# THE CORPORATION OF THE CITY OF SARNIA



# DRAFT CAPITAL BUDGET 2021

# THE CORPORATION OF THE CITY OF SARNIA

# **2021 DRAFT CAPITAL BUDGET**

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#### CITY OF SARNIA - 2021 DRAFT 10-YEAR CAPITAL PLAN

D	Department	Project Name	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Grand To
_	inance	Budgeting, Accounting, and Reporting Software			250,000	250,000							500,0
	inance Total				250,000	250,000							500,0
_	luman Resources	Integrated HRIS and Payroll System	450,000										450,
	luman Resources Total		450,000										450,
_	nformation Technology	IT Hardware Asset Lifecycle	165,000	365,000	220,000	240,000	240,000	260,000	260,000	260,000	260,000	260,000	2,530
	nformation Technology Total		165,000	365,000	220,000	240,000	240,000	260,000	260,000	260,000	260,000	260,000	2,530
Р	Parks and Recreation	Park Infrastructure	230,000	75,000	77,500	210,000	165,000	150,000	150,000	150,000	150,000	150,000	1,507
		Park Infrastructure - Playground & Equipment Replacement	250,000	75,000	275,000	275,000	75,000	240,000	75,000	200,000	200,000	75,000	1,740
		Sport and Recreation	2,602,886	4,163,431	1,750,000	335,000	2,895,000	2,000,000	560,000	595,000	510,000		15,411
		Sport Field Development	156,000	350,000	275,000	325,000	325,000						1,431
_		Waterfront - Ferry Dock Hill Revitalization	100,000	1,500,000									1,600
	Parks and Recreation Total		3,338,886	6,163,431	2,377,500	1,145,000	3,460,000	2,390,000	785,000	945,000	860,000	225,000	21,689
۲	ire Services	Bunker Gear Replacement	92,000	90,000	420,000					425,000			1,027
		Command Vehicle Replacement			150,000								150
		Fire Station 1 - Rehabilitation & Expansion			915,000								915
		Fire Station 1 - Roof Replacement	126,000										126
		Fire Station 3 - Design, Demolition, Construction	1,090,000	2,160,000									3,250
		Fire Truck Replacements	1,500,000			850,000		950,000	1,500,000				4,800
		Marine Vessel Replacements					480,000						48
		Radio System & User Gear	563,000	1,498,377									2,063
		Records Management System		180,000									180
		Self-Contained Breathing Apparatus (SCBA)	710,000										710
_		Station Paving					570,000						570
	ire Services Total		4,081,000	3,928,377	1,485,000	850,000	1,050,000	950,000	1,500,000	425,000			14,269
E	Engineering	Accessibility Improvements	302,500	192,500									495
		Active Transportation Projects	250,000	1,600,000	200,000	200,000	200,000	360,000					2,81
		Bridges & Culverts	700,000	1,000,000	1,600,000	1,800,000	1,800,000	1,200,000	1,250,000	1,300,000	1,350,000	1,400,000	13,40
		Fleet Radio & GPS Units	125,000										12
		Former Michigan Ave. Landfill Remediation	130,000										130
		Oversized Load Corridor	3,790,000	1,107,516	1,980,000	200,000							7,07
		Public Works Facilities Improvements	300,000	1,500,000	1,500,000	500,000	400,000	1,400,000	200,000	200,000	200,000	450,000	6,65
		Rapids Parkway Road Extension	9,000,000					. ===					9,000
		Road Rehabilitation	2,500,000	3,750,000	4,000,000	4,250,000	4,500,000	4,750,000	5,000,000	5,250,000	5,500,000	5,750,000	45,250
		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	26,250
		Soil Management Site	100,000										100
		Streetlights	600,000	200,000	200,000	250,000	250,000	275,000	275,000	300,000	325,000	325,000	3,000
		Traffic Signals	400,000	150,000	200,000	250,000	250,000	275,000	275,000	300,000	325,000	325,000	2,750
		Transit Signal Priority & Accessibility	374,953	836,000	627,000	627,000	418,000	922,047					3,80
_		Transportation Master Plan & Streetscape Improvements	300,000	300,000	300,000	300,000	300,000	350,000	350,000	350,000	375,000	375,000	3,300
	ingineering Total		22,122,453	13,886,016	13,857,000	11,627,000	11,368,000	11,532,047	9,350,000	9,700,000	10,075,000	10,625,000	124,142
_	Clerks	Electronic Documents and Records Management System	100,000	100,000	100,000								30
	Clerks Total		100,000	100,000	100,000								300
E	mergency Management	Facility Access Control Systems	75,000	60,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	335
		Mobile Command Vehicle Replacement	800,000										800
F	mergency Management Total		875,000	60,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	1,135

#### CITY OF SARNIA - 2021 DRAFT 10-YEAR CAPITAL PLAN

Category	Department	Project Name	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	<b>Grand Total</b>
General													
Government	Facilities	120 Seaway Road Building Improvements	85,000	86,000	78,000								249,000
		Backflow Prevention	200,000	100,000									300,000
		City Hall Improvements	145,000	500,000	100,000	180,000	150,000	150,000	100,000	100,000	100,000	100,000	1,625,000
		Clearwater Arena Improvements	175,000		855,000		1,110,000	320,000	500,000	200,000		300,000	3,460,000
		Harbour Dredging					3,000,000						3,000,000
		Lochiel Kiwanis Centre Improvements	110,000	120,000	120,000	225,000							575,000
		Progressive Auto Sales Arena Improvements	1,530,000	525,000	680,000	445,000	165,000	190,000		150,000	300,000	300,000	4,285,000
		Sarnia Arena Improvements	228,800		80,000	900,000		450,000	75,000			300,000	2,033,800
		Sarnia Library Improvements	295,000	250,000	250,000	200,000							995,000
	Facilities Total		2,768,800	1,581,000	2,163,000	1,950,000	4,425,000	1,110,000	675,000	450,000	400,000	1,000,000	16,522,800
<b>General Govern</b>	ment Total		33,901,138	26,083,824	20,477,500	16,087,000	20,568,000	16,267,047	12,595,000	11,805,000	11,620,000	12,135,000	181,539,509
Transit	Engineering	Facility Renovations			1,090,500		350,000	500,000			750,000		2,690,500
		Fleet Upgrades - Fare Boxes and Radios	385,000										385,000
		Maintenance Equipment Upgrades/Replacements	357,500	385,000	330,000				450,000				1,522,500
		Transit Bus Stop Improvements	213,666	213,666	213,666	213,666	146,119	119,721					1,120,504
		Transit Fleet Replacement & Expansion	1,340,000	1,320,000	1,980,000	1,320,000	1,298,000	1,254,000	1,300,000	1,300,000	920,000	1,400,000	13,432,000
		Transit Terminal Upgrades	1,017,500	1,595,000		385,000							2,997,500
	Engineering Total		3,313,666	3,513,666	3,614,166	1,918,666	1,794,119	1,873,721	1,750,000	1,300,000	1,670,000	1,400,000	22,148,004
Transit Total			3,313,666	3,513,666	3,614,166	1,918,666	1,794,119	1,873,721	1,750,000	1,300,000	1,670,000	1,400,000	22,148,004
Water & Sewer	Engineering	Combined Sewer Separation	4,100,000	4,000,000	4,000,000	4,500,000	5,000,000	5,250,000	5,500,000	5,750,000	6,000,000	6,250,000	50,350,000
		Corrosion Protection Plan		1,200,000	1,200,000								2,400,000
		Plank Road Reconstruction	4,700,000	5,200,000									9,900,000
		Pumping Station Improvements	1,500,000	1,505,000	1,500,000	1,500,000	1,500,000	1,550,000	1,600,000	1,650,000	1,700,000	1,750,000	15,755,000
		Sanitary Sewer Oversizing	125,000										125,000
		Sarnia Sewer Upgrade Project	6,000,000										6,000,000
		Stormwater Management Facilities Rehabilitation	440,000	500,000	500,000	500,000	200,000	100,000	100,000	500,000	100,000	100,000	3,040,000
		Water Meters		150,000	150,000	175,000	175,000	200,000	200,000	225,000	225,000	250,000	1,750,000
		Water Pollution Control Centre - Biosolids Processing Upgrades	1,000,000	2,750,000									3,750,000
		Water Pollution Control Centre - Blower Upgrade	250,000										250,000
		Water Pollution Control Centre - Building Improvements	400,000			1,000,000				2,000,000		800,000	4,200,000
		Water Pollution Control Centre - Emergency Generator	900,000										900,000
		Water Pollution Control Centre - Process Improvements	350,000	750,000	1,000,000	1,000,000	1,000,000	1,100,000	1,200,000	1,300,000	1,400,000	1,500,000	10,600,000
		Water Pollution Control Centre - UV Disinfection System Shelter	250,000										250,000
		Watermain, Sanitary, and Storm Sewer Replacements	3,420,000	3,000,000	3,250,000	3,500,000	3,750,000	4,000,000	4,250,000	4,500,000	5,000,000	5,250,000	39,920,000
	Engineering Total		23,435,000	19,055,000	11,600,000	12,175,000	11,625,000	12,200,000	12,850,000	15,925,000	14,425,000	15,900,000	149,190,000
Water & Sewer	Total		23,435,000	19,055,000	11,600,000	12,175,000	11,625,000	12,200,000	12,850,000	15,925,000	14,425,000	15,900,000	149,190,000
Police	Police Services	911 Communication										2,240,000	2,240,000
		Building Improvements			500,000								500,000
	Police Services Total				500,000							2,240,000	2,740,000
Police Total					500,000							2,240,000	2,740,000
Grand Total		·	60,649,804	48,652,490	36,191,666	30,180,666	33,987,119	30,340,768	27,195,000	29,030,000	27,715,000	31,675,000	355,617,514

#### **2021 DRAFT CAPITAL BUDGET - FUNDING SOURCES**

ZOZI BIRNI CAN	2021 DRAFT CAPITAL BUDGET - FUNDING SOURCES						
	6005	6015	6016	6020	6025	6045	6055
	Parkland Dedication	Dvlpmt. Charges	Dvlpmt. Charges B-2	Provincial Gas Tax	Federal Gas Tax	OCIF	ICIP
General Government							
120 Seaway Road Building Improvements							
Bridges & Culverts					700,000		
Bunker Gear Replacement					•		
City Hall Improvements							
Electronic Documents and Records Management System							
Fire Station 3 - Design, Demolition, Construction							
IT Hardware Asset Lifecycle							
Lochiel Kiwanis Centre Improvements							
Oversized Load Corridor							
Park Infrastructure	190,000		40,000				
Public Works Facilities Improvements							
Radio System & User Gear							
Rapids Parkway Road Extension		7,374,253					
Road Rehabilitation						2,500,000	
Shoreline Protection							
Soil Management Site					1 000 000		1 412 000
Sport and Recreation Streetlights					1,000,000		1,412,886
Traffic Signals		157.650					
Transportation Master Plan & Streetscape Improvements		157,650					
Active Transportation Projects							183,325
Transit Signal Priority & Accessibility							274,953
Sarnia Library Improvements							274,333
Integrated HRIS and Payroll System							
Mobile Command Vehicle Replacement							
Facility Access Control Systems							
Backflow Prevention							
Park Infrastructure - Playground & Equipment Replacement			70,000				
Accessibility Improvements							221,823
Fleet Radio & GPS Units							
Waterfront - Ferry Dock Hill Revitalization					100,000		
Sport Field Development			39,000				
Fire Truck Replacements							
Progressive Auto Sales Arena Improvements							
Clearwater Arena Improvements							
Sarnia Arena Improvements							
Former Michigan Ave. Landfill Remediation							
Self-Contained Breathing Apparatus (SCBA)							
Fire Station 1 - Roof Replacement							
Transit Project Control of Contro							262.455
Maintenance Equipment Upgrades/Replacements  Transit Bus Stop Improvements				56,985			262,155
Transit Bus Stop improvements  Transit Fleet Replacement & Expansion				357,378			156,681 982,622
Fleet Upgrades - Fare Boxes and Radios				331,316			282,321
Transit Terminal Upgrades				271,367			746,133
Water & Sewer				_, _,			, 10,100
Combined Sewer Separation							
Plank Road Reconstruction		200,000					1,523,780
Pumping Station Improvements		225,000					,
Sarnia Sewer Upgrade Project							
Stormwater Management Facilities Rehabilitation							
Watermain, Sanitary, and Storm Sewer Replacements		-	-		-		-
Water Pollution Control Centre - Biosolids Processing Upgrades		500,000					
Water Pollution Control Centre - Building Improvements							
Water Pollution Control Centre - Emergency Generator							
Water Pollution Control Centre - Process Improvements							
Sanitary Sewer Oversizing							
Water Pollution Control Centre - Blower Upgrade							
Water Pollution Control Centre - UV Disinfection System Shelter							
Grand Total	190,000	8,456,903	149,000	685,730	1,800,000	2,500,000	6,046,679

#### **2021 DRAFT CAPITAL BUDGET - FUNDING SOURCES**

	I			ı		CAPITAL D		I			
Grand Tot	County	Developer Paid	Potential Grants/ Subsidies/ Donations		6616 Capital Infra Sewer	6615 Capital Infra.	Fire Station	6480 Transit Bldg.	6430 Transit - Vehicle	6365 Sarnia Harbour	Disaster Mitigation Fund
05.00										05.000	
85,00										85,000	
700,00 92,00						92,000					
145,00						145,000					
100,00						100,000					
1,090,00						1,090,000					
165,00						165,000					
110,00						110,000					
3,790,00						3,790,000					
230,00											
300,00				100,000	100,000	100,000					
563,00						563,000					
9,000,00				394,000	107,000	1,124,747					
2,500,00											
3,250,00						3,250,000					
100,00				40,000	40,000	20,000					
2,602,88						190,000					
600,00						600,000					
400,00	35,833	35,000				171,517					
300,00						300,000					
250,00						66,675					
374,95						100,000					
295,00						295,000					
450,000 800,000			200,000			450,000 600,000					
75,00			200,000			75,000					
200,00				200,000		73,000					
250,00				200,000		180,000					
302,50						80,677					
125,00						125,000					
100,00											
156,00						117,000					
1,500,00						1,500,000					
1,530,00						1,530,000					
175,00						175,000					
228,80						228,800					
130,000						130,000					
710,00						710,000					
126,00							126,000				
357,50								95,345			
213,66											
1,340,00									102.600		
385,00									102,680		
1,017,50											
4,100,00				1,310,000	1,310,000						1,480,000
4,700,00				2,671,280	1,310,000	304,939					1, 100,000
1,500,00				_,0,1,200	1,275,000	507,555					
6,000,00					6,000,000						
440,00					140,000	300,000					
3,420,00				1,710,000	1,026,000	684,000					
1,000,00					500,000						
400,00			· 		400,000						
900,00					900,000						
350,00					350,000						
125,00					125,000						
250,00					250,000						
250,00					250,000						
60,649,80	35,833	35,000	200,000	6,425,280	12,773,000	19,463,355	126,000	95,345	102,680	85,000	1,480,000

#### **Capital Project Name**

#### **Department**

120 Seaway Road - Building Improvements	Facilities
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Project Manager		Start Date	<b>Completion Date</b>	Project Classification
	Manager of Facilities	January 2021	September 2021	Building efficiency/reliability

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

These expired assets are in poor condition and are currently failing.

#### **Assessment**

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

**Risk Level** – Deferral will result in further degradation of the asset resulting in potential risk to users, tenants and the general public. There is potential for concerns associated with legislative non-compliance.

**Criticality** – Many of the projects identified have reached a critical point, are beyond lifecycle, and risk further deterioration.

