist rendition of the proposed SMF is shown above. As part of the 2018 Capital Budget, Council approved \$1,000,000 for the construction of the new SMF. As design of the SMF progressed, the discovery of extremely poor geotechnical conditions has dictated that an extraordinary foundation system would need to be constructed to support the salt load.

The additional cost for the proposed foundation is estimated at \$2.5 Million. Administration has obtained second opinions regarding geotechnical and foundation design from a third party engineering firm. All information has concluded that proceeding with the construction of the SMF as designed, in its current location, is considered to be in the best interest of the municipality over the long term.

Upon approval, it proposed to construct the new SMF in late summer of 2019 in order to accept road salt stock in time for the 2019/2020 winter season.

Municipal Works Division

Project Name: Municipal Works Yard Redevelopment - Noise Remediation

Funding: \$829,700 Financing
 45,300 Development Charges
 \$875,000

As part of the Municipal Works (MW) Yard Redevelopment Plan, a noise remediation solution is included in the 2019 Budget Submission. With regard to the impact of noise generated by operations within the MW yard on surrounding neighbourhoods, the City was essentially grandfathered from attenuation requirements. As a result, there are no barriers to mitigate noise emanating from within the yard. However, with the advent of the reconstruction of yard facilities, it became necessary to conduct an assessment to review the impact of noise from within the yard on adjacent residential properties. The study was conducted utilizing Ministry of Environment, Conservation & Parks (MOECP) guidelines.

Study results have recommended that an acoustic barrier be constructed around the MW yard to mitigate noise generated by MW yard operations. Construction of such a barrier, supported by the written conclusions of the noise study report, would serve to eliminate any potential claims regarding operational noise generated from within the yard.

The recommended composition and height of the proposed barrier would serve to mitigate noise impact to recommended levels as per MOECP guidelines. The barrier would also serve to reduce the affects of night lighting and screen MW operations from local neighborhoods. It would also provide a security barrier for the MW yard. The outside finish of such a barrier would be aesthetically pleasing in order to appease residents of immediately adjacent properties. It is recommended the barrier be a modular concrete composite construction similar to the noise remediation barrier wall on the east side of Brookdale Avenue.

Design of the recommended barrier wall has been completed, with intention construction of the first 660 meters in 2019. Extremely poor geotechnical conditions dictate that the wall shall be built on a concrete support base. Consequently, this substantially increases the overall estimated cost of construction.

If approved, it is anticipated that construction would commence in the summer of 2019.



Municipal Works Division

Project Name: Municipal Works Yard Redevelopment - Standby Power Generator

Funding: \$853,400 Financing
46,600 Development Charges
\$900,000

As part of the Municipal Works (MW) Yard Redevelopment Plan, it is necessary to provide a new standby power generator which would have the capacity to power all existing and future MW facilities in the event of a power outage.

The existing standby generator only has capacity to provide electrical power to the existing administrative building and two ancillary buildings. In the event of a power outage, the current contingency plan requires that all other MW facilities (including the fueling station and MW garage) be powered by a portable, municipally-owned, generator. However, in a recent exercise, it was determined that the aging generator did not have the capacity to meet the load demand necessary to power the remaining facilities. In the event of a power outage, it is imperative to ensure that all MW facilities are fully operational in order to appropriately respond to critical service demands or meet the demands of an emergency management event in an expeditious manner. Accordingly, it is recommended to proceed with the proposed acquisition and installation of a new standby generator.

Funding was approved as part of the 2018 budget for the design of the unit. Design of this unit is nearing completion. The generator would be appropriately sized to supply electrical power to all of the current and future facilities encompassed within the MW yard.

Subject to approval, it is proposed to prepare the designated site, purchase, install and commission the unit in the summer of 2019.



Municipal Works Division

Project Name: Municipal Works Yard Redevelopment - Employee Parking Lot

Funding: \$218,000 Financing
 12,000 Development Charges
 \$230,000

As part of the Municipal Works (MW) Yard Redevelopment Plan, it is necessary to construct a new employee parking lot. The parking lot is required at this stage in order to provide employee parking in the immediate future to accommodate reconstruction activities in the yard. For example, construction work is scheduled to install new underground water, sewer and utility (gas, electrical, communications) infrastructure necessary to service future requirements of the new MW yard reconfiguration. This work will displace the existing parking area for an extensive period of time. Additionally, the proposed installation of the new standby generator designed to power the future MW yard facilities is also scheduled in 2019 and will permanently occupy space currently designated for parking. The proposed construction of the new Administration Building in 2020 will again permanently occupy space now designated for parking. In subsequent years, reconstruction and reconfiguration stages will eventually utilize the current parking area. Accordingly, providing employee parking in the proposed new parking lot will eliminate any interference with future construction activity.

It is proposed that the new employee parking lot will be constructed on vacant municipal property located on the south side of Twelfth Street immediately adjacent to the MW Yard. Design work has been completed for the proposed parking lot. The parking lot has been designed with 105 parking stalls which is sufficient to accommodate the parking needs of current (and future projected) staff as well as visitors.

It is proposed that the parking lot have an asphalt surface with concrete curbing around the outer edges complete with appropriate drainage infrastructure. A grassed buffer zone on three sides will serve to distance the parking lot from the surrounding residential homes. Within the buffer zone, a wooden fence will be installed just inside property line to serve as a screening mechanism and noise remediation. The parking lot is designed with lighting which will be un-intrusive to surrounding residential homes.



Municipal Works Division

Project Name: Municipal Works Yard Redevelopment – Design of New Administration Building

Funding: \$426,700 Financing
 23,300 Development Charges
 \$450,000

As part of the Municipal Works (MW) Yard Redevelopment Plan, the design of a new administration building is included in the 2019 Budget Submission. The current Administration Building was constructed in 1964. Over the life of this asset, numerous minor modifications, repairs and upgrades have given the 55 year old building the appearance of a well maintained structure. However, the actual superstructure has shifted due to continuing foundation settlement, causing cracks in the walls and floors. There is asbestos content in wall and ceiling insulation, pipe insulation and floor tiles. Asbestos is considered safe when not disturbed; however, when disturbance is required, it results in extremely expensive exposure prevention procedures. There is insufficient insulation within the walls and the ceilings resulting in excessive HVAC (heating, ventilation and air conditioning) energy usage. The HVAC systems themselves are outdated and considered extremely energy inefficient (this is exacerbated by poor building insulation) and are unable to produce enough heat on extremely cold days. Furthermore, the building does not meet accessibility standards.

In 2016, the Corporation was mandated by the Province to commission a consultant with expertise in conducting building condition assessments (BCA) and developing asset management plans, in order to prepare a comprehensive Asset Management Plan for the municipality according to Provincial guidelines. The consultant who was selected for the work, Facility Condition Assessment Portfolio Experts (FCAPX), conducted BCAs for all 96 of the Corporation’s buildings. The BCA for the Administration Building identified \$230,000 in deficiencies which would need to be addressed within a five year period.

Another factor supporting the construction of a new Administrative Building is the insufficient amount of office space. Contingencies would be incorporated in a new Administration building to accommodate the current complement as well and projected future staffing levels.

The original EA redevelopment schedule called for the construction of a new 1,200 square meter administration building before 2027 with an estimated value of \$3,000,000. However, as part of the ongoing review of the plan, it is recommended that the reconstruction sequencing move the new administration building to 2020 in order to facilitate construction of other buildings, primarily the new Municipal Works garage scheduled for construction in 2022.



Accordingly, funding is required to commission an architectural firm to provide design and construction supervision services for the construction of the new administration building. Design would be completed in 2019, while construction would be scheduled to commence in 2020. The construction contract for the new administration building would include a provision for the demolition of the existing structure.

Municipal Works Division

Project Name: Parking Lot Rehabilitation - St. Columban's

Funding: \$45,000 Tax Base

For the past 10 years, the City has leased 34 parking lot stalls from St. Columban's Church to accommodate overflow parking for Justice Building, Fire Hall and City Hall users. A number of leases had been negotiated whereby, in exchange for provision of the parking stalls, the City would rehabilitated a portion of the parking lot. The rehabilitation process includes: removing the deteriorated asphalt surface, removing the inadequate subbase, installing an appropriate granular base, resurfacing with asphalt, and subsequent line painting. As part of the latest 4-year lease extension signed in 2018, it has been agreed that the City would be responsible to replace the last deteriorated section of the asphalt within the parking lot.

The area designated for rehabilitation is in poor condition with multiple cracks, potholes and crumbling asphalt and poses a potential health and safety risk which may result in trips. Additionally, water ponding may cause ice build up potentially resulting in slips and falls.

In order to obtain competitive pricing, this project would be tendered as part of the City's Asphalt Resurfacing contract. Subject to approval, it is anticipated that project would be completed by late summer 2019. Upon commencement, construction is estimated to last 1 week.



Municipal Works Division

Project Name: Justice Building Courtyard Repairs

Funding: \$175,000 Building Reserve

Over the past several years, efforts have been made to address a number of physical deficiencies identified at the Justice Building front courtyard including: drainage issues leading to water ponding, ice buildup, and slip and fall hazards; heaving concrete slabs and pavement stones which require annual attention to prevent trip edges; and non-conformance with accessibility standards. In a synopsis, the concrete areas in front of the Justice Building are beyond repair and must be replaced, the drainage problems must be addressed to prevent future deterioration and accessibility standards should be complied with.

Upon consultation with stakeholders regarding alternatives to address the described physical deficiencies, it had also been concluded that the courtyard area is underutilized and in need of revitalization. It was pointed out that the Corporation recently expended in the order of \$750,000 to resurface and improve aesthetics (colour change) the exterior of the Justice Building as well as replace all windows. Therefore, the next step in the Justice Building progression was to refresh the associated courtyard.

Administration commenced a process to address the identified deficiencies and at the same time undertake an effort to redevelop the courtyard area with appropriate functionality (to include landscape upgrading and natural re-beautification). This would serve to attract visitors to the downtown core. Envisioned as a 'Small Spaces' project, the revitalisation would incorporate sustainable construction to establish a focal meeting place for the whole of the community. In addition to leisure activities, other activities could include out-door market activities, busker events, media release events, political rallies, out-door speaking/speech events, and ceremonies.

As part of the 2017 budget deliberations, Council approved a budget \$220,000 to undertake a project designed to address the identified physical deficiencies as part of an overall courtyard revitalization. The Corporation commissioned landscape architects Lashley & Associates, to consult with stakeholders regarding revitalization concepts and prepare associated tender specifications and drawings of an approved model. The stakeholder steering committee directed Lashley to develop three potential renewal prototypes which could be presented to all stakeholders and to the general public for review. Following a public meeting, there was consensus to request Council to approve the selected revitalization concept. At their regular council meeting on February 26, 2018, following a presentation by representatives of Lashley & Associates, Council endorsed the preferred renewal concept.

In September 2018, MW issued a tender for construction of the approved revitalization concept. Tender pricing was received and all submitted bids were more than what was budgeted.

Administration is requesting additional funding to complete the courtyard project. Upon approval of funding, the project will be combined with other larger municipal construction tenders in an effort to obtain more competitive pricing thereby resulting in a more economical project cost.

Should funding be allocated, it is anticipated that the project will be completed by late summer 2019.



Municipal Works Division

Project Name: Parking Lot Rehabilitation - Optimist Park

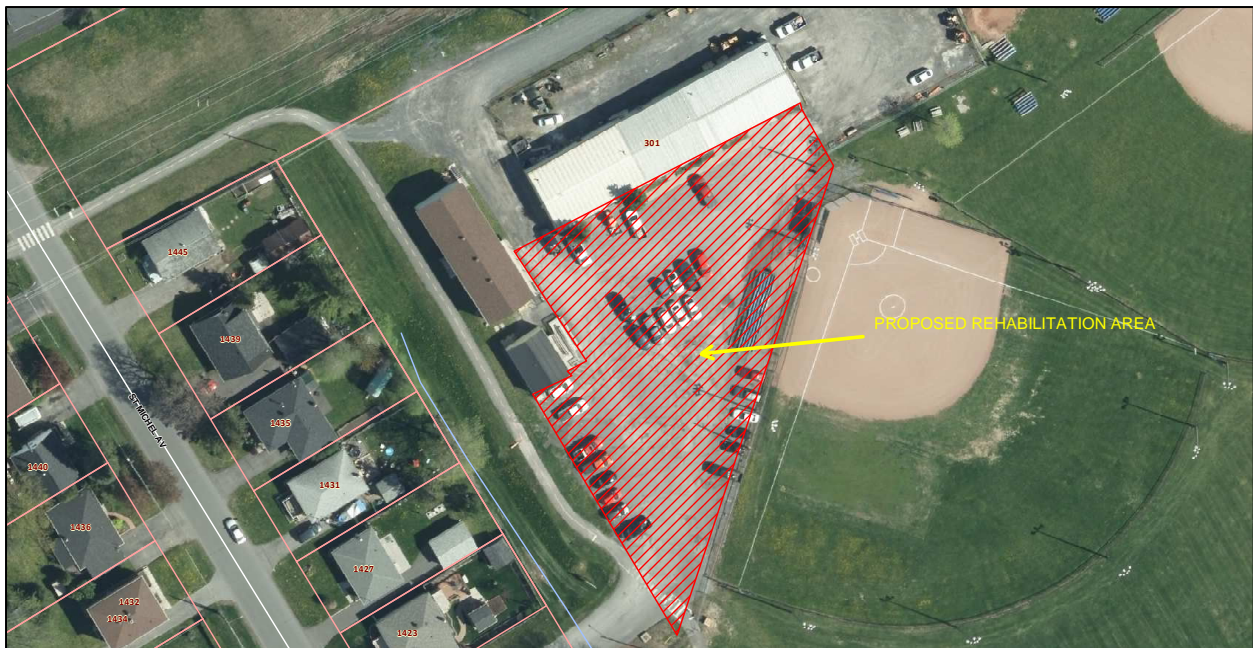
Funding: \$30,000 Tax Base

The asphalt parking lot surface at Optimist Park is in need of replacement. The current parking lot was constructed on a former landfill which provides inadequate sub-base to support repeated vehicle loads. The parking lot has numerous sumps and potholes as well as cracking and crumbling asphalt. Sumps, pot holes, and cracks pose a trip and fall hazard to patrons. Water ponding will result in ice buildup which could result in slips and falls.

