

# **THE CORPORATION OF THE CITY OF SARNIA**



## **DRAFT CAPITAL BUDGET 2022**

**THE CORPORATION OF THE  
CITY OF SARNIA**

**2022 DRAFT CAPITAL BUDGET**

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CITY OF SARNIA - 2022 DRAFT 10-YEAR CAPITAL PLAN

Category	Division	Department	Project Name	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Grand Total	
General Government	City Administration	Clerks	Electronic Documents and Records Management System			100,000								100,000	
		Economic Development	Sarnia Chris Hadfield Airport Infrastructure Upgrades	420,000	1,035,000	875,000	1,205,000	70,000						3,605,000	
		City Administration Total		420,000	1,035,000	975,000	1,205,000	70,000						3,705,000	
	Community Services	Facilities	Backflow Prevention	100,000											100,000
			City Hall Improvements	350,000	100,000	630,000	300,000							1,380,000	
			Clearwater Arena Improvements	300,000		3,000,000									3,300,000
		Facilities - TBD					2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	15,000,000		
		Harbour Dredging				3,000,000								3,000,000	
		Lochiel Kiwanis Centre Improvements		120,000	150,000	80,000								350,000	
		Progressive Auto Sales Arena Improvements	1,900,000	870,000	710,000									3,480,000	
		Sarnia Arena Improvements			400,000	1,700,000								2,100,000	
		Sarnia Library Improvements	80,000	180,000	225,000									485,000	
		Parks and Recreation	Blackwell Park			550,000	100,000								650,000
			Canatara Park	100,000	1,000,000		350,000								1,450,000
			Germain Park	300,000	2,120,000	2,400,000	300,000								5,120,000
			Neighbourhood Parks	150,000	150,000	150,000	165,000								615,000
			Norm Perry Park		80,000										80,000
			Parks & Recreation - TBD					2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	15,000,000	
			Playground Equipment Replacement	300,000											300,000
			Tecumseh Park/Cox Youth Centre Improvements	1,920,670	380,000	730,000	1,200,000								4,230,670
		Waterfront Improvements	150,000		164,000									314,000	
		Community Services Total		5,650,670	5,000,000	9,109,000	7,195,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	56,954,670	
		Corporate Services	Customer Service	Website Redevelopments	183,000										
	Emergency Management		Facility Access Control Systems	60,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000		260,000
			Petro-Chemical Area Projects			350,000									350,000
	Finance		Budgeting, Accounting, and Reporting Software			250,000	250,000								500,000
	Information Technology		Backup Solution	80,000											80,000
			IT Hardware Asset Lifecycle	365,000	220,000	240,000	240,000	260,000	260,000	260,000	260,000	260,000	260,000	260,000	2,625,000
			Virtual Server Infrastructure	90,000											90,000
	Corporate Services Total		778,000	245,000	865,000	515,000	285,000	285,000	285,000	285,000	285,000	285,000	260,000	4,088,000	
	Engineering & Operations	Engineering	Accessibility Improvements	192,500											192,500
			Active Transportation Projects	2,262,961	335,000	100,000									2,697,961
			Bridges & Culverts	850,000	1,600,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	18,450,000	
			City Entrance Signage	225,000											225,000
			Intersection Upgrades	900,000											900,000
			Oversized Load Corridor	5,200,000	436,402	217,598									5,854,000
			Parking Lot Reconstruction	450,000											450,000
			Road Rehabilitation	2,000,000	4,000,000	4,250,000	4,500,000	4,750,000	5,000,000	5,250,000	5,500,000	5,750,000	6,000,000	47,000,000	
			Shoreline Protection	3,250,000	3,250,000	3,250,000	3,250,000	3,250,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	26,250,000
			Streetlight Replacements	100,000	200,000	200,000	200,000	200,000	275,000	300,000	325,000	325,000	350,000	350,000	2,475,000
			Traffic Signals	100,000	150,000	150,000	150,000	150,000	250,000	300,000	325,000	325,000	350,000	350,000	2,250,000
			Transit Signal Priority & Accessibility		836,000	627,000	627,000	418,000	922,047						3,430,047
Transportation Master Plan & Streetscape Improvements			100,000	300,000	300,000	300,000	350,000	350,000	350,000	375,000	375,000	400,000	400,000	3,200,000	

CITY OF SARNIA - 2022 DRAFT 10-YEAR CAPITAL PLAN

Category	Division	Department	Project Name	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Grand Total	
General Government	Engineering & Operations	Operation Services	Former Michigan Avenue Landfill Remediation	300,000	300,000	100,000	100,000	75,000			75,000		75,000	1,025,000	
		Public Works	Public Works Facilities Improvements		1,500,000	500,000	400,000	1,400,000	200,000	200,000	200,000	450,000	500,000	5,350,000	
	Engineering & Operations Total			15,930,461	12,907,402	11,694,598	11,527,000	12,593,000	10,997,047	10,400,000	10,800,000	11,225,000	11,675,000	119,749,508	
	Fire Services	Fire Services	Fire Services	Bunker Gear Replacement	90,000	420,000					425,000				935,000
			Command Vehicle Replacement		150,000										150,000
			Fire Station 1 - Rehabilitation & Expansion		3,500,000										3,500,000
			Fire Station 3 - Demolition, Design, Construction	2,566,665											2,566,665
			Fire Truck Replacements			900,000		1,250,000	1,750,000		1,250,000	1,250,000	1,000,000	7,400,000	
			Marine Vessel Replacements				480,000								480,000
			Radio System & User Gear	1,596,969											1,596,969
			Records Management System	180,000											180,000
			Station Paving				570,000								570,000
	Fire Services Total			4,433,634	4,070,000	900,000	1,050,000	1,250,000	1,750,000	425,000	1,250,000	1,250,000	1,000,000	17,378,634	
General Government Total			27,212,765	23,257,402	23,543,598	21,492,000	19,198,000	18,032,047	16,110,000	17,335,000	17,760,000	17,935,000	201,875,812		
Transit	Engineering & Operations	Transit	Maintenance Equipment Upgrades/Replacements	385,000	330,000				450,000					1,165,000	
			Bus Stop Improvements	213,666	213,666	213,666	146,119	119,721	50,000	50,000	50,000	50,000	50,000	1,156,838	
			Facility Renovations		1,900,000	500,000	500,000	500,000	500,000					3,900,000	
			Fleet Replacement & Expansion	1,600,000	2,800,000	1,600,000	1,600,000	1,600,000	2,100,000	1,400,000	2,800,000	2,800,000	2,800,000	21,100,000	
			Terminal Upgrades	1,595,000		385,000								1,980,000	
	Engineering & Operations Total			3,793,666	5,243,666	2,698,666	2,246,119	2,219,721	3,100,000	1,450,000	2,850,000	2,850,000	2,850,000	29,301,838	
Transit Total			3,793,666	5,243,666	2,698,666	2,246,119	2,219,721	3,100,000	1,450,000	2,850,000	2,850,000	2,850,000	29,301,838		
Water & Sewer	Engineering & Operations	Engineering	Combined Sewer Separation	6,150,000	4,700,000	4,000,000	4,000,000	4,000,000	3,000,000	3,500,000	4,000,000	4,000,000	4,000,000	41,350,000	
			Funding of Design & Construction		1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	13,500,000	
			Plank Road Reconstruction	8,750,000										8,750,000	
			Watermain Replacements	2,590,000	5,250,000	5,550,000	6,000,000	6,500,000	6,750,000	7,000,000	7,250,000	7,500,000	7,750,000	62,140,000	
		Operation Services	Bright's Grove Sewage Treatment Facility	700,000			800,000							400,000	1,900,000
			Pumping Station Improvements	250,000	1,500,000	1,500,000	1,500,000	1,550,000	1,600,000	1,650,000	1,700,000	1,750,000	1,800,000	14,800,000	
			Stormwater Management Facilities Rehabilitation		500,000	500,000	500,000	100,000	100,000	500,000	100,000	100,000	100,000	2,500,000	
			Wastewater Pollution Control Centre - Biosolids Processing Upgrades	3,500,000										3,500,000	
			Wastewater Pollution Control Centre - Building Improvements			1,000,000			2,000,000			800,000		3,800,000	
			Wastewater Pollution Control Centre - Process Improvements	400,000	1,165,000	1,330,000	1,450,000	1,600,000	1,650,000	1,700,000	1,750,000	1,800,000	1,900,000	14,745,000	
		Public Works	Lead Reduction	1,200,000	800,000										2,000,000
			Water Meter Replacements	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,500,000
	Engineering & Operations Total			23,690,000	15,565,000	15,530,000	15,100,000	16,200,000	14,750,000	18,000,000	16,450,000	17,600,000	17,600,000	170,485,000	
Water & Sewer Total			23,690,000	15,565,000	15,530,000	15,100,000	16,200,000	14,750,000	18,000,000	16,450,000	17,600,000	17,600,000	170,485,000		
Police	Police Services	Police Services	911 Communication	360,000							2,240,000		2,600,000		
			Building Improvements	100,000	350,000								450,000		
	Police Services Total			460,000	350,000						2,240,000		3,050,000		
Police Total			460,000	350,000							2,240,000		3,050,000		
Grand Total			55,156,431	44,416,068	41,772,264	38,838,119	37,617,721	35,882,047	35,560,000	36,635,000	40,450,000	38,385,000	404,712,649		

## CITY OF SARNIA - DRAFT 2022 CAPITAL

Category	Division	Department	Project Name	Funding Source			Development Charges	Grants/ Donations	Total Amount Funded
				Tax Levy	Transit Levy	Rates			
General Government	City Administration	Economic Development	Sarnia Chris Hadfield Airport Infrastructure Upgrades	(420,000)					(420,000)
	<b>City Administration Total</b>			<b>(420,000)</b>					<b>(420,000)</b>
	Community Services	Facilities	Backflow Prevention			(100,000)			(100,000)
			City Hall Improvements	(350,000)					(350,000)
			Clearwater Arena Improvements					(300,000)	(300,000)
		Parks and Recreation	Progressive Auto Sales Arena Improvements	(1,900,000)					(1,900,000)
			Sarnia Library Improvements	(80,000)					(80,000)
			Canatara Park	(100,000)					(100,000)
			Germain Park	(300,000)					(300,000)
			Neighbourhood Parks	(110,000)			(40,000)		(150,000)
			Playground Equipment Replacement	(300,000)					(300,000)
			Tecumseh Park/Cox Youth Centre Improvements	(969,736)				(950,934)	(1,920,670)
			Waterfront Improvements					(150,000)	(150,000)
	<b>Community Services Total</b>			<b>(4,109,736)</b>		<b>(100,000)</b>	<b>(40,000)</b>	<b>(1,400,934)</b>	<b>(5,650,670)</b>
	Corporate Services	Customer Service	Website Redevelopments	(183,000)					(183,000)
		Emergency Management	Facility Access Control Systems	(60,000)					(60,000)
		Information Technology	Backup Solution	(80,000)					(80,000)
			IT Hardware Asset Lifecycle	(365,000)					(365,000)
			Virtual Server Infrastructure	(90,000)					(90,000)
	<b>Corporate Services Total</b>			<b>(778,000)</b>					<b>(778,000)</b>
	Engineering & Operations	Engineering	Accessibility Improvements	(51,340)				(141,160)	(192,500)
			Active Transportation Projects	(351,720)			(737,961)	(1,173,280)	(2,262,961)
			Bridges & Culverts					(850,000)	(850,000)
			City Entrance Signage	(225,000)					(225,000)
			Intersection Upgrades	(900,000)					(900,000)
			Oversized Load Corridor	(2,270,584)				(2,929,416)	(5,200,000)
			Parking Lot Reconstruction	(450,000)					(450,000)
			Road Rehabilitation					(2,000,000)	(2,000,000)
			Shoreline Protection	(3,250,000)					(3,250,000)
			Streetlight Replacements	(100,000)					(100,000)
			Traffic Signals	(100,000)					(100,000)
			Transportation Master Plan & Streetscape Improvements	(100,000)					(100,000)
			Former Michigan Avenue Landfill Remediation	(300,000)					(300,000)
	<b>Engineering &amp; Operations Total</b>			<b>(8,098,644)</b>			<b>(737,961)</b>	<b>(7,093,856)</b>	<b>(15,930,461)</b>

# CITY OF SARNIA - DRAFT 2022 CAPITAL

				Funding Source						
Category	Division	Department	Project Name	Tax Levy	Transit Levy	Rates	Development Charges	Grants/ Donations	Total Amount Funded	
General Government	Fire Services	Fire Services	Bunker Gear Replacement	(90,000)					(90,000)	
			Radio System & User Gear	(1,596,969)					(1,596,969)	
			Records Management System	(180,000)					(180,000)	
			Fire Station 3 - Demolition, Design, Construction					(2,566,665)	(2,566,665)	
	Fire Services Total			(1,866,969)				(2,566,665)	(4,433,634)	
General Government Total				(15,273,349)		(100,000)	(777,961)	(11,061,455)	(27,212,765)	
Police	Police Services	Police Services	911 Communication	(360,000)					(360,000)	
			Building Improvements	(100,000)					(100,000)	
	Police Services Total			(460,000)					(460,000)	
Police Total				(460,000)					(460,000)	
Transit	Engineering & Operations	Transit	Maintenance Equipment Upgrades/Replacements		(102,680)			(282,320)	(385,000)	
			Bus Stop Improvements					(213,666)	(213,666)	
			Fleet Replacement & Expansion					(1,600,000)	(1,600,000)	
			Terminal Upgrades					(1,595,000)	(1,595,000)	
	Engineering & Operations Total				(102,680)			(3,690,986)	(3,793,666)	
Transit Total					(102,680)			(3,690,986)	(3,793,666)	
Water & Sewer	Engineering & Operations	Engineering	Combined Sewer Separation	(748,887)		(3,362,651)		(2,038,462)	(6,150,000)	
			Plank Road Reconstruction	(2,378,793)		(3,729,987)		(2,641,220)	(8,750,000)	
			Watermain Replacements	(795,690)		(1,794,310)			(2,590,000)	
		Operation Services	Bright’s Grove Sewage Treatment Facility			(700,000)			(700,000)	
			Pumping Station Improvements			(250,000)			(250,000)	
			Wastewater Pollution Control Centre - Biosolids Processing Upgrades			(2,672,500)	(827,500)		(3,500,000)	
			Wastewater Pollution Control Centre - Process Improvements			(400,000)			(400,000)	
		Public Works	Lead Reduction			(1,200,000)			(1,200,000)	
	Water Meter Replacements				(150,000)			(150,000)		
Engineering & Operations Total			(3,923,370)		(14,259,448)	(827,500)	(4,679,682)	(23,690,000)		
Water & Sewer Total				(3,923,370)		(14,259,448)	(827,500)	(4,679,682)	(23,690,000)	
Total Amount Funded				(19,656,719)	(102,680)	(14,359,448)	(1,605,461)	(19,432,123)	(55,156,431)	