**Financial** –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.

Project Component/Phase	2021	2022	2023	2024	2025	Total
Exterior Siding Replacement	45,000					45,000
Exterior Window Replacements	20,000					20,000
Gutter and Downspout Replacement	20,000					20,000
Warehouse Metal Roof Replacement		86,000				86,000
Parking Lot Re-paving			78,000			78,000
Total Project Cost	85,000	86,000	78,000	-	-	249,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	85,000	86,000	78,000	ı	-	249,000
Funding Sources						
Reserves/Reserve Funds	85,000	86,000	78,000			249,000
Grant						-
Donation						-
Total Funded	85,000	-	-	-	-	85,000
Total Unfunded	-	86,000	78,000	-	-	164,000

#### **Capital Project Name**

#### **Division**

Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Manager of Design & Infrastructure	Spring 2021	Fall 2022	Lifecycle Renewal

#### **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. 2021 Includes major rehabilitation on a number of bridges to ensure they will remain in good condition.

#### Assessment

**Condition** – Numerous bridge components are identified as very poor in biannual inspection reports.

**Risk Level** – Increased rate of deterioration.

**Criticality** – Important to rehabilitate bridges at the right time before they reach a state of disrepair.

**Financial** – Reduced operating costs to maintain bridges and address potential for bridge condition to worsen leading to higher costs in the future.

**Project Cost Breakdown** 

Project Component/Phase	2021	2022	2023	2024	2025	Total
Various Bridges & Culverts	700,000		600,000	1,800,000	1,800,000	4,900,000
Jackson Road Bridge (No. 70)		1,000,000				1,000,000
Michigan Avenue Bridge (No. 40)			1,000,000			1,000,000
Total Project Cost	700,000	1,000,000	1,600,000	1,800,000	1,800,000	6,900,000

<u> </u>						
Year	2021	2022	2023	2024	2025	Total
Validated Request	700,000	1,000,000	1,600,000	1,800,000	1,800,000	6,900,000
Funding Sources						
Reserves/Reserve Funds	700,000	1,000,000	1,600,000	1,800,000	1,800,000	6,900,000
Grant						-
Donation						-
Total Funded	700,000	-	-	-	-	700,000
Total Unfunded	-	1,000,000	1,600,000	1,800,000	1,800,000	6,200,000

#### **Capital Project Name**

#### **Department**

2021 Bunker Gear Replacement	Fire & Rescue Services
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Project Manager		Start Date	Completion Date	Project Classification	
	Fire Chief	January 1, 2021	August 31, 2021	Life-cycle replacement	

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

Bunker gear (or turnout gear) is the personal protective equipment (PPE) worn by personnel for structural firefighting.

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.

O.Reg. 480/10 requires firefighters to wear bunker gear that meets the NFPA design standards if the gear was 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 to be worn once the primary gear has been damaged or requires washing due to soiling or exposure to smoke.

#### **Assessment**

**Condition -** Various ensemble sets and ensemble components are reaching the end of their lifecycle.

**Risk Level -** Older bunker gear loses its protective properties, liners break down and allows carcinogens to permeate through the barriers, increasing the risk of cancer.

Criticality - 10 year-old ensembles and components cannot be worn and must be replaced.

**Financial -** Firefighter injury found to be contributed to by expired PPE puts the employer at fault under 25(2)(h) of the Occupational Health and Safety Act and subject to fines from the Ministry of Labour.

**Project Cost Breakdown** 

Project Component/Phase	2021	2022	2023	2024	2025	Total
Replacement of bunker gear	92,000	90,000	420,000			602,000
						•
						-
						-
Total Project Cost	92,000	90,000	420,000	-	-	602,000

<u> </u>						
Year	2021	2022	2023	2024	2025	Total
Validated Request	92,000	90,000	420,000	-	-	602,000
Funding Sources						
Reserves/Reserve Funds	92,000	90,000	420,000			602,000
Grant						-
Donation						-
Total Funded	92,000	-	-	-	-	92,000
Total Unfunded	-	90,000	420,000	-	-	510,000

#### **Capital Project Name**

#### **Department**

City Hall Building Improvements Facilities
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Project Manager	Start Date	Completion Date	Project Classification
Manager of Facilities	January 2021	September 2021	Building efficiency/reliability

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

Due to the age of the building and the majority of the building operations systems, we would like to have an assessment of the current state, reliability, and efficiency of the HVAC controls throughout the building. Once this assessment is completed, we will then be able to form a plan to replace and upgrade the current controls, which is expected to have some cost savings once implemented. To aid in the efficiency of the building and to reduce the load of the HVAC we plan to replace the windows.

Presently, the podium in Council Chambers is not on an accessible path of travel for the public. The space is less than the standard 1200 mm. In addition, the space does not give six feet of separation from the public and staff members. Additionally, accessible audio and video enhancements need to occur to assist access for all members of the public to view and hear council during Council meetings.

#### **Assessment**

**Condition** – Annual condition assessments and inspections determine which projects become priority. Certain projects are a legislative requirement and need to be completed to secure the integrity of the facility. Council Chambers was built before the modernization of accessibility and requires updating to meet today's standards. The audio/video does not meet today's standards and also requires updating.

**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. 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.

**Criticality** – Current conditions do not align with Ontario Building Code, Design of Public Spaces Standards or Sarnia's Accessibility Design Standards.

**Financial** – Should the projects not be completed, further work and additional costs to repair will be incurred. There will be operational savings in terms of energy efficiency, lower utilities and decrease in general maintenance costs.

**Project Cost Breakdown** 

Project Component/Phase	2021	2022	2023	2024	2025	Total
HVAC	30,000	250,000				280,000
Council Chambers	100,000					100,000
Exterior Pillars	15,000					15,000
Window Replacements		250,000	100,000			350,000
Electrical Panels				180,000		180,000
TBD					150,000	150,000
Total Project Cost	145,000	500,000	100,000	180,000	150,000	1,075,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	145,000	500,000	100,000	180,000	150,000	1,075,000
Funding Sources						
Reserves/Reserve Funds	145,000	500,000	100,000	180,000	150,000	1,075,000
Grant						-
Donation						-
Total Funded	145,000	-	-	-	-	145,000
Total Unfunded	-	500,000	100,000	180,000	150,000	930,000

#### **Capital Project Name**

#### **Department**

Project Manager	Start Date	Completion Date	Project Classification
Director of Legal & Property Services	January 1, 2020	December 31, 2023	Service Improvement

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

The project will consist of the design and implementation of an Electronic Documents and Records Management System (EDRMS). The system will provide staff will a central file-sharing platform that will automate the statutory responsibilities of records classification, retention, and retrieval. Such a system is needed in order to meet legislative requirements with respect to digital documents and emails. Implementation of the EDRMS will increase productivity by reducing time spent searching for a document and facilitating file-sharing across departments. It will also make responding to MFIPPA requests faster and more reliable.

#### **Assessment**

**Condition** – Currently electronic file management is inconsistent and has resulted in the City not meeting requirements under the Records Retention By-law. Ten or more versions exist for each critical electronic document, which sometimes results in the incorrect document being used, and which increases search time. The City also archives all emails indefinitely, and this has added to the proliferation of electronic copies of documents.

**Risk Level** – Current risks include harmed reputation, breach of personal or confidential information, and costs associated with impaired project management as a result of an unreliable records system.

**Criticality** – Given that most mid-sized municipalities are transitioning to EDRMS, the public is less likely to tolerate a major error that results from inconsistent records practices.

**Financial** –Annual costs are associated with designing the architecture for each department in a phased approach over four years. One large department will transition to fully using the EDRMS each year.

**Project Cost Breakdown** 

Project Component/Phase	2021	2022	2023	2024	2025	Total
EDRM Implementation by department	100,000	100,000	100,000			300,000
						-
						-
						-
						-
						-
Total Project Cost	100,000	100,000	100,000	-		300,000

anding bourdes							
Year	2021	2022	2023	2024	2025	Total	
Validated Request	100,000	100,000	100,000	-		300,000	
Funding Sources						-	
Reserves/Reserve Funds	100,000	100,000	100,000			300,000	
Potential Grants/Donations						-	
Other						-	
Total Funded	100,000	-	-	-	-	100,000	
Total Unfunded	-	100,000	100,000	-		200,000	

#### **Capital Project Name**

#### Department

Fire Stat	tion 3 Demolition, Design & Construction	Fire & Rescue Service
THE Stat	tion 3 Demontion, Design & Construction	THE & RESCUE SELV

Project Manager Start Date		<b>Completion Date</b>	Project Classification	
	Fire Chief	January 1, 2020	December 31, 2022	Lifecycle Renewal

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

For the demolition, design and construction of a new fire station in the Colborne Road and Michigan Avenue area.

#### Aspects of the project include:

- · Demolition and temporary housing
- Design and drawings
- Project management
- Construction
- Furnishings and Equipment
- Commissioning

#### **Assessment**

**Condition** – The 2017 Building Condition Assessment in 2017 details structural, mechanical, building envelope and sewer and storm water issues.

**Risk Level** – 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.

**Criticality** – The building is an emergency service facility operating 24/7. Functional requirements of fire department operations can be realized with other community or corporate partnerships.

**Financial** – The building has high maintenance expenses which are not budgeted. This station project was previously deferred to refurbish the Scott Road Fire Station.

**Project Cost Breakdown** 

Project Component/Phase	2021	2022	2023	2024	2025	Total
Demolition, Abatement, Haulage	80,000					80,000
Project Management & Architectural Services	75,000	75,000				150,000
Construction (7,000 s.f. @ \$370 / s.f.)	790,000	1,800,000				2,590,000
Temporary Facility	65,000	40,000				105,000
Furnishings & Equipment		65,000				65,000
Contingency (10% of Construction)	80,000	180,000				260,000
Total Project Cost	1,090,000	2,160,000	-	-	-	3,250,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	1,090,000	2,160,000				3,250,000
Funding Sources						
Reserves/Reserve Funds	1,090,000	2,160,000				3,250,000
Potential Grants/Donations						-
Other						-
Total Funded	1,090,000	-	-	-	-	1,090,000
Total Unfunded	-	2,160,000	-	•	•	2,160,000

#### **Capital Project Name**

#### **Department**

chnology Hardware Asset Lifecycle Information Technology	Information Technology Hardware Asset Lifecycle
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Project Manager	Start Date	Completion Date	Project Classification
IT Manager	January 1, 2020	December 31, 2030	Lifecycle Renewal

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

The Information Technology Department continually reviews its assets, identifying those in a poor, failed or End-of-Life condition. This Project represents replacement, reconditioning and upgrade of these devices annually. It continues to address \$875,000 of a \$1,144,035 IT asset maintenance backlog identified in 2016.

Planned Upgrades: 40Gbps storage area network with real-time mirrored offsite backup, high availability virtualization servers to replace existing obsolete servers, replace existing end of life networking devices, weighed on asset health, criticality and expense.

End User Devices: Telephones, mobile internet connectivity, workstations, printers, laptop and tablet computers, remote access systems, special purpose electronics and peripherals. One third of the workstation and laptop population is replaced yearly in a three year cycle.

#### **Assessment**

Condition - IT Assets in 'poor' or lower condition: 46% (14% improvement Since 2017.)

**Risk Level -** Downtime caused by unplanned system outages disrupt staff ability to serve citizens. Deferral will result in failure of technology assets and system outages.

**Criticality** – Internal and external communication and service levels depend on infrastructure stability. Failure put key functions at risk, such as payroll, communication, security, revenue collection, and accounting. The corporate telephone system servicing all City operated facilities represents a highly critical asset targeted in this project.

**Financial** – Newer systems are universally more energy efficient reducing datacentre energy consumption. Modern open source offerings reduce capital costs by as much as 50%. Continuous improvement is achieved via this regular asset management process.

Project Component/Phase	2021	2022	2023	2024	2025	Total
Networking and Server Asset Refresh	75,000	50,000	110,000	120,000	120,000	475,000
1/3 End User Device Refresh	90,000	90,000	110,000	120,000	120,000	530,000
Telephone System Refresh		225,000				225,000
						-
Total Project Cost	165,000	365,000	220,000	240,000	240,000	1,230,000

i difding oddices						
Year	2021	2022	2023	2024	2025	Total
Validated Request	165,000	365,000	220,000	240,000	240,000	1,230,000
Funding Sources						
Reserves/Reserve Funds	165,000	365,000	220,000	240,000	240,000	1,230,000
Grant						-
Donation						-
Total Funded	165,000	-	-	-	-	165,000
Total Unfunded	-	365,000	220,000	240,000	240,000	1,065,000

#### **Capital Project Name**

#### **Department**

Lochiel Kiwanis Centre - Building Improvements	Facilities
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Project Manager S		Start Date	Completion Date Project Classification	
	Manager of Facilities	January 2021	September 2021	asset renewal

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

Most, if not all, of the windows at the Kiwanis building are original to the building and do not provide much, if any, insulation factor from the weather elements. At the same time, we plan to replace the caulking around all doors, windows and other openings, which will help in the overall efficiency of the building. Additionally, some of the metal siding around the building is in poor condition and needs to be replaced.

We are also planning to expand on the current security cameras around the exterior of the building. There have often been times of gathering of undesirables and attempted break-ins to the building.

#### **Assessment**

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

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

**Financial** – 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.

**Project Cost Breakdown** 

Project Component/Phase	2021	2022	2023	2024	2025	Total
Window Replacements & Caulking	110,000					110,000
Repoint Exterior Brick		80,000				80,000
Concrete Block Repairs		20,000				20,000
Stuco Repairs		10,000				10,000
Seal and Repair Walls		10,000				10,000
Interior Lighting LED Retrofits			60,000	75,000		135,000
Basement Heating System			60,000			60,000
Parking Lot Repavement				150,000		150,000
Total Project Cost	110,000	120,000	120,000	225,000	•	575,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	110,000	120,000	120,000	225,000	ı	575,000
Funding Sources						
Reserves/Reserve Funds	110,000	120,000	120,000	225,000	-	575,000
Grant						-
Donation						-
Total Funded	110,000	-	-	-	-	110,000
Total Unfunded	-	120,000	120,000	225,000	•	465,000

#### **Capital Project Name**

#### **Division**

Project Manager		Start Date	<b>Completion Date</b>	Project Classification
	OLC Project Manager	Spring 2020	2024	Service Improvement

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

The Sarnia-Lambton Oversized Load Corridor 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.

2021 scope includes the reconstruction of Blackwell Side Road between Confederation and Churchill and the continuation of burying hydro wires along the route.

This project has received National Trade Corridor funding of \$6M, Southwestern Ontario Development Fund grant of \$1.5M, and a \$4M donation from Cestar College.

#### **Assessment**

**Condition** – 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

Risk Level – Local manufacturers can't ship large loads to external markets

Criticality – Important to local economy and growth of manufacturing sector

Financial - Grant money is forfeited if the City does not contribute it's share

#### **Project Cost Breakdown**

Project Component/Phase	2021	2022	2023	2024	2025	Total
Oversized Load Corridor	3,790,000	1,107,516	1,980,000	200,000		7,077,516
						-
						-
						-
Total Project Cost	3,790,000	1,107,516	1,980,000	200,000	-	7,077,516

Year	2021	2022	2023	2024	2025	Total
Validated Request	3,790,000	1,107,516	1,980,000	200,000	-	7,077,516
Funding Sources						
Reserves/Reserve Funds	-	67,516	1,500,000	200,000		1,767,516
Grant - NTCF	2,550,000	800,000				3,350,000
Grant - SWODA	240,000	240,000	480,000			960,000
Donation	1,000,000					
Total Funded	3,790,000	1	-	-	-	3,790,000
Total Unfunded	-	1,107,516	1,980,000	200,000	-	3,287,516

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#### **Capital Project Name**

#### **Department**

Park Infrastructure, Amenities, and Design	Parks and Recreation
Park Infrastructure, Amenities, and Design	Parks and Recreation

Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Manager of Recreation and Planning	January 1, 2020	October 21, 2020	Lifecycle Renewal

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

This ongoing program aims to rehabilitate and upgrade park infrastructure within the City of Sarnia park system including the removal of items that are beyond their lifecycle.