In order to obtain competitive pricing, this project will be tendered as part of the City's Asphalt Resurfacing contract. The project will include the removal of the current asphalt surface, installation of a minimal granular base topped with a substantial layer of asphalt millings. These millings are generated from shave and pave portions of the City's Asphalt Resurfacing Contract. It is anticipated that this method of rehabilitation will be the most cost effective solution and will result in a longer lasting hard surface for users.

In addition to the rehabilitation of the parking lot, a short sidewalk in front of the Optimist Park office/garage building will be replaced. The concrete walkway has heaved and cracked and is therefore deemed as a health and safety risk.

It is anticipated that this project will commence in mid-summer 2019 and will be complete within a one week period.



Municipal Works Division

Project Name: Woodhouse Museum Repairs

Funding: \$50,000 Tax Base

In 2016, the Corporation was mandated by the Province to commission a consultant with expertise in conducting building condition assessments (BCA) and developing asset management plans in order to prepare a comprehensive Asset Management Plan for the municipality according to Provincial guidelines.

The consultant who was selected for the work, Facility Condition Assessment Portfolio Experts (FCAPX), conducted BCAs for all 96 of the Corporation's buildings. As part of the process associated with conducting BCAs, FCAPX prepared tables estimating probable costs to remedy identified physical deficiencies as well as recommended schedule (budget year) in which to address the deficiencies.

In addition to the FCAPX BCA, museum staff and MW staff conducted a more detailed building inspection and identified issues which require immediate attention in order to avoid greater possible problems in the future.

The following is the list of building upgrades and replacements which have been prioritized for the Woodhouse Museum in 2019:



1. Conduct painting and staining of applicable interior walls, door frames and banisters;
2. Re-sealing of all period doors;
3. Replacement of exterior metal door of access tunnel;
4. Upgrade lighting with energy efficient models;
5. Repointing and cleaning of sections of exterior stone wall;
6. Supply and install new protective coverings on period windows;
7. Repair/replace deteriorated section of outdoor balcony.

Municipal Works Division

Project Name: Renovations at Various Municipal Buildings

Funding: \$29,000 Tax Base

In 2016, the City was mandated by the Province to commission a consultant with expertise in conducting building condition assessments (BCA) and developing asset management plans in order to prepare a comprehensive Asset Management Plan for the municipality according to Provincial guidelines.

The consultant who was selected for the work, Facility Condition Assessment Portfolio Experts (FCAPX), conducted BCAs for all 96 of the Corporation's buildings. As part of the BCA process, FCAPX prepared tables estimating probable costs to remedy identified physical deficiencies. These tables also included recommended upgrade and replacement schedules that indicated the year in which deficiencies should be addressed.

The following is the list of building upgrades and replacements which have been prioritized to be carried out in 2019:

1. Replace floor tiles at the Optimist Park building.
2. Upgrade the Justice Building elevator in order to comply with current code requirements.
3. Replace the domestic hot water tank at Kinsman Soccer Building.
4. Replace the air condition unit at Fire Hall #1.

Municipal Works Division

For Council
Consideration

Project Name: Locomotive Refurbishment Plan

Funding: \$152,000 Working Reserves
(\$100,000 already approved from the 2017 Budget)

In 2006, Council approved Bylaw #134 -2006 to designate the former Cornwall Street & Railway Locomotive Engine #17 and the land it is currently situated on, as an artifact and land of cultural heritage value or interest.

In 2017, as a result of a petition submitted by supporters for restoration of Locomotive #17, Council allocated \$100,000 from working reserves for the purposes of addressing the physical condition, appearance and location of the locomotive. The policy associated with the use of funds from the Working Reserves indicates that should this project proceed in 2019, any expenditures must be reinstated as part of the 2020 municipal budget.

The latest council report (#2018-06-IMW-MW) regarding the refurbishment of Locomotive #17 addressed Council's direction to consult with the general public in order to gauge constituent's sentiment with regard to refurbishment and relocation of the locomotive. Upon consultation with local historical groups, three historically relevant locations were recommended. Administration then proceeded to develop cost estimates to complete the project at each of the three recommended sites. Estimated costs include: locomotive refurbishment, track installation, security fence and signage, accessible walkway, electrical servicing, and physical movement of the locomotive.

The recommended locations and estimated budget for each of the sites are as follows:

- Remain at Brookdale & Ninth (\$142,000)
- Move to Water Street & Newsey Lalonde Way (\$152,000)
- Move to west of former Lalley Blanchard Parking lot (\$152,000)

As per Council direction, an electronic survey was then conducted to engage public opinion on the matter. The survey provided all of the above noted information. A total of 404 individuals responded to the survey with 218 respondents (54%) in favour of refurbishing the locomotive. Of those in favour of refurbishment, 105 individuals preferred relocating the locomotive to the southwest corner of Water Street and Newsy Lalonde Way.



Upon receiving all of the above information, Council passed a motion to defer and directed Administration to determine if there is any interest from historical groups or organizations in assuming the refurbishment and possession of Locomotive #17. Council also approved a motion to direct Administration to investigate potential grants and fundraising initiatives for the cost of the refurbishment and report back to Council.

Considering the above, Administration is now working in cooperation with a partnership of two local organizations, the Moccasin Club (local train enthusiasts) and the SDG Historical Society, to submit a grant application to the Trillium Foundation in order to secure capital funding towards this project.

Accordingly, it is recommended that the proposed municipal funding remain in place until a decision is received from the Trillium Foundation. Upon notification from the Trillium Foundation, Administration will report back to Council.

2019 TEN YEAR CAPITAL FORECAST

CAPITAL FORECAST FOR THE YEARS 2019 - 2028

MUNICIPAL WORKS EQUIPMENT

DESCRIPTION	EXPENDITURE									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Fleet Renewal Program										
#2 - 2006 Small Car	28									
#20 - 2012 Small Car	30									
#81 - 2009 Service Box Truck	45									
#100 - 2010 Multi-use Truck	87									
#161 - 2009 Plow Truck with attachments	275									
#456 - 2001 Articulating Tractor with attachments	145									
#979 - 1991 Equipment Trailer	7									
#988 - 2004 Equipment Trailer	10									
#989 - 2004 Packer Trailer	12									
#991 - 2006 Pavement Roller Trailer	15									
<i>Equipment estimated for years 2020 - 2028</i>		798	799	799	797	800	800	800	800	800
MUNICIPAL WORKS EQUIPMENT SUBTOTAL	654	798	799	799	797	800	800	800	800	800

2019 TEN YEAR CAPITAL FORECAST

CAPITAL FORECAST FOR THE YEARS 2019 - 2028

FACILITIES/BUILDINGS

DESCRIPTION	EXPENDITURE									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
FACILITIES:										
Municipal Works Yard Redevelopment:		2,550	2,336	3,277	4,743	4,772	1,776	2,156	1,275	
- Salt Management Facility	2,500									
- Standby Power Generator	900									
- Noise Remediation	875									
- Employee Parking Lot	230									
- Design of New Administration Building	450									
	4,955	2,550	2,336	3,277	4,743	4,772	1,776	2,156	1,275	0
BUILDINGS:										
Justice Bldg. HVAC Building HVAC Replacement		450								
Justice Building Courtyard Repairs	175									
Parking Lot Rehabilitation - Optimist Park	30									
Parking Lot Rehabilitation - St. Columban's	45									
Renovations Required at Various Municipal Buildings	29	137	150	92	70	75	91	18	10	16
Woodhouse Museum Repairs	50									
Arc Flash Risk Analysis - Public Property		340	120	100					100	
Justice Building Elevator Upgrades				60				60		
Justice Bldg - Clean HVAC										
Richelieu Day Care HVAC					105		25			
Kinsmen Parking Lot Paving										
Justice Building Painting			225							
Justice Building North and South Side Roofs										
Guindon Park Roof			46							
Bandshell Maintenance				100		212				
Justice Building Make Up Air Units Lower Roofs										
Fire Hall #2 Roof						85				
Richelieu Day Care Roof							140			
City Hall Roof										
	329	927	541	352	310	372	256	78	110	16
BUILDINGS / FACILITIES TOTAL	5,284	3,477	2,877	3,629	5,053	5,144	2,032	2,234	1,385	16

2019 CAPITAL SUBMISSION

**CAPITAL BY BUSINESS UNIT
FOR THE YEAR 2019**

*Please note all figures are in 000s of dollars

DESCRIPTION	Page #	2018 GROSS BUDGET	2019 GROSS SUBMISSION	EXTERNAL FUNDING		RESERVES			2019 TAX BASE
				GRANTS	FINANCING	DEV. CHARGES	GAS TAX	SPECIFIC RESERVE	
TRANSIT SERVICES									
Purchase of 2 Conventional Buses	C-40	510.0	1,160.0	846.0	314.0				
Purchase of a Handi-Transit Bus	C-41	250.0	200.0	146.0	54.0				
Transit Cube Van Replacement	C-42		80.0		80.0				
Vehicle Hoist Repair and Safety	C-43		50.0		50.0				
Passenger Counter / Web Applications	C-44		100.0	73.0	27.0				
Video Surveillance Security System		50.0							
Tire Balancer		25.0							
Transit Services		835.0	1,590.0	1,065.0	525.0	-	-	-	-

**COUNCIL APPROVED CAPITAL BUDGETS
FROM PRIOR YEARS**

DESCRIPTION	GROSS SUBMISSION	EXTERNAL FUNDING		RESERVES			TAX BASE
		GRANTS	FINANCING	DEV. CHARGES	GAS TAX	SPECIFIC RESERVE	
2018 Council Approved Capital	835.0	283.0	502.0				50.0
2017 Council Approved Capital	1,998.0	999.0	999.0				
2016 Council Approved Capital	950.0		850.0		100.0		

Transit Services

Project Name: Purchase of 2 Conventional Buses

Funding: \$ 846,000 ICIP Funding
 314,000 Financing
 \$1,160,000

Two low-floor forty-foot replacement diesel conventional buses are to be purchased through the Metrolinx agreement.

The continuation of the conventional bus replacement fleet is paramount to the viability of the Transit operations. These are replacement buses that will replace two 1998 buses.

Conventional buses typically take 9 months to be assembled and delivered.

Cost savings to the parts and accessories account is maintained because of less maintenance and warranties that are in effect with new buses. New buses are more environmentally friendly and more fuel-efficient.

This project is reliant on funding from the Investing in Canada Infrastructure (ICIP) program. All Cornwall Transit projects submitted for Council approval in the 2019 budget that rely on ICIP funding will be put on hold until the roll out of the ICIP is finalized. The Projects may seek Council approval to finance in a different manner should this funding not materialize.



Transit Services

Project Name: Purchase of a Handi-Transit Bus

Funding: \$146,000 ICIP Funding
54,000 Financing
\$200,000

One low-floor Handi-Transit replacement bus to be purchased through the Metrolinx agreement.

The continuation of the Specialized Transit Fleet is necessary to the viability of Transit operations. This bus will replace a 2011 bus. Typically, a low floor bus has an estimated useful life of 7 years.

Specilized buses must be ordered in the first quarter of the year in order to be delivered in the same year.

As new buses include warranties and require less maintenance, cost savings would be realized as expenses related to parts and accessories would not increase with an aging fleet.

The new bus will operate with gasoline because specialized busses are no longer available from manufacturers with diesel fuel options. As a result, savings in fuel could also be realized as diesel fuel is currently more expensive than gasoline.

This project is reliant on funding from the Investing in Canada Infrastructure (ICIP) program. All Cornwall Transit projects submitted for Council approval in the 2019 budget that rely on ICIP funding will be put on hold until the roll out of the ICIP is finalized. The Projects may seek Council approval to finance in a different manner should this funding not materialize.



Transit Services

Project Name: Transit Cube Van Replacement

Funding: \$80,000 Financing

The cube van is used for Transit operations; such as, cleaning bus shelters, moving equipment, temporary bus stops and transportation of supplies. This vehicle is also used for vault transportation and retrieving large parts from vendors.