## CITY OF SARNIA - DRAFT 2022 CAPITAL

				Funding Source	Total Amount
Category	Division	Department	Project Name	Tax Levy	Funded
General Government					
	City Administration	Economic Development	Sarnia Chris Hadfield Airport Infrastructure Upgrades	(420,000)	(420,000)
	City Administration Total			(420,000)	(420,000)
General Government Total				(420,000)	(420,000)
Total Amount Funded				(420,000)	(420,000)



# 2022 Capital Project Request

Capital Project Name	Department
Sarnia Chris Hadfield Airport Infrastructure Upgrades	Economic Development/CAO

Project Manager	Start Date	Completion Date
Director of Economic Development	January 1, 2022	December 31, 2026

Project Description, Justification, & Impact on Operating
<p>The Sarnia Chris Hadfield Airport (the "airport") is currently owned by the City of Sarnia and is operated by Scottsdale Aviation Inc. under a long-term lease agreement. Through this agreement, Scottsdale agrees to pay the City rent of \$1 annually and receives no operating funding from the City.</p> <p>Prior to the City of Sarnia ownership, Transport Canada owned and operated the airport. It is understood that at the time of ownership transfer (June 27, 1997) from Transport Canada to the City of Sarnia, funds were provided by Transport Canada for future operation and maintenance of the airport.</p> <p>To date, the capital costs and repairs have been funded through the divestiture fund. It was determined that if the fund were to run out, the City would be required to provide the funds from their own budget. The fund is now depleted.</p> <p>In June 2016, the City contracted WSP to conduct an infrastructure assessment and 10-year capital plan on the Sarnia Chris Hadfield Airport. The report assessed the existing condition of airport infrastructure, identified remaining service life and prepared a Ten (10) Year Capital Plan identifying anticipated capital costs for budget planning purposes. The report also identified within the Capital Plan infrastructure what is and is not eligible for funding under the Airport Capital Assistance Program (ACAP) with a focus on the infrastructure that is not eligible for ACAP funding that the City of Sarnia would be responsible for.</p> <p>To date, the WSP 10-year capital budget report has not been incorporated into the City's asset management plan or the 10-year capital budget plan prepared for the city in 2021. We are now 5 years beyond the infrastructure assessment completed through that study and the 10-year plan now needs to be condensed to 5 years of capital investment, as many assets are beyond end of life.</p>

Assessment
<b>Condition</b> – beyond end of life
<b>Risk Level</b> – high for non-compliance and safety with Transport Canada
<b>Criticality</b> – items noted for 2022 – 2024 are in critical need of repair/replacement
<b>Financial</b> – no reserve funds or grant funds are available to assist with the cost of these items

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Taxiway Alpha	150,000					150,000
General Aviation Apron/Ramp		670,000				670,000
Terminal Sidewalks & Entrance	160,000					160,000
General Aviation Tie Down Area		330,000				330,000
Entrance Road off Airport Rd			370,000			370,000
Terminal Parking & Rental Car Lot			470,000			470,000
Taxiway Charlie				170,000		170,000
Secondary Runway				1,000,000		1,000,000
Storm Drains and Paving	10,000	10,000	10,000	10,000	10,000	50,000
Equipment & Professional Services	100,000	25,000	25,000	25,000	60,000	235,000
Total Project Cost	420,000	1,035,000	875,000	1,205,000	70,000	3,605,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	420,000	1,035,000	875,000	1,205,000	70,000	3,605,000
Funding Sources						
Reserves/Reserve Funds	420,000	1,035,000	875,000	1,205,000	70,000	3,605,000
Grant						-
Donation						-
Other						-
Total Funded	420,000	1,035,000	875,000	1,205,000	70,000	3,605,000
Total Unfunded	-	-	-	-	-	-

CITY OF SARNIA - DRAFT 2022 CAPITAL

				Funding Source			Development	Grants/	Total Amount
Category	Division	Department	Project Name	Tax Levy	Rates		Charges	Donations	Funded
General Government	Community Services	Facilities	Backflow Prevention		(100,000)				(100,000)
			City Hall Improvements	(350,000)				(350,000)	
			Clearwater Arena Improvements			(300,000)		(300,000)	
			Progressive Auto Sales Arena Improvements	(1,900,000)				(1,900,000)	
			Sarnia Library Improvements	(80,000)				(80,000)	
		Parks and Recreation	Canatara Park	(100,000)				(100,000)	
			Germain Park	(300,000)				(300,000)	
			Neighbourhood Parks	(110,000)		(40,000)		(150,000)	
			Playground Equipment Replacement	(300,000)				(300,000)	
			Tecumseh Park/Cox Youth Centre Improvements	(969,736)			(950,934)	(1,920,670)	
			Waterfront Improvements				(150,000)	(150,000)	
	Community Services Total			(4,109,736)	(100,000)	(40,000)	(1,400,934)	(5,650,670)	
General Government Total			(4,109,736)	(100,000)	(40,000)	(1,400,934)	(5,650,670)		
Total Amount Funded			(4,109,736)	(100,000)	(40,000)	(1,400,934)	(5,650,670)		

# 2022 Capital Project Request

Capital Project Name	Department
Backflow Prevention	Facilities/Engineering

Project Manager	Start Date	Completion Date
Project Manager, Community Development Services & Standards	January 2022	December 2022

## Project Description, Justification, & Impact on Operating

Many City facilities require backflow prevention to achieve compliance with By-Law No. 89-2016, Backflow Prevention By-Law. Backflow prevention protects our potable water supply from contamination introduced via cross connections or siphonage. The by-law is applicable to all industrial, commercial, and institutional properties, but not residential. However, all properties with an irrigation system are also required to achieve compliance.

The backflow prevention process involves an initial survey to establish the degree of risk imposed on the water distribution by the land use activities, and the installation of a backflow preventer in the water service deemed appropriate for the risk. Qualified personnel must perform the survey and the installation.

Annual testing of each backflow preventer, and reporting of the results, are required to maintain compliance with the by-law. The annual testing costs should be included in departmental operating budgets and are not included in this capital project.

## Assessment

**Condition** – Some water services are equipped with backflow prevention, but the majority require a survey and the installation of a backflow preventer.

**Risk Level** – Some properties store chemicals and/or cleaners, and many are serviced by an irrigation system.

**Criticality** – Protection of the City's potable water supply is paramount and many water services that lack backflow prevention.

**Financial** – Annual testing will impact departmental operating budgets in the future.

## Costing

Project Details	2022	2023	2024	2025	2026	Total
Surveys & Installations	100,000					100,000
						-
						-
						-
						-
						-
<b>Total Project Cost</b>	<b>100,000</b>	-	-	-	-	<b>100,000</b>

## Funding Sources

Year	2022	2023	2024	2025	2026	Total
Validated Request	100,000	-	-	-	-	100,000
<b>Funding Sources</b>						
Reserves/Reserve Funds	100,000					100,000
Grant						-
Donation						-
Other						-
<b>Total Funded</b>	<b>100,000</b>	-	-	-	-	<b>100,000</b>
<b>Total Unfunded</b>	-	-	-	-	-	-

# 2022 Capital Project Request

Capital Project Name	Department
City Hall Improvements	Facilities

Project Manager	Start Date	Completion Date
Manager, Facilities & Park Operations	January 2022	December 2022

## Project Description, Justification, & Impact on Operating

### HVAC System (Chiller Replacement)

This year City Hall's current air conditioning system required a few repairs on multiple occasions, over the summer months. It is our goal to do a full replacement of the air conditioning system to ensure we have a reliable system for several years. As well, the goal will be to increase our energy efficiency on this project.

### North Exterior Staircases Replacement

The north stairs have been in rough shape for several years and continue to deteriorate. In the past, we have capped the stairs in hopes it would prolong its life. Now we are at a state where repairs are required in order to provide a safe working environment.

## Assessment

**Condition** – The current assets are at their end of life, and continue to fail causing operational challenges, which will pose safety concerns if left unattended.

**Risk Level** – A deferral will result in further degradation of the asset, resulting in potential risk to the general public, the operation of City Hall, and may restrict access to publicly desired amenities and facilities. Should certain mechanical/refrigeration projects not be completed there will be significant risk to staff and the general public.

**Criticality** – The projects identified have reached a critical point, are beyond lifecycle, and risk further deterioration to other aspects of the facility.

**Financial** – Should the projects not be completed, the potential to shut down City Hall will result in disruption to City Hall operations. Operational savings in terms of energy efficiency, lower utilities, and decrease in general maintenance costs, is expected.

## Costing

Project Details	2022	2023	2024	2025	2026	Total
HVAC System	250,000					250,000
Staircase Replacements	100,000	100,000				200,000
2nd Floor Washroom Upgrade			200,000			200,000
Electrical Panel Upgrade			180,000			180,000
Window Replacement (1st floor)			250,000			250,000
Window Replacement (2nd floor)				100,000		100,000
3rd Floor Washroom Upgrade				200,000		200,000
<b>Total Project Cost</b>	<b>350,000</b>	<b>100,000</b>	<b>630,000</b>	<b>300,000</b>	<b>-</b>	<b>1,380,000</b>

## Funding Sources

Year	2022	2023	2024	2025	2026	Total
Validated Request	350,000	100,000	630,000	300,000	-	1,380,000
<b>Funding Sources</b>						
Reserves/Reserve Funds	350,000	100,000	630,000	300,000	-	1,380,000
Grant						-
Donation						-
Other						-
<b>Total Funded</b>	<b>350,000</b>	<b>100,000</b>	<b>630,000</b>	<b>300,000</b>	<b>-</b>	<b>1,380,000</b>
<b>Total Unfunded</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

# 2022 Capital Project Request

Capital Project Name	Department
Clearwater Arena Improvements	Facilities

Project Manager	Start Date	Completion Date
Manager, Facilities & Park Operations	January 2022	December 2022

## Project Description, Justification, & Impact on Operating

### Arena - Roof - North Flat Section

This is the last section of flat roof at Clearwater Arena that requires replacement. Over the last several years, we have been replacing sections of the roofing system each year. The roofs deterioration has caused unplanned impacts on our operating budget.

### Façade & Interior Modernization - Design

The Mall Road Library is planning to be re-located to this site in the fall of 2021. Public Works is investigating the opportunity to re-locate the Murphy Road Transit Terminal to the front of Clearwater Arena in 2022, which would bring new visitors to the site, and provide the opportunity to increase the functionality of the front entrance / green space of the site.

This facility has not seen any substantial investment in the building in a number of years. Given the central location of this facility, the goal of this project is to secure an architect to complete a full façade and interior renovation scope / design. This will help to address a number of current issues with Clearwater Arena including, planning for the required AODA upgrades to support overall accessibility. As well as be a proactive effort to look at form and function of the existing space and provide the opportunity to make improvements to the overall facility in the future.

## Assessment

**Condition** – Condition assessment of the roof was completed by a competent roofing expert and deemed the roof to be expired, and in need of replacement. Clearwater Arena has seen little in reinvestment into the facility in over 30 years, as a result many of the assets within the facility are at their end of life and failing.

**Risk Level** – Deferral will result in further degradation of the asset, resulting in potential risk to users, tenants, and the general public, and may restrict access to publicly desired amenities and facilities. Potential for concerns associated with legislative non-compliance.

**Criticality** – The projects identified have reached a critical point, are beyond lifecycle, and risk further deterioration to other aspects of the arena.

**Financial** – Should the projects not be completed, the potential to shut down the arena will result in loss of rental revenue and disruption to existing tenants and user groups. Certain projects, if not completed, will result in further work and additional operational costs to repair.