There are currently over 100 parks and public spaces with over 400 hectares of park, sportsfield and open space along 50 hectares of beach, 80,000 municipal trees and 50kms of natural and paved trails and pathways requiring upgrades and or life cycle replacement to ensure that parks remain safe and an inviting place for the community to enjoy.

This program will include improvements to sidewalks, trail "gateways", park lighting, electrical services, water services, irrigation, community gardens, fencing, pathways, park signage, park furniture and general park amenities.

Areas of focus include Neighborhood Parkland Development & Revitalization; Walkways, Trails, Pathway Development; Naturalized Area and Urban Forest Management; and Park Design/Development/Studies/Assessment Services.

This program will develop, preserve, and enhance the City's investment of its parks system and civic open spaces. These areas provide meaningful and accessible opportunities for citizens to participate in a diverse range of year round passive and active activities in aesthetically pleasing built and natural environments.

Projects identified in this plan will provide improved service delivery and positive community benefit along with departmental operational efficiencies.

Key projects scheduled in 2021: Harry Turnbull Park Improvements; Baxter Park Gathering Area Community Project; Canatara Park Picnic Shelter & Bandshell – accessibility improvements and the Howard Watson Nature trail –Gateway Project; Modeland/Heritage access trail development; park signage & furniture renewal; and design services for the Suncor Agora Sun/Shade shelter.

Key Projects schedule for 2022: Park furniture renewal.

Projects have been determined by identifying needs and priorities based on legislative compliance, risk and liability mitigation and or have been identified within the 2018 Corporate Asset Management Plan, the Development Charges Study and or the 2019 Parks Recreation & Culture Masterplan and are in general alignment with the City's Corporate Strategic Plan.

Should specified grants not meet the anticipated target, certain projects may be scaled down or not take place within the identified year of request.

#### **Assessment**

**Condition** – In some cases, projects have been identified in the Corporate Asset Management Plan. Assets with a condition-rating index of "critical", "poor" and "fair" are generally given priority. Projects address failing and aging park infrastructure and amenities.

**Risk Level** – Deferral will result in a further deterioration resulting in potential lack of access to publically desired amenities including park service infrastructure, safe trails, accessible pathways, and pose an increase risk to public and staff safety.

**Criticality** – Many projects identified have reached a critical point, are beyond lifecycle and risk further deterioration.

**Financial** – Many projects will provide operational efficiencies and have a positive outcome on operating general maintenance accounts. Service delivery efficiencies will be realized along with potential for increase in rental and program revenue.

**Project Cost Breakdown** 

Project Component/Phase	2021	2022	2023	2024	2025	Total
Neighborhood Parkland Development, Revitalization & Amenities	115,000	75,000	50,000	50,000	115,000	405,000
Walkways, Trails, Pathway Development & Improvement Program	75,000	1	27,500	60,000	50,000	212,500
Energy Efficiency - Canatara Parking Lot Lighting				100,000		100,000
Park Design/Development/Studies/ Assesments	40,000					40,000
Total Project Cost	230,000	75,000	77,500	210,000	165,000	757,500

Year	2021	2022	2023	2024	2025	Total
Validated Request	230,000	75,000	77,500	210,000	165,000	757,500
Funding Sources		1 0,000	11,000	_;;;;	100,000	
Reserves/Reserve Funds	190,000	75,000	77,500	210,000	165,000	717,500
Development Charges: Parkland Development Provision - Walkways Trails & Pathways	40,000					40,000
Development Charges: Parkland Development Provision - Walkways Trails & Pathways						-
Grant						-
Donation						-
Total Funded	230,000	-	-	-	-	230,000
Total Unfunded	-	75,000	77,500	210,000	165,000	527,500

#### **Capital Project Name**

#### **Department**

Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Manager of Operation Services	January 2021	Ongoing	Lifecycle Renewal

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

Annual program of capital improvements at various Public Works facilities throughout the City. Projects are required to maintain building and site assets in good condition.

Projects for 2021 include final phase of upgrades at 2100 Confederation Line and general improvements at 651 Devine Street.

#### **Assessment**

**Condition** – various facility components are in very poor condition and do not meet building code.

**Risk Level – Low -** continued degradation of facility assets.

**Criticality – medium -** staff facilities require updating to current standards for diverse work force.

**Financial** – reduction in maintenance costs for deteriorating facilties.

#### **Project Cost Breakdown**

Project Component/Phase	2021	2022	2023	2024	2025	Total
2100 Confederation Line	100,000					100,000
651 Divine Street	200,000					200,000
TBD		1,500,000	1,500,000	500,000	400,000	3,900,000
						-
Total Project Cost	300,000	1,500,000	1,500,000	500,000	400,000	4,200,000

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Year	2021	2022	2023	2024	2025	Total
Validated Request	300,000	1,500,000	1,500,000	500,000	400,000	4,200,000
Funding Sources						
Reserves/Reserve Funds	300,000					300,000
Grant						-
Donation						-
Total Funded	300,000	-	-	-	-	300,000
Total Unfunded	-	1,500,000	1,500,000	500,000	400,000	3,900,000

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#### **Capital Project Name**

#### **Department**

021 Radio System & User Gear Fire & Rescue Services
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Project Manager	Start Date	Completion Date	Project Classification		
Fire Chief	January 1, 2021	December 31, 2022	Lifecycle Renewal		

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

Partner with Sarnia Police Services (SPS) on their public-safety grade voice radio infrastructure. The SPS project involves upgraded infrastructure such as towers, transmitters & 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.

The Sarnia Fire Rescue potion of the project would have three phases:

- 1) feasibility study and technical specifications/infrastructure prep in 2020,
- 2) purchase and install new station, mobile, and portable radios and accessories in 2021, and
- 3) purchase and install new site transmitters/receivers and dispatch radios in 2022.

The 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:

- Shared governance and control with SPS over maintenance, performance, and operation;
- Interoperability (direct radio communications) with police and industry;
- Encrypted communications;
- New portable radios which are intrinsically safe and have a prominent emergency activation button;
- Broader coverage area with fewer dead zones; and
- 97% in-building coverage for firefighter safety.

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 & Safety Act Section 21 Guidance Note 2-3 Radio Communications.

#### **Assessment**

**Condition** – The current voice radio system is aging and requires upgrades as well as radio equipment replacement. The portable radios are at end of life and the existing models can no longer be purchased.

**Risk Level** – There is a risk of dropped radio transmissions with the existing system. There is a risk that Innovation, Science and Economic Development Canada (ISED) may not grant additional frequencies.

**Criticality** – Interior fire operations require reliable voice radio communications for the health and safety of firefighters and the public.

**Financial** – Funded through capital infrastructure reserves.

**Project Cost Breakdown** 

Project Component/Phase	2021	2022	2023	2024	2025	Total
Site transmitter and reciever work		551,500				551,500
Station, dispatch & backup radios		144,400				144,400
Portable and vehicle radios & accessories	563,000					563,000
Contractor, project management, acceptance testing		500,000				500,000
Consulting services & contingency (10%)		302,477				302,477
Total Project Cost	563,000	1,498,377	-	-	-	2,061,377

Year	2021	2022	2023	2024	2025	Total
Validated Request	563,000	1,498,377	ı	ı	ı	2,061,377
Funding Sources						
Reserves/Reserve Funds	563,000	1,498,377				2,061,377
Grant						1
Donation						1
Total Funded	563,000		-		-	563,000
Total Unfunded	•	1,498,377	•	•	•	1,498,377

#### **Capital Project Name**

#### **Division**

Rapids Parkway Road Extension	Engineering & Operations
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Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Manager of			
Development and	Spring 2020	Winter 2021	Growth
Transportation			

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

Extension of The Rapids Parkway from Sandpiper to Exmouth including road, water, sewers, and trail. The extension has been planned since the mid-1990's and is included in the Official Plan, Development Area 1 Secondary Plan, and the 2014 Transportation Master Plan. Development Area 1 continues to grow and the road extension project will ensure the related traffic growth can be accommodated. The watermain needs to be extended to ensure water quality and system redundancy. The new sewer forcemain will alleviate strain on the existing sanitary pumping system. Timing is still pending coordination and approval with the Ministry of Transportation plans to rehabilitate their bridge. This project will lead to an increase in operating costs to maintain the new infrastructure.

#### **Assessment**

Condition - N/A

Risk Level – Low - continued traffic congestion at peak hours if the road is not extended

**Criticality – Low -** may negatively impact development if additional transportation capacity is not provided

**Financial** – Majority of cost is covered by development charges; new infrastructure will result in an increase in operating costs

**Project Cost Breakdown** 

Tojout Goot Broakdown						
Project Component/Phase	2021	2022	2023	2024	2025	Total
Rapids Parkway Extension	9,000,000					9,000,000
						-
						-
						-
Total Project Cost	9,000,000	-	-	-	-	9,000,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	9,000,000	ı	-	-	ı	9,000,000
Funding Sources						
Reserves/Reserve Funds	9,000,000					9,000,000
Grant						-
Donation						-
Total Funded	9,000,000	-	-	-	-	9,000,000
Total Unfunded	-	-	-	-	-	-

#### **Capital Project Name**

#### **Division**

Project Manager		Start Date	<b>Completion Date</b>	Project Classification	
	Construction Manager	Spring 2021	Fall 2021	Lifecycle Renewal	

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

Road reconstruction and resurfacing of roads that have reached the end of their useful life. A road condition survey has identified many roads are in very poor condition and staff receive many complaints about the condition of roads. Road upgrades reduce the operating budget used for road patches and pothole filling.

This program is meant to target all areas of the City with attention to residential streets, commercial/industrial roads, rural roads, and roads within City Parks. The program will primarily focus on local and collector residential roads over the next few years.

#### **Assessment**

**Condition** – There is a large backlog of roads that are in very poor condition

Risk Level - High risk of road conditions continuing to deteriorate

**Criticality** – Potential vehicle damage claims and increased maintenance requirements are likely to occur

**Financial** – Reduce operating costs for maintaining roads in poor condition

**Project Cost Breakdown** 

Project Component/Phase	2021	2022	2023	2024	2025	Total
Road Rehabilitation	2,500,000	3,750,000	4,000,000	4,250,000	4,500,000	19,000,000
						-
						-
						-
Total Project Cost	2,500,000	3,750,000	4,000,000	4,250,000	4,500,000	19,000,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	2,500,000	3,750,000	4,000,000	4,250,000	4,500,000	19,000,000
Funding Sources						
Reserves/Reserve Funds	2,500,000	3,750,000	4,000,000	4,250,000	4,500,000	19,000,000
Grant						1
Donation						-
Total Funded	2,500,000	-	-	-	-	2,500,000
Total Unfunded	-	3,750,000	4,000,000	4,250,000	4,500,000	16,500,000

**Division** 

#### Capital Project Name

Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Construction Manager	Winter 2020/2021	Winter 2022	Lifecycle Renewal

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

Replace steel groynes, retaining walls, beach access points, and other work along the shoreline. Lake water levels are at an all-time 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.

2020/2021 budget is focused on completing the sections of public shoreline in Bright's Grove along Old Lakeshore Road between Penhuron Lane and Pine Avenue. Other needs will also be assessed and addressed over the winter as the shoreline is actively eroding.

The St. Clair Region Conservation Authority has received \$8M in Disaster Mitigation and Adaptation Funding from the Federal Government with \$5M of that dedicated to City of Sarnia shoreline. The funding is for 40% of the project cost with the other 60% funded by the City. This agreement is a multi year agreement. The \$3.25M City funding for 2021 will result in a DMAF contribution of \$2,166,667 for a total value of \$5,416,667.

#### **Assessment**

**Condition** – Very poor, existing shoreline protection is inadequate.

**Risk Level** – High, with record high water levels shoreline erosion is occurring at an increasing rate.

**Criticality** – Current high water levels mean there is a high likelihood of costly emergency repairs if shoreline protection work is not completed.

**Financial** – Reduce cost of emergency repairs (2019 cost was > \$1,000,000. 2020 projected to be close to \$1,000,000)

#### **Project Cost Breakdown**

Project Component/Phase	2021	2022	2023	2024	2025	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

Year	2021	2022	2023	2024	2025	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		13,000,000
Grant						1
Donation						1
Total Funded	3,250,000	-	-	-	-	3,250,000
Total Unfunded	-	3,250,000	3,250,000	3,250,000	3,250,000	13,000,000

#### **Capital Project Name**

**Division** 

Soil Management Site Engineering and Operations

Project Manager	Start Date	<b>Completion Date</b>	<b>Project Classification</b>

Superintendent,	Spring 2021	Ongoing	Service Improvement
Environmental Services	Spring 2021	Oligoning	Service Improvement

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

Site investigations, engineering design, and consultation with the Ministry of Environment, Conservation and Parks (MECP). Public Works currently landfills all soil spoils from watermain and sewer repair works at an average annual cost of \$250,000 due to no storage area. This project will permit the reuse of this site for numerous activities; with the pending Management of Excess Soil regulation that is in the final public consultation period, having a site dedicated to soil storage is a piece of this new regulation and will be key for the City to be compliant when the regulation comes in to effect. Deferral will continue to impact the Public Works operating budgets.

#### **Assessment**

Condition - N/A

Risk Level - Low

Criticality - Low

**Financial** – Potential operating budget savings

#### **Project Cost Breakdown**

Project Component/Phase	2021	2022	2023	2024	2025	Total
Soil management site	100,000					100,000
						-
						-
						-
						-
						-
Total Project Cost	100,000	-	-	-	-	100,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	100,000	-	-	-	1	100,000
Funding Sources						
Reserves/Reserve Funds	100,000					100,000
Grant						-
Donation						-
Total Funded	100,000	-	-	-	-	100,000
Total Unfunded	-	-	-	-	-	

#### Capital Project Name

#### **Department**

Sport & Recreation	Parks and Recreation
Sport of Notice Carlott	r arks arra reservation

Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Manager of Recreation and	January 1 2021	December 31 2022	Lifecycle Renewal & Service Level Improvement
Planning	January 1, 2021	December 31, 2022	Level Improvement

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

This ongoing program to rehabilitate, revitalize and re-design Sport and Recreation facilities within the City of Sarnia including the removal of items that are beyond their lifecycle.

Current inventory of sports fields and facilities include, but are not limited to, 15 baseball diamonds spanned over 9 parks, 32 soccer pitches spanned over 10 parks, 3 football fields, 1 artificial turf outdoor multi-sport field, 2 basketball courts, 17 tennis courts spanned over 7 parks, 1 pickle ball facility, 2 community centres, 1 bike and 2 skate parks, 1 cricket pitch, 1 outdoor swimming pool, and 1 splash pad.

Focus on creation of multi-purpose facilities and conversion of under serviced fields when possible. Upgrades will improve playability and the quality of experience for field users. Expanding access to quality field and facilities will enhance the ability to meet the needs for a variety of team sports.

Community Centres and recreation hubs provide publicly accessible space that promotes and supports community engagement, social connections, personal wellness and physical activity.

Swimming pools are accessible to residents of all ages, abilities and social-economic backgrounds.

Sportsfields and diamonds are the core element of the city's park system. Thousands of residents from children, youth, and adults utilize the fields and facilities for both recreational and competitive play. These facilities can be an economic driver in terms of tourism dollars generated through tournaments.

Key projects scheduled in 2021: Germain Park or North end Spray pad or Pool project, removal of the Norm Perry Tennis Courts.

Key Projects scheduled in 2022: Germain Arena demolition, Strangway Community Centre gymnasium expansion, and Canatara Park Lifeguard Shack/Washroom design.

Projects are completed in collaboration with Community groups and sporting organizations when possible. Should specified grants and donations not meet the anticipated target, certain projects may be scaled down or not take place within the identified year of the request.

Projects have been identified within the 2018 Corporate Asset Management Plan, the Development Charges Study and or the 2019 Parks Recreation & Culture Masterplan, are in general alignment with the City's Corporate Strategic Plan, and will provide positive community recreational and cultural benefit along with departmental operational efficiencies.

