



2023 CAPITAL BUDGET

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- Remaining capital budget requests will be reviewed at Budget Committee between January 27, and January 30, 2023
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Summary by Department

CITY OF MARKHAM
2023 CAPITAL AND OTHER PROGRAMS BUDGET
by Department

#	Project Description	Total	Tax	Life Cycle	DC - Reserve	DC - Developer	Other	Description of Other Funding
CAPITAL BUDGET PRE-APPROVAL REQUESTS								
Development Services								
<i>Theatre</i>								
23047	Theatre-Dressing Room Renovations	447,700		447,700				
23048	Theatre-Fire Curtain Replacement	111,900		111,900				
	TOTAL Theatre	559,600	-	559,600	-	-	-	
<i>Building Services</i>								
23050	Building Standards Guide Builder	71,200					71,200	Building Standards Reserve Fund
	TOTAL Building Services	71,200	-	-	-	-	71,200	
	TOTAL Development Services	630,800	-	559,600	-	-	71,200	
Corporate Services								
<i>IT Services</i>								
23039	ITS - TXM Solution Replacement (Consultancy)	101,800					101,800	Ramp up Reserve
23040	IT Lifecycle Asset Replacement	488,400		390,720			97,680	(4) see note below
23042	ITS - Leap Cloud (Feb Server)	149,600					149,600	Ramp Up, Dvlpm Fee, Bldg Fee, WW
23043	ITS - Microsoft 365	407,000		325,600			81,400	Development Fee, Building Fee, WW
23044	ITS - Oracle DB Licensing	107,400					107,400	Ramp Up, Dvlpm Fee, Bldg Fee, WW
	TOTAL IT Services	1,254,200	-	716,320	-	-	537,880	
<i>Finance</i>								
23045	Water Billing Transition Project - Phase 2 of 3	203,500					203,500	Waterworks Reserve
	TOTAL Finance	203,500	-	-	-	-	203,500	
<i>Sustainability and Asset Management</i>								
23046	Roofing Replacement Projects	767,000		767,000				
	TOTAL Sustainability and Asset Management	767,000	-	767,000	-	-	-	
	TOTAL Corporate Services	2,224,700	-	1,483,320	-	-	741,380	
Community Services								
<i>Recreation Services</i>								
23001	Angus Glen C.C. Pool Repair - Construction	719,600		719,600				
23002	Centennial C.C. Pool Repair - Construction	981,700		981,700				
23003	Markham Pan Am Centre Pool Filter Refurbishment	237,600		237,600				
23004	Recreation Arena Refrigeration Gasket Replacement	35,600		35,600				
	TOTAL Recreation Services	1,974,500	-	1,974,500	-	-	-	
<i>Operations - Roads</i>								
23005	Asphalt Resurfacing	7,883,200		82,011			7,801,189	Gas Tax
23006	Boulevard Repairs	88,000		88,000				

CITY OF MARKHAM
2023 CAPITAL AND OTHER PROGRAMS BUDGET
by Department

#	Project Description	Total	Tax	Life Cycle	DC - Reserve	DC - Developer	Other	Description of Other Funding
23007	Bridge Structure Preventative Maintenance - Roads	27,400		27,400				
23008	Emergency Repairs	162,200		162,200				
23009	Localized Repairs - Curb & Sidewalk	929,700		929,700				
23010	Localized Repairs - Parking Lots	157,000		157,000				
23011	Parking Lots- Rehabilitation	45,800		45,800				
	TOTAL Operations - Roads	9,293,300	-	1,492,111	-	-	7,801,189	
Operations - Parks								
23012	AODA Playground Refurbishments - Year 1 of 4	1,049,900					1,049,900	Ramp up Reserve
23013	Boulevard/Park Trees Replacement	942,300		942,300				
23051	Court Resurfacing/Reconstruction - Markham Tennis Club	236,900		78,968			157,932	Tennis Clubs
23014	Court Resurfacing/Reconstruction/Maintenance	491,000		383,444			107,556	Tennis Clubs
23015	Fence (Tennis Courts)	86,800		86,800				
23016	Markham Trees for Tomorrow	125,300					125,300	Trees for Tomorrow Reserve
23017	Pathways Resurfacing	151,300		151,300				
23018	Playstructure Replacement	705,100		451,100			254,000	Ramp up Reserve
23019	Sportsfield Maintenance & Reconstruction	148,800		148,800				
	TOTAL Operations - Parks	3,937,400	-	2,242,712	-	-	1,694,688	
Operations - Fleet								
23020	Corporate Fleet Replacement - Non-Fire - Pre Approval	2,407,000		2,407,000				(1) see note below
23021	Corporate Fleet Replacement - Waterworks	108,000					108,000	Waterworks Reserve
23022	New Fleet - Parks - Pre Approval	11,200			11,200			(2) see note below
23023	New Fleet - Roads	32,600			32,600			
23024	Upfit of Fleet Services Mobile Van	30,500			30,500			
	TOTAL Operations - Fleet	2,589,300	-	2,407,000	74,300	-	108,000	
Operations - Utility Inspection & Survey								
23025	German Mills Meadow Environmental Monitoring Program - Pre Approval	82,800		82,800				
	TOTAL Operations - Utility Inspection & Survey	82,800	-	82,800	-	-	-	
Environmental Services - Infrastructure								
23026	Bridges and Culverts - Condition Inspection	81,600		81,600				
23027	Storm and Sanitary Sewer CCTV Inspection	756,600		262,600			494,000	Waterworks Reserve
23028	Structures Program-Full-time Staff	149,200		149,200				
23029	West Thornhill Flood Control Implementation Ph 4B Constr.	14,522,500					14,522,500	SMW Rsrv, DMAF Grant, Gas Tax
	TOTAL Environmental Services - Infrastructure	15,509,900	-	493,400	-	-	15,016,500	
Environmental Services - Stormwater								
23030	SWM Ponds - Condition Inspection	28,100		28,100				
23031	Water Quality Improvements	77,300		77,300				
23032	Water Quality Monitoring at Swan Lake	30,900		30,900				
23033	West Thornhill Flood Control - Ph 4C & 4D Addl. Design	203,500					203,500	Stormwater reserve
	TOTAL Environmental Services - Stormwater	339,800	-	136,300	-	-	203,500	

CITY OF MARKHAM
2023 CAPITAL AND OTHER PROGRAMS BUDGET
by Department

#	Project Description	Total	Tax	Life Cycle	DC - Reserve	DC - Developer	Other	Description of Other Funding
Environmental Services - Waterworks								
23034	Asset Management Analyst - Full Time Staff	110,700					110,700	Waterworks Reserve
23035	Cathodic Protection of Ductile Iron Watermains	995,100					995,100	Waterworks Reserve
23036	CI Watermain Replacement - Construction	9,811,400					9,811,400	Waterworks Reserve
23037	SCADA Instrumentation and Replacement	312,000		312,000				
23038	Water Meters - Replacement Program	1,067,600					1,067,600	Waterworks Reserve
TOTAL Environmental Services - Waterworks		12,296,800	-	312,000	-	-	11,984,800	
TOTAL Community Services		46,023,800	-	9,140,823	74,300	-	36,808,677	
Corporate Wide								
<i>Corporate Wide</i>								
	In Camera Project	1,526,400					1,526,400	Ramp Up, Dvlpm Fee, Bldg Fee, WW
TOTAL Corporate Wide		1,526,400	-	-	-	-	1,526,400	
TOTAL Capital Budget Pre-Approval Requests		50,405,700	-	11,183,743	74,300	-	39,147,657	

Notes:

- (1) The overall project budget is \$3,918,900, pre-approval request is \$2,407,000 due to long lead time for delivery of vehicles
- (2) The overall project budget is \$238,100, pre-approval request is \$11,200 due to requirement for upcoming winter maintenance
- (3) The overall project budget is \$357,500, pre-approval request is \$82,800 due to contract extension with current vendor commencing January 1, 2023
- (4) The overall project budget is \$7.1M, preliminary and subject to change. Pre-approval request is \$488,400 due to long lead time for delivery