## Costing

Project Details	2022	2023	2024	2025	2026	Total
Roof	100,000					100,000
Façade & Interior - Design	200,000					200,000
Façade & Interior - Construction			3,000,000			3,000,000
						-
Total Project Cost	300,000	-	3,000,000	-	-	3,300,000

## Funding Sources

Year	2022	2023	2024	2025	2026	Total
Validated Request	300,000	-	3,000,000	-	-	3,300,000
Funding Sources						
Reserves/Reserve Funds		-	3,000,000	-	-	3,000,000
Grant	300,000					300,000
Donation						-
Total Funded	300,000	-	3,000,000	-	-	3,300,000
Total Unfunded	-	-	-	-	-	-

# 2022 Capital Project Request

Capital Project Name	Department
Progressive Auto Sale Arena (PASA) Improvements	Facilities

Project Manager	Start Date	Completion Date
Project Manager, Community Development Services & Standards	March 2022	September 2022

Project Description, Justification, & Impact on Operating
<p><b>Roof Replacement:</b> This is the second phase of the roof replacement that began in 2021. The roof is at end of life and continues to leak in some areas. This increases the risk to all other assets inside the building and the integrity of the building roof system itself. According to the energy efficiency program, this project will better control overall operating costs by reducing air entrance as well. The new roof system will have an estimated useful life of 40-years.</p> <p><b>Rink Boards &amp; Glass Replacement:</b> In accordance with the requirements to operate an OHL facility, the City is required to replace the glass and boards with NHL regulation level standards.</p> <p><b>Rink 2 - Dehumidifier Unit:</b> This unit is at its end of life, and should it fail, it will require the closure of the entire PASA building.</p>

Assessment
<p><b>Condition</b> – Annual condition assessments and inspections determine which projects become priority. Certain projects are a legislative requirement.</p> <p><b>Risk Level</b> – Deferral will result in further degradation of the asset resulting in potential risk to users, tenants, and the general public and may restrict access to the facility. Should certain mechanical/refrigeration projects not be completed there will be significant risk to staff and the general public. Potential for concerns associated with legislative non-compliance.</p> <p><b>Criticality</b> – Many of the projects identified are beyond their useful life and risk further deterioration to other aspects of the arena.</p> <p><b>Financial</b> – Should the projects not be completed, the potential to shut down the arena will result in loss of rental revenue and disruption to existing tenants and user groups. Certain projects if not completed will result in further work and additional costs to repair. There will be operational savings in terms of energy efficiency, lower utilities, and decrease in general maintenance costs. Service delivery efficiencies will be realized along with potential for increase in rental and program revenue.</p>

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Roof Replacement	1,250,000	500,000	200,000			1,950,000
Rink Boards & Glass	500,000					500,000
Rink 2 Dehumidifier	150,000					150,000
HVAC		60,000				60,000
Lobby Floor		50,000				50,000
On-Demand Water		60,000				60,000
Gate 5 - Entrance/Concrete Patio		200,000	80,000			280,000
Chiller Replacement			150,000			150,000
Compressor Replacement			100,000			100,000
Condenser Replacement			100,000			100,000
Water/Boiler Tank			80,000			80,000
Total Project Cost	1,900,000	870,000	710,000	-	-	3,480,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	1,900,000	870,000	710,000	-	-	3,480,000
Funding Sources						
Reserves/Reserve Funds	1,900,000	870,000	710,000	-	-	3,480,000
Grant						-
Donation						-
Other						-
Total Funded	1,900,000	870,000	710,000	-	-	3,480,000
Total Unfunded	-	-	-	-	-	-

# 2022 Capital Project Request

Capital Project Name	Department
Sarnia Library Improvements	Facilities

Project Manager	Start Date	Completion Date
Manager, Facilities & Park Operations	January 2022	December 2022

Project Description, Justification, & Impact on Operating
<b>Security Camera Upgrade</b> Due to the recent increase in vandalism, damages, and other undesired activities outside the library, we are requesting these funds to install a security system that will cover the entire library property, as well as Veterans Park.

Assessment
<b>Condition</b> – Currently, there is inadequate security camera coverage on the exterior of the Sarnia Library, as a result we have seen an increase in vandalism to the building and the park.
<b>Risk Level</b> – There is a high potential of continued vandalism to the building and park due to the lack of security measures. If not approved, we are expecting to see an increase in damages and other unwanted activities around the library and park.
<b>Criticality</b> – Without these security measures, we will not be able to manage the unwanted activities, which will start to affect the public’s willingness to visit the park or library.
<b>Financial</b> – Operating costs will increase without means to reduce or eliminate the unwanted activities.

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Security Camera Upgrade	80,000					80,000
Exterior Precast Stone Panels/Facia		100,000				100,000
Exterior Railings		80,000				80,000
Plumbing, Fixtures, HVAC Controls			100,000			100,000
Elevator Modernization			125,000			125,000
Total Project Cost	80,000	180,000	225,000	-	-	485,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	80,000	180,000	225,000	-	-	485,000
Funding Sources						
Reserves/Reserve Funds	80,000	180,000	225,000	-	-	485,000
Grant						-
Donation						-
Other						-
Total Funded	80,000	180,000	225,000	-	-	485,000
Total Unfunded	-	-	-	-	-	-



# 2022 Capital Project Request

Capital Project Name	Department
Canatara Park Improvements	Parks and Recreation

Project Manager	Start Date	Completion Date
Project Manager, Community Development Services & Standards	January 2022	December 2022

Project Description, Justification, & Impact on Operating
<b>Lifeguard &amp; Washroom Building – Design</b> The existing building is over 40 years old and well past its end of life. Given the incredible community value, staff are recommending a new building design, in preparation for a new build in the coming years. This facility will provide central services for the public in terms of lifeguard support, public washrooms, and potential accessory use, including a concession stand.

Assessment
<b>Condition</b> – The current condition of the washroom facility is poor and does not provide the level of service the city wants to provide.
<b>Risk Level</b> – Is currently low for injury, as it appears to be structurally sound.
<b>Criticality</b> – The current washroom facility is able to provide a base service to the community.
<b>Financial</b> – Continuing to make operational repairs to this structure would be a poor use of our financial resources.

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Lifeguard/Washroom Building (Council Motion)	100,000	1,000,000				1,100,000
Beach Pavillion Refurb.				350,000		350,000
						-
						-
						-
						-
Total Project Cost	100,000	1,000,000	-	350,000	-	1,450,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	100,000	1,000,000	-	350,000	-	1,450,000
Funding Sources						
Reserves/Reserve Funds	100,000	1,000,000	-	350,000	-	1,450,000
Grant						-
Donation						-
Other						-
Total Funded	100,000	1,000,000	-	350,000	-	1,450,000
Total Unfunded	-	-	-	-	-	-



# 2022 Capital Project Request

Capital Project Name	Department
Germain Park Improvements	Parks and Recreation

Project Manager	Start Date	Completion Date
Project Manager, Community Development Services & Standards	January 2022	December 2022

Project Description, Justification, & Impact on Operating
<p><b>Park Master Plan - Design &amp; Recreation Expertise</b> As part of the on-going effort to invest in developing community hubs across our city, this request is to have a master plan developed for Germain Park, to coordinate all the active potential projects and proactively address opportunities to improve design, access, and provide better recreational programming for the community.</p> <p><b>Strangway Centre - Gym Design / Build</b> These funds are required to hire a qualified architectural firm to create a full design/construction drawing ready for tender. This request is to bolster the existing \$150,000 worth of funding provided in 2021, which is required to complete the detailed design of this gym addition.</p>

Assessment
<p><b>Condition</b> – Many assets at Germain Park are at their end of life and past the point of restoring.</p> <p><b>Risk Level</b> – Deferral will result in further degradation of the asset, resulting in potential risk to users, tenants, and the general public, and may restrict access to publicly desired amenities and facilities. Projects not completed will have significant risk to staff and the general public.</p> <p><b>Criticality</b> – Many of the projects identified have reached a critical point, are beyond lifecycle, and risk further deterioration to other aspects.</p> <p><b>Financial</b> – Should the projects not be completed, the potential to shut down the facilities or parks will result in loss of rental revenue and disruption to user groups. Certain projects, if not completed, will result in further work and additional operational costs to repair. Service level delivery efficiencies will be realized along with potential for increase in rental and program revenue.</p>

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Park Master Plan	100,000					100,000
Strangway Centre Gym - Design/Build	200,000					200,000
Strangway Centre Gym - Design/Build		1,000,000				1,000,000
Jackson Pool - Design/Build		1,120,000				1,120,000
Park Lighting			2,000,000			2,000,000
Parking Lot Expansion/Re-surfacing			400,000	300,000		700,000
Total Project Cost	300,000	2,120,000	2,400,000	300,000	-	5,120,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	300,000	2,120,000	2,400,000	300,000	-	5,120,000
Funding Sources						-
Reserves/Reserve Funds	300,000	2,120,000	2,400,000	300,000	-	5,120,000
Grant						-
Donation						-
Other						-
Total Funded	300,000	2,120,000	2,400,000	300,000	-	5,120,000
Total Unfunded	-	-	-	-	-	-

# 2022 Capital Project Request

Capital Project Name	Department
Neighbourhood Parks	Parks and Recreation

Project Manager	Start Date	Completion Date
Manager, Facilities & Park Operations	January 2022	December 2022

Project Description, Justification, & Impact on Operating
<p><b>2022 - Avondale Park, Hannah Park, Blundy Park</b> The following funds will be used to update and replace existing end of life park infrastructure such as playground equipment, pathways, garbage bins, benches, new signage, fencing, etc.</p> <p>2023 – Queens Park, Landsdown Park, Newton Park 2024 – Laurel Lee Park, Farris Park, Riopelle Park 2025 – Sparky Park, Retlaw Park, Westbury Park</p>

Assessment
<p><b>Condition</b> – Annual condition assessments and inspections determine which projects become priority. Certain projects are a legislative requirement and need to be completed and will secure the integrity of the facility.</p> <p><b>Risk Level</b> – Deferral will result in further degradation of the asset, resulting in potential risk to users, tenants, and the general public, and may restrict access to publicly desired amenities.</p> <p><b>Criticality</b> – Many of the projects identified have reached a critical point, are beyond lifecycle and no longer meet best practices and industry standards, and risk for further deterioration to other aspects.</p> <p><b>Financial</b> – Should the projects not be completed, the potential to close parks will result in disruption to the publics use of parks. Certain projects if not completed will result in further work and additionally increase operational costs to repair. Service level delivery efficiencies will be realized.</p>

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Playground equipment	65,000	65,000	65,000	70,000		265,000
Pathways	30,000	30,000	30,000	30,000		120,000
Fencing	15,000	15,000	15,000	15,000		60,000
Other Park Infrastructure	40,000	40,000	40,000	50,000		170,000
						-
Total Project Cost	150,000	150,000	150,000	165,000	-	615,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	150,000	150,000	150,000	165,000	-	615,000
Funding Sources						
Reserves/Reserve Funds	150,000	150,000	150,000	165,000	-	615,000
Grant						-
Donation						-
Other						-
Total Funded	150,000	150,000	150,000	165,000	-	615,000
Total Unfunded	-	-	-	-	-	-

# 2022 Capital Project Request

Capital Project Name	Department
Playground Equipment Replacement	Parks and Recreation

Project Manager	Start Date	Completion Date
Project Manager, Community Development Services & Standards	January 2022	December 2022

Project Description, Justification, & Impact on Operating
<p><b>Playground Equipment Replacement</b></p> <p>This request will provide Park &amp; Facility Operations with the ability to replace 2–3 kids’ playground equipment in 2022 with modern, safe, accessible structures.</p>

Assessment
<p><b>Condition</b> – The team is currently reviewing annual inspection records for existing equipment and assessing service gaps in neighbourhoods where there is little to no access to local kids’ equipment. Based on the results, equipment installation in 2-3 parks is a priority in 2022.</p> <p><b>Risk Level</b> – A large proportion of existing playground equipment does not meet current CSA standards, and there has not been a proactive assessment and replacement program designed around this service.</p> <p><b>Criticality</b> – Kids playground equipment is a foundational element to park and recreational programming and is a primary service that municipalities typically provide.</p> <p><b>Financial</b> – Without the implementation of a proactive and strategic replacement program, the City will be required to remove playground equipment and will not be in a position to replace it right away, causing service disruptions for residents.</p>

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Playground Equipment	300,000					300,000
						-
						-
						-
						-
Total Project Cost	300,000	-	-	-	-	300,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	300,000	-	-	-	-	300,000
Funding Sources						
Reserves/Reserve Funds	300,000	-	-	-	-	300,000
Grant						-
Donation						-
Other						-
Total Funded	300,000	-	-	-	-	300,000
Total Unfunded	-	-	-	-	-	-

# 2022 Capital Project Request

Capital Project Name	Department
Tecumseh Park/Cox Youth Centre Improvements	Parks and Recreation

Project Manager	Start Date	Completion Date
Project Manager, Community Development Services & Standards	March 2022	December 2022

## Project Description, Justification, & Impact on Operating

### Outdoor Pool - Concrete Replacement

The existing concrete pad has reached the end of its lifecycle. Replacing it will improve safety and enhance the appearance of the area.

### Outdoor Pool - New Fence/Berm

This project aims to implement the CEPTED Review recommendations to improve safety at this facility by installing a new fence around the pool and improving sight lines with new berms to protect against vandalism. The existing site design is challenging and has increased the cost of maintenance and security; this re-design project will provide significant improvements.

### Ball Diamond - New 20' Fencing

As per the redesign of the Tecumseh Park, we are planning to relocate the playground equipment to the centre of the park in the fall of 2021. This will require a 20-foot fence to protect against rogue balls. It is good timing as the current fence is past its life.

### Youth Centre Building - AODA Upgrade

The existing facility is not accessible. The aim of the project is to renovate the interior and exterior washrooms and ramps to meet current AODA regulations. An application to the Canada Community Revitalization Fund was made in July 2021 for funding in the amount of \$500,934 to execute this project. Should the grant application be denied, this project will not proceed.

### Skateboard Park Replacement

This project aims to improve the use of space and sport facilities in the park. An application to the Canada Community Revitalization Fund was made in July 2021 for funding in the amount of \$450,000 to execute this project. Should this grant application be denied, this project will not proceed.

## Assessment

**Condition** – Annual condition assessments and inspections determine which projects become priority. Certain projects are a legislative requirement and to be completed and will secure the integrity of the facility.

**Risk Level** – Deferral will result in further degradation resulting in potential risk to users, and the general public, and may restrict access to publicly desired amenities and facilities.

**Criticality** – Many of these assets are beyond their useful life and risk further deterioration to other aspects.

**Financial** – There will be operational savings in terms of a decrease in general maintenance costs. Service level delivery efficiencies will be realized, along with potential for increase in rental and program revenue.