Projects identified include the disposal of the Norm Perry Tennis Courts and Jackson Pool and facilities.

#### **Assessment**

**Condition** – Facility projects have been identified in the Corporate Asset Management Plan. Improvements and projects will ensure integrity of City facilities and will provide the ability to offer better programming and service delivery through improved facility infrastructure.

**Risk Level** – Deferral will result in a further deterioration, resulting in public health and safety concerns and/or exposure to other risk and liability concerns associated with disrepair and/or legislative non-compliance. There is a risk for potential lack of access to publically desired amenities, sportsfields, and facilities.

**Criticality** – Many of the projects identified have reached a critical point, are beyond lifecycle and risk further deterioration.

**Financial** – Service delivery efficiencies will be realized along with potential for increase in rental and program revenue. Participation and enrollment (internal & external programming) will decline should certain projects not be completed.

Project Component/Phase	2021	2022	2023	2024	2025	Total
Norm Perry Park Site Development				60,000	2,820,000	2,880,000
Strangway Community Centre - Gymnasium Expansion	150,000	3,603,431		75,000		3,828,431
Germain Park Complex		500,000				500,000
Swimming Pools & Spraypads	2,412,886					2,412,886
Tennis & Sport Court Revitalization	40,000			200,000	75,000	315,000
Canatara Park Lifeguard Shack/Washroom Project		60,000	1,750,000			1,810,000
Total Project Cost	2,602,886	4,163,431	1,750,000	335,000	2,895,000	11,746,317

Year	2021	2022	2023	2024	2025	Total
Validated Request	2,602,886	4,163,431	1,750,000	335,000	2,895,000	11,746,317
Funding Sources						
Reserves/Reserve Funds	1,190,000	1,545,000	1,637,500	222,500	1,207,500	5,802,500
Development Charges: Parkland Development Provision - Canatara Park Lifeguard Shack			112,500			112,500
Development Charges: Parkland Development Provision - SportsField Development & Improvements				112,500		112,500
Development Charges: Parkland Development Provision					1,687,500	1,687,500
Development Charges: Indoor Recreation Services						-
Grant	1,412,886	2,618,431				4,031,317
Donation						
Total Funded	2,602,886		_			2,602,886
Total Unfunded	-	4,163,431	1,750,000	335,000	2,895,000	9,143,431

### **Capital Project Name**

#### **Division**

Streetlights	Engineering & Operations
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Project Manager	Start Date	Completion Date	Project Classification
Managor of			

i lanager or				
Development and	January 2021	December 2021	Lifecycle Renewal	
Transportation	•			

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

Annual program to replace streetlight infrastructure and convert to LED for energy savings. Current focus of the program is on conversion to LED which has resulted in significant annual savings in electricity costs.

#### **Assessment**

**Condition** – Streetlight poles and wiring are in poor condition.

Risk Level - Low

**Criticality - Low** 

**Financial** – Streetlight conversion to LED results in immediate reduction of electricity costs.

**Project Cost Breakdown** 

Project Component/Phase	2021	2022	2023	2024	2025	Total
LED Light Conversion	600,000					600,000
Pole and Wiring Replacement		200,000	200,000	250,000	250,000	900,000
						-
						-
Total Project Cost	600,000	200,000	200,000	250,000	250,000	1,500,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	600,000	200,000	200,000	250,000	250,000	1,500,000
Funding Sources						
Reserves/Reserve Funds	600,000	200,000	200,000	250,000	250,000	1,500,000
Grant						•
Donation						1
Total Funded	600,000	-	-	-	-	600,000
Total Unfunded	-	200,000	200,000	250,000	250,000	900,000

#### **Capital Project Name**

#### **Division**

Traffic Signals	Engineering & Operations
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Project Manager	Start Date	Completion Date	Project Classification	
Manager of				
Development and	January 2021	December 2021	Lifecycle Renewal	
Transportation				

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

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.

A development proposal on Confederation Street has brought forth the need to re-evaluate traffic patterns. Upon review of the original study, City and County staff have determined that a fully signalized intersection will be necessary in order to avoid substantial traffic issues in the area of the development site. A revision of the study will evaluate two potential intersections on either side of the development to determine which is best suited to improved the overall traffic condition in the area. Confederation Street is a County road, and as such, the cost for this signal will be shared between the developer, the County of Lambton, and the City of Sarnia.

#### **Assessment**

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

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

Criticality – Low, minor traffic issues and increased maintenance fixes

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

**Project Cost Breakdown** 

Project Component/Phase	2021	2022	2023	2024	2025	Total
Traffic Signal Replacement	150,000	150,000	200,000	250,000	250,000	1,000,000
Confederation Traffic Signal	250,000					250,000
						-
						-
Total Project Cost	400,000	150,000	200,000	250,000	250,000	1,250,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	400,000	150,000	200,000	250,000	250,000	1,250,000
Funding Sources						
Reserves/Reserve Funds	329,167	150,000	200,000	250,000	250,000	1,179,167
Grant						1
Donation						-
Other - Developer/County	70,833					70,833
Total Funded	400,000	-	-	-	-	400,000
Total Unfunded	-	150,000	200,000	250,000	250,000	850,000

#### **Capital Project Name**

#### **Division**

Transportation Master Plan & Streetscape Improvements	Engineering & Operations
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Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Manager of			
Development and	January 2021	December 2021	Service Improvement
Transportation			

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

The Transportation Master Plan identified needs 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, intersection upgrades, rehabilitation of sidewalks, upgrades to sidewalk ramps to meet requirements of the Accessibility for Ontarians with Disabilities Act, street furniture, new cycling infrastructure, and new pedestrian crossovers at various locations throughout the City.

The City received the Ontario Municipal Commuter Cycling fund grant. The City has to contribute matching funding to fully utilize these grants.

#### **Assessment**

**Condition** – a lack of active and accessible transportation infrastructure has been identified

Risk Level – low safety level for active transportation users

Criticality – key infrastructure pieces required to improve active transportation safety

**Financial** – matching funds are required for the commuter cycling grant and transit active transportation grant

#### **Project Cost Breakdown**

Project Component/Phase	2021	2022	2023	2024	2025	Total
Active Transportation	300,000	300,000	300,000	300,000	300,000	1,500,000
						-
						-
						-
Total Project Cost	300,000	300,000	300,000	300,000	300,000	1,500,000

r arraining obtained						
Year	2021	2022	2023	2024	2025	Total
Validated Request	300,000	300,000	300,000	300,000	300,000	1,500,000
Funding Sources						
Reserves/Reserve Funds	300,000	300,000	300,000	300,000	300,000	1,500,000
Grant						-
Donation						-
Total Funded	300,000	-	-	-	-	300,000
Total Unfunded	-	300,000	300,000	300,000	300,000	1,200,000

#### **Capital Project Name**

#### **Division**

Active Transportation Projects	Engineering & Operations
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Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Manager of			
Development and	Spring 2021	Winter 2021	Growth
Transportation			

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

This funded initiative aims to improve access to and from transit facilities for residential and industrial areas. By taking advantage of this available funding, the City of Sarnia hopes to:

- Attract additional transit riders by improving overall travel experience
- Improve accessibility to transit
- Provide a multi-use trail on Confederation Street, an arterial road with no active transportation infrastructure
- Install multi-use trail on London Line, an arterial road with no active transportation infrastructure
- Support critical infill sidewalk and bike lane projects as identified
- Install pedestrian crossovers and pedestrian traffic signals in critical locations

This project is funded in part by the Investing in Canada Infrastructure Program; this is a cost shared infrastructure-funding program between the Federal and Provincial governments and the ultimate recipient.

#### **Assessment**

**Condition – Medium** - Active transportation infrastructure continues to grow in its importance to our community. The city has been doing well to target this over the past few years, and with this funding we will be able to further that initiative.

**Risk Level – Low** – Additional active transportation will continue to provide new benefits and access to more city services for members of the community.

**Criticality – High** – Taking advantage of available funding will allow upgrades to be performed at a fraction of the cost.

Financial - Matching funds are required to utilize grant funding.

#### **Project Cost Breakdown**

1 Toject Cost Breakdown						
Project Component/Phase	2021	2022	2023	2024	2025	Total
London Line Multi-Use Trail	100,000	1,500,000				1,600,000
Infill Sidewalk/Bike Lane		100,000	100,000	100,000	100,000	400,000
Pedestrian Crossing/Signals	150,000		100,000	100,000	100,000	450,000
Total Project Cost	250,000	1,600,000	200,000	200,000	200,000	2,450,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	250,000	1,600,000	200,000	200,000	200,000	2,450,000
Funding Sources						
Reserves/Reserve Funds	66,675	426,720	53,340	53,340	53,340	653,415
Grant	183,325	1,173,280	146,660	146,660	146,660	1,796,585
Donation						1
Other - County & Township						-
Prior Year Funding						-
Total Funded	250,000	1,600,000	200,000	200,000	200,000	2,450,000
Total Unfunded	-	-	-	-	-	-

#### **Capital Project Name**

#### **Department**

Transit Signal Priority & Accessibility	Engineering
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Project Manager	Start Date	Completion Date	Project Classification
Manager of			
Development and	Spring 2021	Winter 2021	Lifecycle Renewal/Growth
Transportation			

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

This funded initiative aims to make improvements to existing traffic signal infrastructure and assist with emergency services. By taking advantage of this available funding in 2021, the City of Sarnia hopes to upgrade more traffic signals to comply with AODA for audible pedestrian signals.

This project is funded in part by the Investing in Canada Infrastructure Program which is a cost shared infrastructure funding program between the Federal and Provincial governments and the ultimate recipient.

#### **Assessment**

**Condition – Poor** - Traffic signal infrastructure is outdated and we face increasing maintenance costs each year. Majority of traffic signals do not comply with AODA for audible pedestrian crossing.

**Risk Level – Medium** – Without some investment in improvement as opposed to fixes, maintenance costs associated with traffic signal infrastructure will continue to increase. AODA compliance should be considered high priority.

**Criticality – High** – Taking advantage of available funding will allow for upgrades to be performed at a fraction of the cost.

**Financial** – We should observe some reduced operating costs associated with maintaining infrastructure in poor condition, matching funds are required to fully utilize grant funding.

#### **Project Cost Breakdown**

Project Component/Phase	2021	2022	2023	2024	2025	Total
Transit Signal/Accesibility	374,953	836,000	627,000	627,000	418,000	2,882,953
						-
						1
						-
Total Project Cost	374,953	836,000	627,000	627,000	418,000	2,882,953

i amanig coarec						
Year	2021	2022	2023	2024	2025	Total
Validated Request	374,953	836,000	627,000	627,000	418,000	2,882,953
Funding Sources						
Reserves/Reserve Funds	100,000	222,961	167,221	167,221	111,481	768,884
Grant	274,953	613,039	459,779	459,779	306,519	2,114,070
Donation						-
Total Funded	374,953					374,953
Total Unfunded	-	836,000	627,000	627,000	418,000	2,508,000

#### **Capital Project Name**

#### **Department**

Sarnia Library Improvements	Facilities
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Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Manager of Facilities	January 2021	September 2021	Exterior renewal

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

Currently, there are no railings on part of the roof structure; this is required under the OHSA.

As mentioned in the Asset Management Plan the exterior windows of the Sarnia Library are beyond end of life, these windows are very old, outdated, and provide little insulation for the conditions outside.

The patio on the east side of the building is in disrepair and the current layout of the patio, gardens, lighting, has enabled the area to become an eye sore and collecting undesirables.

#### **Assessment**

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

**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. There is potential for concerns associated with legislative non-compliance.

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

**Financial** – 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.

Project Component/Phase	2021	2022	2023	2024	2025	Total
Exterior Windows	175,000					175,000
Patio/Garden Refurbishment	40,000					40,000
Exterior Basement Entrance	50,000					50,000
Interior Railings	30,000		100,000			130,000
Exterior Precast Panes		150,000				150,000
Plumbing, Fixtures, HVAC Controls		100,000				100,000
Elevator Moderization			125,000			125,000
Boiler and Plumbing (2)				200,000		200,000
Building Exterior			25,000			25,000
Total Project Cost	295,000	250,000	250,000	200,000	-	995,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	295,000	250,000	250,000	200,000	ı	995,000
Funding Sources						
Reserves/Reserve Funds	295,000	250,000	250,000	200,000	ı	995,000
Grant						-
Donation						-
Total Funded	295,000	-	-	-	-	295,000
Total Unfunded	-	250,000	250,000	200,000	•	700,000

#### **Capital Project Name**

#### **Department**

Human Resource Information System and Payroll System	Finance
Trainan Resource Information System and Payron System	Tillance

Project Manager	Start Date	<b>Completion Date</b>	Project Classification
A/City Treasurer	Spring 2021	Late Spring 2021	New

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

The purpose of this project is to source, scope, implement, train and go live with a new integrated Human Resource Information System (HRIS) and Payroll System.

The City currently uses three systems to capture data on its human resources. The City uses InfoHR for its human resource data, Vadim/iCity for payroll process and FMW/RACS for its salary plan budgeting and variance analysis. In addition, data for numerous purposes, such as overtime, vacation, scheduling and benefits, is tracked in excel by most departments in the City. These systems are not integrated, which means that the same employee-related data is touched at least three times to populate the three systems and all of the times it is used in excel spreadsheets. The result is inefficiencies and the risk for errors. The current systems also rely heavily on manual processes, such as updating employee information, completing, approving and inputting timesheets, processing payroll, distributing paystubs and T4s and making payroll remittances. There are also processes that currently do not reside in systems such as recruiting, onboarding, performance management, tracking employee training, scheduling and capturing unpaid overtime and accrued vacation.

The implementation of an integrated system will create one source of data for use by HR and Finance for managing the City's human resources and processing payroll. Employee self-serve will enable employees to update information directly, which should create more timely and accurate data input. Onboarding new employees will be streamlined and the tracking of their required training will allow for timely exception reporting to ensure that the City is complying with all required Health and Safety requirements. Schedules can be created that link to timesheets, approvals will flow through the system (rather than paper or email as is the current process), reminders will be automatic. The elimination of the manual timesheet and other payroll data entry throughout the City will free up time to review, check, analyse and provide insights into the costs that make up a significant percentage of the City's budget and over time will allow staff time to be re-deployed to more important functions. Payroll processing will be real-time (rather than squeezed into 3 days of the payroll week) allowing for more review. Payroll deposits and remittance payments will be processed automatically, eliminating the need for bank uploads. The system will keep track of unpaid overtime and accrued vacation, allowing the City to better understand and manage its liabilities on a timely basis. Managers will have access to their employees and can undertake a number of activities such as approval of vacation requests, make schedule changes, approve timesheets and manage performance.

#### **Assessment**

**Condition** – The current systems are antiquated and lacking the full functionality required for a City of 600-800 employees under 6 different collective agreements. Many processes are not maintained within a system and are performed using paper/excel/email, resulting in inefficiencies and difficulty tracking regulatory requirements such as Health and Safety traning.

**Risk Level** – Payroll makes up 56% of the City's operating budget and with basic, manual systems, the risk of payroll errors is high.

**Criticality** – The City has outgrown its current systems and as a result is creating more and more manual processes outside of the current systems. The need to touch the same data multiple times creates inefficiency and does result in errors.

**Financial** – The City will replace current software license costs with costs for the new license costs. The actual costs will likely be higher ongoing but will be mitigated somewhat by softcost efficiency savings.

**Project Cost Breakdown** 

Project Component/Phase	2021	2022	2023	2024	2025	Total
Source/Scope/Train/Implement	450,000					450,000
						-
						-
						-
Total Project Cost	450,000	-	-	-	-	450,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	450,000	ı	-	-	-	450,000
Funding Sources						
Reserves/Reserve Funds	450,000					450,000
Grant						-
Donation						-
Total Funded	450,000	-	-	-	-	450,000
Total Unfunded	-	•	•	•	-	-

## **Capital Project Name**

## **Department**

Mobile Command Vehicle Replacement	Emergency Management
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Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Manager of Emergency Management	January 2021	December 2021	Lifecycle Renewal

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

### **Project Description**

Replace the current mobile command vehicle.