CITY OF MARKHAM
2023 CAPITAL AND OTHER PROGRAMS BUDGET
by Department

#	Project Description	Total	Tax	Life Cycle	DC - Reserve	DC - Developer	Other	Description of Other Funding
CAPITAL BUDGET REQUESTS								
Development Services								
<i>Culture</i>								
23052	Culture Public Art Master Plan Implementation Phase 4 of 5	248,000					248,000	Public Art Acq. Project 22220
	TOTAL Culture	248,000	-	-	-	-	248,000	
<i>Museum</i>								
23053	Museum - Various Buildings	258,400		258,400				
23054	Museum Maintenance	35,000		35,000				
	TOTAL Museum	293,400	-	293,400	-	-	-	
<i>Theatre</i>								
23049	Theatre-Water Pump Room Replacement	85,600		85,600				
23055	Theatre-Lighting & Video Equipment	67,200		67,200				
23056	Theatre-Stage & Building Maintenance	89,900		89,900				
	TOTAL Theatre	242,700	-	242,700	-	-	-	
<i>Arts Centres</i>								
23057	Gallery Varley and McKay Maintenance and Repair	56,700		56,700				
	TOTAL Arts Centres	56,700	-	56,700	-	-	-	
<i>Building Services</i>								
23058	Development Service ePlan Portal Replacement	101,800					101,800	Building Reserve Fund
23059	ProjectDOX conversion to cloud and upgrade to 9.2	213,700					213,700	Building Reserve Fund
23060	Remote in field inspection app	122,100					122,100	Building Reserve Fund
	TOTAL Building Services	437,600	-	-	-	-	437,600	
<i>Planning</i>								
23061	2023 - Official Plan Review	1,017,500			1,017,500			
23062	Designated Heritage Prop. Grant Prog.-Residential -2023	30,000					30,000	Designated Heritage Prop Grant
23063	Ecological Restoration of City-owned/Managed Natural Areas	399,900					399,900	Restoration/Landscape fund
23064	ePLAN Project Dox Development Application Workflows	223,900					223,900	Development Fees
23065	Heritage Façade Improvements/Sign Replacement - 2023	30,000		30,000				
23066	Housing Strategy - Implementation	106,300			95,670		10,630	Development Fees
23067	Planning & Design Staff Salary Recovery	866,400			866,400			
	TOTAL Planning	2,674,000	-	30,000	1,979,570	-	664,430	
<i>Parks Design & Construction</i>								
23068	Ada Mackenzie Park Phase 3 Design and Construction	3,564,600			3,564,600			
23069	Berczy Glen Northwest Parkette Design and Construction	208,700			208,700			
23070	Berczy Glen West Parkette Design and Construction	780,300			780,300			
23071	Community Garden Maintenance	45,800	25,000	20,800				
23072	Frisbee Golf - Mildred Temple Park	61,100			61,100			

CITY OF MARKHAM
2023 CAPITAL AND OTHER PROGRAMS BUDGET
by Department

#	Project Description	Total	Tax	Life Cycle	DC - Reserve	DC - Developer	Other	Description of Other Funding
23073	Hughson Park	56,000			56,000			
23074	Off-Leash Dog Area Policy & Implementation Plan	120,900			120,900			
23075	Paddock Park/Flowervale CC	183,200			132,800		50,400	Landscape Recovery
23076	Park Redevelopment Strategy & Implementation Plan	247,900			161,136		86,764	17.5 % Non DC Growth /17.5 % CBC
23077	Parks Salary Recovery	498,100			498,100			
23078	Planner Salary	118,400			118,400			
23079	Public Realm - Light Post Banners	38,800					38,800	Project 22320 - 22328 CIP
23080	Public Realm - Median Streetscape Enhancement	20,400					20,400	Project 22323 CIP and MSPP Grant
23081	Public Realm - Town Centre Blvd. Banner Arm Replacement	11,200					11,200	Project 22328 CIP
23082	Public Realm - Traffic Wraps	8,000		8,000				
23083	Russell Carter Tefft Pedestrian Bridge D&C	779,300			506,545		272,755	17.5 % Non DC Growth/17.5 % CBC
23084	South Cornell Parkette 156 Design and Construction	1,060,100			1,060,100			
23085	Urban Parks Strategy	181,400			181,400			
23086	Villages of Fairtree East NP - Construction	1,479,200			1,479,200			
23087	Ward 2 - Off Leash Area - Design	44,700			44,700			
23088	Ward 3 Off-Leash Dog Area - Design and Construction	584,800			584,800			
23089	Ward 4 - Off Leash Area - Design	44,700			44,700			
23090	Ward 6 Off-Leash Dog Area - Design and Construction	584,800			584,800			
23091	Ward 8 - Off Leash Area - Design and Construction	584,800			584,800			
	TOTAL Design	11,307,200	25,000	28,800	10,773,081	-	480,319	
Engineering								
23092	Birchmount Bridge over Rouge River- Bridge Repair	670,100		670,100				
23093	Centurian/Frontenac Intersection and Sidewalk	2,354,800			1,135,498		1,219,302	17.5 % Non DC Growth/17.5 % CBC
23094	Cycling and Pedestrian Advisory Committee (CPAC)	28,000			18,200		9,800	17.5 % Non DC Growth/17.5 % CBC
23095	Downstream Improvements Program (Construction)	1,889,800		141,046	261,942		1,486,812	Carry forward from Project 22028
23096	Downstream Improvements Program (Design)	1,145,900		401,065	744,835			
23097	Engineering Staff Salary Recovery	433,700			433,700			
23098	Establish Design Standards for Underground SWM Tanks	127,400			127,400			
23099	Highway 404 MBC, N of 16th Avenue (Construction)	53,552,100			53,552,100			
23100	Indigenous Community Consultation (Capital Projects)	60,900			60,900			
23101	Installation of Wayfinding Signs at Rouge Valley Trail	485,500			189,495		296,005	40% CF 21027/20 % Non DC Growth
23102	Markham Centre Trails Phase 3 - Construction	916,800			595,920		320,880	17.5 % Non DC Growth/17.5 % CBC
23103	Markham Cycles	16,800			10,920		5,880	17.5 % Non DC Growth/17.5 % CBC
23104	Markham Cycling Day	11,200			7,280		3,920	17.5 % Non DC Growth/17.5 % CBC
23105	Markham Transportation Strategic Plan (MTSP) Update	974,700			974,700			
23106	New Traffic Signals (Design)	121,800			121,800			
23107	Pedestrian Cross-Over (PXO) Design & Construction	396,000			257,400		138,600	17.5 % Non DC Growth/17.5 % CBC
23108	RVT Extension - Under Hwy 7 & Bullock (Design)	342,400			222,560		119,840	17.5 % Non DC Growth/17.5 % CBC
23109	Smart Commute Markham-Richmond Hill	76,300			76,300			
23110	Traffic Asset Replacement	430,000		430,000				
23111	Traffic Calming of Main Street Markham & Carlton Road	182,800			118,820		63,980	17.5 % Non DC Growth/17.5 % CBC
23112	Traffic Operational Improvements	57,000			39,177		17,823	Non-DC Growth
23113	Victoria Square Boulevard - Phase 1 Construction	21,442,700			21,442,700			
	TOTAL Engineering	85,716,700	-	1,642,211	80,391,647	-	3,682,842	

CITY OF MARKHAM
2023 CAPITAL AND OTHER PROGRAMS BUDGET
by Department

#	Project Description	Total	Tax	Life Cycle	DC - Reserve	DC - Developer	Other	Description of Other Funding
TOTAL Development Services		100,976,300	25,000	2,293,811	93,144,298	-	5,513,191	
CAO, Legal, HR & Fire								
<i>Legal Services</i>								
23114	Internal Document Management Software	76,300	19,075				57,225	Development Fees
23115	OLT - Growth Related Hearings	356,200					356,200	Development Fees
TOTAL Legal Services		432,500	19,075	-	-	-	413,425	
<i>Human Resources</i>								
23116	Digitizing of HR Employee Files	175,700	140,560				35,140	Development Fee, Building Fee, WW
TOTAL Human Resources		175,700	140,560	-	-	-	35,140	
TOTAL CAO, Legal, HR & Fire		608,200	159,635	-	-	-	448,565	
<i>Fire & Emergency Services</i>								
23117	Air Monitor Replacement	55,000		55,000				
23118	Bunker Gear Life Cycle Replacement	119,600		119,600				
23119	Burn Prop-Second Floor Configuration	63,900			63,900			
23120	Firefighter Mental and Physical Health Program	53,400	53,400					
23121	Firefighting Tools & Equipment Replacement	105,500		105,500				
23122	New Recruits Dudley	144,800			144,800			
23123	Personal Firefighter Thermal Imaging Cameras	56,000	56,000					
23124	Replacement of Equipment due to Staff Retirements	108,600		108,600				
23125	Rescue Equipment Replacement	85,200		85,200				
23126	Self Contained Breathing Apparatus (SCBA) Replacement	950,000		950,000				
23127	Technical Rescue Program - Training	29,900	29,900					
23128	Water Rescue Equip. Replac. - RDC and Technician Vests	33,000		33,000				
TOTAL Fire & Emergency Services		1,804,900	139,300	1,456,900	208,700	-	-	
TOTAL CAO, Legal, HR & Fire		2,413,100	298,935	1,456,900	208,700	-	448,565	
Corporate Services								
<i>IT Services</i>								
23129	Contract Resource Recovery	507,500					507,500	Ramp Up
23130	ITS - AMP's (Administrative Monetary Penalty) Expansion	335,800		335,800				
23131	ITS - Gimmel Upgrade to the Cloud	58,200	58,200					
23132	MPL Digital Literacy Strategy Implementation	57,000	57,000					
23133	GPS/AVL Replacement	458,700			458,700			
23134	IT Lifecycle Asset Replacement - 2	6,568,600		5,366,822			1,201,778	Development Fee, Building Fee, WW
23135	ITS - Existing Portal Infrastructure Extension	305,300	244,240				61,060	Development Fee, Building Fee, WW
23136	ITS - Feature Manipulation Engine (FME)	27,100	27,100					
TOTAL IT Services		8,318,200	386,540	5,702,622	458,700	-	1,770,338	
<i>Finance</i>								
23137	Internal Project Management	987,800			987,800			