## Costing

Project Details	2022	2023	2024	2025	2026	Total
Pool Concrete Replacement	150,000					150,000
Pool Fencing	200,000					200,000
Ball Diamond 20 Fencing	200,000					200,000
Youth Centre Building	770,670					770,670
Skateboard Park	600,000					600,000
Various Park Improvements		380,000	730,000	1,200,000		2,310,000
<b>Total Project Cost</b>	<b>1,920,670</b>	<b>380,000</b>	<b>730,000</b>	<b>1,200,000</b>	<b>-</b>	<b>4,230,670</b>

## Funding Sources

Year	2022	2023	2024	2025	2026	Total
Validated Request	1,920,670	380,000	730,000	1,200,000	-	4,230,670
<b>Funding Sources</b>						
Reserves/Reserve Funds	969,736	380,000	730,000	1,200,000		3,279,736
Grant	950,934					950,934
Donation						-
Other						-
<b>Total Funded</b>	<b>1,920,670</b>	<b>380,000</b>	<b>730,000</b>	<b>1,200,000</b>	<b>-</b>	<b>4,230,670</b>
<b>Total Unfunded</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

# 2022 Capital Project Request

Capital Project Name	Department
Waterfront Improvements	Parks and Recreation

Project Manager	Start Date	Completion Date
Project Manager, Community Development Services & Standards	January 2022	December 2022

Project Description, Justification, & Impact on Operating
<p><b>Ferry Dock Hill</b></p> <p>These funds will be used to secure an appropriate architectural design firm in line with the outcome of the Waterfront Master Plan. This will support redeveloping the area into a new usable space on the waterfront. These funds are in addition to the \$100,000 approved in 2021.</p>

Assessment
<p><b>Condition</b> – Current conditions of the Ferry Dock Hill lands have attracted unwanted and unsafe activities, and conditions with waterfront. Many assets are at end of life and in general need of reinvestment.</p> <p><b>Risk Level</b> – Deferral will result in potential risk and injury to the general public.</p> <p><b>Criticality</b> – Currently, the Ferry Dock Hill site is in an unsafe condition and the public continue to enter the site despite staff having fenced off the area and posting signage to deter people away.</p> <p><b>Financial</b> – If left unmanaged, the shoreline will continue to deteriorate, and cost will increase when the time comes to make the proper repairs to the site.</p>

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Ferry Dock Hill project	150,000					150,000
Seaway building - warehouse metal roof replacement			86,000			86,000
Seaway building - parking lot re-paving			78,000			78,000
						-
						-
						-
Total Project Cost	150,000	-	164,000	-	-	314,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	150,000	-	164,000	-	-	314,000
Funding Sources						
Reserves/Reserve Funds		-	164,000	-	-	164,000
Grant	150,000					150,000
Donation						-
Other						-
Total Funded	150,000	-	164,000	-	-	314,000
Total Unfunded	-	-	-	-	-	-

## CITY OF SARNIA - DRAFT 2022 CAPITAL

				Funding Source	Total Amount
Category	Division	Department	Project Name	Tax Levy	Funded
General Government	Corporate Services	Customer Service	Website Redevelopments	(183,000)	(183,000)
		Emergency Management	Facility Access Control Systems	(60,000)	(60,000)
		Information Technology	Backup Solution	(80,000)	(80,000)
			IT Hardware Asset Lifecycle	(365,000)	(365,000)
			Virtual Server Infrastructure	(90,000)	(90,000)
	Corporate Services Total			(778,000)	(778,000)
General Government Total				(778,000)	(778,000)
Total Amount Funded				(778,000)	(778,000)

# 2022 Capital Project Request

Capital Project Name	Department
Website Redevelopments	Customer Service

Project Manager	Start Date	Completion Date
Customer Service Manager	February 2022	February 2023

Project Description, Justification, & Impact on Operating
<p>The redesign of the City’s website, <a href="http://www.sarnia.ca">www.sarnia.ca</a>, in 2019 was an enhancement to the City's digital services for citizens, without a large investment; however, it is important that we maintain the website to current best practices and at the highest quality possible. Website redevelopment will involve the technical system, people, policies, procedures, standards, and guidelines that govern the creation and maintenance of our official website. The outcome of this project is to maintain an optimal user experience on the City's website and implement innovative solutions to find efficiencies. The website redevelopment is important to keep up with user trends, address aging hardware and software, implement new device and platform releases, and functionality expectations. There is a growing need for the digitization and modernization of municipal services to align with staff and citizens expectations of access, service, convenience, and self-serve options to the services and programs provided. The redevelopment is key to providing citizens with easy, convenient access to the information that impacts their lives. The redevelopment of the website and intranet solution will connect internal and external processes to deliver opportunities for citizens to conduct transactions online at their convenience, providing a better customer experience. Automating routine tasks will allow skilled staff to focus their time on high-value activities.</p>

Assessment
<p><b>Condition</b> – The current website is unable to reflect design for ease of structure and navigation. The content is not built within a Content Management System that meets growing needs.</p> <p><b>Risk Level</b> – Risk of technical obscurity is identified, and with the current website IT staff are required to have a significant understanding of the functional backend of the website. This is a very serious risk, and resource distribution of IT and the ability for the site to be properly maintained, documented, and enhanced. Pursuing a solution that is managed by a third party ensures the longevity and stability of the website, as well as lifts staffing restraints when updates need to be made. The current website and intranet do not allow for a strong content strategy, with limited tools, and lacks modern functionality and standards. A website development will allow the City to stay current, accurate, citizen-focused, well organized, and more accessible.</p> <p><b>Criticality</b> – The current website and intranet are limited in functionality, leaving important content hard to find. It is the goal to have more engaging content to provide the best possible experience and current information for users.</p> <p><b>Financial</b> – The investment will allow for more integration options, efficiencies, and better communication. The project will include needs assessment, sitemap creation, writing style guide, content writing, web training, design, menu items, micro-site options, and continually changing accessibility requirements, within a responsive design.</p>

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Public Website Redesign	127,000					127,000
Intranet	56,000					56,000
Total Project Cost	183,000	-	-	-	-	183,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	183,000	-	-	-	-	183,000
Funding Sources						
Reserves/Reserve Funds	183,000					183,000
Grant						-
Donation						-
Other						-
Total Funded	183,000	-	-	-	-	183,000
Total Unfunded	-	-	-	-	-	-



# 2022 Capital Project Request

Capital Project Name	Department
Facility Access Control Systems	Emergency Management

Project Manager (Title)	Start Date	Completion Date
Manager, Emergency Management & Corporate Security	January 2021	December 2026

Project Description, Justification, & Impact on Operating
<p>Upgrading our current software, Winpak will streamline all facilities within the Corporation into one system. This would increase our ability to secure all our properties and know exactly who has access to what and when. In future installments, we would have the ability to install cameras at entrances that bookmarks when proximity cards are used for easy retrieval on our video recording. Emergency Management would like to provide a streamlined approach for delivering proximity cards and security access to new and existing employees throughout all our facilities within the Corporation. We are currently using an outdated version of Winpak to provide this solution and it does not meet the requirements for a modern access control system. There are no operational impacts.</p> <p><b>2021</b> - Older equipment at City Hall, Public Works, Transit, Compost Site, and Telfer Street Garage were upgraded to ensure compatibility with the new software, upgraded to the latest version of Winpak software, and migrated data from previous software to new. Information Technology has indicated that we would need to purchase a new server and 48 port switch to accommodate future expansion.</p> <p><b>2022</b> - Decommission and administer new Proxicards and door swipes at Canatara Maintenance, Germain Park, Lambton Area Water Supply System, Progressive Auto Sales Arena, Wastewater Pollution Control Centre.</p> <p><b>2023-2026</b> - Identify additional doors from all facilities that need door swipe access. Identify exterior doors needing cameras installed.</p>

Assessment
<p><b>Condition</b> – Older maintenance panels will need to be replaced at City Hall, Public Works, Transit, Compost Site and Telfer Street Garage.</p> <p><b>Risk Level</b> – Inability to know who has access to buildings. Access is currently granted by providing staff with keys. Terminated employees could still have access with keys. Duplication of keys is easy.</p> <p><b>Criticality</b> – Security to our facilities is important to protecting all our assets, protect our staff, and investigate wrongdoing after the fact.</p> <p><b>Financial</b> – The ability to protect our assets. The ability to deter potential theft/wrongdoing.</p>

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Cameras, door swipes, printers	60,000	25,000	25,000	25,000	25,000	160,000
Total Project Cost	60,000	25,000	25,000	25,000	25,000	160,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	60,000	25,000	25,000	25,000	25,000	160,000
Funding Sources						
Reserves/Reserve Funds	60,000	25,000	25,000	25,000	25,000	160,000
Grant						-
Donation						-
Other						-
Total Funded	60,000	25,000	25,000	25,000	25,000	160,000
Total Unfunded	-	-	-	-	-	-



# 2022 Capital Project Request

Capital Project Name	Department
Backup Solution	Information Technology

Project Manager	Start Date	Completion Date
IT Manager	January 4, 2022	February 28, 2022

### Project Description, Justification, & Impact on Operating

Currently the City’s back up of data is handled by an outdated product that no longer adequately addresses our needs. The current system is slow, does not address data stored in the cloud, and does not offer offline backups that are critical to most disaster recovery scenarios. A strong back up solution will ensure we retain data according to various legal obligations, are protected from human or system errors, and have disaster recovery in response to various threats. This project will result in significant reduction to the risk associated to data and system loss and is vital to business continuity. Solutions from Bacula, Veeam, and Barracuda are being explored.

### Assessment

**Condition** – The current Barracuda solution is at the end of its life and needs to be updated/replaced to address current needs for physical servers, virtual servers, cloud servers, and offline storage needs.

**Risk Level** – Adequate back up of data is the single largest risk IT has identified for IT Infrastructure for 2022.

**Criticality** – Addressing back up needs is extremely critical to the security of the corporation’s data.

**Financial** – The potential financial impact of losing critical data or systems, without a path to recovery, would be many times over the cost to implement this project.

### Costing

Project Details	2022	2023	2024	2025	2026	Total
Deploy and Implement	80,000					80,000
						-
						-
						-
Total Project Cost	80,000	-	-	-	-	80,000

### Funding Sources

Year	2022	2023	2024	2025	2026	Total
Validated Request	80,000	-	-	-	-	80,000
Funding Sources						
Reserves/Reserve Funds	80,000					80,000
Grant						-
Donation						-
Other						-
Total Funded	80,000	-	-	-	-	80,000
Total Unfunded	-	-	-	-	-	-

# 2022 Capital Project Request

Capital Project Name	Department
IT Hardware Asset Lifecycle	Information Technology

Project Manager	Start Date	Completion Date
IT Manager	January 1, 2022	December 31, 2022

Project Description, Justification, & Impact on Operating
<p>This is the ongoing refreshing of the City of Sarnia IT assets. This includes laptops, desktops, monitors, printers, desk phones as well as the infrastructure behind the scenes such as Wi-Fi Access Points, and network switches. The year 2022 was identified as a year when many of the devices that were previously leased would be failing and at end of life.</p> <p>This will be a critical year to invest in this lifecycle to ensure the smooth operations for staff across the organization.</p>

Assessment
<p><b>Condition</b> – Assets scheduled for a 3-year lifecycle are now approaching the end of their 6<sup>th</sup> year. The condition of many existing assets is beyond poor.</p> <p><b>Risk Level</b> – Continued failures will result in loss of productivity as staff face slow downs and complete failures if not replaced.</p> <p><b>Criticality</b> – As more staff participate in remote from office work options, this asset lifecycle becomes even more critical.</p> <p><b>Financial</b> – Loss of productivity would have significant but unknown financial impacts.</p>

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Networking & Server	50,000	110,000	120,000	120,000	130,000	530,000
End User Device Replacements	90,000	110,000	120,000	120,000	130,000	570,000
Telephone System	225,000					225,000
						-
Total Project Cost	365,000	220,000	240,000	240,000	260,000	1,325,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	365,000	220,000	240,000	240,000	260,000	1,325,000
Funding Sources						
Reserves/Reserve Funds	365,000	220,000	240,000	240,000	260,000	1,325,000
Grant						-
Donation						-
Other						-
Total Funded	365,000	220,000	240,000	240,000	260,000	1,325,000
Total Unfunded	-	-	-	-	-	-

# 2022 Capital Project Request

Capital Project Name	Department
Virtual Server Infrastructure	Information Technology

Project Manager	Start Date	Completion Date
IT Manager	March 1, 2022	April 29, 2022

**Project Description, Justification, & Impact on Operating**

The City of Sarnia runs its many on-site servers as virtual instances located on two server clusters. Each have had significant resources to share with and assign to these many servers. The virtualization product VMWare was used on an aging and failing IBM BladeCenter and the virtualization product ProxMox is used on aging HP servers that cannot bear the entire load. With the IBM BladeCenter’s decommission in 2021 there is a significant gap in the ability to meet the City’s server needs going forward.

This project would address this gap with new Dell server infrastructure and provide the needed server capacity.

IT is reviewing both VMWare and Hyper-V products to determine the best value and fit for a new virtual server.

**Assessment**

**Condition** – The current hardware consists of a, now decommissioned due to repeated failures, BladeCenter and an under powered HP server cluster. The current hardware will not meet the server needs going forward.

**Risk Level** – The single point of failure and imminent risk of the BladeCenter has been addressed through migrating the virtual servers off the BladeCenter and then decommissioning it; the HP cluster does not have the capacity to continue to host all the server needs and is itself aging. The risk of not being able to meet server needs is high.

**Criticality** – Maintaining the server needs is highly critical to the function of almost every department in the organisation.

**Financial** – A reliable server infrastructure is key to the operations of the City of Sarnia with potential financial impacts due to loss of productivity or even the complete inability of many departments to perform any of their tasks and functions. Financial impact of not going forward would be tied to a potentially significant loss of productivity.