#### **Justification**

Our current command vehicle is over 30 years old. Parts are near impossible to find. Items that are now broken with unavailable parts to replace go unrepaired.

We will also be approaching industry for a \$200,000 donation. They donated a significant amount 30 years ago for our current mobile command vehicle. We will reduce the scope of our purchase without the 200k.

## **Impact on Operating**

This would reduce the operating maintenance and repairs budget for the command vehicle.

#### **Assessment**

**Condition** – The mobile command vehicle is 30 years old and in poor condition, needing constant repairs. Parts are hard to find.

**Risk Level –** The ability to find parts, and the know-how to fix issues with the bus, is reduced every year. The asset is also at high risk of failure, making the services of the Command post bus unrenderable.

**Criticality –** The mobile command vehicle is end of life.

Financial - n/a

### **Project Cost Breakdown**

. reject coet Ereattaettii						
Project Component/Phase	2021	2022	2023	2024	2025	Total
Mobile Command Vehicle	800,000					800,000
						1
						1
						-
Total Project Cost	800,000	-	-	-	-	800,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	800,000	ı	1	-	-	800,000
Funding Sources						
Reserves/Reserve Funds	600,000					600,000
Grant						-
Donation	200,000					200,000
Total Funded	600,000	-	-	-	-	600,000
Total Unfunded	200,000	-	-	-	-	200,000

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# **Capital Project Name**

### **Department**

Facility Access Control Systems	Emergency Management
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Project Manager	Start Date	Completion Date	Project Classification
Manager of Emergency Management	January 2021	December 2025	Lifecycle Renewal

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

### **Project Description:**

Upgrade our current software: Winpak.

All facilities within the corporation would be streamlined into one system. This would increase our ability to secure all of 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. This project would be built upon every year.

#### Year 1:

Upgrade older equipment at City Hall, Public Works, Transit, Compost Site and Telfer Street Garage and ensure its compatibility with the new software. Upgrade to latest version of Winpak software. Migrate 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.

### Year 2:

Decommission and administer new Proxicards and door swipes at Canatara Maintenance, Germain Park, LAWSS, PASA Arena, Water pollution site.

### Years 3, 4, 5:

Identify additional doors from all facilities that need door swipe access. Identify exterior doors needing cameras installed.

#### Justification:

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 does not meet the requirements for a modern access control system.

## **Impact on Operating:**

No additional impact to operating

### **Assessment**

**Condition** – Older maintenance panels will need to be replaced at City Hall, Public Works, Transit, Compost Site and Telfer Street Garage.

**Risk Level** – 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.

**Criticality** – Security to our facilities is important to protecting all of our assets, protect our staff and investigate wrongdoing after the fact.

**Financial** – The ability to protect our assets. The ability to deter potential theft / wrongdoing.

**Project Cost Breakdown** 

Project Component/Phase	2021	2022	2023	2024	2025	Total
Cameras, door swipes, printers	25,000	60,000	25,000	25,000	25,000	160,000
Replace Hardware	10,000					10,000
Upgrade Software	20,000					20,000
IT hardware	20,000					20,000
Total Project Cost	75,000	60,000	25,000	25,000	25,000	210,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	75,000	60,000	25,000	25,000	25,000	210,000
Funding Sources						
Reserves/Reserve Funds	75,000	60,000	25,000	25,000	25,000	210,000
Grant						-
Donation						-
Total Funded	75,000	-	-	-	-	75,000
Total Unfunded	-	60,000	25,000	25,000	25,000	135,000

### **Capital Project Name**

### **Department**

Backflow Prevention Facilities/Engineering
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Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Manager of Facilities	January 2021	Ongoing	Service Level Improvement

## **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 that could be 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 process of installing backflow prevention 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. The survey and the installation must be performed by qualified personnel.

Annual testing of each backflow preventer, and reporting of the results, is required to maintain compliance with the by-law. The annual testing costs should be included in departmental operating budgets and are not covered by 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** – high, some properties store chemicals and/or cleaners, and many are serviced by an irrigation system.

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

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

**Project Cost Breakdown** 

Project Component/Phase	2021	2022	2023	2024	2025	Total
Surveys and installations	200,000	100,000				300,000
						1
						-
						-
Total Project Cost	200,000	100,000	-	-	-	300,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	200,000	100,000	ı	-	ı	300,000
Funding Sources						
Reserves/Reserve Funds	200,000	100,000				300,000
Grant						-
Donation						-
Total Funded	200,000	-	-	-	-	200,000
Total Unfunded	-	100,000	1	-	1	100,000

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### **Capital Project Name**

## **Department**

Park Infrastructure - Playground & Equipment Replacement   Community Services	Park In	nfrastructure - Playground & Equipment Replacement	Community Services
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Project Manager	Start Date	Completion Date	Project Classification
Manager of Recreation and Planning	January 1, 2021	October 31, 2025	Lifecycle Renewal

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

Parks and Recreation division currently maintains 26 play structures, 85 sets of swings, and 38 slides spanned over 68 parks. Improvements will establish and provide better service delivery opportunities through improved accessible playground infrastructure.

Playgrounds provide children the opportunity to develop social, emotional, cognitive, and physical skills. Neighborhood playgrounds create a relaxed space in which residents can connect and interact and a sense of community can develop.

This program aims to rehabilitate, revitalize, and re-design community playgrounds and includes the development of Accessible and Inclusive Playgrounds in previously identified Community parks over the next 8 years including Tecumseh Park, Cathcart Park, Germain Park, Mike Weir Park, and Oak Acres Park. These sites provide a good distribution of accessible play equipment throughout the City in appropriate parks.

Enhancements include both the playground equipment and surrounding amenities including: pathways and connectivity; park furniture; adjoining picnic shelters with a focus on improving accessibility and inclusiveness in each space through universal design standards pre-established by the City. These standards are used as a base line for installing new play equipment and creating accessible and inclusive playgrounds and park space ensuring that children of all ranges of physical and sensory ability and their caregivers can be active in a shared environment

Key projects scheduled in 2021 include but are not limited to the Tecumseh Park Accessible and Inclusive playground project.

Key project scheduled in 2022 include play equipment replacement in neighborhood parks.

Projects have been identified within the 2019 Parks Recreation & Culture Masterplan and are in general alignment with the City's Corporate Strategic Plan.

Should specified grants and donations not meet the anticipated target, certain projects may be scaled down or not take place within the identified year of the request.

#### **Assessment**

**Condition** – Improvements and projects will ensure integrity of City Playgrounds & Play equipment.

**Risk Level** – Deferral will result in a further deterioration resulting in public health and safety concerns and/or exposure to other risk and liability concerns associated with disrepair and/or legislative non-compliance. There is a risk for potential lack of access to publically desired amenities, sports fields and facilities.

**Criticality** – Many of the projects identified have reached a critical point, are beyond lifecycle and risk further deterioration.

**Financial** – Many projects will provide operational efficiencies and have a positive outcome on annual operating budget general maintenance accounts.

**Project Cost Breakdown** 

Project Component/Phase	2021	2022	2023	2024	2025	Total
Neigborhood Playground equipment Replacement program	25,000	75,000	75,000	75,000	75,000	325,000
Tecumseh Park - Accessible & Inclusive Project	225,000					225,000
Mike Weir Park - Accessible & Inclusive Park				200,000		200,000
Cathcart Park - Accessible and Inclusive Park			200,000			200,000
Total Project Cost	250,000	75,000	275,000	275,000	75,000	950,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	250,000	75,000	275,000	275,000	75,000	950,000
Funding Sources						
Reserves/Reserve Funds	80,000	75,000	250,000	250,000	75,000	730,000
Accessibilty Grant (TP)	100,000					100,000
Development Charges: Parkland Development Neighborhood Parkland Development	30,000					30,000
Development Charges: Parkland Development Playground & Equipment Program	40,000		25,000	25,000		90,000
Donation						-
Total Funded	250,000	-	-	•	-	250,000
Total Unfunded	-	75,000	275,000	275,000	75,000	700,000

## **Capital Project Name**

### **Division**

Accessibility Improvements	Engineering & Operations
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Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Manager of			
Development and	January 2021	December 2021	Growth/Lifecycle Renewal
Transportation			

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

Replacement for sidewalks in poor condition and improvement of curb face to sidewalk ramps for compliance and improvement in accessibility standards.

This project is funded in part by the Investing in Canada Infrastructure Program which is a cost shared infrastructure funding program between the Federal and Provincial governments and the ultimate recipient.

#### **Assessment**

**Condition – Poor –** Infrastructure is currently in poor (unsafe) or non-compliant with regulations.

**Risk Level – Medium –** Deteriorating infrastructure poses a risk to members of the community, opening the city to legal liability.

**Criticality – High -** Efforts should be made on an annual basis to replace infrastructure and improve conditions.

**Financial** – Immediate impact with the cost of replacement. Negligible effect on maintenance costs replacing existing infrastructure with new which need to be maintained.

## **Project Cost Breakdown**

Project Component/Phase	2021	2022	2023	2024	2025	Total
Sidewalk/Curb Replacement	110,000					110,000
Ramps	192,500	192,500				385,000
						-
						-
<b>Total Project Cost</b>	302,500	192,500	1	-	-	495,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	302,500	192,500	ı	-	ı	495,000
Funding Sources						
Reserves/Reserve Funds	80,677	51,340				132,017
Grant	221,823	141,160				362,983
Donation						-
Total Funded	302,500	192,500	1	•	ı	495,000
Total Unfunded	-		•	•	1	-

## **Capital Project Name**

**Division** 

Fleet Radios and GPS Units Engineering & Operations

Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Fleet Superintendent	January 2021	July 2021	Replacement/New

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

Existing non-programmable software in current two-way radios renders GPS tracking feature inoperable. Lack of tracking poses potential risk to employee and public safety. End of life cycle radios in fleet require replacement along with GPS installation in equipment with no two-way radio communications.

### **Assessment**

**Condition** – Unusable

Risk Level - High

Criticality - High

**Financial** – Will provide a fail-safe two-way radio/GPS system.

**Project Cost Breakdown** 

Project Component/Phase	2021	2022	2023	2024	2025	Total
Radio Replacement	125,000					125,000
						-
						-
						-
Total Project Cost	125,000	•	-	-	-	125,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	125,000	1	1	-	1	125,000
Funding Sources						
Reserves/Reserve Funds	125,000					125,000
Grant	-					-
Donation						-
Total Funded	125,000	-	-	-	-	125,000
Total Unfunded	-	-	-	-	-	-

### **Capital Project Name**

### **Department**

Waterfront – Ferry Dock Hill Revitalization Project Community Services
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Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Manager of Recreation and Planning	January 1, 2021	December 31, 2022	Lifecycle Renewal & Service Level Improvement

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

This project will re-design, revitalize and create a Community gathering space at the Ferry Dock Hill Waterfront Park and immediate surrounding area.

Ferry Dock Hill Waterfront Park provides a direct link to the City's Downtown core and provides a publicly accessible space that if revitalized would promote community engagement, social connections, personal wellness, and physical activity.

This project will act as a placeholder for what will be a key area of focus within the 2021 Waterfront Masterplan process. This project will be developed through an extensive public consultation process and will be connected to a direct outcome within the Waterfront Masterplan and pending said outcome, the project could commence in Q4 of 2021.

Key projects scheduled in 2021: Design Services

Key projects in 2022: Project implementation

This project has been identified and or supported within the 2020 Economic Development Strategy; 2019 Parks Recreation & Culture Masterplan; is in general alignment with the City's Corporate Strategic Plan, and will provide positive community and cultural benefit. The advancement of this project will be pending the outcome of the 2020 Waterfront Masterplan process.

### **Assessment**

**Condition** – Improvements will ensure integrity of City facilities and will provide the ability to offer better service delivery through improved facility infrastructure.

**Risk Level** – Deferral will result in a further deterioration, resulting in public health and safety concerns and/or exposure to other risk and liability concerns associated with disrepair and/or legislative non-compliance.

**Criticality** – Project site has reached a critical point and risks further deterioration.

**Financial** –Service delivery efficiencies will be realized along with potential for increase in rental revenue.

### **Project Cost Breakdown**

Project Component/Phase	2021	2022	2023	2024	2025	Total
Ferry Dock Hill Project Design	100,000					100,000
Project Implementation		1,500,000				1,500,000
Total Project Cost	100,000	1,500,000	-	-	-	1,600,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	100,000	1,500,000	-	-	1	1,600,000
Funding Sources						
Reserves/Reserve Funds	100,000	1,500,000				1,600,000
Development Charges						-
Grant						-
Donation						-
Total Funded	100,000	-	-	-	-	100,000
Total Unfunded	-	1,500,000		-	-	1,500,000

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## Capital Project Name Department

Sport Field Development Parks and Recreation
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Project Manager	Start Date	Completion Date	Project Classification
Manager of Recreation	January 1, 2020	December 31, 2025	Lifecycle Renewal & Service
and Planning	January 1, 2020		Improvement

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

Sportsfields are a core element of the City's park system. Soccer is among the most popular team sports in the world, serving residents though children's recreational and competitive leagues to adult recreational play.

Key Project identified in 2021 includes the development of a Premier Soccer Pitch in Germain Park. Upgrades include turf management, irrigation, fencing, bleachers, pathways, player's benches, and lighting.

Key Project identified in 2022 included the additional of outdoor field lighting at the Premier Soccer Pitch in Germain Park.

This project will undertake the conversion of an under serviced soccer field. Upgrades will improve playability and the quality of experience for field users. Expanding access to quality field and facilities will enhance the ability to meet the needs for community soccer.

The Germain Park Premier Field Development project will provide positive community recreational benefit. The City is currently void of a premier soccer pitch. Economic impact through tournaments and additional matches will be realized.

Field and facility development will be completed in collaboration with Community sporting organizations. Should specified grants and donations not meet the anticipated target, certain components may be scaled down or not take place within the identified year of the request.

### **Assessment**

**Condition -** Improvements and projects will ensure integrity of City facilities and will provide the ability to offer better programming and service delivery opportunities through improved facility infrastructure.

**Risk Level** –There is a risk for potential lack of access to publically desired amenities, sportsfields and facilities.

**Criticality** – The need for the development of a premier sportsfield identified as a service need.

**Financial** – Service delivery efficiencies will be realized along with potential for increase in rental and program revenue. Participation and enrollment (internal & external programming and organizations) will decline as will the ability to generate rental revenue should a premier field not be developed.

Project Cost Breakdown

Project Component/Phase	2021	2022	2023	2024	2025	Total
Germain Park Turf mangement	18,000					18,000
Germain Park Bleachers	60,000					60,000
Germain Park Pathways/Connectivity	35,000					35,000
Germain Park Irrigation	8,000					8,000
Germain Park Ball Diamond Lighting	20,000		200,000		200,000	420,000
Energy Efficiency - Lighting		350,000				350,000
Germain Park Community Shelter/Gathering space			75,000			75,000
Germain Park Benches/Player Dug Out	15,000					15,000
Blackwell Park (bleachers, backstop netting, bins)				325,000	125,000	450,000
Total Project Cost	156,000	350,000	275,000	325,000	325,000	1,431,000

1 anding courses						
Year	2021	2022	2023	2024	2025	Total
Validated Request	156,000	350,000	275,000	325,000	325,000	1,431,000
Funding Sources						
Reserves/Reserve Funds	117,000	350,000	275,000	325,000	325,000	1,392,000
Development Charges: Parkland Development Provision - SportsField Development & Improvements	39,000					
Grant						-
Donation						-
Total Funded	156,000		-	-		156,000
Total Unfunded	-	350,000	275,000	325,000	325,000	1,275,000

### **Capital Project Name**

## **Department**

Fire Truck Replacements - Ladder 2 Fire & Rescue Services
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Project Manager	Start Date	Completion Date	Project Classification
Fire Chief	January 1, 2021	December 31, 2021	Lifecycle Renewal

# Project Description, Justification, & Impact on Operating

Replace current Ladder 2 with a new aerial apparatus. Ladder 2 will be put into reserve status so that the 1998 Reserve-1 pumper can be retired.