A major feature of the cube van is the hydraulic lift gate at the rear, which will need major repairs in 2019. The cube van is 14 years old and the mileage has exceeded 145,000 kilometres.

It is expected that the cube van can be replaced within 6 months of tender issue. This piece of equipment is necessary to perform tasks which would be costly to contract out.



Transit Services

Project Name: Vehicle Hoist Repair and Safety

Funding: \$50,000 Financing

This project will address the repair and safety of two vehicle hoists at the Transit Garage.

These hoists lift buses to in order to perform repairs. The safety of these hoists is a health and safety concern and needs to be addressed. The hoists are approximately 40 years old and have received regular maintenance; however, they have exceeded their useful life and maintenance costs are becoming more expensive.

Once awarded, it is expected that the project can be completed within 60 days.



Transit Services

Project Name: Passenger Counter / Web Applications

Funding: \$ 73,000 ICIP Funding
27,000 Financing
\$100,000

This technology will allow an accurate count of all passengers boarding and departing buses on route.

The second part of the upgrade will allow connectivity of our web based automatic vehicle location (AVL) to Google, Apple and Ping for better customer information of on route buses.

This project is considered to be a tool to enhance the ridership experience and to help enable growth in public transportation.

This project is reliant on funding from the Investing in Canada Infrastructure program (ICIP). All Cornwall Transit projects submitted for Council approval in the 2019 budget that rely on ICIP funding will be put on hold until the roll out of the ICIP is finalized. The Projects may seek Council approval to finance in a different manner should this funding not materialize.

2019 TEN YEAR CAPITAL FORECAST

CAPITAL FORECAST FOR THE YEARS 2019 - 2028

TRANSIT

DESCRIPTION	EXPENDITURE									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Purchase of 2 Conventional Buses	1,160	580	580	580	580	580	580	580	580	580
Purchase of Handi-Transit Bus	200	200	200	200	200	225	225	225	225	225
Transit Cube Van Replacement	80									
Vehicle Hoist Repair and Safety	50									
Passenger Counter/ Web Applications	100									
Shop Air Compressor		50								
Transit Shelters and Cement Pads		40		40		40		40		
Sewer System				100						
Natural Gas Compressor				150						
Parking Lot						50				
Transit Building heating/ Cooling System					50					
Roll Up Garage Doors			88							
Concrete Slabs in Garage				70						
Hvac System & equipment		28					225			
Metal Siding- Maintenance & Storage Garage										
Electrical Service and Panels			50							
Wall Finishes-Paint Wall Covering		60								
Electrical Service and Panels			300							
Fare Box Upgrade and Support										
Transit Bus Wash										
TRANSIT SUBTOTAL	1,590	958	1,218	1,140	1,055	895	805	845	805	805

2019 CAPITAL SUBMISSION

**CAPITAL BY BUSINESS UNIT
FOR THE YEAR 2019**

*Please note all figures are in 000s of dollars

DESCRIPTION	Page #	2018 GROSS BUDGET	2019 GROSS SUBMISSION	EXTERNAL FUNDING		RESERVES			2019 TAX BASE
				GRANTS	FINANCING	DEV. CHARGES	GAS TAX	SPECIFIC RESERVE	
WASTE MANAGEMENT									
Landfill Leachate and Gas Collection Systems Upgrades	C-47	1,290.0	200.0						200.0
Landfill Site - Public Service Area Infrastructure Upgrades	C-48	50.0	40.0						40.0
Waste Management Diversion Review and Program Implementation	C-49	50.0	10.0						10.0
Landfill Expansion / Alternative Disposal ECA	C-50		50.0						50.0
WASTE MANAGEMENT TOTAL		1,390.0	300.0	0.0	0.0	0.0	0.0	0.0	300.0

**COUNCIL APPROVED CAPITAL BUDGETS
FROM PRIOR YEARS**

DESCRIPTION	GROSS SUBMISSION	EXTERNAL FUNDING		RESERVES			TAX BASE
		GRANTS	FINANCING	DEV. CHARGES	GAS TAX	SPECIFIC RESERVE	
2018 Council Approved Capital	1,390.0		1,290.0				100.0
2017 Council Approved Capital	400.0				400.0		
2016 Council Approved Capital	400.0	115.0			125.0		160.0

Waste Management

Project Name: Landfill Leachate and Gas Collection Systems Upgrades

Funding: \$200,000 Tax Base

The landfill gas collection system collects gas under a vacuum and conveys it to the landfill gas flaring facility, which is currently being relocated and upgraded, to capture greenhouse gas emissions and odours caused by the decomposition of waste. In 2017, the City received approval from the Ministry of Environment, Conservation, and Parks (MECP) for a gas collection system expansion in cells 1 and 2 within Quadrant 3. This expansion, which includes the construction and implementation of additional extraction wells, will capture greenhouse gas emissions and odours from the recently capped area.

The leachate collection system collects surface run-off and groundwater from the site and directs it toward the Waste Water Treatment Plant through a series of underground pumps and pipes. The Corporation has applied to the MECP for a leachate expansion into Quadrant 4, cell 1. This expansion will allow the Corporation to begin placing waste in this new cell. The cell, once the leachate expansion is approved, will be ready to accept waste in mid-2019.

The proper operation of the leachate and methane gas collection system is fundamental to the proper operation of the solid waste disposal site and compliance with the Certificate of Approval. The ongoing expansion of both the gas and leachate collection systems is essential to control the methane gas build up at the landfill. Improper operation or the delay in construction of these systems may create an environmental health and safety issue. The expansion of these systems will continue as the landfill reaches capacity.



Waste Management

Project Name: Landfill Site – Public Service Area Infrastructure Upgrades

Funding: \$40,000 Tax Base

There is an average of 28,000 visits made by the public to the landfill site each year. The Public Service area, built in 1968, acts as a transfer station within the landfill, which allows the public to properly sort their waste materials into garbage, recycling, scrap metal, tires, Chlorofluorocarbon (CFC) appliances, hazardous waste, and electronics. The public service area is also serviced by a weigh scale which uses Geoware software to identify vehicles, weigh them, and assign them to a specific waste class in order to properly charge inbound site users. This system is also essential in gathering data for the landfill sites Annual Report as is required each year by the Ministry of Environment, Conservation, and Parks under the Environmental Compliance Approval for the site.



To improve public accessibility of the Landfill Site, to resolve some health and safety concerns, and to comply with Environmental Compliance Approval (ECA) requirements, the following projects are proposed to be completed in 2019:

Lighting

The lighting at the scale house facility is original to its construction, and has since outlived its expected lifespan. The Building Condition Assessment (BCA) recommends the replacement of the original lighting with LED fixtures. The installation of LED fixtures at the scale house will provide increased site lighting addressing health and safety concerns and providing additional site security.

Entry doors

There are currently four metal entry doors at the scale house facility, each side has one solid metal door, and one storm door. These doors are original to the facilities construction, and have since outlived their anticipated lifespan. The BCA recommends the replacement of the original four doors. The replacement of the four doors will increase security while preventing heat loss from inside the facility.

Roof Condition Assessment

The facility has a metal roof which was installed when the facility was constructed. The BCA recommends a roof assessment to be completed in order to determine the remaining lifespan of the roof.

Flooring

The concrete floor in the facility is original and has become damaged and uneven. This project is recommended in order to satisfy health and safety concerns and will be done in conjunction with the replacement of the outside doors.

Security Camera

The scale house also serves as a guardhouse for the facility. It currently has one camera, which is used for site security and the monitoring of inbound waste. To increase site security, it is recommended that an additional camera be installed on the outbound scale, to monitor the back side of the scale house and also survey the public service area.

Waste Management

Project Name: Waste Management Diversion Review and Program Implementation

Funding: \$10,000 Tax Base

The Solid Waste Recycling Review Implementation looks at investing money in studies to determine how Cornwall can better manage its waste using both recycling and diversion programming.

Over the next year, the Waste Management Division will be issuing a RFP to hire a consultant to complete an Organics Feasibility Study. The feasibility study will serve as an assessment of the practicality of a proposed organics management plan in Cornwall. The feasibility study will consider different methodologies of collection and processing of residential organic waste as well as the social, economic, and environmental aspects of each of the proposed collection and processing plans. The study will also consider the benefits of a regional approach to organic waste management to determine feasibility of including other urban settlement areas in the SD&G area to help mitigate costs.

The completion of this feasibility study is essential to the City, as it is directly related to the Provincial Food and Organic Waste Policy. Under this Policy, the City of Cornwall is subject to policy 4.2ii, wherein the City must achieve a 50% waste reduction and resource recovery of food and organic waste generated by single family dwellings in urban settlement areas by 2025. Currently, the City offers a seasonal leaf and yard waste program, which reflects a 6.28% organic diversion rate, leaving a remaining 43.72% to be captured by 2025.

Based on a curbside residential waste audit completed in 2014, it was determined that roughly 54% of the garbage collected from residential homes is made up of Organic Waste. That roughly adds to 163.43 kg/hh/yr. As the City continues to grow, this weight will only increase. Public feedback, recorded from the Open House and Surveys completed as part of the public consultation process for the Solid Waste Management Master Plan, indicated that 62% of participants would be interested in an organics program. The implementation of an Organics Management Plan is one of the recommendations in the Solid Waste Management Master Plan. The overall goal over the course of the next few years is to organize a pilot program for residential organics management.



Waste Management

Project Name: Landfill Expansion / Alternative Disposal ECA

Funding: \$50,000 Tax Base

The current expected life of the landfill is 11 years (closure by 2030). The Landfill Expansion and Alternative Disposal ECA project funding will help finance studies and applications to the Provincial Government that will help either expand our current landfill or determine alternative ways to manage our waste once the landfill reaches capacity. This project is essential to the health and safety of the community as it ensure the continuity of a reliable means of waste disposal and management. Opening a new landfill or expanding the current site is a lengthy process with no guarantees of success. Based on a recent report issued by the Ontario Waste Management Association, it is estimated that in Ontario landfills there is only 122.9 million tonnes remaining for disposal. It is anticipated in this report that there will be no remaining landfill capacity (assuming no new landfills are approved) by 2032 in Ontario.

In 2011, a report (2011-41) was presented to Council to advise them on the processes and costs associated with opening a new landfill or the process for applying for a landfill expansion. This process regardless of which option could take anywhere from 7-12 years, and is why this project will be phased over multiple years. It is estimated that after application, should the new landfill or expansion be approved, the construction would cost around \$50-\$60 million dollars. Due to this large investment, it is essential that the City consider all available options with regards to waste management.

It is the Waste Management Divisions intention to issue a RFP to a consulting firm with expertise in waste management to develop a terms of reference, which, once developed will identify all available options the City can use to manage waste, while also providing more precise timelines, and costs.

The terms of reference document will also consider environmental, social, political, and economical feasibilities of options for waste management while following the Ministry of Environment, Conservation, and Park's comprehensive public consultation process. The Terms of Reference will also look to determine the feasibilities of working collaboratively with our surrounding municipalities in SD&G to consider the geographic catchment area and to sustainably manage waste in the area for the future.



2019 TEN YEAR CAPITAL FORECAST

CAPITAL FORECAST FOR THE YEARS 2019 - 2028

WASTE MANAGEMENT

DESCRIPTION	EXPENDITURE									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Landfill Leachate and Gas Collection Systems Upgrades	200	250	250	250	300	300	300	300	300	300
Landfill Site - Service Area Infrastructure Upgrades	40	20	65	50	20	80	60			
Waste Management Diversion Review and Program Implementation	10		50				50			
Landfill Expansion / Alternative Disposal ECA	50	150	150	150	150	150	50	50	50	50
Diversion Facilities Equipment and Building Upgrades		30	20			30	50			
WASTE MANAGEMENT SUBTOTAL	300	450	535	450	470	560	510	350	350	350

2019 CAPITAL SUBMISSION

**CAPITAL BY BUSINESS UNIT
FOR THE YEAR 2019**

*Please note all figures are in 000s of dollars

DESCRIPTION	Page #	2018 GROSS BUDGET	2019 GROSS SUBMISSION	EXTERNAL FUNDING		RESERVES			2019 TAX BASE
				GRANTS	FINANCING	DEV. CHARGES	GAS TAX	SPECIFIC RESERVE	
RECREATION									
FACILITY UPGRADES									
Arc Flash Analysis	C-53		125.0					125.0	
Aquatic Centre Ventilation Improvements and UV Disinfection	C-54		500.0		500.0				
Brian Tardif Field Lighting	C-55		85.0						85.0
Brian Tardif Field Netting	C-56		55.0						55.0
Civic Complex and Benson Centre LED Arena Lighting	C-57		550.0		550.0				
Benson Centre Arena Duct Work	C-58		80.0					80.0	
Upgrade Outdoor Pool Filter Systems	C-59		55.0						55.0
Art Centre Design	C-60		300.0		300.0				
Recreation Master Plan Update	C-61		60.0			43.8			16.2
Civic Complex Floors in Dressing Rooms	C-62	55.0	55.0					55.0	
Civic Complex Arena Spectator Seat Replacement	C-63		55.0					55.0	
King George Park Washroom	C-64	25.0	25.0						25.0
Aquatic Centre Pool Lighting		80.0							
Benson Centre - CN Land Acquisition		230.0							
Civic Complex Parking Lot, Exterior Stairs, and Walkway Improvements		125.0							
Civic Complex Main Concourse Renovations		75.0							
PARKS / PLAYGROUNDS									
Bikepath Retaining Wall Structure Replacement	C-65		1,000.0		1,000.0				
Emerald Ash Borer	C-66	300.0	300.0		300.0				
Bicycle Path Repairs	C-67	50.0	50.0				50.0		
Docks at RCAF and Guindon Park	C-68	80.0	80.0						80.0
Guindon Park Road Improvements		50.0							
Playground Structure Replacement		120.0							
Arts in the Park Improvements and Art Display Infrastructure		30.0							
Recreation		1,220.0	3,375.0	-	2,650.0	43.8	50.0	315.0	316.2

**COUNCIL APPROVED CAPITAL BUDGETS
FROM PRIOR YEARS**

DESCRIPTION	GROSS SUBMISSION	EXTERNAL FUNDING		RESERVES			TAX BASE
		GRANTS	FINANCING	DEV. CHARGES	GAS TAX	SPECIFIC RESERVE	
2018 Council Approved Capital	1,220.0		530.0		50.0	310.0	330.0
2017 Council Approved Capital	770.0		300.0		50.0	140.0	280.0
2016 Council Approved Capital	1,550.0		750.0		80.0	65.0	655.0

Parks and Recreation

Project Name: Arc Flash Analysis

Funding: \$125,000 Recreation Facilities Reserve

An Arc Flash analysis is required for all of the City's Recreation Building electrical panels.