**Costing**

Project Details	2022	2023	2024	2025	2026	Total
Deploy and Implement	90,000					90,000
						-
						-
Total Project Cost	90,000	-	-	-	-	90,000

**Funding Sources**

Year	2022	2023	2024	2025	2026	Total
Validated Request	90,000	-	-	-	-	90,000
<b>Funding Sources</b>						
Reserves/Reserve Funds	90,000					90,000
Grant						-
Donation						-
Other						-
Total Funded	90,000	-	-	-	-	90,000
Total Unfunded	-	-	-	-	-	-

CITY OF SARNIA - DRAFT 2022 CAPITAL

				Funding Source			Development Charges	Grants/ Donations	Total Amount Funded	
Category	Division	Department	Project Name	Tax Levy	Transit Levy	Rates				
General Government	Engineering & Operations	Engineering	Accessibility Improvements	(51,340)				(141,160)	(192,500)	
			Active Transportation Projects	(351,720)			(737,961)	(1,173,280)	(2,262,961)	
			Bridges & Culverts					(850,000)	(850,000)	
			City Entrance Signage	(225,000)					(225,000)	
			Intersection Upgrades	(900,000)					(900,000)	
			Oversized Load Corridor	(2,270,584)				(2,929,416)	(5,200,000)	
			Parking Lot Reconstruction	(450,000)					(450,000)	
			Road Rehabilitation					(2,000,000)	(2,000,000)	
			Shoreline Protection	(3,250,000)					(3,250,000)	
			Streetlight Replacements	(100,000)					(100,000)	
			Traffic Signals	(100,000)					(100,000)	
			Transportation Master Plan & Streetscape Improvements	(100,000)					(100,000)	
		Operation Services	Former Michigan Avenue Landfill Remediation	(300,000)					(300,000)	
		Engineering & Operations Total				(8,098,644)			(737,961)	(7,093,856)
	General Government Total				(8,098,644)			(737,961)	(7,093,856)	(15,930,461)
Transit	Engineering & Operations	Transit	Maintenance Equipment Upgrades/Replacements		(102,680)			(282,320)	(385,000)	
			Bus Stop Improvements					(213,666)	(213,666)	
			Fleet Replacement & Expansion					(1,600,000)	(1,600,000)	
			Terminal Upgrades					(1,595,000)	(1,595,000)	
	Engineering & Operations Total					(102,680)		(3,690,986)	(3,793,666)	
Transit Total					(102,680)		(3,690,986)	(3,793,666)		
Water & Sewer	Engineering & Operations	Engineering	Combined Sewer Separation	(748,887)		(3,362,651)		(2,038,462)	(6,150,000)	
			Plank Road Reconstruction	(2,378,793)		(3,729,987)		(2,641,220)	(8,750,000)	
			Watermain Replacements	(795,690)		(1,794,310)			(2,590,000)	
		Operation Services	Bright's Grove Sewage Treatment Facility			(700,000)			(700,000)	
			Pumping Station Improvements			(250,000)			(250,000)	
			Wastewater Pollution Control Centre - Biosolids Processing Upgrades			(2,672,500)	(827,500)		(3,500,000)	
			Wastewater Pollution Control Centre - Process Improvements			(400,000)			(400,000)	
		Public Works	Lead Reduction			(1,200,000)			(1,200,000)	
			Water Meter Replacements			(150,000)			(150,000)	
	Engineering & Operations Total				(3,923,370)		(14,259,448)	(827,500)	(4,679,682)	(23,690,000)
Water & Sewer Total				(3,923,370)		(14,259,448)	(827,500)	(4,679,682)	(23,690,000)	
Total Amount Funded				(12,022,014)	(102,680)	(14,259,448)	(1,565,461)	(15,464,524)	(43,414,127)	

# 2022 Capital Project Request

Capital Project Name	Department
Accessibility Improvements	Engineering

Project Manager	Start Date	Completion Date
Manager of Development and Transportation	January 2022	December 2022

Project Description, Justification, & Impact on Operating
<p><b>ICIP SAR-08</b> - Replacement of sidewalks in poor condition and improvement of curb face to sidewalk ramps for compliance and improvement in accessibility standards.</p> <p>This project is funded in part by the Investing in Canada Infrastructure Program, which is a cost shared funding program between the Federal and Provincial governments and the ultimate recipient.</p>

Assessment
<p><b>Condition</b> – Infrastructure is currently in poor (unsafe) condition or non-compliant with regulations.</p> <p><b>Risk Level</b> – Deteriorating infrastructure poses a risk to members of the community, opening the city to legal liability.</p> <p><b>Criticality</b> – Infrastructure should be replaced on an annual basis to improve conditions and avoid non-compliance.</p> <p><b>Financial</b> – Negligible effect on maintenance costs to replace the existing infrastructure with new, which will require maintenance.</p>

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Sidewalk Ramp Upgrades	192,500					192,500
						-
						-
						-
Total Project Cost	192,500	-	-	-	-	192,500

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	192,500					192,500
Funding Sources						
Reserves/Reserve Funds	51,340					51,340
Grant	141,160					141,160
Donation						-
Other						-
Total Funded	192,500	-	-	-	-	192,500
Total Unfunded	-	-	-	-	-	-

# 2022 Capital Project Request

Capital Project Name	Department
Active Transportation	Engineering

Project Manager	Start Date	Completion Date
Manager of Development and Transportation	January 2022	December 2022

Project Description, Justification, & Impact on Operating
<p><b>ICIP SAR-07</b> - Installation of a multi-use trail on London Line from Barclay Drive to Blackwell Sideroad, sidewalk infill projects and pedestrian crossovers to continue with the annual improvements to the active transportation network. The current lack of active transportation infrastructure is a significant safety concern and continuing this initiative will help in achieving our overall active transportation network targets. New active transportation infrastructure will lead to a minor increase in the operating budget for maintenance.</p> <p>This project was included in the Investing in Canada Infrastructure Program – Public Transit Stream grant application. If successful, the City of Sarnia must provide matching funds of 26.67%</p>

Assessment
<p><b>Condition</b> – N/A (new active transportation infrastructure)</p> <p><b>Risk Level</b> – High safety risk due to current lack of active transportation infrastructure.</p> <p><b>Criticality</b> – High priority in the Transportation Master Plan.</p> <p><b>Financial</b> – Minor increase to operating costs.</p>

Costing

Project Details	2022	2023	2024	2025	2026	Total
London Line Trail	1,275,000					1,275,000
Pedestrian Crossing/Signals	150,000	150,000	100,000			400,000
Sidewalk Infill/Bike Lanes	475,000	185,000				660,000
Confederation Multi-Use Trail	112,961					112,961
London Road Trail	250,000					250,000
Total Project Cost	2,262,961	335,000	100,000	-	-	2,697,961

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	2,262,961	335,000	100,000			2,697,961
Funding Sources						
Reserves/Reserve Funds	351,720	62,675	26,670			441,065
Grant	1,173,280	172,326	73,330			1,418,936
Donation						-
Other - DC Reserve	737,961	100,000				837,961
Total Funded	2,262,961	335,000	100,000	-	-	2,697,961
Total Unfunded	-	-	-	-	-	-

# 2022 Capital Project Request

Capital Project Name	Department
Bridges and Culverts	Engineering

Project Manager	Start Date	Completion Date
Manager of Design & Infrastructure	Spring 2022	Ongoing

Project Description, Justification, & Impact on Operating
Rehabilitation and replacement of bridges and culverts based on needs identified in biannual inspection reports. Rehabilitation projects ensure that these expensive assets will reach their intended design life. Projects will reduce operating costs to maintain deteriorating infrastructure. Projects in 2022 include the major rehabilitation of Jackson Road bridge to ensure it will remain in good condition.

Assessment
<b>Condition</b> – Numerous bridge components are in very poor condition based on biannual inspection reports.
<b>Risk Level</b> – Increased rate of deterioration.
<b>Criticality</b> – Important to rehabilitate bridges at the right time before they reach a state of disrepair.
<b>Financial</b> – Reduced operating costs to maintain bridges and address potential for bridge condition to worsen leading to higher costs in the future.

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Jackson Road Bridge	850,000					850,000
Michigan Road Bridge		1,000,000				1,000,000
McGregor Sideroad Bridge		600,000				600,000
Various Bridges & Culverts			2,000,000	2,000,000	2,000,000	6,000,000
Total Project Cost	850,000	1,600,000	2,000,000	2,000,000	2,000,000	8,450,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	850,000	1,600,000	2,000,000	2,000,000	2,000,000	8,450,000
Funding Sources						
Reserves/Reserve Funds						-
Grant	850,000	1,600,000	2,000,000	2,000,000	2,000,000	8,450,000
Donation						-
Other						-
Total Funded	850,000	1,600,000	2,000,000	2,000,000	2,000,000	8,450,000
Total Unfunded	-	-	-	-	-	-

# 2022 Capital Project Request

Capital Project Name	Department
City Entrance Signage	Engineering

Project Manager	Start Date	Completion Date
Manager of Development and Transportation	January 2022	December 2022

Project Description, Justification, & Impact on Operating
<p>Project to replace and enhance the city entrance welcome signage at various locations. Existing signage is faded and outdated. New signage would improve the image of the City.</p> <p>It would likely be beneficial to delay the project one year until City rebranding has been considered to ensure new signs would conform to the new City branding.</p>

Assessment
<p><b>Condition</b> – existing signage is in very poor condition</p> <p><b>Risk Level</b> – low</p> <p><b>Criticality</b> – medium, mainly an aesthetic concern but they are in very poor condition</p> <p><b>Financial</b> – low</p>

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Sign Replacements	225,000					225,000
						-
						-
						-
Total Project Cost	225,000	-	-	-	-	225,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	225,000				-	225,000
Funding Sources						
Reserves/Reserve Funds	225,000					225,000
Grant						-
Donation						-
Other - County Share						-
Total Funded	225,000	-	-	-	-	225,000
Total Unfunded	-	-	-	-	-	-



# 2022 Capital Project Request

Capital Project Name	Department
Intersection Upgrades	Engineering

Project Manager	Start Date	Completion Date
Manager of Development and Transportation	January 2022	December 2022

Project Description, Justification, & Impact on Operating
<p>In 2012 a traffic study was completed to evaluate the operating condition of the intersection of Cathcart Boulevard and Indian Road. The study indicated that the level of operation would receive incremental improvement to the level of operation by implementing either a lane reduction/road diet, traffic signals, or a roundabout, respectively. At the July 2021 council meeting staff were asked to prepare a report on the Cathcart and Indian, and Cathcart and Murphy Road Intersections with respect to potential intersection improvements. Staff have previously committed to reviewing and performing pilot projects at each intersection in 2022 and 2023 respectively.</p> <p>After review of the options presented in the base study and the relative costs provided (with 17% inflationary increase) the following costs were derived for budget purposes:</p> <p>Cathcart &amp; Murphy: Signalized intersection – \$350,000</p> <p>Cathcart and Indian: Signalized intersection – \$350,000</p> <p>Lane Reductions and Traffic Calming: Road Diet - \$150,000</p> <p>Any improvement at either intersection as a standalone project will require significant capital investment to make changes due to the number of approach lanes and existing infrastructure.</p> <p>This request is being submitted in anticipation of the upcoming resolution and may be adjusted depending on the result.</p>

Assessment
<p><b>Condition</b> – both intersections have been quantified to operate at an acceptable level, though it has been documented that improvements would significantly improve the level of service.</p> <p><b>Risk Level</b> – the intersections have a relatively high collision rate.</p> <p><b>Criticality</b> –major infrastructure changes required to reach higher level of service.</p> <p><b>Financial</b> – significant capital investment required to implement effective change to both intersections.</p>

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Cathcart & Murphy Signals	375,000					375,000
Cathcart & Indian Signals	375,000					375,000
Lane Reductions & Calming	150,000					150,000
Total Project Cost	900,000	-	-	-	-	900,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	900,000					900,000
Funding Sources						
Reserves/Reserve Funds	900,000					900,000
Grant						-
Donation						-
Other						-
Total Funded	900,000	-	-	-	-	900,000
Total Unfunded	-	-	-	-	-	-

# 2022 Capital Project Request

Capital Project Name	Department
Oversized Load Corridor	Engineering

Project Manager	Start Date	Completion Date
OLC Project Manager	January 2021	December 2024

Project Description, Justification, & Impact on Operating
<p>The Sarnia-Lambton Oversized Load Corridor (OLC) is a project to rehabilitate and improve a designated route that traverses the City and upgrade existing Sarnia Harbour Facilities located at the westerly terminus of Exmouth Street. The corridor will accommodate the shipment and export of super oversized objects fabricated in the vicinity of the Plank Road industrial area, as well as the shipment of such objects imported to support the area’s traditional petrochemical and emerging bio-industrial base.</p> <p>This project has received National Trade Corridor funding of \$6M, Southwestern Ontario Development Fund grant of \$1.5M, and a donation of \$4M from Cestar College.</p>

Assessment
<p><b>Condition</b> – The OLC report identified infrastructure, including utilities and culverts, that are obstacles to moving large oversize loads from the fabricators to the Port of Sarnia.</p> <p><b>Risk Level</b> – Local manufacturers can’t ship large loads to external markets.</p> <p><b>Criticality</b> – Important to local economy and growth of manufacturing sector.</p> <p><b>Financial</b> – Grant money is forfeited if the City does not contribute it’s share.</p>

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Utilities	150,000					150,000
Roads	100,000					100,000
Dock	4,950,000	436,402	105,538			5,491,940
Other			112,060			112,060
Total Project Cost	5,200,000	436,402	217,598	-	-	5,854,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	5,200,000	436,402	217,598	-	-	5,854,000
Funding Sources						
Reserves/Reserve Funds	2,270,584					2,270,584
Grant	1,429,416	280,000	200,000			1,909,416
Donation	1,500,000	156,402	17,598			1,674,000
Other						-
Total Funded	5,200,000	436,402	217,598	-	-	5,854,000
Total Unfunded	-	-	-	-	-	-

# 2022 Capital Project Request

Capital Project Name	Department
Parking Lot Reconstruction	Engineering

Project Manager	Start Date	Completion Date
Construction Manager	Spring 2022	Fall 2022

Project Description, Justification, & Impact on Operating
Replacement of the Mitton Street parking lot. The Mitton Village public parking lot is in very poor condition and is in need of replacement.
The investment in the parking lot also aligns with recommendations from the adopted Community Improvement Plan and efforts of the Mitton Village Community Development Advisory Committee. The creation of an expanded park space within the lot along the Mitton Street right of way will contribute to an enhanced streetscape and provide opportunity to further activate the space.

Assessment
<b>Condition</b> – Very poor condition.
<b>Risk Level</b> – Potential for damage claims to cars, and trip and fall claims.
<b>Criticality</b> – Potential trip and fall claims, vehicle damage claims, and increased maintenance requirements are likely to occur.
<b>Financial</b> – Reduce operating repair & maintenance costs.