CITY OF MARKHAM
2023 CAPITAL AND OTHER PROGRAMS BUDGET
by Department

#	Project Description	Total	Tax	Life Cycle	DC - Reserve	DC - Developer	Other	Description of Other Funding
23138	Water Billing Transition Project	5,247,700					5,247,700	Waterworks
	TOTAL Finance	6,235,500	-	-	987,800	-	5,247,700	
Sustainability and Asset Management								
23139	8100 Warden Facility Repair and/or Replacement Projects	191,200		191,200				
23140	Accessibility Retrofit Program	239,200		239,200				
23141	Bird Safe Film	156,000		156,000				
23142	Building Automation Systems Replacement Program	903,100		903,100				
23143	Centennial Near Net-Zero Emissions Retrofit Pilot	13,690,900					13,690,900	INFC's GICB grant, Gas Tax
23144	Civic Centre Repair and/or Replacement Projects	896,000		896,000				
23145	Clatworthy Near Net-Zero Emissions Retrofit Pilot	1,544,700		308,927			1,235,773	INFC's GICB program grant
23146	Corporate Asset Management	140,900		36,634			104,266	74% - Water Rate, 26% -Life Cycle
23147	Corporate Energy & Net-Zero Emissions Plan	111,900					111,900	MECO
23148	Corporate Security Operations & System Upgrades	425,400		425,400				
23149	Designated Substances Management	53,000		53,000				
23150	EV Chargers Expansion and Repairs	251,300	213,625				37,675	MECO
23151	Fire Facilities Repair and/or Replacement Projects	399,700		399,700				
23152	Fire Station 97 Near Net-Zero Emissions Retrofit Pilot	683,900		341,950			341,950	FCM Pilot grant
23153	Fire Systems Maintenance at Various City Facilities	77,000		77,000				
23154	Library Facilities Repair and/or Replacement Projects	84,400		84,400				
23155	Low-Carbon Vehicle Policy Study and Strategy	223,900					223,900	FCM grant, MECO & MEP Implem Proj
23156	Municipal Building Backflow Prevention - Annual Testing	21,400		21,400				
23157	Municipal Energy Plan (MEP) Update	142,500	72,500				70,000	MEP grant and MECO
23158	Operations Facilities Repair and/or Replacement Projects	314,900		314,900				
23159	Parking Lot Light Replacement	72,800		72,800				
23160	Recycling Depots Repair and/or Replacement Projects	13,000		13,000				
23161	Roofing Maintenance and Repair	126,100		126,100				
23162	Salary Recoveries for staff	1,673,100		1,673,100				
23163	Satellite Community Centre Repair and/or Replacement	97,800		97,800				
23164	Thornhill Near Net-Zero Emissions Retrofit Pilot	2,871,200		574,293			2,296,907	INFC's GICB program grant
	TOTAL Sustainability and Asset Management	25,405,300	286,125	7,005,904	-	-	18,113,271	
	TOTAL Corporate Services	39,959,000	672,665	12,708,526	1,446,500	-	25,131,309	
Community Services								
Recreation Services								
23165	Aaniin C.C. Expansion Joint Study (Phase 1 of 2)	45,800		45,800				
23166	Angus Glen C.C. & Pingle House Fire System Replacement	86,500		86,500				
23167	Angus Glen C.C. Arena Boards Replacement	46,600		46,600				
23168	Angus Glen C.C. Arena Rubber Flooring Replacement	310,200		310,200				
23169	Angus Glen C.C. Exterior Wood Refurbishment	210,700		210,700				
23170	Angus Glen C.C. Mirrors Replacement	38,300		38,300				
23171	Angus Glen C.C. Pool Flooring and Blinds Replacement	36,600		36,600				
23172	Angus Glen C.C. Wood Ceiling Replacement	35,100		35,100				
23173	Armada C.C. Wooden Gym Floor Refinishing	40,000		40,000				
23174	City of Markham Environics Analytics	97,100		97,100				
23175	Clatworthy Arena Header Trench Cover Replacement	45,900		45,900				

CITY OF MARKHAM
2023 CAPITAL AND OTHER PROGRAMS BUDGET
by Department

#	Project Description	Total	Tax	Life Cycle	DC - Reserve	DC - Developer	Other	Description of Other Funding
23176	Clatworthy Arena Marquee Replacement	66,700		66,700				
23177	Cornell C.C. Parking Structure Annual Maintenance	9,200		9,200				
23178	Cornell C.C. Pool Tunnel Investigation and Repair	145,500		145,500				
23179	Crosby C.C. Arena Heaters Replacement	20,400		20,400				
23180	Crosby C.C. Facility Improvement	17,500		17,500				
23181	Heintzman House Historical Lighting Refurbishment	24,500		24,500				
23182	Heintzman House Site Feature Refurbishment	16,200		16,200				
23183	Markham Pan Am Centre Pool Equipment Replacement	20,400		20,400				
23184	Markham Village C.C. Audio System Replacement	10,800		10,800				
23185	Milliken Mills C.C. Dance Studio Blind Replacement	6,100		6,100				
23186	Milliken Mills C.C. Divider Wall Replacement	143,800		143,800				
23187	Milliken Mills C.C. Fire System Replacement (Phase 2 of 2)	228,300		228,300				
23188	Old Unionville Library C.C. Ceiling Tile Replacement	24,900		24,900				
23189	Outdoor Automated External Defibrillator (AED) Program	24,600	24,600					
23190	Pickleball Court Lining Project	12,300	12,300					
23191	Recreation AED Program Replacement	5,100		5,100				
23192	Recreation Aquatics Equipment Replacement	87,600		87,600				
23193	Recreation Arena Refrigeration Study	133,600	133,600					
23194	Recreation Facility Equipment Replacement	88,800		88,800				
23195	Recreation Fitness Equipment Replacement	6,600		6,600				
23196	Recreation Painting Projects	98,600		98,600				
23197	Recreation Pool Grouting Replacement	72,800		72,800				
23198	Recreation Program Equipment Replacement	100,100		100,100				
23199	Recreation Tables and Chairs Replacement	55,500		55,500				
23200	St. Roberts Soccer Clubhouse LED Lighting Upgrade	15,300		15,300				
23201	Thornhill C.C. Rubber Floor Replacement	179,100		179,100				
	TOTAL Recreation Services	2,607,100	170,500	2,436,600	-	-	-	
Markham Public Library								
23203	Library Collections	2,958,700		2,958,700				
23204	Library Furniture, Equipment & Shelving Replacement	187,300		187,300				
	TOTAL Markham Public Library	3,146,000	-	3,146,000	-	-	-	
Operations - Roads								
23205	14th Ave Railway Crossing	82,100		82,100				
23206	City Owned Entrance Feature Rehabilitation/Replacement	274,400		274,400				
23207	City Owned Fence Replacement Program	71,200		71,200				
23208	Citywide Ditching Program	149,800		149,800				
23209	Don Mills Storm Channel	21,500		21,500				
23210	Guiderail- Install/Upgrade	79,900		79,900				
23211	Incremental Growth Related Winter Maintenance Vehicles	477,400			477,400			
23212	Retaining Wall Repair Program	78,700		78,700				
23213	Storm Water Retention Pond Maintenance Program	56,200		56,200				
	TOTAL Operations - Roads	1,291,200	-	813,800	477,400	-	-	
Operations - Parks								
23214	2022 Wind Storm Tree Replacement - Phase 1	224,600		224,600				