Required to maintain reliable fire protection to the community. Impact of not doing or deferral of this project is increased time out of service and mounting operational maintenance costs. Potential for critical failure.

### **Assessment**

**Condition** – Ladder 2 was built in 2008 and is already showing increased wear. The apparatus will be put into reserve status for 3-4 years in order to retire current Reserve-1 pumper.

**Risk Level –** Reserve-1 pumper is over 22 years old and cannot be relied upon for reserve status. Ladder 2 is experiencing decreasing availability for frontline service due to increasing downtime for repairs, but would be appropriate as a reserve unit.

**Criticality** – Potential for critical failure of Reserve-1 pumper.

**Financial** – Avoidance of unscheduled and expensive operational budget overruns for both apparatuses.

**Project Cost Breakdown** 

Project Component/Phase	2021	2022	2023	2024	2025	Total
Ladder 2 Replacement	1,500,000					1,500,000
						-
						-
						-
						-
Total Project Cost	1,500,000	-	-	-	-	1,500,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	1,500,000	ı	ı	ı	ı	1,500,000
Funding Sources						
Reserves/Reserve Funds	1,500,000					1,500,000
Grant						-
Donation						•
Total Funded	1,500,000	-	-	1		1,500,000
Total Unfunded	-	1	-	1	•	•

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# Capital Project Name

## **Department**

Arena Improvements – Progressive Auto Sales Arena Facilities
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Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Manager of Facilities	January 2021		Lifecycle Renewal

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

This ongoing program aims to rehabilitate Arena facilities within the City of Sarnia. Progressive Auto Sales Arena (PASA). The following projects have been identified within one of or all of the following: Arena Management Study, adopted by Council in 2015, the 2018 Corporate Asset Management Plan Facilities assessments and or as identified in the 2019 Parks, Recreation & Culture Masterplan.

The 2015 Arena Management study recommended that a min. of \$1,050,000 be allocated annually toward Arena Capital Projects.

### Progressive Auto Sales Arena

Projects to be completed in 2021 at PASA include but are not limited to; Phase 2 Roof Replacement; accessible/female dressing/ gender-neutral dressing room project; and the Sarnia Sting dressing room project (Managed by the Sarnia Sting). The construction of the accessible/female dressing/ gender-neutral dressing room is solely contingent on whether or not the Sarnia sting completes there new dressing room and Sarnia sting space consolidation project. As the spaces intended for the new accessible/female dressing/ gender-neutral dressing room is currently occupied by the Sarnia sting. With the creation of the new accessible/female dressing/ gender-neutral dressing we will then be able to offer a suitable dressing room to female and on gender neutral hockey players that happen to be playing on majority male team.

Replacing/upgrading these assets will provide energy efficiencies and will result in a decrease in asset maintenance expenses. Projects are required in order to comply with AODA legislation, ensure compliance and integrity of arena facilities and prevent further facility degradation.

### **Assessment**

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

**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. 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.

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

**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 costs to repair. There will be operational savings in terms of energy efficiency, lower utilities and decrease in general maintenance costs. Service level delivery efficiencies will be realized along with potential for increase in rental and program revenue.

**Project Cost Breakdown** 

Project Component/Phase	2021	2022	2023	2024	2025	Total
PASA - roof replacement (Phase II)	600,000	400,000	300,000	300,000		1,600,000
Sarnia Sting dressing room	600,000					600,000
Accessible/ female/gender neutral dressing room	300,000					300,000
Main Entrance canopy expansion	30,000					30,000
HVAC replacement		125,000		85,000		210,000
Lobby floor replacement			30,000			30,000
Chiller replacement			150,000			150,000
Compressors replacement			100,000			100,000
Condenser replacement			100,000			100,000
Water boiler/tank replacements				50,000		50,000
Gate 1 door replacement				10,000	10,000	20,000
Gate 5 concrete patio					60,000	60,000
Concession refurbishments					55,000	55,000
Restaurant HVAC					40,000	40,000
Total Project Cost	1,530,000	525,000	680,000	445,000	165,000	3,345,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	1,530,000	525,000	680,000	445,000	165,000	3,345,000
Funding Sources						
Reserves/Reserve Funds	1,530,000	525,000	680,000	445,000	165,000	3,345,000
Grant						1
Donation						1
Total Funded	1,530,000	•	-		-	1,530,000
Total Unfunded	-	525,000	680,000	445,000	165,000	1,815,000

# Capital Project Name

## **Department**

Arena Improvements – Clearwater Arena	Facilities

Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Manager of Facilities	January 2021	December 2021	Lifecycle Renewal

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

This ongoing program aims to rehabilitate Arena facilities within the City of Sarnia. Areas of focus include Clearwater Arena, Progressive Auto Sales Arena (PASA) and the Sarnia Arena. The following projects have been identified within one of or all of the following: Arena Management Study, adopted by Council in 2015, the 2018 Corporate Asset Management Plan Facilities assessments and or as identified in the 2019 Parks, Recreation & Culture Masterplan.

The 2015 Arena Management study recommended that a min. of \$1,050,000 be allocated annually toward Arena Capital Projects.

### Clearwater Arena

Projects to be completed in 2021 at Clearwater Arena include but are not limited to: Flat roof replacement at North end of the Arena. This section of roof is currently in poor condition and is leaking. We have on numerous accounts had to make minor repairs to this roof over the past several years. According to the Asset condition assessment, this roof is due for replacement by 2023. By having this roof repaired, we expect \$0-\$1000 savings in our operating budget. In 2021 we are also having a roof replaced at PASA, so the plan is to include this roof in the tender, which should provide some cost savings by having them both done at the same time. Prior to 2020 we have not had adequate funding for our capital projects and therefore until now other projects took priority over this one.

Replacing/upgrading this asset will result in a decrease in asset maintenance cost as well with the new roof a railing safety system will be installed along the perimeter. This will allow us to perform maintenance to roof mounted equipment and stay in compliance with working at heights legislation.

### **Energy Efficiency Upgrades**

Input has been received from the operations teams regarding projects that align with the scope of energy conservation. The following project is currently identified for 2021:

The lighting at Clearwater Community Centre, will address public areas of the facilities as part of life cycle replacement and energy reduction to LED lighting.

### Assessment

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

**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. Should certain mechanical/refrigeration projects not be completed, there will be significant risk to staff and the general public. There is potential for concerns associated with legislative non-compliance.

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

**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 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.

**Project Cost Breakdown** 

Project Component/Phase	2021	2022	2023	2024	2025	Total
North flat roof replacement	100,000					100,000
Clearwater Community Centre Lighting	75,000					75,000
Clearwater Community Centre Cooling Tower			100,000			100,000
Parking lot replacment			755,000			755,000
Blue rink refrigeration floor boards replacement					1,110,000	1,110,000
Total Project Cost	175,000	-	855,000	-	1,110,000	2,140,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	175,000	-	855,000	-	1,110,000	2,140,000
Funding Sources						
Reserves/Reserve Funds	175,000	-	855,000	-	1,110,000	2,140,000
Grant						-
Donation						-
Total Funded	175,000	•	-	•	-	175,000
Total Unfunded	-	•	855,000	-	1,110,000	1,965,000

### **Capital Project Name**

### **Department**

Arena Improvements – Sarnia Arena Facilities
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Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Manager of Facilities	January 2021	September 2021	Lifecycle Renewal

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

This ongoing program aims to rehabilitate Arena facilities within the City of Sarnia. Areas of focus include Clearwater Arena, Progressive Auto Sales Arena (PASA) and the Sarnia Arena. The following projects have been identified within one of or all of the following: Arena Management Study, adopted by Council in 2015, the 2018 Corporate Asset Management Plan Facilities assessments and or as identified in the 2019 Parks, Recreation & Culture Masterplan.

The 2015 Arena Management study recommended that a min. of \$1,050,000 be allocated annually toward Arena Capital Projects.

### Sarnia Arena

Projects to be completed in 2021 at Sarnia Arena include but are not limited to replacement of refrigeration condenser, and the expansion of the accessible seating area.

The condenser is very old, the actual age of the equipment is unable to be determine based on the fact the serial numbers and rating plate is severely worn and unable to read. With a new condenser, we expect to see significant savings in utilities on both hydro and water consumption. Savings expected to be \$5,000-\$10,000 annually on our operating budget.

Prior to 2020 we have not had adequate funding for our capital projects and therefore until now other projects took priority over this one. Replacing/upgrading these assets will provide energy efficiencies and will result in a decrease in equipment maintenance expenses.

Due to its proximity to nursing homes, and group homes for people with disabilities it is a popular attraction for many people who use wheelchairs and walkers. The accessible seating area consists of one row at ice level. However, once the seating area is occupied by persons with wheelchairs no other person can pass in front due to the narrow width of the aisle. This is extremely difficult when watching a game when someone has to leave. It causes all other wheelchairs in the row to exit the area to let the person out. The project will consist of removal of a row of seating and expanding the width of the aisle way.

# **Assessment**

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

**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. 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.

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

**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 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.

**Project Cost Breakdown** 

Project Component/Phase	2021	2022	2023	2024	2025	Total
refrigeration condenser replacement	60,000					60,000
expansion of accessible seating	138,800					138,800
gutter and downspout replacement	30,000					30,000
dressing room, hallway flooring			70,000			70,000
compressor glycol cooling			10,000			10,000
refrigeration floor, header, piping replacement				900,000		900,000
Total Project Cost	228,800	-	80,000	900,000	-	1,208,800

Year	2021	2022	2023	2024	2025	Total
Validated Request	228,800	-	80,000	900,000	-	1,208,800
Funding Sources						
Reserves/Reserve Funds	228,800	-	80,000	900,000	-	1,208,800
Grant						-
Donation						-
Total Funded	228,800	-	-	-	-	228,800
Total Unfunded	-	-	80,000	900,000	-	980,000

## **Capital Project Name**

### **Department**

Self-Contained Breatning Apparatus	Self-Contained Breathing Apparatus	Fire & Rescue Services
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Project Manager	Start Date	Completion Date	Project Classification
Fire Chief	January 1, 2021	December 31, 2021	Lifecycle Renewal

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

This project is a regular periodic replacement of SCBA (self-contained breathing apparatus) which is a health & safety requirement.

Self-Contained Breathing Apparatus (SCBA) is a critical component of firefighter personal protective equipment (PPE). The purchase would include:

- · Full facemasks with Heads-up displays;
- Pressure gauges;
- Assembly of harnesses, back plates, hoses and regulators;
- Personal alert safety systems (firefighter-down alarms);
- High pressure cylinders; and
- Air monitoring software.

The new SCBA will meet the 2019 edition of NFPA 1982: Standard on Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services and Occupational Health & Safety Act Section 21 Guidance Note 4-9 Respiratory Protection Program.

#### **Assessment**

**Condition** – Equipment will be reaching end-of-service timelines (15 years).

**Risk Level –** This equipment is essential for firefighters to operate in hazardous atmospheres which are or may be immediately hazardous to life or health.

**Criticality –** The equipment must be replaced to the latest standard.

**Financial** – \$500,000 in funding was previously earmarked from the former Fire Equipment Reserves.

**Project Cost Breakdown** 

Project Component/Phase	2021	2022	2023	2024	2025	Total
SCBA	710,000					710,000
						1
						-
						1
						-
Total Project Cost	710,000	-	-	-	-	710,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	710,000	-	-	-	-	710,000
Funding Sources						
Reserves/Reserve Funds	710,000					710,000
Grant						-
Donation						-
Total Funded	710,000	-	-	-	-	710,000
Total Unfunded	-	-	-	-	-	-

## **Capital Project Name**

## **Department**

ner Michigan Avenue Landfill - Remediation Project Engineering and Operations
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Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Superintendent, Environmental Services	Spring 2020	Summer 2020	Rehabilitation

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

Site investigations, engineering design, and consultation with the Ministry of Environment, Conservation and Parks (MECP).

Remedial works based on 2020 site investigation which could include the installation/extension of containment systems and/or underground barriers, the addition/extension of active extraction systems and the installation of monitoring/sentry wells.

### **Assessment**

Condition - N/A

**Risk Level – High –** If no action taken, there will be adverse environmental impacts.

**Criticality – High –** Fines, costly environmental cleanup.

**Financial** – Operating budget will be impacted, reflection will be shown in the 2022 budget.

### **Project Cost Breakdown**

Project Component/Phase	2021	2022	2023	2024	2025	Total
Remediation Project	130,000					130,000
						1
						1
						1
Total Project Cost	130,000	-	-	-	-	130,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	130,000	ı	-	-	ı	130,000
Funding Sources						
Reserves/Reserve Funds	130,000					130,000
Grant						-
Donation						1
Total Funded	130,000	1	-	-	1	130,000
Total Unfunded	-	-	-	-	-	-

## **Capital Project Name**

## **Department**

Fire Station 1 - Roof Replacement Fire & Rescue Services
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Project Manager	Start Date	Completion Date	Project Classification
Fire Chief	January 1, 2021	December 31, 2021	Lifecycle Renewal

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

Building envelope improvements are necessary to keep water out of the building, protect interior finishes and furnishings as well as structural members.

Continued long-term neglect will lead to more expensive unscheduled maintenance of adjacent components and/or systems or lead to premature building end-of-service.

#### **Assessment**

**Condition** – Building condition assessment in 2017 identified this component as being high priority.

**Risk Level** – As the roof is past its service life expectation, there is an increasing likelihood of water penetration through building envelope and damage to interior finishes and equipment.

**Criticality** – The building is an emergency service facility operating 24/7 which requires the periodic capital investment.

**Financial** – Avoidance of unscheduled and unbudgeted operational budget overruns. Comparatively small investment maintains capital asset to its service life, avoiding premature capital asset replacement.

# Project Cost Breakdown

Project Component/Phase	2021	2022	2023	2024	2025	Total
Flat Roof Replacement	126,000					126,000
						•
						-
						•
						-
Total Project Cost	126,000	-	-	-	-	126,000

i diffallig boarces						
Year	2021	2022	2023	2024	2025	Total
Validated Request	126,000	-	-	-	-	126,000
Funding Sources						
Reserves/Reserve Funds	126,000					126,000
Grant						-
Donation						-
Total Funded	126,000	-	-	-	-	126,000
Total Unfunded	-	-	-	-	-	-

### **Capital Project Name**

### **Division**

Transit Maintenance Equipment Upgrade & Replacement	Engineering & Operations
---	--------------------------

Project Manager	Start Date	Completion Date	Project Classification
Fleet Superintendent	Spring 2021	Summer/Fall 2021	Replacement/New

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

The existing bus wash is more than 10-years old. The manufacturer is no longer in business. Maintenance staff spend many hours repairing, manufacturing and tooling components to try and keep the washer operating. A new bus wash will require less maintenance and will permit maintenance personnel to focus their time on maintaining a safe and reliable bus fleet. Also, it will provide for underbody cleaning which will help make bus chassis last longer and have potential to service smaller fleet vehicles.