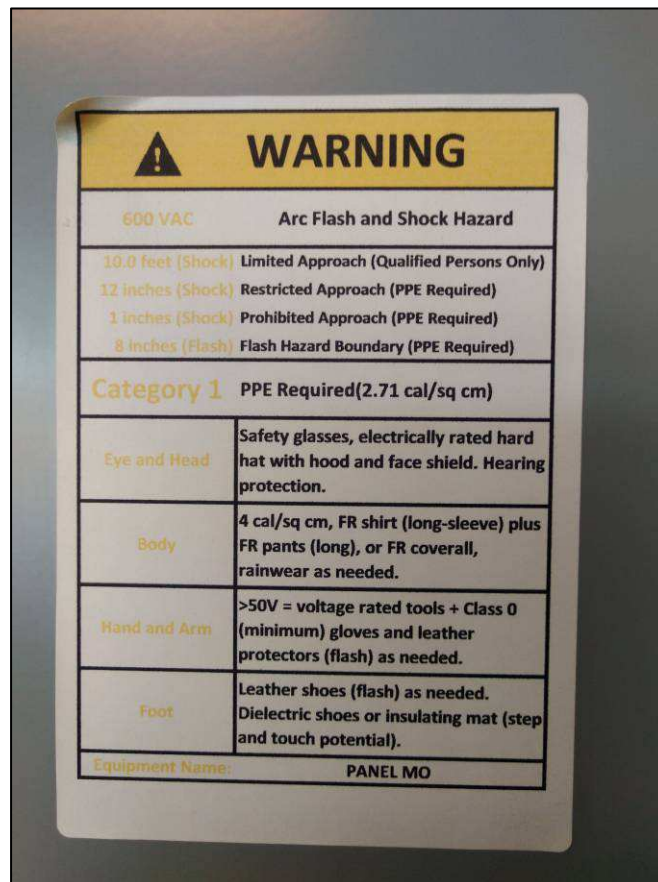
This analysis identifies the potential hazards within the electrical panels and specifies the necessary safety precautions and personal protective equipment for all persons accessing the panels.

To ensure the safety and well being of employees when accessing electrical panels, Parks and Recreation would:

- Provide proper training to recognize potential hazards related to Arc Flashes
- Establish the necessary safety precautions
- Provide staff the appropriate personal protective equipment

Municipal Works initiated an identical project in 2018 for other City buildings outside of Recreation Services.

This photo is an example of an electrical panel with Arc Flash warning labels which inform staff of the potential hazard and the required personal protective equipment if accessing the panel.



Parks and Recreation

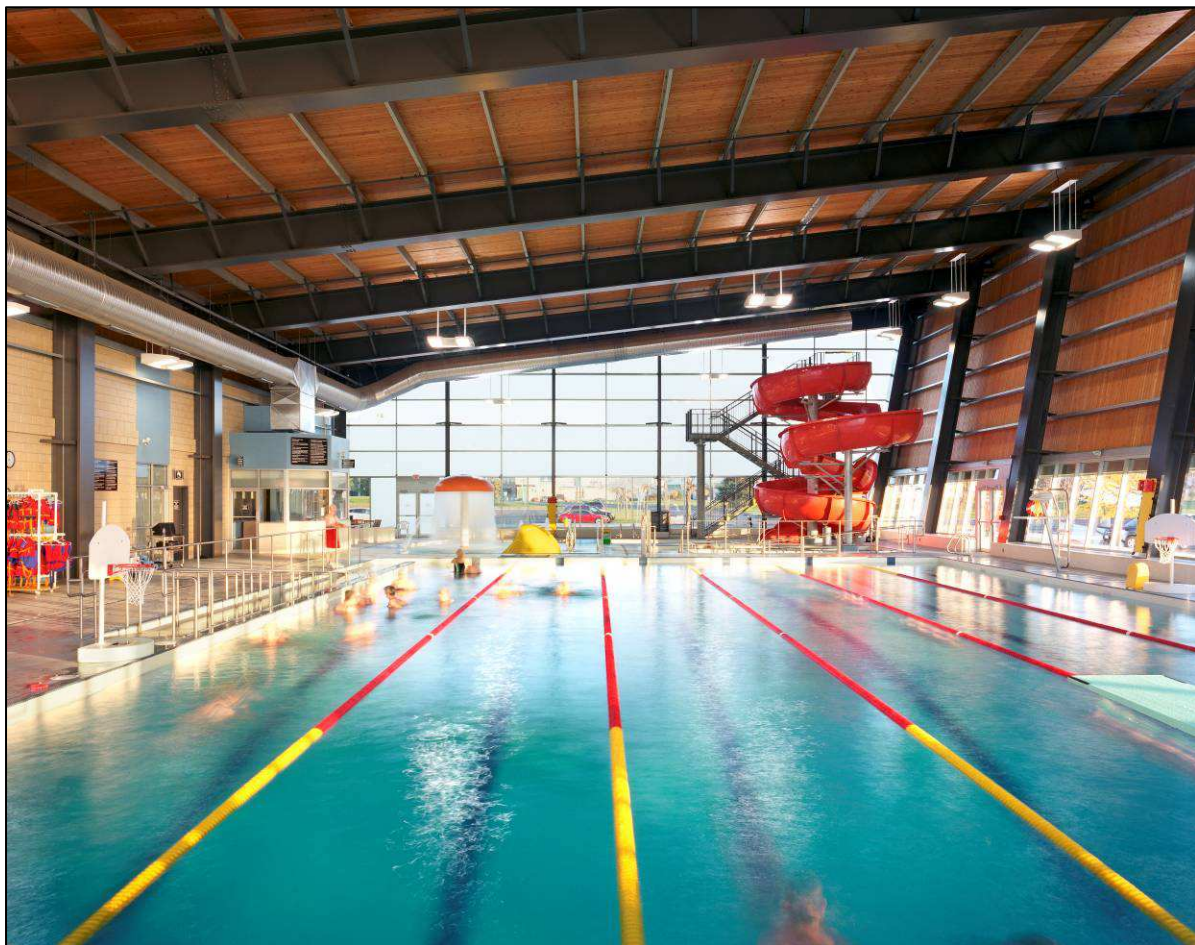
Project Name: Aquatic Centre Ventilation Improvements and UV Disinfection

Funding: \$500,000 Financing

Parks and Recreation has retained the services of a consulting engineering firm to review the Cornwall Aquatic Centre's air handling and filtration systems. The consultants produced a report with recommendations on how to address ongoing air quality issues. The report recommended improvements to the existing ventilation system and the addition of an ultraviolet disinfection system to address air quality issues within the aquatorium.

Industry standards and design philosophies have changed since the original construction of the Cornwall Aquatic Centre. The indoor pool industry has become increasingly aware of the creation and accrual of air borne chlorine (Chloramines) within indoor pool air spaces. New systems are now designed to capture and exhaust chloramines from the facility. Long term exposure to chloramines can impact health of patrons and staff, as well as impact the life expectancy of all steel components within the aquatorium.

The ultraviolet light (UV) disinfection system proposed for the main pool will reduce the amount of chlorine required to disinfect the pool. This will help reduce the amount of chloramines created in the aquatorium.



Parks and Recreation

Project Name: Brian Tardif Field Lighting

Funding: \$85,000 Tax Base

The existing baseball lights at Brian Tardif Field have reached the end of their life expectancy and should be replaced.

The lighting is mounted on wooden cross beams which are affixed to the wooden poles around the perimeter of the field. The existing wooden cross beams are deteriorating and some have recently been replaced as they were found to be rotten and unsound. The existing wooden poles are showing signs of deterioration and some are no longer standing plumb.

The proposed replacement lighting system would be LED technology, which operate much more efficiently and would reduce maintenance costs.

It is proposed to complete this project in conjunction with the replacement of the safety netting around Brian Tardif Field. Much of the safety netting is supported from the existing light standards, making it more cost effective to replace both the netting and lighting infrastructure at the same time.



Existing wooden poles in the outfield which are no longer plumb



Parks and Recreation

Project Name: Brian Tardif Field Netting

Funding: \$55,000 Tax Base

This project involves the replacement of the existing sports field netting at Brian Tardif Field at King George Park. The purpose of the netting around Brian Tardif Field is to prevent balls from leaving the field of play and damaging property or injuring the public.

The existing netting is hung from the field lighting support posts. The netting should be replaced in conjunction with the lighting system replacement project.

The existing netting is aged with new holes requiring repair each year. Also, the existing netting in the left field has become intertwined with vegetation which requires removal. Removal of the vegetation without causing damage to the netting would be labour intensive and costly.

The photo below shows the existing safety netting along the third base line. Note that this section of netting is supported from the existing field light poles.



Parks and Recreation

Project Name: Civic Complex and Benson Centre LED Arena Lighting

Funding: \$550,000 Financing

It is proposed to replace the existing lighting within the arenas, fieldhouse, and tennis court at the Benson Centre and Ed Lumley Arena using LED technology.

LED lights operate much more efficiently, require significantly less electricity, and generate significantly less heat than the existing metal halide light fixtures. This will result in reduced electricity costs. LED lights also have a longer life expectancy resulting in lower maintenance costs due to fewer bulb replacements.

LED light conversion projects are becoming very common in recreation facilities, such as hockey rinks, that have a large number of high wattage light fixtures. The existing metal halide light fixtures take approximately 20 minutes to warm up before they provide their designed output level; therefore, the existing metal halide arena lights are only turned off during extended periods of inactivity. LED light fixtures provide their design output levels almost instantaneously. As a result, LED lights can be shut off immediately after the space is no longer occupied, resulting in further electricity savings.



The photo above shows the existing arena lighting at the Ed Lumley Arena. There is additional lighting around the perimeter that is used for high profile games (such as the IIHF game shown). These additional fixtures aren't used during regular programming as they generate too much heat and impact ice quality if left on for long durations.

Parks and Recreation

Project Name: Benson Centre Arena Duct Work

Funding: \$80,000 Recreation Facilities Reserve

The existing ventilation ducts within Pads 1, 2, and 3 of the Benson Centre require modifications to improve the flow of air within these arena air spaces.

During the late summer/early fall, these arenas experience issues with high humidity, despite the existing dehumidification system operating at maximum capacity. The high humidity levels during these times of year cause significant condensation within these spaces. The condensation drips from the supporting roof structure onto the ice melting holes in the ice surface, creating a safety hazard for patrons. The excessive condensation will eventually cause premature failure of mechanical and electrical equipment within this space as a result of corrosion.

This project proposes to extend the air supply ducts the length of the ice surface so that the dehumidified air supplied to the rink space can be discharged into the arena at one end of the rink, with the return air grille remaining in the opposite end. The proposed modification will provide a better exchange of the air within this space which will allow the existing dehumidification system to remove air bound moisture more efficiently and effectively.

The image below shows the existing air supply duct (large white pipe suspended above the safety netting) and the return air grille.



Parks and Recreation Division

Project Name: Upgrade Outdoor Pool Filter Systems

Funding: \$55,000 Tax Base

The outdoor pool filtration systems are aging and need to be replaced. This is a multi-year project which began in 2015.

The pool filtration systems at St. Joseph's Park and Reg Campbell Park have been upgraded. The existing filtration systems at Mattice Park, St. Francis Park, and Terry Fox Park are the original systems which were installed at the time of pool construction and are proposed to be upgraded.