CITY OF MARKHAM
2023 CAPITAL AND OTHER PROGRAMS BUDGET
by Department

#	Project Description	Total	Tax	Life Cycle	DC - Reserve	DC - Developer	Other	Description of Other Funding
23215	Cemetery Fence Repair/Replacement	17,300		17,300				
23216	City Park Furniture / Amenities	185,600		185,600				
23217	Fence (Backstop and Outfield) Replacement	331,000		331,000				
23218	Fence Replacement (Wood Privacy and Decorative)	50,900		50,900				
23219	Irrigation Refurbishment	155,900		155,900				
23220	Mt Joy Artificial Turf Replacement	80,600		80,600				
23221	Park Lighting Replacement	11,100		11,100				
23222	Parks Retaining Wall Replacement	52,900		52,900				
23223	Relamping & Fixtures Refurbishment	27,500		27,500				
23224	Replace Recycling Containers	17,900		17,900				
23225	Shade Structure Rehabilitation and/or Replacement	253,100		253,100				
23226	Talc Metal Cabinet Replacment	34,700		34,700				
23227	Urban Forestry Management Plan	152,600	152,600					
TOTAL Operations - Parks		1,595,700	152,600	1,443,100	-	-	-	
Operations - Fleet								
23228	Corporate Fleet Growth	10,200			10,200			
23229	Corporate Fleet Refurbishing	39,700		39,700				
23230	Corporate Fleet Replacement - Fire	3,042,900		3,042,900				
23231	Corporate Fleet Replacement - Ice Resurfacing Machine	163,800		163,800				
23232	Corporate Fleet Replacement - Non-Fire	1,962,200		1,962,200				
23233	New Fleet - Community Parks	199,400			199,400			
23234	New Fleet - Parks	226,900			226,900			
23235	New Fleet - Recreation	130,700			130,700			
23236	New Fleet - Utility Locates (Bill 93 AMPs)	101,400			101,400			
TOTAL Operations - Fleet		5,775,800	-	5,208,600	567,200	-	-	
Operations - Utility Inspection & Survey								
23237	German Mills Meadow Environmental Monitoring Program	274,700		274,700				
23238	Survey Monument Replacement	56,100		56,100				
TOTAL Operations - Utility Inspection & Survey		330,800	-	330,800	-	-	-	
Environmental Services - Infrastructure								
23239	MNRF Monitoring for Capital Projects at Water Crossings	21,400		21,400				
23240	Storm Culvert Rehabilitation (2 Structures) - Construction	2,773,400					2,773,400	Gas Tax
23241	Streetlights - Miscellaneous Requests	101,900	101,900					
23242	Streetlights - Pole Condition Inspection	132,200		132,200				
23243	Streetlights - Poles Replacement	134,300		134,300				
23244	Structures Rehabilitation (6 Structures) - Design & Const.	273,500					273,500	Gas Tax
23245	Toogood Pond Dam - Rehabilitation	1,239,900		1,239,900				
TOTAL Environmental Services - Infrastructure		4,676,600	101,900	1,527,800	-	-	3,046,900	
Environmental Services - Stormwater								
23246	City-wide Erosion Master Study - Update	151,700		151,700				
23247	Don Mills Flood Control Program - Culverts #1 & #2- Design	1,025,700					1,025,700	SW Fee \$615k, DMFA Grant \$410k
23248	Erosion Restoration Program	953,400		333,700	619,700			
23249	Feasibility Study of Stormwater diversions at Swan Lake	152,600		152,600				

CITY OF MARKHAM
2023 CAPITAL AND OTHER PROGRAMS BUDGET
by Department

#	Project Description	Total	Tax	Life Cycle	DC - Reserve	DC - Developer	Other	Description of Other Funding
23250	Oil Grit Separators (OGS) - Inspection and Cleaning	133,300		133,300				
23251	South Unionville Underground Stormwater Tank Rehab	1,628,200					1,628,200	Gas Tax
23252	Storm Pumping Stations - Equipment Inspection	105,800		105,800				
23253	Stormwater Pipes Emergency Repairs	58,500		58,500				
23254	Stormwater Underground Tank - Condition Inspection	46,900		46,900				
23255	Wet SWM Pond Cleaning ID#44 & #96 - Construction	1,419,800		1,419,800				
23256	Wet SWM Pond Cleaning ID#50, #56 & #75 - Design	238,100		238,100				
TOTAL Environmental Services - Stormwater		5,914,000	-	2,640,400	619,700	-	2,653,900	
<i>Environmental Services - Waste</i>								
23257	Incremental Growth Related Waste Management Vehicles	106,100			106,100			
TOTAL Environmental Services - Waste		106,100	-	-	106,100	-	-	
<i>Environmental Services - Waterworks</i>								
23258	Curb Box Inspection and Replacement Program	748,000					748,000	Waterworks Reserve
23259	Mobile District Metering Area Program	95,100					95,100	Waterworks Reserve
23260	Review and Development Design Standard Drawings/Criteria	79,400					79,400	Waterworks Reserve
23261	Sampling and Flushing Stations Replacement	72,500		72,500				
23262	Sanitary Pumping Stations - Component Replacement	391,600		391,600				
23263	Sanitary Pumping Stations-Condition Assessment/Upgrades	211,700		211,700				
23264	Sanitary Sewers - Rehabilitation	846,600					846,600	Waterworks Reserve
23265	Suspended Watermain Insulation - Condition Inspection	32,400					32,400	Waterworks Reserve
23266	Wastewater Flow Monitoring	63,200					63,200	Waterworks Reserve
23267	Water System Model Calibration	143,200					143,200	Waterworks Reserve
23268	Watermain Leak Detection Program	35,600					35,600	Waterworks Reserve
TOTAL Environmental Services - Waterworks		2,719,300	-	675,800	-	-	2,043,500	
TOTAL Community Services		28,264,000	425,000	18,222,900	1,871,800	-	7,744,300	
TOTAL Capital Budget Requests		171,612,400	1,421,600	34,682,137	96,671,298	-	38,837,365	
TOTAL Capital Budget Pre-Approval		50,405,700	-	11,183,743	74,300	-	39,147,657	
TOTAL Capital Budget Requests Including Pre-Approval		222,018,100	1,421,600	45,865,880	96,745,598	-	77,985,022	

Pre-Approval Requests



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$447,700

Project Name: Theatre-Dressing Room Renovations

Commission: Development Services

Repair/Replace

Department: Theatre

Useful Life: 15 Pre Approval:

Project Mgr: Andrew Rosenfarb

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Originally requested, approved by council, tendered and awarded in 2020-Project # 20008, this project was deferred because the facility was closed. Project includes a redesign and renovation of 6 separate dressing rooms including replacement of flooring, counters, shower stalls, tiles, plumbing fixtures, toilets, partitions, sinks/faucets, mirrors, chairs, costume racks, lighting, electrical and painting.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	360,000	0
Internal Charges:	0	0
External Consulting:	40,000	0
Contingency %: 10	40,000	0
Sub Total:	440,000	0
HST Impact:	7,744	0
Total Project Cost:	447,700	0

NOTES

Last refurbished over 15 years ago (2007), the venue's dressing rooms are in disrepair and several components have visible damage. Dressing rooms are used by both our professional artists from around the world and members of our community. For some, these rooms are one of the only few impressions they get of the Theatre and City of Markham. The theatre is requesting to renovate these spaces to better serve our clients and community. Amount is consistent with the 2023 Life Cycle Reserve Study update.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>	<u>Design & Consultant</u>	<u>Construction</u>	<u>Contingency</u>	<u>HST Impact</u>		
Operating Funded Life Cycle	447,700	40,000	360,000	40,000	7,700	447,700	0
TOTAL FUNDING	447,700					447,700	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="1,333,700"/>
				Amount Incl HST <input type="text" value="447,700"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$111,900

Project Name: Theatre-Fire Curtain Replacement

Commission: Development Services

Repair/Replace

Department: Theatre

Useful Life: 25 Pre Approval:

Project Mgr: Andrew Rosenfarb

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Original to the building (1985), the fire curtain separates the stage from the audience in the event of a fire. The fire curtain was not completely replaced after it's usefull life as the condition assesment determined that minor repairs were sufficient. Recently, the fire curtain was inspected by staff and a theatrical rigging company, it's been advised that this curtain along with it's components is due for complete replacement. This project will also replace the manual winch system which controls the movement of this fire separation barrier with an automated one.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	100,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 10	10,000	0
Sub Total:	110,000	0
HST Impact:	1,936	0
Total Project Cost:	111,900	0

NOTES

The hardware, bolts and chains that secure the equipment overhead are due for replacement. The industry standard useful life for this asset is 25 years, the current life of the curtain (37 years) is well past it's replacement time.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>	<u>Supply/Install</u>	<u>HST</u>				
Operating Funded Life Cycle	111,900	110,000	1,900	0	0	111,900	0
TOTAL FUNDING	111,900					111,900	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="1,333,700"/>
				Amount Incl HST: <input type="text" value="111,900"/>
				Year in the study: <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: 23050

Project Cost: \$71,200

Project Name: **Building Standards Guide Builder**

Commission: Development Services

New Asset/Expansion

Department: Building Services

Useful Life: 0 Pre Approval:

Project Mgr: Stephanie Di Perna

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Specialized guide builder software to assist building management staff in creating specific and comprehensive user guides with ease and without dedicated staff or ITS support. Currently applicants are spending upwards to 10 business days trying to figure out what is required for the different application types. There is software that will assist in building guides to assist applicants along the way with built in checklist so that the application filed the first time is correct and can be circulated for building code and zoning review.

BUILDING MARKHAM'S FUTURE TOGETHER: Stewardship of Money & Resources

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	70,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>70,000</u>	<u>0</u>
HST Impact:	<u>1,232</u>	<u>0</u>
Total Project Cost:	<u>71,200</u>	<u>0</u>

NOTES

Cloud based software and future cloud based fees will be incurred (\$34,000/yr). Software name is Camino Permit Guide Solution.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>							
Building Fees	71,200	0	0	0	0	0	0	
TOTAL FUNDING	<u>71,200</u>					<u>0</u>	<u>0</u>	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$34,000	\$0	\$34,000

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$101,800

Project Name: ITS - TXM Solution Replacement (Consultancy)

Studies/Pilot Programs

Commission: Corporate Services

Useful Life: 0 Pre Approval:

Department: ITS

Category: Minor

Project Mgr: Ned Sirry

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

As a result of Mississauga's notification of the Property Tax Billing System (TXM) not being supported post a future TBD date, we will need to find a new solution. As we are also in the midst of looking for a new water billing solution as well, there may be an opportunity to look at bundling the systems together. In order to determine the next steps and identify future capital requirements, consultant capital is need to review and help determine solution direction.