### **Assessment**

Condition - Very Poor

Risk Level - Low

Criticality – High in order to permit repair staff to focus on fleet repairs & maintenance

**Financial** – Approved Investing in Canada Infrastructure grant will pay for 73.33 percent of this project.

## **Project Cost Breakdown**

<b>Project Component/Phase</b>	2021	2022	2023	2024	2025	Total
Bus Wash	357,500					357,500
Hoist		385,000				385,000
Fuel Pump & Storage			330,000			330,000
						-
Total Project Cost	357,500	385,000	330,000	ı	-	1,072,500

1 allaling Cources						
Year	2021	2022	2023	2024	2025	Total
Validated Request	357,500	385,000	330,000	-	-	1,072,500
Funding Sources						
Reserves/Reserve Funds	95,345	102,680	88,011			286,036
Grant	262,155	282,321	241,989			786,464
Donation						-
Total Funded	357,500	-	-	-	-	357,500
Total Unfunded	-	385,000	330,000	-	-	715,000

### **Capital Project Name**

### **Division**

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ITalis	แ วแ	וווד טכ	provem	ents

**Engineering & Operations** 

Project Manager	Start Date	Completion Date	Project Classification
Fleet Superintendent	Spring 2021	Fall 2021	New

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

Many of the existing brown bus shelters are over 20-years old. Base and supports have sustained significant rusting over this period, which require elaborate repairs. Additionally, the lighting in existing end-of-life shelters requires hydro, whereas, solar shelters eliminate electricity costs.

At bus stops in the City where no shelter currently exists, a concrete pad is required in order to support the structure. The dimensions of the existing brown shelters are slightly smaller than the solar shelters. As a result, new concrete/extensions are necessary in order to support green solar shelters. Additionally, concrete pads are required at bus stops to ensure they are accessible.

### **Assessment**

Condition - Very poor

Risk Level - Low

**Criticality - Low - Medium** 

**Financial** – Approved Investing in Canada Infrastructure grant will pay for 73.33 percent of this project

### **Project Cost Breakdown**

Project Component/Phase	2021	2022	2023	2024	2025	Total
Shelters & Concrete Pads	213,666	213,666	213,666	213,666	146,119	1,000,783
						-
						-
						-
<b>Total Project Cost</b>	213,666	213,666	213,666	213,666	146,119	1,000,783

Year	2021	2022	2023	2024	2025	Total
Validated Request	213,666	213,666	213,666	213,666	146,119	1,000,783
Funding Sources						
Reserves/Reserve Funds	56,985	56,985	56,985	56,985	38,970	266,910
Grant	156,681	156,681	156,681	156,681	107,149	733,873
Donation						1
Total Funded	213,666	-	-	-	1	213,666
Total Unfunded	-	213,666	213,666	213,666	146,119	787,117

### **Capital Project Name**

### **Division**

Transit Fleet Replacement & Expansion	Engineering & Operations
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Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Transit Superintendent	Spring 2020	Fall 2020	Replacement/New

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

The existing fleet of older buses are at their 12-year life cycle and require replacement. One of the two buses is nearing one million kilometers, the other is near 900,000 kilometers. Keeping these buses in service past 2021 will significantly increase maintenance costs, and structural concerns. Cost of deferral for this project could lead to bus failures and long-term unplanned service impact.

## **Assessment**

Condition - Very Poor

**Risk Level –** High from a safety and service reliability perspective

Criticality - High in order to maintain existing service levels and prevent break-down

**Financial** – Approved Investing in Canada Infrastructure grant will pay for 73.33 percent of this project

**Project Cost Breakdown** 

Project Component/Phase	2021	2022	2023	2024	2025	Total
Conventional NOVA Bus (2)	1,340,000					1,340,000
Conventional		1,320,000	1,980,000	1,320,000	1,122,000	5,742,000
Care-A-Van					176,000	176,000
						-
Total Project Cost	1,340,000	1,320,000	1,980,000	1,320,000	1,298,000	7,258,000

i dildilig oodices						
Year	2021	2022	2023	2024	2025	Total
Validated Request	1,340,000	1,320,000	1,980,000	1,320,000	1,298,000	7,258,000
Funding Sources						
Reserves/Reserve Funds	357,378	352,044	528,066	352,044	346,177	1,935,709
Grant	982,622	967,956	1,451,934	967,956	951,823	5,322,291
Donation						-
Total Funded	1,340,000	-	-	-	-	1,340,000
Total Unfunded	-	1,320,000	1,980,000	1,320,000	1,298,000	5,918,000

### Capital Project Name

### **Division**

Transit Fleet Upgrades: Fare Boxes and Radios	Engineering & Operations
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Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Fleet Superintendent	Spring 2021	Fall 2021	Replacement/New

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

The existing transit fare boxes are over 30 years old and require frequent repair and replacement, parts are becoming increasingly unavailable. Repair time takes technicians away from maintaining bus fleet. New fare boxes will increase reliability and make it easier for operators to access fare deposit. New fare boxes are more secure.

Existing non-programmable software in current two-way radios renders GPS tracking feature inoperable. Lack of tracking poses potential risk to employee and public safety. End of life cycle radios in fleet require replacement along with GPS installation in equipment with no two-way radio communications.

### **Assessment**

Condition - Poor

Risk Level - Low

Criticality - Moderate

**Financial** – Approved Investing in Canada Infrastructure grant will pay for 73.33 percent of this project

### **Project Cost Breakdown**

Project Component/Phase	2021	2022	2023	2024	2025	Total
New fare boxes	165,000					165,000
New Radios	220,000					220,000
						-
						-
<b>Total Project Cost</b>	385,000	-	-	-	-	385,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	385,000	ı	ı	ı	ı	385,000
Funding Sources						
Reserves/Reserve Funds	102,680					102,680
Grant	282,321					282,321
Donation						-
Total Funded	385,000	-	-	-	-	385,000
Total Unfunded	-	•	1	•	-	•

### **Capital Project Name**

### **Division**

Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Transit Superintendent	Spring 2021	Fall 2021	Reconstruction

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

The Bayside terminal is significantly aged. The sidewalk and adjacent parking lot is replete with tripping hazards, inoperative overhead lighting, and broken planters. The passenger walkway intersects with parking lot, increasing pedestrian safety hazards. A redesigned & constructed terminal will improve passenger safety, capacity and access, and accessibility to public transit by correcting platform grades, AODA approved tactile plates, crosswalk, and public WIFI.

The Murphy Road Terminal is planned for construction in 2022 with design in 2021. Will likely require a new location due to limited space at existing location.

#### **Assessment**

**Condition** – Very poor, broken concrete

**Risk Level** – High due to hazards presented by poor lighting, tripping hazards, excessive sidewalk grade.

**Criticality** – High in order resolve safety issues, improve capacity & accessibility

**Financial** – Approved Investing in Canada Infrastructure grant will pay for 73.33 percent of this project

### **Project Cost Breakdown**

<b>Project Component/Phase</b>	2021	2022	2023	2024	2025	Total
Bayside Terminal	825,000					825,000
Murhpy Road Terminal	192,500	1,595,000				1,787,500
Northgate Terminal				385,000		385,000
						-
<b>Total Project Cost</b>	1,017,500	1,595,000	-	385,000	1	2,997,500

unung oodices						
Year	2021	2022	2023	2024	2025	Total
Validated Request	1,017,500	1,595,000	-	385,000	-	2,997,500
Funding Sources						
Reserves/Reserve Funds	271,367	425,387	-	102,680	-	799,433
Grant	746,133	1,169,614	-	282,321	-	2,198,067
Donation						-
Total Funded	1,017,500	-	-	-	-	1,017,500
Total Unfunded	-	1,595,000	-	385,000	-	1,980,000

### **Capital Project Name**

### **Division**

Combined Sewer Separation	Engineering & Operations
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Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Manager of Design and	Spring 2021	Winter 2021	Lifecycle Renewal

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

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 of the City, combined sewer separation projects typically, include the reconstruction of all infrastructure within the City's right-of-way.

Stuart Street from Wellington Street to Talfourd Street, and Queen Street from Wellington Street to Talfourd Street sewer separation is planned for 2021 and Wellington Street for 2022, including design; modifications; studies required for the system as part of DMAF including model updating, and calibration of the sewer model; ECA amendments, etc.

This project is funded in part by Federal Government's Disaster Mitigation and Adaptation Fund.

#### **Assessment**

**Condition** – 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.

**Risk Level –** Risk of basement flooding during wet weather events and risk of sewer pipes failing.

**Criticality** – With increasing frequency and intensity of wet weather events, the likelihood of basement flooding increases. Asset failure results in costly emergency repair work.

**Financial** – Reduced operating costs to maintain infrastructure in poor condition, matching funds are required to fully utilize grant funding.

**Project Cost Breakdown** 

Project Component/Phase	2021	2022	2023	2024	2025	Total
Stuart Street and Queen Street	3,700,000					3,700,000
Design & Construction	400,000					400,000
Sewer Separation		4,000,000	4,000,000	4,500,000	5,000,000	17,500,000
						-
Total Project Cost	4,100,000	4,000,000	4,000,000	4,500,000	5,000,000	21,600,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	4,100,000	4,000,000	4,000,000	4,500,000	5,000,000	21,600,000
Funding Sources						
Reserves/Reserve Funds	2,620,000	2,400,000	2,400,000	2,700,000	3,000,000	13,120,000
Grant	1,480,000	1,600,000	1,600,000	1,800,000	2,000,000	8,480,000
Donation						-
Total Funded	4,100,000	-	-	-	-	4,100,000
Total Unfunded	-	4,000,000	4,000,000	4,500,000	5,000,000	17,500,000

### **Capital Project Name**

### **Division**

Plank Road Reconstruction	Engineering & Operations
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Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Manager of Design and Infrastructure	Spring 2021	Winter 2022	Lifecycle Renewal

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

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 poor condition. Detailed design is currently in progress with construction scheduled for 2021, 2022, and potentially 2023. The project will reduce operating costs required to maintain the existing poor condition infrastructure.

As part of this project the Gladwish Drive watermain loop will also be completed to improve water quality and pressure in this area. This work will facilitate reconstruction of the Plank Road watermain without significant service disruptions to the industries in the area.

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 would need to contribute the remaining portion of the road and all costs for the watermain.

#### **Assessment**

**Condition** – The road is in poor condition and the watermain has experienced numerous breaks.

**Risk Level –** High risk of road and watermain continuing to deteriorate.

**Criticality** – This is a major industrial road and service disruptions are likely.

**Financial** – Reduce operating costs for maintaining roads in poor condition, need to provide matching funds to utilize potential grant.

### **Project Cost Breakdown**

Project Component/Phase	2021	2022	2023	2024	2025	Total
Plank Road Project	3,000,000	5,200,000				8,200,000
Gladwish Drive	1,300,000					1,300,000
Design & Construction	400,000					400,000
						-
Total Project Cost	4,700,000	5,200,000	-	-	-	9,900,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	4,700,000	5,200,000	-	-	-	9,900,000
Funding Sources						
Reserves/Reserve Funds	3,176,220	2,558,780				5,735,000
Grant	1,523,780	2,641,220				4,165,000
Donation						-
Total Funded	4,700,000	-	-	-	-	4,700,000
Total Unfunded	•	5,200,000	•	•	•	5,200,000

# Capital Project Name Division

Pumping Station Improvements Engineering	g and Operations
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Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Superintendent,			
Environmental Services			
& Manager of	Spring 2020	Ongoing	Lifecycle Renewal/Growth
Development and			·
Transportation			

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

Annual capital program for improvements/rehabilitation at 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 our Ministry of the Environment, Conservation and Parks (MECP) Certificates of Approval. Capital upgrades to pumping stations will reduce maintenance and overtime costs.

A development proposal at 1873 London Line (Sunset Golf Course) has increased the priority of an existing deficiency with Sanitary Pumping Station 29. Operations staff have identified numerous concerns with capacity at the station, and this was confirmed through flow monitoring completed as part of the due diligence process for this development proposal. Through negotiation with the proponent, it has been agreed that the city will cover 25% of the upgrade and the proponent will be responsible for the remainder. Pumping Station 29 was identified within the DC study as part of a network of pumping stations and force mains leading to the south huron trunk sewer eligible for DC funding. As such, a small portion of this cost can be funded through the DCs. This project should have a positive impact on operations as they will not be required to respond to this site as frequently following the upgrade.

#### **Assessment**

**Condition – Poor -** Many pumping stations have reached the end of their useful life and are in poor condition. Pumping Station 29 currently operates at capacity during dry weather and over capacity during wet weather.

**Risk Level – High -** Failure could result in basement flooding, overflows and fines. Development proposal would not be able to proceed without the pumping station upgrade

**Criticality – High -** Pumping stations must be maintained to reduce the probability of failure leading to basement flooding and adverse environmental impacts. The upgrade is required in order for the subdivision development to proceed.

**Financial** – Reduced maintenance and overtime costs and reduction in risk (cost of lawsuits from basement flooding, fines, environmental remediation). Labour hours directly associated with this pumping station would decrease as the pump would no longer be at critical capacity. Pump operating costs decrease as the pump would be at a far more efficient point on the duty curve. City can improve an asset that is in critical need of repair at 25% of full cost with majority contribution on the upgrade coming from the developer.

**Project Cost Breakdown** 

Project Component/Phase	2021	2022	2023	2024	2025	Total
PS#14 - Rosedale (carry over		550,000				550,000
from Phase I)		550,000				550,000
PS#3 - Clifford	600,000					600,000
PS#11 - Lasalle			600,000			600,000
PS#13 - McCaw		500,000				500,000
PS#18 - Giffel		455,000				455,000
PS#29 - London Line @	000 000					000 000
Brairwood	900,000					900,000
Construction/Rehabilitation			900,000	1,500,000	1,500,000	3,900,000
Smith & Loveless Sites			900,000	1,500,000	1,500,000	3,900,000
<b>Total Project Cost</b>	1,500,000	1,505,000	1,500,000	1,500,000	1,500,000	7,505,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	1,500,000	1,505,000	1,500,000	1,500,000	1,500,000	7,505,000
Funding Sources						
Reserves/Reserve Funds	600,000	1,505,000	1,500,000	1,500,000	1,500,000	6,605,000
Develop Charges	225,000					225,000
Donation						-
Other - Developer	675,000					675,000
Prior Year Funding						-
Total Funded	1,500,000	-	-	-	-	1,500,000
Total Unfunded	-	1,505,000	1,500,000	1,500,000	1,500,000	6,005,000

### **Capital Project Name**

### **Division**

Sarnia Sewer Upgrade Project	Engineering & Operations
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Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Manager of Operation Services	January 1, 2015	October 31, 2021	Lifecycle Renewal

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

Construction of new gravity sanitary sewer, new sanitary forcemain, and new sanitary pumping station servicing approximately 50% of the City. This is one of the largest infrastructure projects undertaken in the city and will ensure sanitary sewer capacity for existing residents and future growth. The project is combining two large pumping stations into one, thus reducing operating costs. This project is in part funded by Federal and Provincial grant under the New Building Canada-Small Community Fund (NBCF-SCF).

#### **Assessment**

**Condition** - The 'Sarnia Wastewater Master Plan' was completed by Stantec in 2012. In this Study, the Bedford Pump Station, Green Street Pump Station, and Murphy Road Pump Station were identified as limited in capacity, particularly under wet weather conditions.

**Risk Level** – Pumping station failure can lead to basement flooding and overflows and service disruption.

**Criticality** – During major rain events these pump stations run at 100% capacity with significant storage of flow in the upstream sanitary sewers leading to a risk of basement flooding. The Bright's Grove Lagoon system was also identified as top priority due to the limited capacity and effluent exceedances. The above projects were also identified as the top projects in the City's Core Infrastructure Asset Management Plan and are major concerns of the City due to capacity and operational issues.

**Financial** – This project will not only reduce the long-term maintenance cost but also increase the capacity of collection system to accommodate future growth within the city boundary.