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Mitton Village Parking Lot	450,000					450,000
						-
						-
						-
						-
						-
Total Project Cost	450,000	-	-	-	-	450,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	450,000	-	-	-	-	450,000
Funding Sources						
Reserves/Reserve Funds	450,000					450,000
Grant						-
Donation						-
Other						-
Total Funded	450,000	-	-	-	-	450,000
Total Unfunded	-	-	-	-	-	-

# 2022 Capital Project Request

Capital Project Name	Department
Road Rehabilitation	Engineering

Project Manager	Start Date	Completion Date
Construction Manager	Spring 2022	Fall 2022

Project Description, Justification, & Impact on Operating
<p>Road reconstruction and resurfacing of roads that have reached the end of their useful life. A road condition survey has identified many roads which are in very poor condition and staff receive several complaints about the condition of roads. Road upgrades improve public safety and reduce the operating budget used for road patches and pothole filling.</p> <p>This program intends to target all areas of the City with equal attention to residential streets, commercial/industrial roads, rural roads, walking trails, and roads within City Parks.</p>

Assessment
<p><b>Condition</b> – There is a large backlog of roads in very poor condition.</p> <p><b>Risk Level</b> – High risk of road conditions continuing to deteriorate.</p> <p><b>Criticality</b> – Potential vehicle damage claims and increased maintenance requirements are likely to occur.</p> <p><b>Financial</b> – Reduced operating costs for maintaining roads in poor condition.</p>

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Road Rehabilitation	2,000,000	4,000,000	4,250,000	4,500,000	4,750,000	19,500,000
						-
						-
						-
Total Project Cost	2,000,000	4,000,000	4,250,000	4,500,000	4,750,000	19,500,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	2,000,000	4,000,000	4,250,000	4,500,000	4,750,000	19,500,000
Funding Sources						
Reserves/Reserve Funds		1,050,641	1,300,641	1,550,641	1,800,641	5,702,564
Grant	2,000,000	2,949,359	2,949,359	2,949,359	2,949,359	13,797,436
Donation						-
Other						-
Total Funded	2,000,000	4,000,000	4,250,000	4,500,000	4,750,000	19,500,000
Total Unfunded	-	-	-	-	-	-

# 2022 Capital Project Request

Capital Project Name	Department
Shoreline Protection	Engineering

Project Manager	Start Date	Completion Date
Construction Manager	Winter 2022	Fall 2022

Project Description, Justification, & Impact on Operating
<p>Proposed work for 2022 includes both shoreline revetment and groyne construction.</p> <p>Replace steel groynes, retaining walls, beach access points, and other work along the shoreline. Lake water levels are still dangerously high resulting in significant erosion. Old shoreline protection is failing at an increasing rate resulting in costly emergency repair work. Upgrades to shoreline protection will create beaches for recreation, protect the shoreline from erosion, and protect municipal infrastructure and property near the shoreline.</p> <p>The City will continue in 2022 with the St. Clair Region Conservation Authority (SCRCA) on their multi-year Disaster Mitigation and Adaptation Funding (DMAF) from the Federal Government. Contributing 60% and receiving 40% grant. The City supports SCRCA in pursuing additional DMAF funding.</p>

Assessment
<p><b>Condition</b> – Very poor, existing shoreline protection is inadequate.</p> <p><b>Risk Level</b> – High, with record high water levels shoreline erosion is occurring at an increasing rate.</p> <p><b>Criticality</b> – 2020 saw the all-time high water level on Lake Huron. The water levels are still dangerously high and erosion and costly emergency repairs will continue if shoreline protection work is not completed.</p> <p><b>Financial</b> – Reduce cost of emergency repairs.</p>

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Shoreline Protection	3,250,000	3,250,000	3,250,000	3,250,000	3,250,000	16,250,000
						-
						-
						-
Total Project Cost	3,250,000	3,250,000	3,250,000	3,250,000	3,250,000	16,250,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	3,250,000	3,250,000	3,250,000	3,250,000	3,250,000	16,250,000
Funding Sources						
Reserves/Reserve Funds	3,250,000	3,250,000	3,250,000	3,250,000	3,250,000	16,250,000
Grant						-
Donation						-
Other						-
Total Funded	3,250,000	3,250,000	3,250,000	3,250,000	3,250,000	16,250,000
Total Unfunded	-	-	-	-	-	-

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Capital Project Name	Department
Streetlight Replacements	Engineering

Project Manager	Start Date	Completion Date
Manager of Development and Transportation	January 2022	December 2022

### **Project Description, Justification, & Impact on Operating**

Annual program to replace streetlight infrastructure that is in poor condition. This program includes the replacement of wiring, poles, and fixtures.

## Assessment

**Condition** – Streetlight Poles and wiring in poor condition.

**Risk Level – Low**

**Criticality** – Low

**Financial** – Lifecycle replacement of infrastructure contributes to a reduction in maintenance operating costs.

## Costing

Project Details	2022	2023	2024	2025	2026	Total
Pole and Wiring Replacement	100,000	200,000	200,000	200,000	200,000	900,000
						-
						-
						-
Total Project Cost	100,000	200,000	200,000	200,000	200,000	900,000

## Funding Sources

Year	2022	2023	2024	2025	2026	Total
Validated Request	100,000	200,000	200,000	200,000	200,000	900,000
<b>Funding Sources</b>						
Reserves/Reserve Funds	100,000	200,000	200,000	200,000	200,000	900,000
Grant						-
Donation						-
Other						-
<b>Total Funded</b>	<b>100,000</b>	<b>200,000</b>	<b>200,000</b>	<b>200,000</b>	<b>200,000</b>	<b>900,000</b>
<b>Total Unfunded</b>	-	-	-	-	-	-

Project Manager	Start Date	Completion Date
Manager of Development and Transportation	January 2022	December 2022

Annual program to replace traffic signal infrastructure including poles, heads, controllers, and wiring. Current infrastructure has reached the end of its useful life and needs to be replaced. Operating costs are increasing to maintain deteriorating infrastructure.

**Condition** – Traffic signal infrastructure is in poor condition.

**Risk Level** – Medium risk of traffic signals going into flash mode is becoming more common.

**Criticality** – Minor traffic issues and increased maintenance fixes.

**Financial** – Traffic signal maintenance costs are increasing year over year due to the state of infrastructure.

Project Details	2022	2023	2024	2025	2026	Total
Signal Heads and Wiring	100,000	150,000	150,000	150,000	150,000	700,000
						-
						-
						-
Total Project Cost	100,000	150,000	150,000	150,000	150,000	700,000

Year	2022	2023	2024	2025	2026	Total
Validated Request	100,000	150,000	150,000	150,000	150,000	700,000
<b>Funding Sources</b>						
Reserves/Reserve Funds	100,000	150,000	150,000	150,000	150,000	700,000
Grant						-
Donation						-
Other						-
<b>Total Funded</b>	<b>100,000</b>	<b>150,000</b>	<b>150,000</b>	<b>150,000</b>	<b>150,000</b>	<b>700,000</b>
<b>Total Unfunded</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

# 2022 Capital Project Request

Capital Project Name	Department
Transportation Master Plan & Streetscape Improvements	Engineering

Project Manager	Start Date	Completion Date
Manager of Development and Transportation	January 2022	December 2022

Project Description, Justification, & Impact on Operating
<p>The Transportation Master Plan identified a need to improve active transportation and road safety throughout the City. Creating complete streets that support all modes of transportation will make our community healthier and more livable. Projects include new sidewalks, rehabilitation of sidewalks, upgrades to sidewalk ramps to meet requirements of the Accessibility for Ontarians with Disabilities Act (AODA), street furniture, new cycling infrastructure, and new pedestrian crossovers at various locations throughout the City.</p>

Assessment
<p><b>Condition</b> – There is a lack of active and accessible transportation infrastructure.</p> <p><b>Risk Level</b> – Currently there are safety risks for active transportation users.</p> <p><b>Criticality</b> – Key infrastructure pieces are required to improve active transportation safety.</p> <p><b>Financial</b> – These projects will reduce operating repair and maintenance costs.</p>

Costing						
Project Details	2022	2023	2024	2025	2026	Total
TMP & Streetscapes	100,000	300,000	300,000	300,000	350,000	1,350,000
						-
						-
						-
Total Project Cost	100,000	300,000	300,000	300,000	350,000	1,350,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	100,000	300,000	300,000	300,000	350,000	1,350,000
Funding Sources						
Reserves/Reserve Funds	100,000	300,000	300,000	300,000	350,000	1,350,000
Grant						-
Donation						-
Other						-
Total Funded	100,000	300,000	300,000	300,000	350,000	1,350,000
Total Unfunded	-	-	-	-	-	-



# 2022 Capital Project Request

Capital Project Name	Department
Former Michigan Avenue Landfill Remediation	Operation Services

Project Manager	Start Date	Completion Date
Superintendent, Environmental Services	2022	Ongoing

Project Description, Justification, & Impact on Operating
Site investigations, engineering design, and consultation with the Ministry of Environment, Conservation and Parks (MECP) and St. Clair Region Conservation Authority (SCRCA).  Remedial work based on 2020 site investigation which could include the installation/extension of containment systems and/or underground barriers, soil removal, the addition/extension of active extraction systems and the installation of monitoring/sentry wells.

Assessment
<b>Condition</b> – N/A  <b>Risk Level</b> – High – If no action taken, there will be adverse environmental impacts.  <b>Criticality</b> – High – Fines, costly environmental cleanup.  <b>Financial</b> – Operating budget will be impacted; reflection will be shown in future operating budgets.

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Remediation	300,000	300,000	100,000	100,000	75,000	875,000
						-
						-
						-
Total Project Cost	300,000	300,000	100,000	100,000	75,000	875,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	300,000	300,000	100,000	100,000	75,000	875,000
Funding Sources						
Reserves/Reserve Funds	300,000	300,000	100,000	100,000	75,000	875,000
Grant						-
Donation						-
Other						-
Total Funded	300,000	300,000	100,000	100,000	75,000	875,000
Total Unfunded	-	-	-	-	-	-

Project Manager	Start Date	Completion Date
Transit Manager	Spring 2022	Fall 2022

**ICIP SAR-02** - Existing hoists at the Transit facility require replacement as they are 18 years old and approaching the end of their life cycle. This project is for the purchase and installation of a drive-on hoist to repair and service buses and support vehicles. It is funded, in part, by the Investing in Canadian Infrastructure Program (ICIP).

**Condition** – Poor

**Risk Level** – High – Employee Safety

**Criticality** – High – Improve aging infrastructure and vehicle service productivity

**Financial** – Medium – Partial funding through approved grant program

Project Details	2022	2023	2024	2025	2026	Total
Hoist & Installation	385,000					385,000
Diesel Fuel Pump & Maintenance Program		330,000				330,000
						-
						-
<b>Total Project Cost</b>	<b>385,000</b>	<b>330,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>715,000</b>

Year	2022	2023	2024	2025	2026	Total
Validated Request	385,000	330,000	-	-	-	715,000
<b>Funding Sources</b>						
Reserves/Reserve Funds	102,680	88,011				190,691
Grant	282,320	241,989				524,309
Donation						-
Other						-
<b>Total Funded</b>	<b>385,000</b>	<b>330,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>715,000</b>
<b>Total Unfunded</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

# 2022 Capital Project Request

Capital Project Name	Department
Bus Stop Improvements	Transit

Project Manager	Start Date	Completion Date
Transit Manager	Spring 2022	Fall 2022

Project Description, Justification, & Impact on Operating
<p><b>ICIP SAR-05</b> - Many of the existing bus shelters are more than 20-years old. Base and supports have significant rusting which require repairs. The lighting in the existing end-of-life shelters requires hydro and switching to solar shelters will eliminate electricity costs. The dimensions of the existing shelters are slightly smaller than the solar shelters; new concrete or extensions will be necessary to support green solar shelters. Additionally, concrete pads are required at bus stops to ensure they are accessible. This project is funded by Provincial Gas Tax and the Investing in Canada Infrastructure Program (ICIP).</p>

Assessment
<p><b>Condition</b> – Poor</p> <p><b>Risk Level</b> – Low</p> <p><b>Criticality</b> – Medium</p> <p><b>Financial</b> – Reduced operating repair &amp; maintenance, and electricity costs.</p>

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Bus stops and shelters	213,666	213,666	213,666	146,119	119,721	906,838
						-
						-
						-
Total Project Cost	213,666	213,666	213,666	146,119	119,721	906,838

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	213,666	213,666	213,666	146,119	119,721	906,838
Funding Sources						
Reserves/Reserve Funds						-
Grant	213,666	213,666	213,666	146,119	119,721	906,838
Donation						-
Other						-
Total Funded	213,666	213,666	213,666	146,119	119,721	906,838
Total Unfunded	-	-	-	-	-	-

# 2022 Capital Project Request

Capital Project Name	Department
Fleet Replacement & Expansion	Transit

Project Manager	Start Date	Completion Date
Transit Manager, Fleet Superintendent	Spring 2022	Fall 2023

Project Description, Justification, & Impact on Operating
<b>ICIP SAR-04</b> – For the procurement of two new 40’ diesel buses. Transit fleet is continuously aging and will require upgrades while planning to convert the current fleet to electric buses over the coming years.