BUILDING MARKHAM'S FUTURE TOGETHER: Stewardship of Money & Resources

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>	<u>NOTES</u>
Cost/Quote:	0	0	
Internal Charges:	0	0	
External Consulting:	100,000	0	
Contingency %: 0	0	0	
Sub Total:	<u>100,000</u>	<u>0</u>	
HST Impact:	<u>1,760</u>	<u>0</u>	
Total Project Cost:	<u>101,800</u>	<u>0</u>	

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Ramp Up	101,800	0	0	0	0	0	
TOTAL FUNDING	<u>101,800</u>					<u>0</u>	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: **23040**

Project Cost: **\$488,400**

Project Name: **IT Lifecycle Asset Replacement**

Commission: Corporate Services

Repair/Replace

Department: ITS

Useful Life: 0 Pre Approval:

Project Mgr: Sugun Rao

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The request is to seek pre-approval of IT Lifecycle hardware and software assets that are 8 to 10 year old and have started to fail causing unexpected service interruptions.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	480,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	480,000	0
HST Impact:	8,448	0
Total Project Cost:	488,400	0

NOTES

The pre-approval request includes replacement of the following assets:

1. Tier 1 Firewall (Primary Data Centre),
2. Computing device - For newly elected council members, Forestry department and adhoc new requests,
3. Audio Visual equipment for Council Chambers

The \$92k Non-Personnel operating budget is for the ongoing firewall subscription licenses that provide additional cyber security features. Operating budget impact is expected to start in 2023.

<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>					<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>				<u>TOTAL</u>		
Building Fees	29,304	0	0	0	0	0	
Development Fees	39,072	0	0	0	0	0	
Operating Funded Life Cycle	390,720	0	0	0	0	0	
Waterworks	29,304	0	0	0	0	0	
TOTAL FUNDING	488,400				0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$92,000	\$0	\$92,000

DCA/LIFE CYCLE DETAILS

<u>DCA</u> Name	Year	Amount	Amount in Study	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="5,198,000"/>
				Amount Incl HST <input type="text" value="390,700"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Staff has validated that the proceeding 2023 capital submission has sufficient life cycle funding.

Item	Quantity	Total Costs	Life Cycle	Source of Funding			
				Water Works	Building	Engineering	Planning
2023 IT Lifecycle Asset Replacement							
1 Tier 1 Firewall Replacement <i>Replacement of aging Tier one Firewall. (8+ year old), The replacement solution will include enhanced security features such as threat prevention, Sandblast for Zero-Day protection.</i>		\$250,000	\$200,000	\$15,000	\$15,000	\$10,000	\$10,000
2 Council Chamber - Audio Processor Replacement <i>Replacement of 10 years old Digital Audio processor and touch screen control panel in Council Chamber. The components of this asset has failed three times within a month causing service interruption during council meeting.</i>	1	\$130,000	\$104,000	\$7,800	\$7,800	\$5,200	\$5,200
3 Computing device replacement <i>Life Cycle replacement of computing device for new council members, Forestry and other adhoc requests</i>		\$100,000	\$80,000	\$6,000	\$6,000	\$4,000	\$4,000
Total		\$480,000	\$384,000	\$28,800	\$28,800	\$19,200	\$19,200
HST Impact		1.76% \$8,448	\$6,758	\$507	\$507	\$338	\$338
Total with HST Impact		\$488,448	\$390,758	\$29,307	\$29,307	\$19,538	\$19,538



2023 PROJECT FUNDING REQUEST FORM

Number: **23042**

Project Cost: **\$149,600**

Project Name: **ITS - Leap Cloud (Feb Server)**

Commission: Corporate Services

Repair/Replace

Department: ITS

Useful Life: 2 Pre Approval:

Project Mgr: Rob Cole

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Our current portal forms are maintained in what is called LEAP (formerly FEB server). Capital costs include cost of upgrading current Leap forms to Leap version 9 and migrating forms from the current Compugen environment to a new environment on the Amazon Web Services Cloud.

This includes migrating approximately 85 existing Portal forms.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	147,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	147,000	0
HST Impact:	2,587	0
Total Project Cost:	149,600	0

NOTES

There is \$52.5k operating budget for Leap hosting in GL account 400-400-5361. The \$70k Non-Personnel Cost is incremental operating cost and is expected to start in 2024.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Building Fees	8,976	0	0	0	0	0	0
Development Fees	11,968	0	0	0	0	0	0
Ramp Up	119,680	0	0	0	0	0	0
Waterworks	8,976	0	0	0	0	0	0
TOTAL FUNDING	149,600					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$70,000	\$0	\$70,000

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: **23043**

Project Cost: **\$407,000**

Project Name: **ITS - Microsoft 365**

Commission: Corporate Services

New Asset/Expansion

Department: ITS

Useful Life: 8 Pre Approval:

Project Mgr: Sugun Rao

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Microsoft 365 (M365) has become the standard tool in our industry for efficient utilization of the office suite of tools (ie. Word, Excel, PowerPoint.) as well as for email, document collaboration, messaging. The tool is cloud based allowing for the freeing up of onsite server capacity. In addition, it provides the opportunity to further introduce Power BI, a business intelligence tool for mining data and being able to present and use this data to make critical decisions.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	100,000	0
Internal Charges:	0	0
External Consulting:	300,000	0
Contingency %: 0	0	0
Sub Total:	400,000	0
HST Impact:	7,040	0
Total Project Cost:	407,000	0

NOTES

High level estimate of \$300k for consultancy and implementation services received from Microsoft based on our current environment, inclusive of a new tool to collect usage stats. Capital includes Year 1 licensing cost of \$100K. Incremental annual operating budget impact of \$100k is expected to start in 2024. This project and solution will require an additional 0.5 FTE for ongoing support. The 1 FTE Personnel Costs shown below is a combined submission of the 0.5 FTE needed for this project and 0.5 FTE needed for the Cyber Security Enhancement project. The Personnel Cost impact is expected to start in 2023.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>				<u>TOTAL</u>		<u>Phases</u>
Building Fees	24,420	0	0	0	0	0	0
Development Fees	32,560	0	0	0	0	0	0
Operating Funded Life Cycle	325,600	0	0	0	0	0	0
Waterworks	24,420	0	0	0	0	0	0
TOTAL FUNDING	407,000				0		0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$124,625	\$100,000	\$0	\$224,625

DCA/LIFE CYCLE DETAILS

<u>DCA</u> Name	Year	Amount	Amount in Study	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="2,442,100"/>
				Amount Incl HST <input type="text" value="325,600"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Staff has validated that the proceeding 2023 capital submission has sufficient life cycle funding.



2023 PROJECT FUNDING REQUEST FORM

Number: **23044**

Project Cost: **\$107,400**

Project Name: **ITS - Oracle DB Licensing**

Commission: Corporate Services

New Asset/Expansion

Department: ITS

Useful Life: 0 Pre Approval:

Project Mgr: Matt Miller

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Increase the Oracle Enterprise Edition License pool with 3 additional core licenses. These additions will allow us to expand our Oracle Database storage and processing power. This will allow us to futureproof for any additional Enterprise applications as needed. This is needed for license compliance. Hardware has already been ordered and is about to be commissioned.

CAPEX

Oracle Database Enterprise Edition License = 3 @ \$28,821 = \$86,463

Software Update License & Support = 3 @ \$6,341 = \$19,023

Total = \$105,486

Operating

Software Update License & Support = 3 @ \$6,341 = \$19,023

Total: \$19,023

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	105,500	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	105,500	0
HST Impact:	1,857	0
Total Project Cost:	107,400	0

NOTES

The Non-Personnel budget impact is expected to start in 2024.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	
Building Fees	6,444	0	0	0	0	0	0
Development Fees	8,592	0	0	0	0	0	0
Ramp Up	85,920	0	0	0	0	0	0
Waterworks	6,444	0	0	0	0	0	0
TOTAL FUNDING	107,400					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$19,100	\$0	\$19,100

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: **23045**

Project Cost: **\$203,500**

Project Name: **Water Billing Transition Project - Phase 2 of 3**

Studies/Pilot Programs

Commission: Corporate Services

Useful Life: 0 Pre Approval:

Department: Finance

Category: Minor

Project Mgr: Shane Manson

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The City's water billing is currently outsourced to Alectra Utilities until the end of 2024. Phase 1 was Discovery Phase to clearly articulate the current state and desired objectives for the water billing solution, which includes documenting requirements and provide options on the best process to to move forward. This is expected to be completed by the end of September 2022. Phase 2 requires a consultant to support and guide in the procurement, evaluation, selection and vendor negotiations of the option selected (in-house, out-sourced, or hybrid), which should be decided by the end of 2022. Phase 3 will be the implementation of the option chosen.