The City outdoor pool facilities are regularly inspected by the Eastern Ontario Health Unit (EOHU). A previous inspection completed by EOHU of the City's outdoor pool facilities identified the age of the existing filtration systems as a concern and recommended that a plan for their replacement be implemented.



A lifeguard provides swimming lesson programming at one of the City's outdoor pools.

Parks and Recreation

Project Name: Art Centre Design

Funding: \$300,000 Financing

It is proposed to retain the services of an architectural firm to complete the design drawings and tender documents for the conversion of the recently purchased 159 Pitt St. into an Arts Centre.

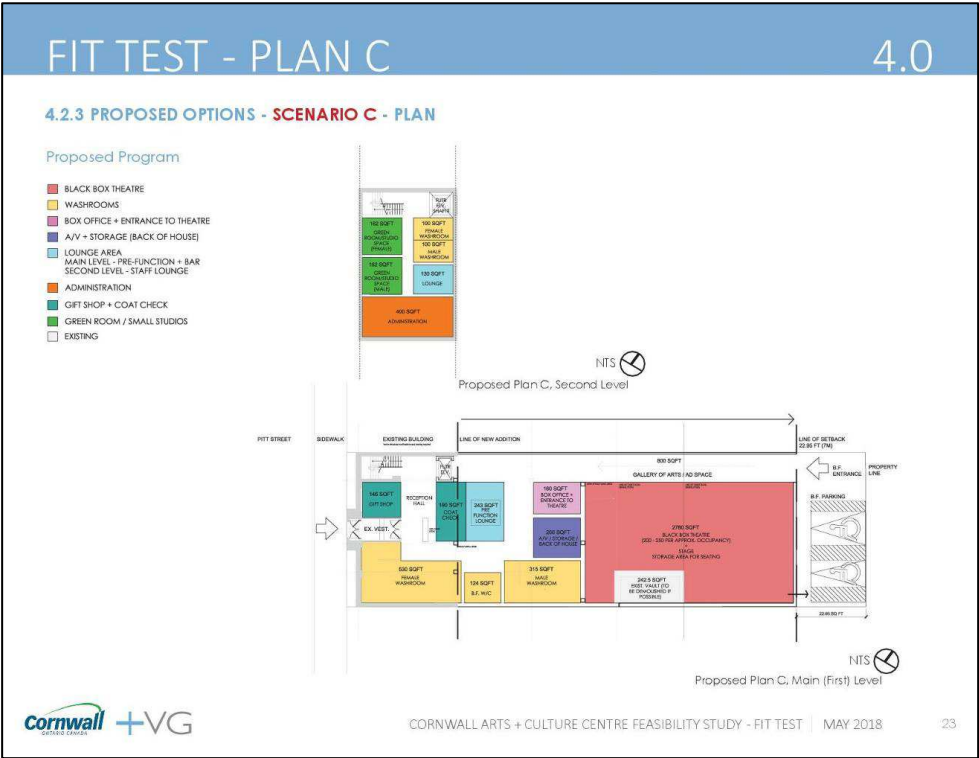
In 2018, the City purchased the former BMO building at 159 Pitt St. for the future conversion into an Arts and Culture Centre. Prior to the purchase of the building, VG+ Architects, completed an Arts Centre Feasibility Study for the City of Cornwall. This study recommended that a new Arts Centre be established in a new addition to the Civic Complex.



When the former BMO building at 159 Pitt St. was listed for sale in early 2018 a group comprised of members of the local Arts Community, approached City Administration with a proposal to consider purchasing 159 Pitt St. for conversion into an Arts Centre, as an alternative to the recommended addition to the Civic Complex. The group indicated that they preferred the downtown location and historic façade that 159 Pitt St. offered as compared to an addition to the Civic Complex.

VG+ Architects were retained to complete a "Fit Test" study to determine the suitability of converting the building into an Arts Centre. The "Fit Test" study concluded that the building could be converted into an Arts Centre containing a black box theatre, lounge area, gallery space and administrative space. The study included three floor plan concepts for the Arts Centre with construction estimates for each. The image below is a conceptual floor plan listed as Option C within the "Fit Test" Study.

A community group called the Arts Collective has been formed with a mandate to raise \$1 million from the community to contribute to the construction costs for a new Arts Centre.



Parks and Recreation Division

Project Name: Recreation Master Plan Update

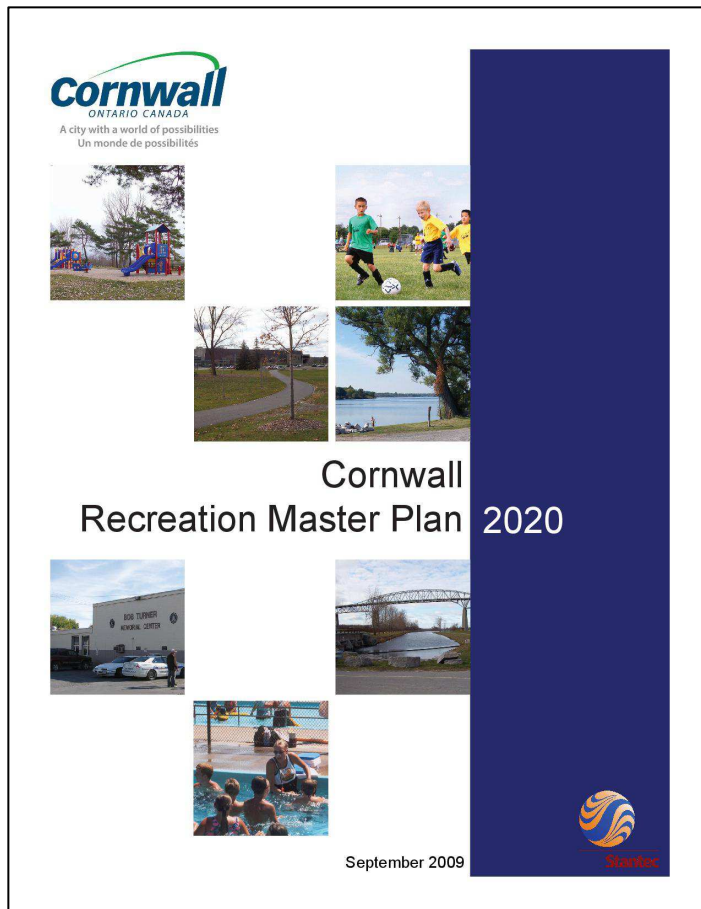
Funding: \$43,800 Development Charges
16,200 Tax Base
\$60,000

The Department of Parks and Recreation's existing Recreation Master Plan is scheduled to expire at the end of 2019.

The Recreation Master Plan is a strategic planning document that sets out the needs and priorities for recreation facilities, programs and activities, and parks and open spaces to the year 2030.

It is proposed to retain a consultant to create an updated Recreation Master Plan. Public engagement and consultation will be a key component to assessing the community's needs for new recreation facilities, programs and activities as well as assessing the effectiveness and needs of existing programs that are currently offered by the City.

The community's recreation needs are continually evolving. Some examples of recreation facility needs that have recently been brought to the Recreation Department's attention by various community groups that weren't identified during the creation of the 2020 Recreation Master Plan are Cricket, BMX cycling, and Pickleball.



Shown here is the Recreation Master Plan 2020 document which was created in 2009

Parks and Recreation

Project Name: Civic Complex Floors in Dressing Rooms

Funding: \$55,000 Recreation Facilities Reserve

The existing flooring in the Civic Complex dressing rooms and hallways has reached the end of its life expectancy and its condition has deteriorated such that replacement is required.

This is a two year project with the first phase (\$55,000) of the project approved in 2018. The first phase of this project was to replace the flooring in the dressing rooms as well as the hallway between the dressing rooms and player benches.

The second phase of the project (\$55,000) proposes to replace the flooring in the remaining dressing rooms (Colts dressing room, former Nationals dressing room, and Fiesta dressing room).

The tender for the supply, delivery, and installation of this flooring was approved by Council at the December 10, 2018 meeting (report number 2018-76-PU) which includes the 2019 funding contribution from the Recreation Facilities Reserve of \$55,000.



Parks and Recreation

Project Name: Civic Complex Arena Spectator Seat Replacement

Funding: \$55,000 Recreation Facilities Reserve

The condition of the existing blue spectator seats at the Civic Complex has deteriorated to the point that they are in need of refurbishment. The seating dates back to the original construction of the facility. The support springs within the seat cushions no longer provide proper support and the seat's fabric has become worn and stained. The original supplier of the existing blue spectator seats, American Seating, is still in operation. We propose to replace the bottom portion of the seats only with new seat bottoms from the existing supplier, as the steel supports and backrests remain in reasonable condition. There are approximately 4,000 existing blue spectator seats that require refurbishment.

This project is part of a new multi-year program. An amount of \$55,000 is proposed to be budgeted in each of the next 5 years.

The photo below shows the existing blue spectator seats along the south side of the arena as well as the red seats which were installed in advance of the RBC Cup hosted at the facility in 2008.



Parks and Recreation

Project Name: King George Park Washroom

Funding: \$25,000 Tax Base

This project involves the transport of an existing portable to King George Park and its conversion into a public washroom.

The portable was acquired through the purchase of a former school property at the corner of Ninth and McConnell.



This is the second year of a two year project. As part of the 2018 approved budget, \$25,000 was budgeted to relocate the portable from its current location to King George Park. In 2019, an additional \$25,000 is budgeted to convert the relocated portable into a public washroom.

Since the demolition of the former clubhouse at King George Park, the City pays for porta potties to provide temporary washroom facilities at the park through the summer months. This project would address the need for a more permanent washroom facility.

The photo below illustrates the proposed location of the washroom facility outside of the field fencing beyond right field.



Parks and Recreation

Project Name: Bikepath Retaining Wall Structure Replacement

Funding: \$1,000,000 Financing

Four retaining walls located along the Montreal Rd. bikepath have deteriorated as a result of exposure to road salt and have begun to fail.

The existing retaining walls total approximately 800m in length and range in height between 0.6m and 1.5m. The retaining walls are required to provide support for the bikepath, due to the difference in elevation between the bikepath and the existing slope along the river bank. As the walls continue to fail, erosion of the bikepath surface can be expected, resulting in the temporary closures of the bikepath in these sections.



In order to facilitate the replacement of the retaining wall systems, the existing bikepath and railing system will also require removal and replacement.

It is proposed to replace the existing wall with another soil retention system that is proven to be more resistant to road salt. Also, as part of the design of the replacement retention system, care will be taken when designing the surrounding grading to direct salt laden stormwater runoff away from any precast concrete or steel products.

It is anticipated to complete the surveying and design work in 2019, then tender the project for 2020 construction. The estimated project budget includes the surveying and design costs as well as construction costs. Inset are two photos of sections of retaining wall that are in the worst condition.



Parks and Recreation

Project Name: Emerald Ash Borer

Funding: \$300,000 Financing

The purpose of the Emerald Ash Borer (EAB) program is to deal with the Emerald Ash Borer, an invasive species which kills ash trees. The program involves the removal of infected ash trees, injecting existing ash trees with a treatment to deter EAB insects, and planting replacement trees.



This capital project is a continuation of the program as approved by Council in 2014.

The Emerald Ash Borer is confirmed to be well established in the Cornwall Area, and the effect on the local ash tree population is becoming increasingly evident. Staff annually review the City's existing ash tree inventory and identify trees that require removal. The plan provides replanting of removed trees on a one to one ratio.

The EAB Management Plan is anticipated to be a 10-15 year long project, which will inevitably result in the removal of all ash trees from municipally-owned properties. The photo below provides an example of the damage that can result from the Emerald Ash Borer. The same street pictured here within a 3-year time period.



Parks and Recreation

Project Name: Bicycle Path Repairs

Funding: \$50,000 Gas Tax

This project will address Health/Safety issues with the existing bicycle path systems within the City's boundaries.

This project is an annual project that typically allows for the resurfacing of approximately 1-1.5 kilometers of the City's existing bicycle path infrastructure. The City maintains approximately 40km of bicycle paths within the City boundaries. This level of funding allows the paths to be resurfaced on a 30-35 year cycle.

Typically this annual maintenance work is included within the City's Various City Streets Asphalt Resurfacing Tender in order to obtain the most competitive pricing. However, should the proposed Montreal Rd. Retaining Wall project be approved, we would resurface areas of the bikepath along Montreal Rd. in between the sections of the path where the retaining wall is proposed to be reconstructed and include this work as part of the retaining wall project tender. By coordinating this resurfacing work with the proposed retaining wall construction work, a continuous section of bikepath, approximately 2km long, would be rehabilitated.

This photo shows a section of existing bikepath along Vincent Massey Dr. adjacent to Guindon Park.



Parks and Recreation

Project Name: Docks at RCAF and Guindon Park

Funding: \$80,000 Tax Base

The existing docks at both Guindon Park and the RCAF boat launch are aging and will need to be replaced. In 2019, this capital project will include replacement docks for the RCAF boat launch.

This multiyear project was originally proposed to replace the docks over multiple years, with the RCAF docks being first (approved in the 2018 budget) and the Guindon Park docks proposed for 2019.