Assessment
<b>Condition</b> – Poor
<b>Risk Level</b> – Aging fleet require more repairs and affect service levels
<b>Criticality</b> – Improve aging fleet
<b>Financial</b> – Funded by Provincial Gas Tax and Investing in Canadian Infrastructure Program (ICIP)

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Conventional Transit Bus Replacements	1,600,000	2,800,000	1,600,000	1,600,000	1,600,000	9,200,000
						-
						-
Busses						-
Total Project Cost	1,600,000	2,800,000	1,600,000	1,600,000	1,600,000	9,200,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	1,600,000	2,800,000	1,600,000	1,600,000	1,600,000	9,200,000
Funding Sources						
Reserves/Reserve Funds						-
Grant	1,600,000	2,800,000	1,600,000	1,600,000	1,600,000	9,200,000
Donation						-
Other						-
Total Funded	1,600,000	2,800,000	1,600,000	1,600,000	1,600,000	9,200,000
Total Unfunded	-	-	-	-	-	-

# 2022 Capital Project Request

Capital Project Name	Department
Terminal Upgrades	Transit

Project Manager	Start Date	Completion Date
Project Manager, Engineering & Operations	Spring 2022	Fall 2022

Project Description, Justification, & Impact on Operating
<p><b>ICIP SAR-06</b> - The Murphy Road Terminal is very congested and there is no space at the existing location to make improvements. The Transportation Master Plan identified relocation of the terminal as a high priority. This project would include a new terminal with enhanced amenities for staff and passengers.</p> <p>This project is funded, in part, by the Investing in Canada Infrastructure Program.</p>

Assessment
<p><b>Condition</b> – The existing terminal assets are in reasonable condition, but functionality is poor.</p> <p><b>Risk Level</b> – Congestion at the existing site poses some safety risks.</p> <p><b>Criticality</b> – Relocation identified as a high priority in the Transportation Master Plan.</p> <p><b>Financial</b> – Matching funds are required for ICIP funding.</p>

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Murphy Road Terminal	1,595,000					1,595,000
Northgate Terminal			385,000			385,000
						-
						-
Total Project Cost	1,595,000	-	385,000	-	-	1,980,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	1,595,000	-	385,000	-	-	1,980,000
Funding Sources						
Reserves/Reserve Funds		-				-
Grant	1,595,000	-	385,000			1,980,000
Donation						-
Other						-
Total Funded	1,595,000	-	385,000	-	-	1,980,000
Total Unfunded	-	-	-	-	-	-

# 2022 Capital Project Request

Capital Project Name	Department
Combined Sewer Separation	Engineering

Project Manager	Start Date	Completion Date
Manager of Design & Infrastructure	Spring 2022	Fall 2022

Project Description, Justification, & Impact on Operating
<p>Sewer separation refers to the practice of separating the combined sanitary and storm flows being conveyed in a single sewer pipe into two separate pipes; one dedicated to sanitary sewage and the other to storm water. As the City’s combined sewers are often found in the oldest infrastructure areas, combined sewer separation projects typically include the reconstruction of all infrastructure within the City’s right-of-way.</p> <p>Sewer separation projects include design and modifications; studies, required as part of DMAF including, model updating, calibration, and ECA amendments etc.</p> <p>This project is funded, in part, by the Federal Government’s Disaster Mitigation and Adaptation Fund.</p>

Assessment
<p><b>Condition</b> – Combined sewers result in excess strain at the treatment plant and can result in basement flooding and overflows. Infrastructure on these roads is generally in very poor condition.</p> <p><b>Risk Level</b> – Risk of basement flooding during wet weather events and risk of sewer pipes failing.</p> <p><b>Criticality</b> – With increasing frequency and intensity of wet weather events, the likelihood of basement flooding increases. Asset failure results in costly emergency repair work.</p> <p><b>Financial</b> – Reduced operating costs to maintain infrastructure in poor condition, matching funds required to fully utilize grant funding.</p>

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Alfred, Russell, Shepherd St.	4,200,000					4,200,000
Crawford Street	1,200,000					1,200,000
Design & Construction	750,000					750,000
TBD		4,700,000	4,000,000	4,000,000	4,000,000	16,700,000
Total Project Cost	6,150,000	4,700,000	4,000,000	4,000,000	4,000,000	22,850,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	6,150,000	4,700,000	4,000,000	4,000,000	4,000,000	22,850,000
Funding Sources						
Reserves/Reserve Funds	4,111,538	2,820,000	2,400,000	2,400,000	3,786,462	15,518,000
Grant	2,038,462	1,880,000	1,600,000	1,600,000	213,538	7,332,000
Donation						-
Other						-
Total Funded	6,150,000	4,700,000	4,000,000	4,000,000	4,000,000	22,850,000
Total Unfunded	-	-	-	-	-	-

# 2022 Capital Project Request

Capital Project Name	Department
Plank Road Reconstruction	Engineering

Project Manager	Start Date	Completion Date
Manager of Design & Infrastructure	Spring 2022	Winter 2022

Project Description, Justification, & Impact on Operating
<p><b>Phase 2</b> - Reconstruction of Plank Road between Indian Road South and Highway 40. The project will include the road, ditches, and watermain. The existing watermain and road are in very poor condition. The project will reduce operating costs required to maintain the existing poor condition infrastructure.</p> <p>The city has been approved for a grant from the provincial and federal governments, through the Investing in Canada Infrastructure Program, to reconstruct Plank Road from Indian Road to Hwy 40. The grant will contribute 83.3% up to a maximum of \$4.17M for the road reconstruction. The City must contribute the remaining portion of the road and all costs for the watermain etc.</p> <p>Phase 1 from Indian Road to McGregor Side Road was completed in 2021. Phase 2 is from McGregor Side Road to Highway 40.</p>

Assessment
<p><b>Condition</b> – The road is in very poor condition and the watermain has experienced numerous breaks.</p> <p><b>Risk Level</b> – High risk of road and watermain continuing to deteriorate.</p> <p><b>Criticality</b> – This is a major industrial road and service disruptions are likely.</p> <p><b>Financial</b> – Reduced operating repair &amp; maintenance costs for the road and watermain in poor condition. The need to provide matching funds to utilize potential grant.</p>

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Plank Road phase 2	8,000,000					8,000,000
Design & Construction	750,000					750,000
						-
						-
Total Project Cost	8,750,000	-	-	-	-	8,750,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	8,750,000	-	-	-	-	8,750,000
Funding Sources						
Reserves/Reserve Funds	6,108,780					6,108,780
Grant	2,641,220					2,641,220
Donation						-
Other						-
Total Funded	8,750,000	-	-	-	-	8,750,000
Total Unfunded	-	-	-	-	-	-

# 2022 Capital Project Request

Capital Project Name	Department
Watermain Replacements	Engineering

Project Manager	Start Date	Completion Date
Manager of Design & Infrastructure	Spring 2022	Winter 2022

Project Description, Justification, & Impact on Operating
<p>The purpose of this project is to complete the lifecycle replacement of watermain at various locations throughout the City. These projects are prioritized based on condition or other needs, such as low water pressure. Replacing infrastructure at the end of its useful life reduces costly emergency repairs and general operating expenses. This work will also include related design option analysis/assessments, investigations, and water model updates and scenarios.</p>

Assessment
<p><b>Condition</b> – These proposed watermain projects are required for various reasons including; loops that impact water pressure and quality, deterioration, breaks, and diameters that restrict fire flows and pressure.</p> <p><b>Risk Level</b> – High risk of low pressure and fire flows and continued deterioration.</p> <p><b>Criticality</b> –Severe service disruptions are likely.</p> <p><b>Financial</b> – Reduce operating costs for maintaining watermain in poor condition.</p>

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Mandaumin	1,100,000					1,100,000
Donalda	780,000					780,000
Oldham	110,000					110,000
LaSalle Connections	600,000					600,000
Various Watermains		5,250,000	5,550,000	6,000,000	6,500,000	23,300,000
Total Project Cost	2,590,000	5,250,000	5,550,000	6,000,000	6,500,000	25,890,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	2,590,000	5,250,000	5,550,000	6,000,000	6,500,000	25,890,000
Funding Sources						
Reserves/Reserve Funds	2,590,000	5,250,000	5,550,000	6,000,000	6,500,000	25,890,000
Grant						-
Donation						-
Other						-
Total Funded	2,590,000	5,250,000	5,550,000	6,000,000	6,500,000	25,890,000
Total Unfunded	-	-	-	-	-	-



# 2022 Capital Project Request

Capital Project Name	Department
Bright's Grove Sewage Treatment Facility	Operation Services

Project Manager	Start Date	Completion Date
WPCC Superintendent	January 3, 2022	December 31, 2022

### Project Description, Justification, & Impact on Operating

The Bright's Grove Sewage Treatment Facility consists of two aerated lagoon cells and the Submerged Attached Growth Reactor (SAGR) treatment system. The facultative lagoon treatment process was upgraded in 2017 as the initial capital project in the ongoing Sewer Upgrade. Both lagoon cells are 1.8m (6') deep.

Cell #1 of the aerated lagoon receives the raw sewage, and the majority of the suspended solids settle in this cell. The liquid overflows into Cell #2 and continues through the downstream treatment process. Eventually the settled sludge in Cell #1 requires removal to avoid/minimize the amount of suspended solids from reaching Cell #2.

Cell #1 was last cleaned in 1998, the estimated amount of sludge currently in the cell is 22,600 cubic metres. The sludge has reached a depth of 1.5m in the vicinity of the inlet and an average depth of 400mm across the entire cell. Cell #2 was last cleaned in 2006.

Cell #1 was not cleaned as part of the recent facility upgrade; the cell now requires desludging.

### Assessment

**Condition** – Cell #1 is considered full of sludge.

**Risk Level** – deferring the desludging increases the risk of additional sludge reaching Cell #2 and expediting its cleaning.

**Criticality** – reliable performance of the aerated lagoon cells is critical to the removal of the suspended solids and the operation of downstream SAGR system. Exceedances of the effluent criteria are probable should the SAGR system fail.

**Financial** – exceedances of the effluent criteria could lead to fines from the MECP if preventive, and/or corrective, action is not taken.

### Costing

Project Details	2022	2023	2024	2025	2026	Total
Desludging Cell #1	700,000					700,000
Desludging Cell #2					800,000	800,000
Total Project Cost	700,000	-	-	-	800,000	1,500,000

### Funding Sources

Year	2022	2023	2024	2025	2026	Total
Validated Request	700,000	-	-	-	800,000	1,500,000
Funding Sources						
Reserves/Reserve Funds	700,000				800,000	1,500,000
Grant						-
Donation						-
Other						-
Total Funded	700,000	-	-	-	800,000	1,500,000
Total Unfunded	-	-	-	-	-	-

# 2022 Capital Project Request

Capital Project Name	Department
Pumping Station Improvements	Operation Services

Project Manager	Start Date	Completion Date
Superintendent, Environmental Services	Spring 2021	Ongoing

Project Description, Justification, & Impact on Operating
Annual capital program for improvements/rehabilitation of various sanitary pumping stations throughout the City. Many sanitary pumping stations have reached the end of their useful life and require rehabilitation. If a sanitary pumping station fails it may cause basement flooding or result in non-compliance with the Ministry of the Environment, Conservation and Parks (MECP) Certificates of Approval. Capital upgrades to pumping stations will reduce operational maintenance and overtime costs.

Assessment
<b>Condition – Poor</b> - Many pumping stations have reached the end of their useful life and are in poor condition.
<b>Risk Level – High</b> - Failure could result in basement flooding, overflows and fines. Development proposal would not be able to proceed without the pumping station upgrade.
<b>Criticality – High</b> - Pumping stations must be maintained to reduce the probability of failure leading to basement flooding and adverse environmental impacts.
<b>Financial</b> – Reduced maintenance and overtime costs and reduction in risk (cost of lawsuits from basement flooding, fines, environmental remediation, etc.). Labour hours directly associated with pumping stations would decrease as the pump would not longer be at critical capacity. Operating costs would decrease as the site would be more efficient.

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Design and tender preparation for PS# 32, 35, 41, 44	250,000					250,000
PS# 11, 14 Replacement, Construction/Rehabilitation Smith & Loveless Sites (Design and tender preparation for PS# 7, 8, 12, 23)		1,500,000				1,500,000
PS# 13, 18, 32 Replacement			1,500,000			1,500,000
PS# 35, 41, 44 Replacement				1,500,000		1,500,000
PS# 7, 8, 12 Replacement					1,550,000	1,550,000
Total Project Cost	250,000	1,500,000	1,500,000	1,500,000	1,550,000	6,300,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	250,000	1,500,000	1,500,000	1,500,000	1,550,000	6,300,000
Funding Sources						
Reserves/Reserve Funds	250,000	1,500,000	1,500,000	1,500,000	1,550,000	6,300,000
Grant						-
Donation						-
Other						-
Total Funded	250,000	1,500,000	1,500,000	1,500,000	1,550,000	6,300,000
Total Unfunded	-	-	-	-	-	-

# 2022 Capital Project Request

Capital Project Name	Department
Wastewater Pollution Control Centre – Biosolids Processing Upgrades	Operation Services

Project Manager	Start Date	Completion Date
Manager, Operation Services	January 3, 2022	December 31, 2022

Project Description, Justification, & Impact on Operating
<p><b>Phase II</b> - Continuation of capital improvements to the Biosolids treatment process initiated by Phase 1 in 2021. The original Biosolids treatment system, commissioned in 2000, has many components that are at the end of their useful life. Phase 2 will include the addition of a third centrifuge which will provide operational flexibility for sludge dewatering, a new sludge mixing system, replacement of worn conveyors and steel cladding, refurbishment of the odour control equipment, and a new loading ramp and a control room.</p> <p>Consulting engineering services for Phase 2 were included in the 2021 capital project.</p>

Assessment
<p><b>Condition</b> – Condition assessments have recommended phased improvements to the existing facility as it is in very poor condition.</p> <p><b>Risk Level</b> – The risk imposed by the existing condition and treatment capacity of the sludge dewatering equipment is extreme. The two existing centrifuges require frequent maintenance and are incapable of treating sufficient sludge when one unit is out of service. A third centrifuge is required but requires up to a year lead-time for procurement and manufacturing.</p> <p><b>Criticality</b> – If the dewatering process is not improved, operational upsets would be critical. A single centrifuge is not capable of processing the amount of sludge currently generated.</p> <p><b>Financial</b> – The back-up plan of hauling sludge to other facilities for processing would be very costly. There is significant potential for non-compliance damages if processing does not meet effluent criteria.</p>

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Phase 2	3,500,000					3,500,000
						-
						-
						-
Total Project Cost	3,500,000	-	-	-	-	3,500,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	3,500,000	-	-	-	-	3,500,000
Funding Sources						
Reserves/Reserve Funds	3,500,000					3,500,000
Grant						-
Donation						-
Other						-
Total Funded	3,500,000	-	-	-	-	3,500,000
Total Unfunded	-	-	-	-	-	-

# 2022 Capital Project Request

Capital Project Name	Department
Wastewater Pollution Control Centre – Process Improvements	Operation Services

Project Manager	Start Date	Completion Date
WPCC Superintendent	January 3, 2022	December 31, 2022

Project Description, Justification, & Impact on Operating
Various projects to upgrade and rehabilitate the Wastewater Pollution Control Centre (WPCC).  Projects in 2022 include starting an annual program to replace the four raw sewage pumps that lift the incoming raw sewage into the treatment plant. The other main project is paving a new road dedicated to truck traffic around the perimeter. There have been two incidents in the last few years with contractors damaging existing pipe racks on the current truck route.