BUILDING MARKHAM'S FUTURE TOGETHER: Stewardship of Money & Resources

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	200,000	0
Contingency %: 0	0	0
Sub Total:	200,000	0
HST Impact:	3,520	0
Total Project Cost:	203,500	0

NOTES

Pre-approval required of \$200K to ensure funding is intact to acquire consultant to continue to move forward with Phase 2. A separate budget will be submitted for software, systems, etc once the option has been determined and approved by Senior Management.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>	<u>Consultant</u>					
Waterworks	203,500	203,500	0	0	0	203,500	0
TOTAL FUNDING	203,500					203,500	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
Name				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$767,000

Project Name: Roofing Replacement Projects

Repair/Replace

Commission: Corporate Services

Useful Life: 20 Pre Approval:

Department: Sustainability and Asset Management

Category: Major

Project Mgr: Michael Ryan

Cost Validation: Internal peer review

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project includes roofing and accessories replacement works at various locations throughout the City to ensure a state of good repair and in alignment to the Asset Management Plan/Policy. Roofs for replacement in the budget year will be determined in the previous year, upon completion of annual condition assessment. Funding request is based on historical budgets, life cycle database and trending. Condition assessment completed 2021, over a year ago, and as a result may be subject to change.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	753,734	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>753,734</u>	<u>0</u>
HST Impact:	<u>13,266</u>	<u>0</u>
Total Project Cost:	<u>767,000</u>	<u>0</u>

NOTES

\$42,800 - Cedar Grove Community Centre - Chimney (1960) & Shingles (2003)
 \$724,200 - Thornhill Community Centre - Fitness Centre Flat Roof (2005)

Amount is consistent with the 2022 Life Cycle Reserve Study update.

SOURCE(S) OF FUNDING (\$)

<u>Funding Type</u>	<u>Budget</u>	<u>Components</u>				<u>TOTAL</u>	<u>Future Phases</u>
		<u>Cedar Grove Community Centre</u>	<u>Thornhill Community Centre</u>				
Operating Funded Life Cycle	767,000	42,800	724,200	0	0	767,000	0
TOTAL FUNDING	<u>767,000</u>					<u>767,000</u>	<u>0</u>





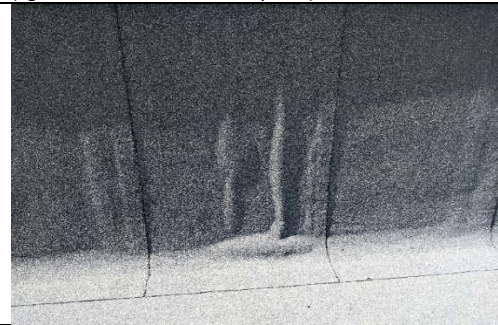

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="938,100"/>
				Amount Incl HST <input type="text" value="767,000"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				

2023 Budget Request Back-up Pictures

Thornhill Community Centre – Roofing (18 years olds)

	
<p>Photo 1: Numerous Blisters (elevated areas) in a high traffic area. Previous patch repairs (lighter coloured membrane areas).</p>	<p>Photo 2: Close up of blister on Roofs at the same area as Photo 1. Significantly more blisters than what would be seen on a roof such as this.</p>
	
<p>Photo 3: Degranulation (darker areas) of the membrane which is indicative of the age. Will accelerate UV deterioration of the membrane. Previous patch repairs (lighter coloured membrane patch).</p>	<p>Photo 4: Blister at the roof perimeter. Note with increase in temperature blisters become larger this increases the thermal expansion/contraction of the membrane. This will increase wear on the membrane (e.g. degranulation, cracking).</p>
	
<p>Photo 5: Blisters at the walls, widespread at walls.</p>	<p>Photo 6: Previous patch repairs.</p>

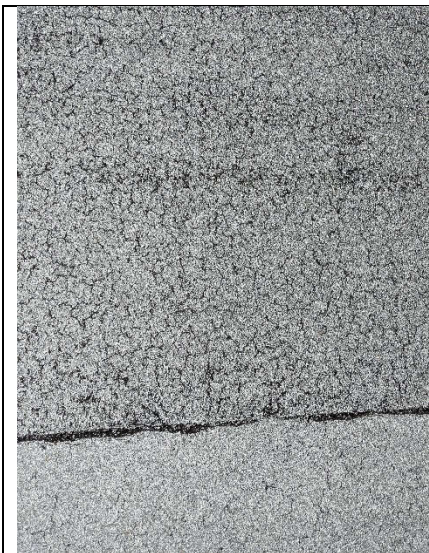


Photo 7: Alligatoring (cracking) of roofing membrane.



Photo 8: Roofing membrane degranulation. Granules protect roof from UV degradation.

Cedar Grove Community Centre – Roof Replacement (19 years old)



Photo 1: Roof shingles are curling at west elevation. Sign of UV degradation.



Photo 2: Degranulation and curling of shingles at roof.



Photo 3: Widespread curling of the roofing shingles. Roof has failed.



Photo 4: Shingle curling at the east elevation.



Photo 5: Leaking at building interior, significant leak event to cause this "bubbling" of the tile.



Photo 6: Water staining at the building interior.



2023 PROJECT FUNDING REQUEST FORM

Number: **23001**

Project Cost: **\$719,600**

Project Name: **Angus Glen C.C. Pool Repair - Construction**

Commission: Community Services

Repair/Replace

Department: Recreation Services

Useful Life: 50 Pre Approval:

Project Mgr: Kerry Wakefield / Colby Brygidyr

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to repair the main pool tank at Angus Glen C.C. During the COVID-19 pandemic, the pool was closed and drained and extensive time without water caused the concrete walls, waterproof membrane, and grout to dry and shrink more than it typically would during a normal shutdown for maintenance. The drier conditions of the materials followed by a quick fill with cold water as per industry standard resulted in cracking of the concrete shell. This resulted in water leaking through the concrete tank in a number of areas around the tank, predominantly in the deep end where the water filled first. Phase 1 is underway, where a consultant (Aquatic Design & Engineering) has been retained to investigate the extent of the issue. This project is to request funding for the second phase of the project.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	600,000	0
Internal Charges:	48,000	0
External Consulting:	0	0
Contingency %: 10	60,000	0
Sub Total:	708,000	0
HST Impact:	11,616	0
Total Project Cost:	719,600	0

NOTES

The main tank pool is original and was constructed in 2006. The purpose of the concrete tank is to hold and maintain water in a safe manner within the pool environment. Due to the leaks experienced while reopening the Angus Glen pool, a condition assessment of the main pool tank was completed. Further investigation and preliminary findings indicate that extensive repair is warranted.

SOURCE(S) OF FUNDING (\$)		Components					Future Phases
Funding Type	Budget				TOTAL		
Operating Funded Life Cycle	719,600	719,600	0	0	0	719,600	0
TOTAL FUNDING	719,600					719,600	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: **23002**

Project Cost: **\$981,700**

Project Name: **Centennial C.C. Pool Repair - Construction**

Commission: Community Services

Repair/Replace

Department: Recreation Services

Useful Life: 50 Pre Approval:

Project Mgr: Janice Carroll / Colby Brygidyr

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to repair and replace the tiles and waterproofing of the main pool tank at Centennial C.C. During the COVID-19 pandemic, the pool was closed and drained and extensive time without water caused the concrete walls, waterproof membrane and grout to dry and shrink more than it typically would during a normal shutdown for maintenance. The same conditions also caused the underwater light casing and seals to crack. The drier conditions of the materials followed by a quick fill with cold water as per industry standard resulted in cracking of the concrete shell. This resulted in water leaking through the concrete tank in a number of areas around the tank, predominantly in the deep end where the water filled first. This project is to request funding for second phases of work. The first phase is underway, where a consultant is conducting tests and make repair recommendations. The second phase is to repair according to the consultant recommendations.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	810,000	0
Internal Charges:	75,000	0
External Consulting:	0	0
Contingency %: 10	81,000	0
Sub Total:	966,000	0
HST Impact:	15,682	0
Total Project Cost:	981,700	0

NOTES

The tiles on the main tank pool are original and constructed in 1968. Due to the leaks experienced, a condition assessment indicates that replacement was warranted. A consultant has been retained to investigate the extent of the repair and a contractor will be retained to complete the necessary repair to the main pool tank. The pool tank is at the end of its lifecycle and will require replacement within the next few years.