However, in the fall of 2018, this project was deferred as a cost saving measure to offset operating budget overages. As a result, the RCAF docks are proposed to be replaced in 2019 and the Guindon Park docks in 2020.

The existing docks at the RCAF boat launch are founded on steel float systems. Cranes are used to install and remove the docks at the beginning and end of each season. Due to the age of the existing docks, Administration is concerned that if an existing dock float were to puncture, the dock would need to be removed for the remainder of the boating season.

It is proposed to replace the existing docks using docks founded on aluminum floats with wheels mounted to the underside. Docks could then be towed up and down the boat launch at the beginning and end of each season, thus negating the requirement to use cranes.



A dock at RCAF being removed by crane for the purposes of a repair in August 2017.



An aerial photo of the boat launch in Lamoureux Park behind the RCAF.

2019 TEN YEAR CAPITAL FORECAST

CAPITAL FORECAST FOR THE YEARS 2019 - 2028

DESCRIPTION	EXPENDITURE									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
FACILITIES										
1 COMPLEX	60									
Recreation Master Plan Update										
Main Concourse Renovations					75					
Restaurant Equipment Upgrade				55	55					
Arena Spectator Seat Replacement	55	55	55		100					
Office Upgrade (Carpets)							200			
Parking Lot Improvement (Paving / Railings)										
Dressing Room / Hallway & Showers	125									
Arc Flash Analysis	250									
Civic Complex LED Arena Lighting										
2 Aquatic Centre	55		350	350		500	300		300	
Pool Lights / Window Filming										
Change Room Floors										
Dectron										
Slide Repairs / Replacement										
Filtration Syst. Upgrade										
Heat Recovery Unit Replacement					500					
Aquatic Centre - Other	500									
Ventilation Improvements and UV Disinfection								300		
3 Benson Centre	300	2,000								
LED Arena Lighting										
Soccer Fields										
Dressing Room & Hallway Flooring										
Automotive Room Flooring		25					100			
Arena Duct Work	80									
4 Arts Centre	300	5,500								
Arts Centre Design										
Arts Centre Renovations										
5 Joe St.Denis Field				300						
Phase 1 Replace Existing Field Lighting										
Phase 2 Artificial Turf				1,100	1,100					
6 Outdoor Pools	55	60	55	60	60	60				
Upgrade Outdoor Pool Filter Systems										
Resurface Pool Basins Concrete, 1 Per Year										
Menard Park Splash Pad				450						

2019 TEN YEAR CAPITAL FORECAST

CAPITAL FORECAST FOR THE YEARS 2019 - 2028

DESCRIPTION	EXPENDITURE									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
7 Tennis Courts										
Refurbish One Court Per Year		60	60	60	60	60				
Replace Old Lighting 2 Courts Per Year		50	50	50	50	50				
Saunders Drive (Pickle Ball)		120								
8 Playing Fields	85		60							75
Reg Campbell Ball Netting										
Brian Tardif Field Lighting										
Upgrade Ball Lights At Optimist Park			60		60					
Upgrade Soccer Lights At Optimist Park				75						
Reg Campbell Parking Improvements										
Brian Tardif Field Netting	55		110	110						
Optimist Park Soccer Fields										
9 Marina		250								
Above Ground Fuel Tanks										
10 Big Ben				60						
New Snow Gun							200			
Replace Tow Lift										
11 Parks & Landscape										
Docks at RCAF and Guindon Park	80	40								
Playground Structure Replacement		120		120		120		120		
Emerald Ash Borer	300	300	300	300	300	300	300	300	300	300
Guindon Park Trail Upgrade										
Off Leach Dog Park (Lamoureux)		50	50	50	50		90	50	50	50
Bicycle Path Repairs										
Outdoor Park Furniture			55							
Upgrade Of Skate Board Park / Bmx		65								
King George Park Washroom	25									
Guindon Park Road Improvements		50								
Guindon Park Camping			30							
Arts In The Park Improvements										
Bikepath Retaining Wall Structure Replacement	1,000									
RECREATION SERVICES SUBTOTAL	3,375	8,745	1,285	3,140	2,410	2,340	1,040	770	650	425

2019 CAPITAL SUBMISSION

**CAPITAL BY BUSINESS UNIT
FOR THE YEAR 2019**

DESCRIPTION	Page #	2018 GROSS BUDGET	2019 GROSS SUBMISSION	EXTERNAL FUNDING		RESERVES			2019 TAX BASE
				GRANTS	FINANCING	DEV. CHARGES	GAS TAX	SPECIFIC RESERVE	
Building / Bylaw Software Upgrade - CityView	C-72		50.0						50.0
Building / Bylaw		-	50.0	-	-	-	-	-	50.0

**COUNCIL APPROVED CAPITAL BUDGETS
FROM PRIOR YEARS**

DESCRIPTION	GROSS SUBMISSION	EXTERNAL FUNDING		RESERVES			TAX BASE
		GRANTS	FINANCING	DEV. CHARGES	GAS TAX	SPECIFIC RESERVE	
2018 Council Approved Capital							
2017 Council Approved Capital							
2016 Council Approved Capital							

Building Services and Bylaw Enforcement

Project Name: Software Upgrade – CityView

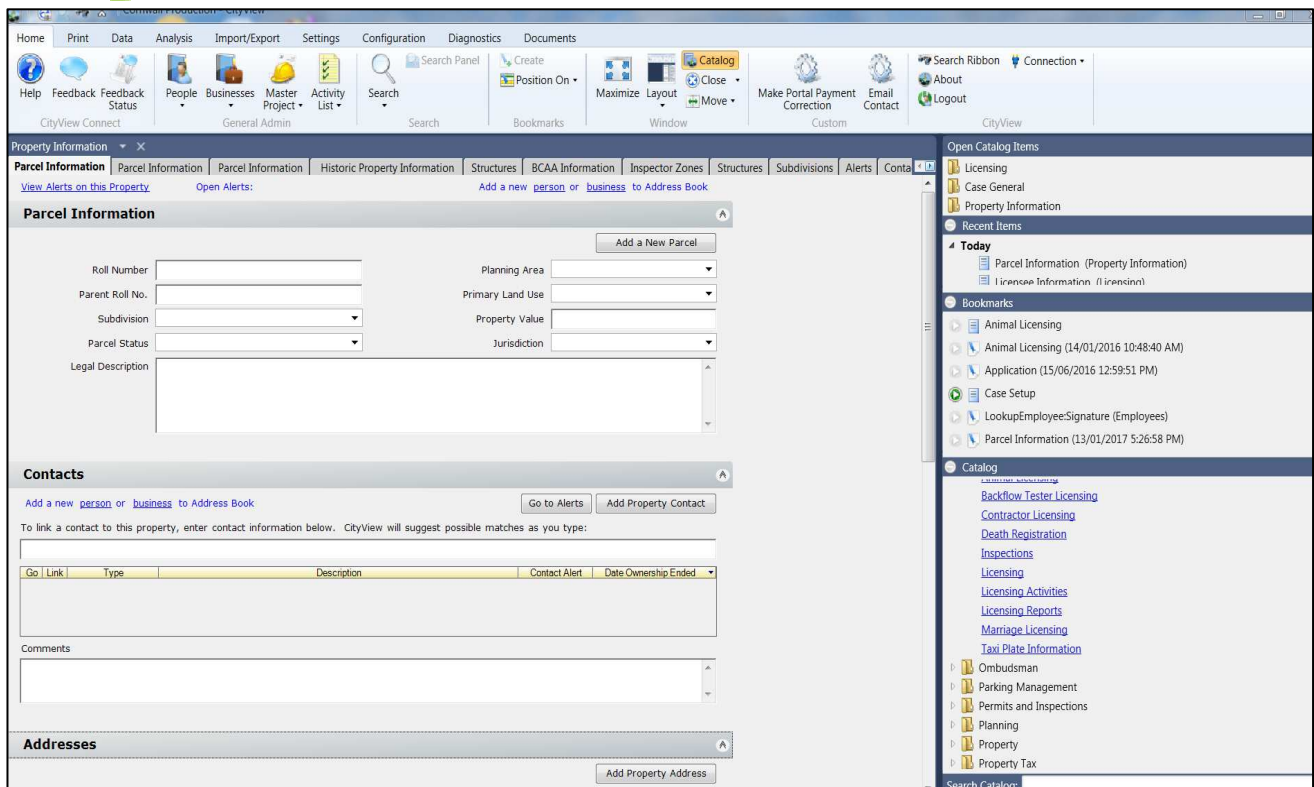
Funding: \$50,000 Tax Base

CityView municipal software was created by former public sector employees and was designed to serve a wide realm of municipal government operations. The City of Cornwall has been using CityView since 1999 for record management and enforcement, which includes: permit related site inspections and enforcement orders, business licences, animal control, bylaw complaints, property standards, and service performance reporting.

Implemented in 2018, mobile operations have increased Inspector and Bylaw Officer productivity and helped streamline customer service needs. The software supports shorter building permit issuance timelines and reduces paper and manual processes.

The original server based version will no longer be supported in the next two to four years. This upgrade will provide a contemporary web-based solution. Delivery and training is included in the upgrade.

The software is also being used by the Planning Division and work is ongoing towards linking other departments with CityView, (i.e. Fire Department and Municipal Works).



2019 TEN YEAR CAPITAL FORECAST

CAPITAL FORECAST FOR THE YEARS 2019 - 2028

BUILDING AND BYLAW

DESCRIPTION	EXPENDITURE									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Software Upgrade - CityView	50									
BUILDING AND BYLAW	50	0	0	0	0	0	0	0	0	0

2019 CAPITAL SUBMISSION

**CAPITAL BY BUSINESS UNIT
FOR THE YEAR 2019**

*Please note all figures are in 000s of dollars

DESCRIPTION	Page #	2018 GROSS BUDGET	2019 GROSS SUBMISSION	EXTERNAL FUNDING		RESERVES			2019 TAX BASE
				GRANTS	FINANCING	DEV. CHARGES	GAS TAX	SPECIFIC RESERVE	
ITT									
Microsoft Office Upgrade		40.0	-						
SharePoint implementation		355.0	-						
Corporate Email Replacement		73.0	-						
Desktop Virtualization		340.0	-						
Finance									
Upgrade Accounting System		90.0	-						
Financial Services		898.0	-	-	-	-	-	-	-

**COUNCIL APPROVED CAPITAL BUDGETS
FROM PRIOR YEARS**

DESCRIPTION	GROSS SUBMISSION	EXTERNAL FUNDING		RESERVES			TAX BASE
		GRANTS	FINANCING	DEV. CHARGES	GAS TAX	SPECIFIC RESERVE	
2018 Council Approved Capital	898.0		768.0			20.0	110.0
2017 Council Approved Capital	1,200.0	60.0	1,000.0			100.0	40.0
2016 Council Approved Capital	270.0				150.0	30.0	90.0

Financial Services

Financial Services does not have Capital requests for 2019. Staff continue to work on the following multi-year capital projects:

Project Name: Corporate Email Replacement

The Corporation will be changing its email platform from Lotus Notes to Microsoft Outlook. Benefits of replacing Lotus Notes with Outlook: Outlook will run on a Microsoft Exchange Server which will allow for seamless user and object management on the network; Integrates seamlessly with a Microsoft suite of productivity solutions as most software solutions are created to use Outlook for their email functions; Familiar platform for employees; Simplified client setup and troubleshooting; Security appliances have built in tools that can be used with Outlook only.

Project Name: Implementation of SharePoint

SharePoint is the platform for a secure Electronic Document and Records Management System (EDRMS) which ensures legislative and regulatory compliance (including Freedom of Information requests). SharePoint will ensure the safeguarding of the City's vital information, including historical records. SharePoint is an industry leading platform for team collaboration, web portals, intranets/extranets, enterprise search, content management, document sharing, integrated applications, customized workspaces, shared calendars, workflow forms, business process management and application development.

Project Name: Upgrade of the Corporate Phone System

The current phone system is reaching its end of life and replacement components are becoming increasingly difficult to source. Phone systems and their supporting technologies represent a vital tool required by the Corporation to perform its day to day functions and provide customer service both internally and externally. Given the number of service locations, facilities operated by the City and the vast array of services provided, the reliance on these combined technologies becomes a critical component in the Corporation's ability to successfully deliver services.

Project Name: Desktop Virtualization

Virtual desktop infrastructure (VDI) is the practice of hosting a desktop operating system within a virtual machine running on a centralized server. VDI encapsulates a software application into one virtual file which will enable upgrades (for the benefit of the entire Corporation) to be completed in one action. VDI is also a green solution as all applications will be housed on a server which means computers will be replaced by a far less powerful device.

Project Name: Accounting/HR Software Upgrade

Financial Services and HR Services will be implementing Diamond Municipal Solutions, replacing its current accounting and in-house built software applications.