Assessment
<b>Condition</b> – An annual review of the maintenance records will be conducted to establish the raw sewage pump requiring replacement each year.  <b>Risk Level</b> – The risk imposed by a failed sewage pumps is high. Without the required pump capacity, the sewage could back-up in the collection system and flood basements.  <b>Criticality</b> – Reliable performance of the raw sewage pumps is critical to the operation of the wastewater collection system.  <b>Financial</b> – The cost of a raw sewage pump is negligible when compared to the potential cost of the damage from flooded basements. The budgetary figure also includes installation.

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Raw Sewage Pumps	300,000	315,000	330,000	350,000		1,295,000
Internal Road Paving	100,000					100,000
TBD		850,000	1,000,000	1,100,000	1,600,000	4,550,000
Total Project Cost	400,000	1,165,000	1,330,000	1,450,000	1,600,000	5,945,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	400,000	1,165,000	1,330,000	1,450,000	1,600,000	5,945,000
Funding Sources						
Reserves/Reserve Funds	400,000	1,165,000	1,330,000	1,450,000	1,600,000	5,945,000
Grant						-
Donation						-
Other						-
Total Funded	400,000	1,165,000	1,330,000	1,450,000	1,600,000	5,945,000
Total Unfunded	-	-	-	-	-	-

# 2022 Capital Project Request

Capital Project Name	Department
Lead Reduction	Public Works

Project Manager	Start Date	Completion Date
PW Manager/ PW Superintendent	April 2022	December 2024

Project Description, Justification, & Impact on Operating
<p>In 2019, the City of Sarnia launched the Lead Reduction Program. Based on the current drinking water quality standards, the City shall work to remove all the verified lead service lines that have a lead concentration of 10µg/liter and above.</p> <p>The City will cover the full cost of replacing the lead service lines and coordinate the work with an independent contractor on behalf of the homeowners. This work will include the replacement of lead lines and limited restoration (maximum of \$500) such as seeding/sodding or filling gravel on asphalt/concrete driveways. The City will cover all of the costs directly with the contractor. All additional restoration work is the onus of the homeowner.</p>

Assessment
<p><b>Condition</b> – It was found that only 191 (2%) out of 8,787 properties have verified lead water service lines. Approximately 670 service lines still require testing which should be completed by 2022.</p> <p><b>Risk Level</b> – Lead water services are a health concern as the lead can leach into the water therefore the risk level is high.</p> <p><b>Criticality</b> – Reliable safe drinking water is critical to the health and safety of Sarnia. Non-compliance of the lead levels in drinking water can lead to adverse health effects.</p> <p><b>Financial</b> – Failure to remove and reduce lead levels in water services can result in fines from the MECP if preventive, and/or corrective, action is not taken.</p>

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Lead Service Replacement	1,200,000	800,000				2,000,000
						-
						-
						-
Total Project Cost	1,200,000	800,000	-	-	-	2,000,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	1,200,000	800,000	-	-	-	2,000,000
Funding Sources						
Reserves/Reserve Funds	1,200,000	800,000				2,000,000
Grant						-
Donation						-
Other						-
Total Funded	1,200,000	800,000	-	-	-	2,000,000
Total Unfunded	-	-	-	-	-	-



## CITY OF SARNIA - DRAFT 2022 CAPITAL

				Funding Source		
Category	Division	Department	Project Name	Tax Levy	Grants/ Donations	Total Amount Funded
General Government	Fire Services	Fire Services	Bunker Gear Replacement	(90,000)		(90,000)
			Radio System & User Gear	(1,596,969)		(1,596,969)
			Records Management System	(180,000)		(180,000)
			Fire Station 3 - Demolition, Design, Construction		(2,566,665)	(2,566,665)
	Fire Services Total			(1,866,969)	(2,566,665)	(4,433,634)
General Government Total				(1,866,969)	(2,566,665)	(4,433,634)
Total Amount Funded				(1,866,969)	(2,566,665)	(4,433,634)

# 2022 Capital Project Request

Capital Project Name	Department
Bunker Gear Replacement	Fire Services

Project Manager	Start Date	Completion Date
Fire Chief	January 1, 2022	December 31, 2022

Project Description, Justification, & Impact on Operating
<p>Bunker gear (or turnout gear) is the personal protective equipment (PPE) worn by personnel for structural firefighting.</p> <p>The standard that the National Fire Protection Association has designated to firefighter protective clothing, NFPA 1971 “Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting”, 2007 edition, specifies the minimum design, performance, safety, testing, and certification requirements for structural firefighting protective ensembles and ensemble elements that include coats, trousers, coveralls, helmets, gloves, footwear, and interface components.</p> <p>O.Reg. 480/10 requires firefighters to wear bunker gear that meets the NFPA design standards if manufactured on or after March 1, 2007. Ensembles and ensemble components are to be 10 years old or less. This includes spare or backup gear, which is worn once the primary gear has been damaged or requires washing due to soiling or exposure to smoke.</p>

Assessment
<p><b>Condition</b> – Various ensemble sets, and ensemble components are reaching the end of their life cycle.</p> <p><b>Risk Level</b> – Older bunker gear loses its protective properties. Liners break down and allows carcinogens to permeate through the barriers, increasing the risk of cancer.</p> <p><b>Criticality</b> – 10-year-old ensembles and components cannot be worn and must be replaced.</p> <p><b>Financial</b> – Firefighter injury due to expired PPE puts the employer at fault under 25(2) (h) of the Occupational Health and Safety Act and is subject to fines from the Ministry of Labour.</p>

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Bunker Gear	90,000	420,000				510,000
						-
						-
						-
Total Project Cost	90,000	420,000	-	-	-	510,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	90,000	420,000	-	-	-	510,000
Funding Sources						
Reserves/Reserve Funds	90,000	420,000				510,000
Grant						-
Donation						-
Other						-
Total Funded	90,000	420,000	-	-	-	510,000
Total Unfunded	-	-	-	-	-	-



# 2022 Capital Project Request

Capital Project Name	Department
Radio System and User Gear	Fire Services

Project Manager	Start Date	Completion Date
Fire Chief	January 2021	December 31, 2022

Project Description, Justification, & Impact on Operating
<p>Partnered with Sarnia Police Services on their public-safety grade voice radio infrastructure, the SPS project involves upgraded infrastructure such as towers, transmitters &amp; receivers, and interface with dispatch consoles. This infrastructure has capacity to add a separate Fire system to provide for the critical emergency and non-emergency communications needs of Sarnia Fire Rescue.</p> <p>Project 25 (P25) is a set of standards for digital mobile radio communications designed for public safety use. This technology will allow Sarnia Fire Rescue to have:</p> <ul style="list-style-type: none"><li>• Shared governance and control with SPS over maintenance, performance, and operation</li><li>• Interoperability (direct radio communications) with police and industry</li><li>• Encrypted communications</li><li>• New portable radios which are intrinsically safe and have a prominent emergency activation button</li><li>• Broader coverage area with fewer dead zones</li><li>• 97% in-building coverage for firefighter safety</li></ul> <p>Meets National Fire Protection Association (NFPA) 1802: Standard on Personal Portable (Hand-Held) Two-Way Radio Communications Devices for Use by Emergency Services Personnel in the Hazard Zone and Occupational Health &amp; Safety Act Section 21 Guidance Note 2-3 Radio Communications.</p>

Assessment
<p><b>Condition</b> – The current voice radio system is aging and requires upgrades as well as radio equipment replacement. The portable radios are at the end of their useful life and the existing models are no longer available for purchase.</p> <p><b>Risk Level</b> – There is a risk of dropped radio transmissions with the existing system. There is a risk that ISED may not grant additional frequencies.</p> <p><b>Criticality</b> – Interior fire operations require reliable voice radio communications for the health and safety of firefighters and the public.</p> <p><b>Financial</b> – During the radio system and user gear feasibility study it was determined Fire was under-paying SPS for annual services. 2021 and 2022 each has an annual increase of \$25,000.00 while still operating status quo under the existing radio system. 2023 and beyond, operating with a new radio system, the annual increase will be \$60,298.00. These increases are not adjusted for inflation.</p>

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Radio Infrastructure	1,596,968					1,596,968
						-
						-
						-
Total Project Cost	1,596,968	-	-	-	-	1,596,968

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	1,596,968	-	-	-	-	1,596,968
Funding Sources						
Reserves/Reserve Funds	1,596,968					1,596,968
Grant						-
Donation						-
Other						-
Total Funded	1,596,968	-	-	-	-	1,596,968
Total Unfunded	-	-	-	-	-	-

# 2022 Capital Project Request

Capital Project Name	Department
Records Management System	Fire Services

Project Manager	Start Date	Completion Date
Fire Chief	January 1 2022	December 31 2022

Project Description, Justification, & Impact on Operating
<p>The records management system (RMS) is the primary data repository for Sarnia Fire Rescue (SFRS). It is used by Captains and Platoon Chiefs to enter emergency incident information which is then electronically sent to the Office of the Fire Marshal. Fire Inspectors also use the platform to enter fire safety inspection information on properties, noting contraventions of the Ontario Fire Code.</p> <p>While upgrades were purchased in 2020 to better optimize the platform, such as Fire Inspection and Inventory Management, the current system is dated, and its functionality is limited. Additional modules, such as Roster or Asset Management, are not available in the existing version.</p> <p>SFRS requires a robust platform to meet specific applications for all divisions (Administration, Training, Suppression, Prevention and Education) which can also integrate with various corporate platforms, such as GIS or MMS, via embedded links.</p> <p>An optimized, single platform for all data collection will lead to better allocation of resources and targeted programming through data and trend analysis, including layering multiple levels of SFRS data with the city’s GIS database.</p>

Assessment
<p><b>Condition</b> – The current version is two generations behind and lacking all available modules in the marketplace.</p> <p><b>Risk Level</b> – Accurate and timely data is difficult to compile and organize in a suitable reporting format for analysis and reporting. Manual transcription and the use of multiple, non-integrated software applications lends itself to errors and unreliable data.</p> <p><b>Criticality</b> – As data analytics are unavailable with the current system, SFRS is unable to make data-driven decisions in all facets of its operations. Reporting capability is constrained by significant staff time to manually manipulate data and formulas for re-formatting, data edits, and quality assurance. Fire and life safety programming decisions will be better directed using business intelligence solutions.</p> <p><b>Financial</b> – Operational efficiencies to be gained through improved staff productivity. Impact on operating budget is estimated to be \$25,000 annually for licensing and service.</p>

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Records Management System	180,000					180,000
						-
Total Project Cost	180,000	-	-	-	-	180,000

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	180,000	-	-	-	-	180,000
Funding Sources						
Reserves/Reserve Funds	180,000					180,000
Grant						-
Donation						-
Other						-
Total Funded	180,000	-	-	-	-	180,000
Total Unfunded	-	-	-	-	-	-

# 2022 Capital Project Request

Capital Project Name	Department
Fire Station 3 - Demolition, Design, Construction	Fire Services

Project Manager	Start Date	Completion Date
Fire Chief	October 2020	November 2022

Project Description, Justification, & Impact on Operating
<p>The last deferral to this project was pending a Fire Master Plan Location Study. The study confirms this is the proper location to build.</p> <p>The updated budget request is to cover all aspects of the project, including:</p> <ul style="list-style-type: none"><li>• Demolition and temporary housing</li><li>• Design and drawings</li><li>• Project management</li><li>• Construction</li><li>• Contingencies</li><li>• Furnishings and Equipment</li><li>• Commissioning</li></ul>

Assessment
<p><b>Condition</b> – The 2017 Building Condition Assessment details structural, mechanical, building envelope and sewer, and storm water issues.</p> <p><b>Risk Level</b> – As building components are at or past service life expectation, there is an increasing likelihood of water penetration through building envelope and interruption of operations due to unplanned maintenance issues.</p> <p><b>Criticality</b> – The building is one of five Fire Stations strategically situated within the city operating 24/7. A properly functioning station is vital to response times within the response area with additional resources to back up other areas of the city.</p> <p><b>Financial</b> – The current station is in disrepair beyond a realistic maintenance schedule. The project has been deferred twice since 2015.</p>

Costing						
Project Details	2022	2023	2024	2025	2026	Total
Demolition to Commissioning	2,566,665					2,566,665
						-
						-
						-
Total Project Cost	2,566,665	-	-	-	-	2,566,665

Funding Sources						
Year	2022	2023	2024	2025	2026	Total
Validated Request	2,566,665	-	-	-	-	2,566,665
Funding Sources						
Reserves/Reserve Funds						-
Grant	2,566,665					2,566,665
Donation						-
Other						-
Total Funded	2,566,665	-	-	-	-	2,566,665
Total Unfunded	-	-	-	-	-	-

## CITY OF SARNIA - DRAFT 2022 CAPITAL

				Funding Source	Total Amount
Category	Division	Department	Project Name	Tax Levy	Funded
Police	Police Services	Police Services	911 Communication	(360,000)	(360,000)
			Building Improvements	(100,000)	(100,000)
	Police Services Total			(460,000)	(460,000)
Police Total				(460,000)	(460,000)
Total Amount Funded				(460,000)	(460,000)