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget	Construction			TOTAL		
Operating Funded Life Cycle	981,700	981,700	0	0	0	981,700	0
TOTAL FUNDING	981,700					981,700	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA
Name

Year **Amount** **Amount in Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$237,600

Project Name: Markham Pan Am Centre Pool Filter Refurbishment

Repair/Replace

Commission: Community Services

Useful Life: 5 Pre Approval:

Department: Recreation Services

Category: Minor

Project Mgr: Edward Migue

Cost Validation: External peer review

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to refurbish the components within the two (2) pool filtration tanks at Markham Pan Am Centre. The components being replaced for the pool filtration tanks are utilized to remove insoluble matter from the swimming pool to ensure for clear, safe and hygienic water to all participants. The work will consist of parts and labour required to open the pool filters.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	200,000	0
Internal Charges:	0	0
External Consulting:	12,300	0
Contingency %: 10	21,230	0
Sub Total:	233,530	0
HST Impact:	4,110	0
Total Project Cost:	237,600	0

NOTES

The existing pool filtration tanks were installed in 2014. A condition assessment conducted by a third party consultant indicates that multiple parts within the filtration tank require replacement. The project consists of replacing multiple filter elements (septums, o-rings, gaskets, etc.) and labour to ensure that the filtration system meets its life cycle. Annually, Pan Am hosts 42 swim meets and events. Water quality issues have been mitigated with short term solutions, but these will not be sustainable.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>						
Operating Funded Life Cycle	237,600	237,600	0	0	0	237,600	0
TOTAL FUNDING	237,600					237,600	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="1,766,400"/>
				Amount Incl HST <input type="text" value="237,600"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$35,600

Project Name: Recreation Arena Refrigeration Gasket Replacement

Repair/Replace

Commission: Community Services

Useful Life: 10 Pre Approval:

Department: Recreation Services

Category: Minor

Project Mgr: Mike Hasted

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to replace the gaskets within the plate and frame heat exchanger at Centennial C.C. The heat exchanger is a critical piece of refrigeration equipment. Its performance directly affects efficiency and safety. The manufacturer of the heat exchanger recommends replacement of the gasket every 7-10 years based on condition assessment. Constant exposure to ammonia speeds the aging process of the rubber gaskets and thus can compromise sealing efficiency.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	35,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>35,000</u>	<u>0</u>
HST Impact:	616	0
Total Project Cost:	<u>35,600</u>	<u>0</u>

NOTES

The existing plate and frame heat exchanger was last installed in 2009 at Centennial C.C. The gaskets are original. Based on condition assessment, replacement is warranted. Constant exposure of the gaskets to ammonia speeds the natural aging process of the rubber gaskets and thus can compromise sealing efficiencies. The amount requested is consistent with recent quote.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>							
Operating Funded Life Cycle	35,600	0	0	0	0	0	0	
TOTAL FUNDING	<u>35,600</u>					<u>0</u>	<u>0</u>	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
<u>Name</u>				Amount in Study: <input type="text" value="2,154,400"/>
				Amount Incl HST <input type="text" value="35,600"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: 23005

Project Cost: \$7,883,200

Project Name: Asphalt Resurfacing

Repair/Replace

Commission: Community Services

Useful Life: 20 Pre Approval:

Department: Operations - Roads

Category: Minor

Project Mgr: Zoyeb Vahora

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
 5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Asphalt resurfacing of roads throughout the City utilizing a pavement management program to select rehabilitation candidates. The overall goal is to maintain an acceptable pavement condition index and user satisfaction by implementing cost effective strategies designed to extend pavement life and reduce overall maintenance costs of the road network. Other work includes interlock, material testing, route and seal, steel, and AC index. Various strategies are utilized on a site specific basis to reach program goals.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	7,746,869	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>7,746,869</u>	<u>0</u>
HST Impact:	<u>136,345</u>	<u>0</u>
Total Project Cost:	<u>7,883,200</u>	<u>0</u>

NOTES

Asphalt Resurfacing of approximately 19.5 km of two and four lane roads. 5.4 km of two and four lane roads of pavement preservation. There is no substantial backlog in this program. The 2021 pavement laser condition survey, conducted biannually, identifies 75.7% of the road network as good or better (long term target 80%). AC Index component is \$176K and will be adjusted at the time of award, dependent on the current price of crude oil.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
	<u>Budget</u>					<u>TOTAL</u>	
	0	0	0	0	0	0	0
Operating Funded Life Cycle	7,883,200	0	0	0	0	0	0
TOTAL FUNDING	<u>7,883,200</u>					<u>0</u>	<u>0</u>

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: 7,679,700
				Amount Incl HST 7,883,200
				Year in the study 2023

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Request amount is higher than life cycle due to increased cost of crude oil impacting the components of the asphalt mix. The additional request amount of \$200K is an estimate and is subject to change.

Project	Asphalt Resurfacing
2023 Capital Request	\$7,883,200
Funding Source	Life Cycle Reserve
Description of Program	Asphalt resurfacing of roads throughout the City utilizing a pavement management program to select rehabilitation candidates. The overall goal is to maintain an acceptable pavement condition index and user satisfaction by implementing cost effective strategies designed to extend pavement life and reduce overall maintenance and reconstruction costs of the road network.
Project Rationale	Condition assessment is conducted bi-annually to determine specific locations. This is followed by a detailed visual inspection by Operations staff which verifies the laser condition assessment. Identified in the Life Cycle Reserve Study.
Legislative Requirement	O. Reg. 239/02: Minimum Maintenance Standards for Municipal Highways outlines patrol and maintenance requirement related to roadway infrastructure inclusive of asphalt pavement and sidewalk.
History	n/a
Future Phases	This funding is requested each year.
Total Project Cost	n/a
Related Projects	
Related Maps	
Alignment to the Strategic Plan	Properly paved and well maintained roads help reduce accidents and promotes safe movement of traffic reducing traveling time. Contracts within this program call for reharvesting and recycling of construction materials. Strategies include warm mix designs which lowers emissions and utilizes recycled aggregate.



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$88,000

Project Name: Boulevard Repairs

Repair/Replace

Commission: Community Services

Useful Life: 10 Pre Approval:

Department: Operations - Roads

Category: Annual

Project Mgr: Taylor Thomson

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The purpose of this project is to maintain boulevard areas in good condition to minimize hazards for pedestrians. Repairs to boulevards throughout the City are for interlock brick pavers only (does not include concrete, curb or asphalt).

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	86,485	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	86,485	0
HST Impact:	1,522	0
Total Project Cost:	88,000	0

NOTES

Some of the larger repairs include Main Street Markham, Kenilworth Gate and Abberly, 438 Raymerville, Calvert Park, and Colborne St. Installation cost is \$36/m2. The budget allows for 2402 SqM to be repaired. This is an annual program. There is no substantial backlog within this program and the boulevards are in a state of good repair. 3 year avg is \$51K. Unit cost is consistent with recent award plus inflation.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Operating Funded Life Cycle	88,000	0	0	0	0	0	0
TOTAL FUNDING	88,000					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="88,000"/>
				Amount Incl HST <input type="text" value="88,000"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$27,400

Project Name: Bridge Structure Preventative Maintenance - Roads

Repair/Replace

Commission: Community Services

Useful Life: 30 Pre Approval:

Department: Operations - Roads

Category: Annual

Project Mgr: Taylor Thomson

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Annual preventative maintenance of the 27 City owned bridge/culvert structures on an as required basis. Work to be carried out on an as required basis which includes fill and grade bridge approaches, route and seal cracks on bridge decks, concrete sealer application, concrete patches on approach.

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<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	26,900	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	26,900	0
HST Impact:	473	0
Total Project Cost:	27,400	0

NOTES

Locations to be determined upon condition assessment. There is no substantial backlog and Bridge structures are in a state of good repair. Operations is responsible for preventative maintenance on bridges/culverts such as minor grading, patching, sealing of bridge approaches and bridge decks, while Environmental Services is responsible for its inspection/rehabilitation and replacement. Amount requested is consistent with the 2022 Life Cycle Reserve Study update.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Operating Funded Life Cycle	27,400	0	0	0	0	0	0
TOTAL FUNDING	27,400					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
Life Cycle resides in Environmental Services (\$54,800) and is split 50:50 between Roads and Parks.				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$162,200

Project Name: Emergency Repairs

Repair/Replace

Commission: Community Services

Useful Life: 20 Pre Approval:

Department: Operations - Roads

Category: Annual

Project Mgr: Dennis King/ Anthony Leocata

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Visual inspection

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Emergency repairs to guidrails, guide cable, storm sewers, entrance features, outfalls, inlets, and cross connections as required. These repairs could be necessary due to motor vehicle accidents, winter maintenance, and damage from storm water or pipe/road failures.