2019 TEN YEAR CAPITAL FORECAST

CAPITAL FORECAST FOR THE YEARS 2019 - 2028

FINANCIAL SERVICES

DESCRIPTION	EXPENDITURE									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
INFORMATION TECHNOLOGY					165	150	150	200		200
Microsoft Office Upgrade		100		150		150	200			200
SharePoint Application Development and Procurement				100						
Corporate Phone System - Upgrade Infrastructure				100	80		200		150	100
Desktop Virtualization - Upgrade Infrastructure				100			100			
Storage		100		100			100			
Servers and virtual licencing - Renewal Costs				75	100	100	150			125
Network			100		100	100			100	
ITT Strategic Plan		75					100			
Other ITT Requirements		225	300	75	55	250	0	0	150	75
FINANCE								150		
Upgrade Accounting Systems								150		
Tax / Water System Upgrade									100	
Budgeting Software Upgrade			100							
FINANCIAL SERVICES	0	500	500	500	500	500	500	500	500	500

2019 CAPITAL SUBMISSION

**CAPITAL BY BUSINESS UNIT
FOR THE YEAR 2019**

*Please note all figures are in 000s of dollars

DESCRIPTION	Page #	2018 GROSS BUDGET	2019 GROSS SUBMISSION	EXTERNAL FUNDING		RESERVES			2019 TAX BASE
				GRANTS	FINANCING	DEV. CHARGES	GAS TAX	SPECIFIC RESERVE	
FIRE SERVICES									
Fire Headquarters and Training Centre	C-78		3,231.2		2,900.0	331.2			
Rescue Boat	C-79		90.0					90.0	
Training Centre - Site Preparation		60.0							
Fire Services Total		60.0	3,321.2	0.0	2,900.0	331.2	0.0	90.0	0.0

**COUNCIL APPROVED CAPITAL BUDGETS
FROM PRIOR YEARS**

DESCRIPTION	GROSS SUBMISSION	EXTERNAL FUNDING		RESERVES			TAX BASE
		GRANTS	FINANCING	DEV. CHARGES	GAS TAX	SPECIFIC RESERVE	
2018 Council Approved Capital	60.0						60.0
2017 Council Approved Capital	50.0						50.0
2016 Council Approved Capital							

Fire Services

Project Name: Fire Headquarters and Training Centre

Funding: \$8.7M (3 year project, equally budgeted at \$2.9M per year)

A new Fire Station is included in the City's Long-Term Financial Plan in the year 2020. Throughout the construction period, the City will short-term borrow (if necessary) for project costs until the project is complete. It is proposed that the project be funded through financing and development charges.

Over the years, the City has undertaken numerous studies and modeling exercises which demonstrated that:

- moving the current fire station headquarters to the northwest quadrant of the City (in the general vicinity of the intersection of Brookdale Avenue and Vincent-Massey Drive) would improve fire service response times and avoid duplication of coverage; and,
- the Cornwall Fire Service (CFS) would benefit from development of a Training Centre alongside the proposed Fire Station. Currently, 61 CFS staff members are sent offsite to receive training which results in time off from regular duty, additional compensation and training schedule planning difficulties (CFS staff is dependent on the external training agency's availability making it difficult to achieve annual training goals).



Colliers Project Leaders was engaged by the City to complete a Business Plan to identify potential sites, space requirement, schematic facility space layout and needs, affordability, physical components, suitable location and cost estimates for the proposed Fire Station and Training Centre in the City's northwest quadrant. As a result of this study, which will be presented to Council in 2019, we have clarity on the projected class "D" estimate¹ for the new station.

The department is proposing to begin the process with the purchase of land in 2019 in order to design build by 2021. Please note that this project is financed, and as such, the direct impact to the budget is though financing charges.



¹ Class "D" estimate is a projected unit cost analysis format (such as cost per m² or other measurement unit) based upon a list of project requirements (ie. scope) and assumptions.

Fire Services

Project Name: Rescue Boat

Funding: \$90,000 Equipment and Vehicles Reserve

The Cornwall Fire Services rescue boat has reached its end of life. Our attempts at maintaining it in operational condition has been impacted by a major break in the internal ballasts. The boat is partially inflatable, and therefore cannot be welded or fixed in any meaningful way.

The *Canadian Coast Guard* is looking for primary Search and Rescue capabilities in this area. They have recommended that, if we were properly equipped with a 25-30ft boat with twin engines, they would provide training and logistical support. The Cornwall Fire Service would then provide increased operational capabilities under reasonable year-over-year investments.

This capital request is to purchase an appropriate boat to meet our water-based rescue mandate, as outlined in our Establishing and Regulating bylaw.



2019 TEN YEAR CAPITAL FORECAST

CAPITAL FORECAST FOR THE YEARS 2019 - 2028

FIRE SERVICES

DESCRIPTION	EXPENDITURE									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Facilities										
Fire Headquarters and Training Centre	2,900	2,900	2,900							
Fleet Vehicles										
Pumper 3 Replacement		76	750		87		1,000			
Aerial 1 Truck Replacement										
Support Vehicles										
HazMAT								60		
Equipment										
Rescue Boat	90									
Extrication Equipment		64								
Training Center Equipment		25								
General Equipment		10		60					100	50
FIRE SERVICES SUBTOTAL	2,990	3,075	3,650	60	87	0	1,000	60	100	50

2019 CAPITAL SUBMISSION

**CAPITAL BY BUSINESS UNIT
FOR THE YEAR 2019**

*Please note all figures are in 000s of dollars

DESCRIPTION	Page #	2018 GROSS BUDGET	2019 GROSS SUBMISSION	EXTERNAL FUNDING		RESERVES			2019 TAX BASE
				GRANTS	FINANCING	DEV. CHARGES	GAS TAX	SPECIFIC RESERVE	
Cornwall SDG Paramedic and Emergency Management Services									
Ambulance Replacement	C-82	783.0	525.0					525.0	
Toughbook Computers	C-83	58.0	58.0					58.0	
Defibrillators	C-84		29.0					29.0	
PAD Program (Defibrillators)	C-85	141.0	17.0					17.0	
PAD Vehicle Replacement	C-86		31.0					31.0	
Automatic CPR Devices		70.0							
Cornwall SDG Paramedic and Emergency Management Services		1,052.0	660.0	-	-	-	-	660.0	-

**COUNCIL APPROVED CAPITAL BUDGETS
FROM PRIOR YEARS**

DESCRIPTION	GROSS SUBMISSION	EXTERNAL FUNDING		RESERVES			TAX BASE
		GRANTS	FINANCING	DEV. CHARGES	GAS TAX	SPECIFIC RESERVE	
2018 Council Approved Capital	1,052.0		435.0			617.0	
2017 Council Approved Capital	497.0					497.0	
2016 Council Approved Capital	589.0					589.0	

Cornwall SDG Paramedic & Emergency Management Services

Project Name: Ambulance Replacement

Funding: \$525,000 Land Ambulance Reserve

The fleet renewal program for ambulances is ongoing, with approximately three replaced each year. Ambulances are replaced in regular intervals in order to maintain their reliability as increased repair costs and downtime begins to occur at 54 months. The three ambulances included in the 2019 budget submission are expected to be delivered by the Spring of 2019.

The ambulances being replaced have over 350,000 kilometers. Although regular fleet maintenance is preformed, the number of repairs tends to increase with older vehicles, leading to more downtime and increased costs. Reliability of the ambulance fleet is integral to the ability to respond to emergencies.

A new ambulance is estimated to cost \$175,000. The total cost for three new ambulances is \$525,000. The old ambulances are sold and generate approximately \$8,000 to \$9,000 in revenue depending on the condition.

As per report 2018-66-PU, Council approved the purchase of these ambulances in 2018. This was done to secure the best price, as well as giving sufficient manufacturing lead time to ensure delivery by Spring of 2019.



Cornwall SDG Paramedic & Emergency Management Services

Project Name: Toughbook Computers

Funding: \$58,000 Land Ambulance Reserve

Toughbooks are portable computers used by paramedics in the field. They differ from regular portable laptop computers in that they must be built to withstand the rugged conditions which are inherent in the paramedic business. They are also mounted into restraints when used in moving vehicles.

These computers are essential for Paramedics in order to meet documentation standards. They are instrumental for data retention and data analysis. They are also used to transfer patient charts to the hospital which is essential to continuation of care for the patient. These computers can also be used for navigational assistance in the field.



The expected useful life is approximately 5 years. The computers purchased in 2019 are scheduled to replace those in the field which are reaching the end of their useful life. There are approximately 11 computers scheduled for replacement in 2019.

Each Toughbook computer is approximately \$5,200, for a total cost of approximately \$58,000.

The retired computers are well used. The possibility of resale for these units is unlikely as the cost to repair them is nearing the price of a new computers.

Cornwall SDG Paramedic & Emergency Management Services

Project Name: Defibrillators

Funding: \$29,000 Land Ambulance Reserve

With increased demand for the Community Paramedic (CP) program, an additional defibrillator is required.

The Community Paramedic (CP) program has the demand to staff two or more paramedics per day. This is an increase of one paramedic per day, which will be staffed using paramedics on modified duty. This project would enhance the current complement to allow more than one community paramedic staffed each day.

The objective of this program is to manage non emergency patients without the utilization of an ambulance. Success in this program is measured by the number of hours an ambulance is available. Available ambulances are instrumental to response times.

Community Paramedics are limited by the resources available. The demand in the community is great and the opportunity to utilize medics in a different capacity would contribute to community well-being.



Cornwall SDG Paramedic & Emergency Management Services

Project Name: PAD Program (Defibrillators)

Funding: \$17,000 Land Ambulance Reserve

Paramedic Services is requesting to use \$17,000 from the Land Ambulance Reserve for the replacement of defibrillators.

Public Access defibrillators are the devices located in municipally-owned buildings which can be used to deliver a shock to a person who has suffered a sudden cardiac arrest. The key to surviving an out of hospital cardiac arrest is the delivery of a shock while the heart remains in ventricular fibrillation or ventricular tachycardia. The more points of access to a defibrillator is thought to increase the chance one will be available when needed.



Paramedic Services is anticipating that approximately 53 units will need to be replaced in 2019. Each unit is just under \$3,000.

In 2018, \$141,000 was budgeted to replace 47 units. These units passed their yearly maintenance inspections, meaning that they exceeded their life cycle replacement expectations. Based on the fact they all passed the yearly test, it was deemed that they should remain in service for another year.

With \$141,000 being carried forward from 2018, the additional funds required in 2019 for this capital project is \$17,000.

Cornwall SDG Paramedic & Emergency Management Services

Project Name: PAD Vehicle Replacement

Funding: \$31,000 Land Ambulance Reserve

This vehicle is primarily used by the Public Access Defibrillation (PAD) program. The former PAD vehicle was a retired 2007 first response vehicle. This vehicle reached the end of its life expectancy part way through 2018 and has been removed from the road for safety reasons.

There are over 114 public access defibrillators located throughout SDG and these defibrillators are part of a regular maintenance program. Access to the various defibrillator sites is limited to the hours of operation of the buildings, making it difficult to coordinate with existing vehicles within the fleet.



The defibrillators are located throughout Cornwall, Stormont, Dundas and Glengarry. It is vital that these units follow the recommended maintenance schedule to ensure the Public Access Defibrillators function as intended.

Three costing models were explored (ie. leasing the vehicle or paying mileage). The option to purchase the vehicle is the most cost effective solution.

Paramedic Services has also budgeted an increase in CPR instruction so that Citizen CPR is enhanced. This vehicle would also be utilized to accommodate this initiative.



2019 TEN YEAR CAPITAL FORECAST

CAPITAL FORECAST FOR THE YEARS 2019 - 2028

Cornwall SDG Paramedic and Emergency Management Services

DESCRIPTION	EXPENDITURE									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Cornwall SDG Paramedic and Emergency Management Services										
Ambulance Replacement	525	525	350	525	350	700	525	525	525	525
First Response Vehicles	58	80	58	240	58	58	160	58	58	58
Toughbook Computers	29	460	150	33	156	141	17	90	42	175
Defibrillators	17	31	60	60	60	60	60	60	60	60
Emergency Command Vehicle										
Pad Program (Defibrillators)										
Stair Chairs										
PAD Vehicle Replacement										
Automatic CPR Devices										
Stretchers										
Study										
Cornwall SDG Paramedic and Emergency Management Services Subtotal	660	1,183	444	681	831	899	1,020	832	1,061	583

2019 CAPITAL SUBMISSION

**CAPITAL BY BUSINESS UNIT
FOR THE YEAR 2019**

*Please note all figures are in 000s of dollars

DESCRIPTION	Page #	2018 GROSS BUDGET	2019 GROSS SUBMISSION	EXTERNAL FUNDING		RESERVES			2019 TAX BASE
				GRANTS	COUNTIES	DEV. CHARGES	GAS TAX	SPECIFIC RESERVE	
GLEN STOR DUN LODGE									
Flooring Replacement - Third Floor	C-89	150.0	100.0		30.0				70.0
Resident Equipment	C-90	65.0	55.0		16.5				38.5
Building Requirements - Various	C-91		48.0		14.4				33.6
Kitchen Equipment Replacement	C-92	75.0	50.0		15.0				35.0
Building Requirements - Air Conditioning Units	C-93	15.0	44.0		13.2				30.8
Building Requirements - Elevators	C-94		60.0		18.0				42.0
Building Requirements - Lighting	C-95		42.0		12.6				29.4
Building Requirements - Building Management Upgrades		70.5							
Building Requirements - Exterior		50.0							
Building Requirements - Retaining Wall, Fencing, and Lattice		96.0							
Building Requirements - Furniture		55.0							
Glen Stor Dun Lodge		576.5	399.0	-	119.7	-	-	-	279.3

**COUNCIL APPROVED CAPITAL BUDGETS
FROM PRIOR YEARS**

DESCRIPTION	GROSS SUBMISSION	EXTERNAL FUNDING		RESERVES			TAX BASE
		GRANTS	COUNTIES	DEV. CHARGES	GAS TAX	SPECIFIC RESERVE	
2018 Council Approved Capital	576.5		173.0				403.6
2017 Council Approved Capital	526.0		157.8				368.2
2016 Council Approved Capital	524.5		157.4				367.1

Glen Stor Dun Lodge

Project Name: Flooring Replacement – Third Floor

Funding: \$ 70,000 Tax Base
 30,000 Counties
 \$100,000

Over the past few years, replacement of the original flooring at the GSDL has been addressed. For example, the flooring in the fourth floor hallways and common areas have been replaced as well as the majority of ground floor.