Project Component/Phase	2021	2022	2023	2024	2025	Total
Sarnia Sewer Upgrade Project	6,000,000					6,000,000
						-
						-
						-
Total Project Cost	6,000,000	-	-	-	-	6,000,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	6,000,000	-	-	-	-	6,000,000
Funding Sources						
Reserves/Reserve Funds	6,000,000					6,000,000
Grant						-
Donation						1
Total Funded	6,000,000	-	-	-	1	6,000,000
Total Unfunded	-	-	-	-	-	-

### **Capital Project Name**

### **Division**

Storm Water Management Facilities (SWMF)	Engineering and Operations
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Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Superintendent,			

Environmental Services

January 2020
Ongoing
Lifecycle Renewal

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

Rehabilitation and major cleaning of stormwater management facilities. Stormwater management facilities require regular rehabilitation and cleaning in order to function properly and to control the quality and quantity of stormwater. Maintenance is required in order to maintain conformance with Ministry of Environment, Conservation and Parks Certificate of Approval for the site.

#### **Assessment**

**Condition** – Numerous ponds are reaching the timeline for their first major cleaning/rehabilitation.

**Risk Level** – Risk of ponds not achieving their intended design of quality and quantity control, overflow(s) of sediment and fines.

**Criticality – High**, risk will increase as ponds continue to fill with sediment.

**Financial** – Reduced maintenance and overtime costs, and reduction in risk (cost of fines, environmental remediation).

### **Project Cost Breakdown**

Project Component/Phase	2021	2022	2023	2024	2025	Total
Construction/Rehabilitation/ Sampling program					200,000	200,000
ST#1 - D2C (Modeland Road)	440,000					440,000
ST#2 - Heritage Park			500,000			500,000
ST#4 - Upper Canada Drive		500,000				500,000
ST#5 - Blackwell Glen				500,000		500,000
						-
Total Project Cost	440,000	500,000	500,000	500,000	200,000	2,140,000

r arraining obtained						
Year	2021	2022	2023	2024	2025	Total
Validated Request	440,000	500,000	500,000	500,000	200,000	2,140,000
Funding Sources						
Reserves/Reserve Funds	440,000	500,000	500,000	500,000	200,000	2,140,000
Grant						-
Donation						-
Total Funded	440,000	-	-	-	-	440,000
Total Unfunded	-	500,000	500,000	500,000	200,000	1,700,000

### **Capital Project Name**

### **Division**

Watermain, Sanitary & Storm Sewer Replacements	Engineering & Operations
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Project Manager	Start Date	Completion Date	Project Classification
Manager of Design and	Spring 2021	Winter 2022	Lifecycle Renewal

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

The purpose of this project is to complete the lifecycle replacement of watermains, sanitary sewers, and storm sewers in various locations throughout the City. Locations are selected based on poor condition of existing infrastructure or other needs like low water pressure or lack of sewer capacity. Replacing infrastructure at the end of its useful life reduces costly emergency repairs and general operating expenses.

## Projects to be completed in 2021 include:

Replacement of watermains on Lakeshore Road (Collaboration with County road replacement), Yeates Court and Helen Avenue, and addition of a storm sewer on Wilgrun Drive to address flooding concerns.

#### **Assessment**

**Condition** – The watermain has experienced numerous breaks.

**Risk Level –** High risk of watermain continuing to deteriorate.

**Criticality** – Severe service disruptions are likely.

Financial – Reduce operating costs for maintaining watermains in poor condition.

### **Project Cost Breakdown**

Project Component/Phase	2021	2022	2023	2024	2025	Total
Lakeshore Road	2,300,000					2,300,000
Yeates Court - Watermain	120,000					120,000
Helen Avenue - Watermain	450,000					450,000
Wilgrun Drive - Storm Sewer	150,000					150,000
Design & Construction	400,000					400,000
TBD		3,000,000	3,250,000	3,500,000	3,750,000	13,500,000
Total Project Cost	3,420,000	3,000,000	3,250,000	3,500,000	3,750,000	16,920,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	3,420,000	3,000,000	3,250,000	3,500,000	3,750,000	16,920,000
Funding Sources						
Reserves/Reserve Funds	3,420,000	3,000,000	3,250,000	3,500,000	3,750,000	16,920,000
Grant						-
Donation						-
Total Funded	3,420,000	-	-	-	-	3,420,000
Total Unfunded	-	3,000,000	3,250,000	3,500,000	3,750,000	13,500,000

## **Capital Project Name**

### **Division**

Biosolids Processing Upgrades -WPCC Engineering and Operations
--

Project Manager	Start Date	Completion Date	Project Classification
WPCC Superintendent	January 2021	December 2021	Service Level Improvement

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

Replace the biosolids infrastructure at the Water Pollution Control Centre. The current equipment and building used for the biosolids treatment process are in poor condition and have minimal redundancy. An upgraded system will reduce overtime costs.

Phase 2 of the Biosolids Processing Improvements include the addition of 3<sup>rd</sup> centrifuge for sludge dewatering, additional sludge pumping, and instrumentation and controls upgrades. Final design fees and centrifuge purchase costs are included in the 2021 capital project, and construction will be included in the capital project requests for 2022. The Phase 3 upgrades are included in the request for 2022 also.

### **Assessment**

**Condition** – the existing biosolids infrastructure is in poor condition

**Risk Level** – the risk of equipment failure, and the resulting overtime costs to treat stored sludge, is very high

**Criticality** – high, if a major equipment breakdown occurred there are limited alternative treatment options available, but all would be expensive

**Financial** – the upgraded system will reduce overtime costs

#### **Project Cost Breakdown**

Project Component/Phase	2021	2022	2023	2024	2025	Total
Phase 2 Processing Upgrades	1,000,000					1,000,000
Phase 3 Processing Upgrades		2,750,000				2,750,000
						-
						-
<b>Total Project Cost</b>	1,000,000	2,750,000	-	-	-	3,750,000

runding Sources						
Year	2021	2022	2023	2024	2025	Total
Validated Request	1,000,000	2,750,000	-	-	-	3,750,000
Funding Sources						
Reserves/Reserve Funds	1,000,000	2,750,000				3,750,000
Grant						-
Donation						-
Total Funded	1,000,000	-	-	-	-	1,000,000
Total Unfunded	-	2,750,000	-	-	-	2,750,000

## **Capital Project Name**

### **Division**

PCC Building Upgrades Engineering and Operations
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Project Manager	Start Date	<b>Completion Date</b>	Project Classification	
WPCC Superintendent	January 2021	December 2021	Lifecycle Renewal	

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

Replacement of the administration building's roofing and original windows from 1959 construction.

The roofing has been prone to leaking in recent years. The most recent leak resulted in water dripping onto an operating 600V motor control centre.

The windows are from the original construction of the facility and require replacement. North winds create condensation/frost on the windows and excessive cold in the employee change room.

### **Assessment**

**Condition** – the building is aging and key components require upgrading to maintain safe working conditions. The roofing and windows are prone to adverse weather conditions.

**Risk Level** – high, water leaking onto electrical equipment is not safe.

**Criticality** – high, protection of the electrical equipment and maintaining a safe work environment for plant staff.

**Financial** – the leaking roof could increase operating costs if electrical equipment fails and drafty windows increase heating costs.

**Project Cost Breakdown** 

Project Component/Phase	2021	2022	2023	2024	2025	Total
Roof replacement	175,000					175,000
Windows replacement	225,000					225,000
Building Upgrades - TBD				1,000,000		1,000,000
						-
Total Project Cost	400,000	-	-	1,000,000	-	1,400,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	400,000		1	1,000,000	-	1,400,000
Funding Sources						
Reserves/Reserve Funds	400,000			1,000,000		1,400,000
Grant						-
Donation						-
Total Funded	400,000	-	-	-	-	400,000
Total Unfunded	-	-	-	1,000,000	-	1,000,000

### **Capital Project Name**

#### **Division**

WPCC Emergency Generator	Engineering and Operations
Wi de Emergency deficiator	Linguiscering and operations

Project Manager	Start Date	<b>Completion Date</b>	Project Classification
WPCC Superintendent	January 2021	December 2021	Service Improvement

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

A second emergency generator is required to maintain operation of the 4 raw sewage pumps. The existing generator was designed to provide emergency power to 2 of the raw sewage pumps; however emergency power is now required for all four pumps.

The need for the second generator developed as a result of the discharges from the Plank Road Pump Station and the Devine Street Pump Station being redirected to the gravity sewer upstream of the WPCC to ensure the sewage is screened prior to entering the treatment processes. More flow is now received in the wet well and emergency power is required for all 4 raw sewage pumps to minimize the risk of backing up the collection system.

#### **Assessment**

**Condition** – the existing generator is deemed acceptable condition for continued service.

**Risk Level** – the risk of basement flooding in the collection system is extreme if sufficient raw sewage pumps are not available to handle the incoming sewage during wet weather events.

**Criticality** – the discharges from the Plank Road Pump Station and the Devine Street Pump Station were redirected as part of the Sewer Upgrade project. The need for a second generator is urgent.

**Financial** – operating costs will increase due to increased fuel and maintenance required for the second generator.

**Project Cost Breakdown** 

,						
Project Component/Phase	2021	2022	2023	2024	2025	Total
WPCC Generator	900,000					900,000
						-
						-
						-
Total Project Cost	900,000	-	-	-	-	900,000

runung sources						
Year	2021	2022	2023	2024	2025	Total
Validated Request	900,000		-	-	-	900,000
Funding Sources						
Reserves/Reserve Funds	900,000					900,000
Grant						-
Donation						-
Total Funded	900,000	-	-	-	-	900,000
Total Unfunded	-	-	-	-	-	-

### **Capital Project Name**

## **Department**

WPCC Process Improvements Engineering and Operations
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Project Manager	Start Date	<b>Completion Date</b>	Project Classification
WPCC Superintendent	January 2021	December 2021	Lifecycle Renewal

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

In 2021, process improvements are required in two separate areas of the Water Pollution Control Centre (WPCC):

- 1. Improvements to the phosphorus control system to minimize the usage of alum and reduce the amount of phosphorus released to the St. Clair River during plant bypasses.
- 2. Replacement of the outdated programmable logic controllers (computers) required for the control of the WPCC's treatment processes and archiving of operational data for reporting.

Additional process improvements, such as clarifier chain replacements and pump change outs, will be required in future years as the equipment ages.

#### **Assessment**

**Condition** – The phosphorus control system is in acceptable condition but requires improvements to limit the amount of alum being released to the environment. The existing programmable logic controllers (PLCs) are no longer supported and replacement parts are not available.

**Risk Level** – Equipment failure exposes the WPCC to potential non-compliance with the effluent requirements of the environmental compliance approval, and potential charges from the Ministry of the Environment, Conservation and Parks (MECP).

**Criticality** – The MECP is undertaking measures to reduce the phosphorus levels in the Great Lakes and the City is involved directly with a study financed by the Ministry. Failure of the PLCs would result in the loss of automated control and the entire facility would default to manual control.

**Financial** – Operating costs for the alum system will benefit from the reduction in chemicals required. The City could be exposed to environmental charges as result of the damages caused by equipment failures at the WPCC.

**Project Cost Breakdown** 

Project Component/Phase	2021	2022	2023	2024	2025	Total
Phosphorus Control System	100,000					100,000
Programmable Logic Controllers	250,000					250,000
Process Improvements TBD		750,000	1,000,000	1,000,000	1,000,000	3,750,000
						-
Total Project Cost	350,000	750,000	1,000,000	1,000,000	1,000,000	4,100,000

i anang coares						
Year	2021	2022	2023	2024	2025	Total
Validated Request	350,000	750,000	1,000,000	1,000,000	1,000,000	4,100,000
Funding Sources						
Reserves/Reserve Funds	350,000	750,000	100,000	100,000	1,000,000	2,300,000
Grant						-
Donation						-
Total Funded	350,000	-	-	-	-	350,000
Total Unfunded	-	750,000	1,000,000	1,000,000	1,000,000	3,750,000

### **Capital Project Name**

### **Division**

Sanitary Sewer Oversizing Engineering & Operations	
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Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Manager of			
Development and	January 2021	December 2021	Service Improvement
Transportation			

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

City staff have asked Sifton, the developer of the site immediately north and west of Michigan Avenue and Modeland Road, respectively, to provide a cost for sanitary sewer oversizing. The purpose of the proposed project is to provide capacity for a future scenario where residents on Holden Drive, Malcom Crescent and portions of Blackwell Road could be converted from septic systems to municipal sewers. Taking this cost on now to allow provision for the future will protect the city from a potentially significant investment in the future. Should the area decide to or be required to convert from septic, having to route the flow in a different direction due to a lack of capacity through the Sifton Property would cost substantially more than this provision.

#### **Assessment**

**Condition – Fair –** Currently, the benefactors to this project have septic systems for sewage.

**Risk Level – Medium –** Whether or not the entire existing area will come off septic is not known at this time, but the cost associated with not taking this decision is far greater than the cost of taking it.

**Criticality – Medium –** The project itself is not critical, however the timing of approving the funds is critical as the oversizing work needs to begin with Phase 1 of the Sifton Development and will proceed on a phase by phase basis.

**Financial** – There are immediate financial impacts to oversizing this run as the city will be required to contribute its portion of the cost of oversizing. There is negligible increase to the operating cost as there will be new infrastructure created for the city to maintain, regardless of the oversizing. This request represents potential future savings in excess of 500k.

## **Project Cost Breakdown**

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Project Component/Phase	2021	2022	2023	2024	2025	Total
Sanitary Sewer Oversizing	125,000					125,000
						-
						-
						-
Total Project Cost	125,000	-	-	-	-	125,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	125,000	ı	-	-	ı	125,000
Funding Sources						
Reserves/Reserve Funds	125,000					125,000
Grant						-
Donation						-
Total Funded	125,000	-	-	1	-	125,000
Total Unfunded	-	-	-	-	•	-

# **Capital Project Name**

## **Department**

Energy Efficiency- Water Pollution Control Centre Blower Upgrade	Facilities
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Project Manager	Start Date	<b>Completion Date</b>	Project Classification
Facilities Manager	January 2021	December 2021	Energy Efficiency

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

Blower Upgrade projection of savings is approx. 70,000-100,000. Potential pay back period of 2 years.

### **Assessment**

As part of the Energy Conservation and Demand Management Plan (2019) continued efforts to reduce the energy usage of facilities are identified to mitigate costs and reduce greenhouse gas emissions.

The blower upgrade at the Water Pollution Control Centre is to reduce electrical demand through improved equipment and programming to maintain operations.

## **Project Cost Breakdown**

Project Component/Phase	2021	2022	2023	2024	2025	Total
Blower Upgrade	250,000					250,000
						-
						-
Total Project Cost	250,000	-	-	-	-	250,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	250,000	1	-	-	ı	250,000
Funding Sources						
Reserves/Reserve Funds	250,000					250,000
Grant						-
Donation						-
Total Funded	250,000	-	-	-	-	250,000
Total Unfunded	-	1	-	-	1	•

## **Capital Project Name**

### **Division**

WPCC – UV Shelter Engineering and Operations
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Project Manager	Start Date	<b>Completion Date</b>	Project Classification
WPCC Superintendent	January 2021	December 2021	Health and Safety

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

The UV disinfection system, which was originally installed with the plant expansion in 2000, was replaced in 2019 in favour of current technology requiring significantly less power to achieve the effluent limits required by the Environmental Compliance Approval.

A shelter is required to protect staff from weather extremes while preforming maintenance on the system and promote worker safety while working in the proximity of electricity and wet environments.

### **Assessment**

**Condition** – there is no building and workers have been exposed to the environment while maintaining the UV system.

**Risk Level** – the current risk of adverse working conditions is high.

**Criticality** – high, maintaining a safe work environment for plant staff.

**Financial** – reduce operating costs by protecting equipment.

### **Project Cost Breakdown**

<b>Project Component/Phase</b>	2021	2022	2023	2024	2025	Total
UV Shelter	250,000					250,000
						-
						-
						-
Total Project Cost	250,000	-	-	-	-	250,000

Year	2021	2022	2023	2024	2025	Total
Validated Request	250,000		ı	-	ı	250,000
Funding Sources						
Reserves/Reserve Funds	250,000					250,000
Grant						-
Donation						-
Total Funded	250,000	•	•	-	ı	250,000
Total Unfunded	-		-	-	-	-