This project will address the resident's rooms and hallways on the third floor. This floor is aging and reaching the end of its useful life. New flooring is non-skid and low maintenance, which provides better infection control. The flooring is easier for our staff to maintain and requires less time for cleaning and maintenance.

This project is part of our asset replacement program which agrees with the City's Asset Management Plan.



Glen Stor Dun Lodge

Project Name: Resident Equipment

Funding: \$38,500 Tax Base
 16,500 Counties
 \$55,000

Floor Lifts (\$15,000)

To manage the complex resident population, new floor lifts continue to be needed. These lifts are part of an ongoing replacement program. Some of our present lifts are no longer serviceable. This will provide a wider range of capabilities to better serve our residents. In 2019, we are requesting one new lift.

Ceiling Lifts (\$15,000)

As per our lift replacement program, we have started adding additional ceiling lifts in our resident rooms. We currently have 21 out of the 120 rooms set up with this equipment. Our goal is to install ceiling tracks in every room with the capability of adding a lift mechanism to the track as needed. This project will address approximately 8 lifts.

Electric beds (\$25,000)

Similar to our lift replacement program initiated in 2017, we have begun replacing electric beds as replacement parts are becoming obsolete. We currently have 38 beds spread throughout the facility. With new Hi-Low beds estimated at \$2,000 each, we are requesting that approximately 12 beds will be replaced in 2019.



Glen Stor Dun Lodge

Project Name: Building Requirements - Various

Funding: \$33,600 Tax Base
\$14,400 Counties
\$48,000

The items below are part of the GSDL asset replacement programs which agrees with the City's Asset Management Plan. Items identified for replacement in 2019 are:

Asphalt repairs (\$15,000)

The asphalt surrounding the Lodge is originally from 1994 when the facility was first built. In 2018, half of the west side entrance was resurfaced along with new curbing and a catch basin. This project will address the other half of the entrance.

Door handle replacement - Year 1 of 4 (\$17,000)

All the door handles are original to the building. In the early 2000s the keying system changed to a more modern master system. In the last few years, many door handles required repairs, but parts are becoming more difficult to source. The replacement program will be phased-in over the next 4 years with 85 handles being changed each year. As handles are replaced, parts will be kept to ensure the functionality of the remaining handles. Each unit is estimated to be approximately \$200.



Sink and accessory replacement - Year 1 of 4 (\$16,000)

The sink, pipes and taps are original to the building. In the past few years both the taps and the pipes have corroded to the point where they have become unrepairable. Within the last couple of years, the chrome/copper pipe system has been converted to an abs/pvc system. This proposed capital project will be phased-in over 4 years. Approximately 40 units will be replaced each year at an estimated cost of \$400 each.



Glen Stor Dun Lodge

Project Name: Kitchen Equipment Replacement

Funding: \$35,000 Tax Base
 15,000 Counties
 \$50,000

Dining Room Furniture: \$17,000

Much of the dining room furniture has reached the end of its useful life. In 2018, new chairs were purchased for the second floor dining areas. In 2019, the chairs on the third floor have been identified for replacement. These chairs are specifically designed for health care, assuring the height is appropriate for the senior population and the seat material is made of soil proof crypton fabric.



As well, we are experiencing more complexity with resident admissions. In order to accommodate the needs of this demographic, there is a need for a new dining room table solution. These tables are designed for the health care field.

Smaller Dietary Equipment: \$33,000

The 2019 budget includes a continued investment in smaller equipment used in our kitchen and serveries. Many pieces of equipment that have exceeded their useful life include: Refrigerators, meat slicer, food cutter, water/ice machine, serving counters, and carts.

Glen Stor Dun Lodge

Project Name: Building Requirements - Air Conditioning Units

Funding: \$30,800 Tax Base
\$13,200 Counties
\$44,000

The GSDL is requesting funds to replace a variety of units that were installed in 1994. These units are reaching the end of their useful life and require ongoing repairs.

Replacement of these units will be staggered over the next 5 years as part of our asset replacement program which agrees with the City's Asset Management Plan.

Units identified for replacement in 2019 are:

Air conditioning units in 3 nursing and office areas (\$16,500)

These are original to the facility and repairs are becoming costly. Some units have been replaced in previous years.

Air supply unit in the tea room (\$20,000)

There are 4 air supply units throughout the Lodge. The air supply unit in the Tea Room has been problematic over the past year and has required on-going repairs. It has been identified as being a priority for 2019.

Fan centre circulation blowers on ground floor (\$7,500)

These blowers are situated in every common area. They work year round to circulate air as required. Original to the building, many of the motors are beyond repair. A total of 28 units have been identified for replacement in 2019 at approximately \$265 each.



Glen Stor Dun Lodge

Project Name: Building Requirements - Elevators

Funding: \$42,000 Tax Base
\$18,000 Counties
\$60,000

The GSDL has two passenger elevators as well as one service elevator. These elevators will be 25 years old this year. This project will address component modernization, which is anticipated in the next two years. This is a multi-year project that will be phased-in over the next two years with the project commencing in 2020.

Some of the major components of the modernization that will need to be addressed are:

- a) The door operators which maintain door speed and increase the elevator reliability, provide a smoother and quieter ride while improving passenger safety.
- b) The optiguard is a door protection system that uses infrared emitters and detectors to create an invisible safety net across the elevator entrance.
- c) Door restrictors are components that prevent residents from opening the door when the elevator is stalled between floors. The change is to meet elevator safety codes.
- d) Solid state starters eliminate power surges which reduce the impact on electrical equipment and minimize competition from electricity between lights, computers and elevators. They also prevent elevator motors from burning out by adjusting the current. Additionally, they reduce downtime, optimize motor start-up time and provide quieter operation.

This item is part of the asset replacement program which agrees with the City's Asset Management Plan.



Glen Stor Dun Lodge

Project Name: Building Requirements - Lighting

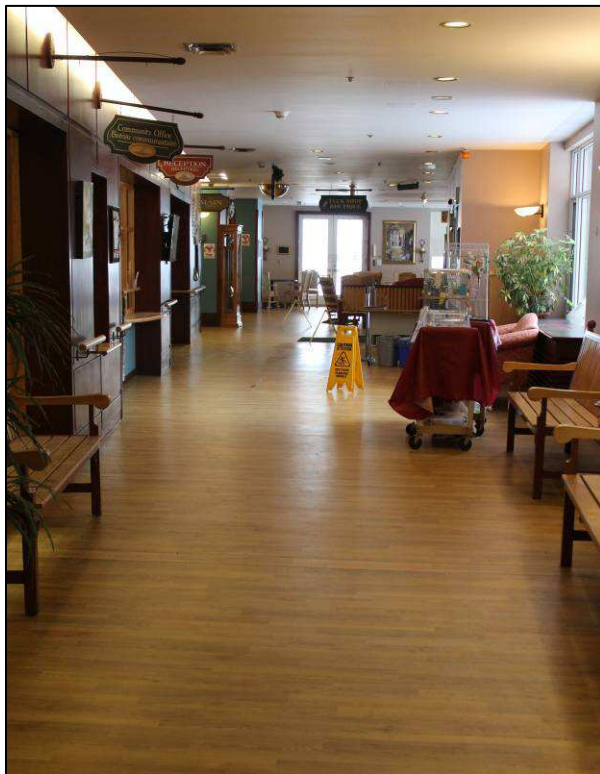
Funding: \$29,400 Tax Base
\$12,600 Counties
\$42,000

The Ministry of Health regulates the Lux (unit of measure for illuminance) required in different areas of the home under the O. Reg. 79/10 Sec. 18 of the Long Term Care Homes Act. The regulation requires the home to have minimum levels of lighting in various areas of the facility as well as minimum continuous levels in specific other spaces.

We have identified areas we believe may not be in compliance. For example, lighting on the main floor shows a variety of lighting levels and shadows. Furthermore, the majority of the lighting is original to the building and is not energy efficient. We are requesting that all lighting fixtures be reviewed and replaced over the next 4 years as part of an asset renewal program.

There are approximately 200 fixtures per floor and the average replacement cost is estimated to be \$210 per unit. Also, it is anticipated that some electrical work will be required during this project.

This is the first year of a four year replacement program. Lighting on the fourth floor has been identified for replacement in 2019 and will begin with Resident Care areas.



2019 TEN YEAR CAPITAL FORECAST - GLEN STOR DUN LODGE

CAPITAL FORECAST

FOR THE YEARS 2019 - 2028

DESCRIPTION	EXPENDITURE									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
1 BUILDING REQUIREMENTS										
Outdoor Furniture Replacement				25.0					20.0	
Indoor Furniture Replacement				20.0					20.0	
Awning								75.0		
Building Management System Upgrade										45.0
Hot water tank replacement - Domestic			40.0	15.0						
Hot water tank replacement - Kitchen										
Hot water tank replacement - Laundry										
Hydronic Boiler System Replacement										
Air conditioning Units- Office& Nursing areas	16.5	22.0	16.5		300.0					
Back up Generator										
Air Supply Unit # 1 - Building			125.0	100.0						
Air Supply Unit # 2 - Kitchen	20.0									
Air Supply Unit # 3 - Tea Room		20.0							20.0	
Air Supply Unit # 4 - Chapel	7.5	7.5	7.5	7.5						
Fan centre circulation blowers										
Brick veneer										
EIFS Work										
Fencing Work										
Concrete Stone Work										
Asphalt paving	15.0						20.0			
Door handle replacement program	17.0	17.0	17.0	17.0						
Sink and accessory replacement program	16.0	16.0	16.0	16.0						
2 passenger elevator hydraulic modernization	60.0	200.0								
2 passenger inground cylinder replacement		75.0	75.0							
1 passenger elevator hydraulic modernization										
Lighting 4th Floor	42.0									45.0
Lighting 3rd Floor		42.0								
Lighting 2ndFloor			42.0							
Lighting Ground Floor										
Mahogany refinishing program		30.0								
Total Building Requirements	194.0	429.5	339.0	242.5	300.0	0.0	150.0	75.0	60.0	110.0

2019 TEN YEAR CAPITAL FORECAST - GLEN STOR DUN LODGE

CAPITAL FORECAST

FOR THE YEARS 2019 - 2028

DESCRIPTION	EXPENDITURE									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2 FLOORING REPLACEMENT	100.0	150.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Third Floor Resident rooms										
Ground Floor West Wing			100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Ground Floor East Wing										
Common Areas										
Fourth Floor Resident rooms										
Total Flooring Replacement	100.0	150.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
3 KITCHEN / LAUNDRY EQUIPMENT	17.0	105.0	20.0	30.0	45.0	50.0	30.0	45.0	25.0	50.0
Condensers for Main Kitchen Fridge & Freezers					20.0				25.0	
Dining Room Chairs, Tables & Furnishings										
Range, Oven and Open fry pot										
Servery redesign x 6		105.0	27.0	30.0	45.0	50.0	30.0	45.0	25.0	25.0
Other dietary equipment	33.0	45.0								
Washers (Laundry)		40.0	40.0						40.0	45.0
Dryers (Laundry)			25.0							
Air Conditioning										
Total Kitchen / Laundry Equipment	50.0	190.0	112.0	30.0	65.0	50.0	30.0	45.0	90.0	145.0
4 RESIDENT EQUIPMENT	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Ceiling Lifts										
Floor Lifts	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Electric Beds	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Bath Tubs										
Blanket Warmers		10.0				10.0				
Bedroom Furniture		20.0		20.0	20.0	20.0	20.0	20.0	20.0	20.0
Floor Furnishings		20.0			20.0			20.0		
Mattresses		25.0		25.0		25.0		25.0		
Beauty Parlor Furnishings									10.0	
Total Resident Equipment	55.0	130.0	55.0	100.0	75.0	110.0	115.0	140.0	125.0	60.0
Total Capital	399.0	899.5	606.0	472.5	540.0	260.0	395.0	360.0	375.0	415.0