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<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	159,365	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	159,365	0
HST Impact:	2,805	0
Total Project Cost:	162,200	0

NOTES

Examples of work done in previous years; Storm Sewer Repairs - 20 Heritage, 12 Vanwood, Silver Aspen, Main Street Markham, and Main Street Unionville- 3yr avg \$149K. This is an annual program.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>				<u>TOTAL</u>		
Operating Funded Life Cycle	162,200	0	0	0	0	0	
TOTAL FUNDING	162,200				0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="162,200"/>
				Amount Incl HST <input type="text" value="162,200"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$929,700

Project Name: Localized Repairs - Curb & Sidewalk

Repair/Replace

Commission: Community Services

Useful Life: 20 Pre Approval:

Department: Operations - Roads

Category: Minor

Project Mgr: Taylor Thomson

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Maintenance repairs to sidewalks, curbs, and catch basins throughout the City as identified by staff. Ensure that deficient sections are repaired to minimize trip and fall incidents and reduce associated liability to the City. The purpose of the concrete curb is to channel storm water into the storm sewer system.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	913,620	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	913,620	0
HST Impact:	16,080	0
Total Project Cost:	929,700	0

NOTES

Specific locations to be determined upon completion of condition audit in 2022. 3 year avg is \$844K. Amount requested is higher due to growth and more deficiencies identified, consistent with the amount in the 2022 Life Cycle Reserve Study Update.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Operating Funded Life Cycle	929,700	0	0	0	0	0	0
TOTAL FUNDING	929,700					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="929,700"/>
				Amount Incl HST <input type="text" value="929,700"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				

Project	Localized Repairs – Curb and Sidewalk
2023 Capital Request	\$929,700
Funding Source	Life Cycle Reserve
Description of Program	Maintenance repairs to sidewalks, curbs, multi-use paths (MUP) and catch basins throughout the City as identified by staff through road patrol. Ensure that deficient sections are repaired to minimize trip and fall incidents, ponding/drainage issues, and reduce associated liability to the City. The purpose of conducting repairs to our concrete curbs are to removed damaged sections (hit by vehicles) and to ensure the channelization of storm water into the storm sewer system.
Project Rationale	Addresses minor repair locations of curb, sidewalk, MUP failures in order to reduce the City's liability, protect against claims of negligence and extend the Life Cycle. Identified in the Life Cycle Reserve Study.
Legislative Requirement	O. Reg. 239/02: Minimum Maintenance Standards for Municipal Highways outlines patrol and maintenance requirement related to roadway infrastructure inclusive of asphalt pavement and sidewalk.
History	n/a
Future Phases	This funding is requested each year.
Total Project Cost	n/a
Related Projects	Localized Repairs Concrete/Asphalt, Asphalt Resurfacing
Related Maps	n/a
Alignment to the Strategic Plan	Program ensures roads and boulevards are made safe for all cyclists, pedestrians and vehicular traffic. Program removes hazards, deficiencies, and reduces risk to the City by replacing with new concrete. This program promotes safety, reduces liability and encourages walkability within the community.



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$157,000

Project Name: Localized Repairs - Parking Lots

Repair/Replace

Commission: Community Services

Useful Life: 8 Pre Approval:

Department: Operations - Roads

Category: Minor

Project Mgr: Taylor Thomson

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Ongoing maintenance and repairs of municipal parking lots throughout the City. Includes repairs to concrete and asphalt infrastructure, maintenance holes and catchbasin adjustments and asphalt resurfacing.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	154,285	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	154,285	0
HST Impact:	2,715	0
Total Project Cost:	157,000	0

NOTES

2023 locations: Markham Village Arena (2,050 m2) and Main Street Markham Fire Station 97 (1,439 m2) . This is an annual program. There is no substantial backlog in this program. 3 year avg is \$157K.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Operating Funded Life Cycle	157,000	0	0	0	0	0	0
TOTAL FUNDING	157,000					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="126,400"/>
				Amount Incl HST <input type="text" value="157,000"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
Amount requested increased to align with the 3 yr average to allow for more area to be done at he Markham Village Arena which will push out the total rehab of the parking lot in Life Cycle by 5-10 years.				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$45,800

Project Name: Parking Lots- Rehabilitation

Repair/Replace

Commission: Community Services

Useful Life: 20 Pre Approval:

Department: Operations - Roads

Category: Minor

Project Mgr: Zoyeb Vahora

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Complete rehabilitation of selected municipal parking lots throughout the City. Includes removal and replacement of concrete, interlock and asphalt infrastructure, as well as maintenance holes and catch basin adjustments.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	44,990	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	44,990	0
HST Impact:	792	0
Total Project Cost:	45,800	0

NOTES

Rehabilitation of Fire Station 91 (1,345 m2). There is no backlog in the program. The parking lots are in a state of good repair. Unit cost is consistent with recent award plus inflation.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>				<u>TOTAL</u>		
Operating Funded Life Cycle	45,800	0	0	0	0	0	
TOTAL FUNDING	45,800				0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="81,600"/>
				Amount Incl HST <input type="text" value="45,800"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
<input type="text" value="185 Main Street (\$21K) and 22 Washington (\$15K) deferred based on condition assessment."/>				



2023 PROJECT FUNDING REQUEST FORM

Number: 23012

Project Cost: \$1,049,900

Project Name: AODA Playground Refurbishments - Year 1 of 4

Commission: Community Services

Repair/Replace

Department: Operations - Parks

Useful Life: 0 Pre Approval:

Project Mgr: Dean McDermid

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Replacement of safety surfacing along with associated elements to make playgrounds fully accessible and AODA compliant. This 4 year project will address playgrounds currently with sand safety surfacing installed from 2015 and later and will run in parallel to the yearly capital life cycle replacement project for Playstructures & Rubberized Surface Replacement. There are 17 locations in the first year where the play surface will be upgraded to Engineered Wood Fiber (EWF) to be compliant with AODA standards.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	984,947	2,750,039
Internal Charges:	0	0
External Consulting:	46,791	0
Contingency %: 0	0	0
Sub Total:	<u>1,031,738</u>	<u>2,750,039</u>
HST Impact:	<u>18,159</u>	<u>48,401</u>
Total Project Cost:	<u>1,049,900</u>	<u>2,798,400</u>

NOTES

This is a Citywide 4 year program with locations selected based on current accessibility by ward. There is currently a backlog of playgrounds which require refurbishment to be fully AODA compliant by 2025. This project requires removal of sand surfacing and replacement with EWF, in addition to installing drainage, curbs, entrance ramps, and paved pathways to access the playground. Funding source is Ramp Up Reserve, as approved by Council.

<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>	
Ramp Up	1,049,900	0	0	0	0	0	2,798,400	
TOTAL FUNDING	<u>1,049,900</u>					<u>0</u>	<u>2,798,400</u>	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				

Project	AODA Playground Refurbishments
2023 Capital Request	\$1,049,900
Funding Source	Life Cycle Reserve
Description of Program	Replacement of safety surfacing along with associated elements to make playgrounds fully accessible and AODA compliant. This 4 year project will address playgrounds with sand safety surfacing from 2015 forward and will run in parallel to the yearly capital lifecycle replacement project for Playstructures & Rubberized Surface Replacement. There are 17 locations in the first year with a total of 19 playstructures being refurbished in the first year.
Project Rationale	Playground safety surfacing is required to meet AODA guidelines to meet the CSA guidelines (Z614-07 Children's Play spaces and Equipment).
Legislative Requirement	City playground safety surfacing is required to be CSA – Canadian Standards Association CAN/CSA-Z614-07 certified at the time of installation and throughout the useful life. Monthly inspections by certified playground inspectors combined with a yearly third party inspector ensure compliance
History	This project is reflective of AODA requirements for compliant playground surfacing by the end of 2025. Play structures are identified for inspection after 17 years of service with the total number of structures yearly being reflective of growth which occurred 17
Future Phases	\$2,798,400
Total Project Cost	\$3,848,300
Related Projects	n/a
Related Maps	n/a
Alignment to the Strategic Plan	The City provides safe use of outdoor recreation facilities for families which aligns with the guidelines established in the Integrated Leisure Master Plan.

Park Name	Park Address	Ward	Area	Surfacing	Pit size	Curb Type	Curb Length	Class	Built	Replaced	Fences	Drainage	Sod	Curbs	Pathways	EWF	Ramps	Remove Sand	Park Total
Springdale Park	45 Norwich Drive	4	3	Granite Sand	433	Grass	102m	Sr.		2016	\$6,000	\$2,500	\$4,000	\$18,360	\$900	\$15,155	\$3,500	\$5,196	\$55,611
John Baird Woods	145 Mingay Drive	4	3	Granite Sand	520	Curb	179m	Jr./Sr.	2017		\$6,000	\$2,500	\$4,000			\$18,200	\$3,500	\$6,240	\$40,440
Alma Walker Park	31 Wooten Way North	4	4	Granite Sand	544.41	Grass	89m	Jr./Sr.		2018	\$6,000	\$2,500	\$2,000	\$16,020		\$19,043.50	\$3,500	\$6,492.92	\$55,556
Armstrong Park	25 Major Button's Drive	4	4	Granite Sand	308.19	Grass	141m	Jr./Sr.		2018	\$6,000	\$2,500	\$2,000	\$25,380	\$42,000	\$10,787	\$3,500	\$3,698.28	\$95,865
Robinson Park	46 Robinson Street	4	3	Granite Sand	487	Grass	135m	Jr./Sr.		2018	\$6,000	\$2,500	\$2,000	\$24,300	\$7,500	\$17,045	\$3,500	\$5,844	\$68,689
Stargell Park	17 Stargell Crescent	4	3	Granite Sand	310	Grass	71m	Jr./Sr.		2018	\$6,000	\$2,500	\$2,000	\$12,780	\$1,500	\$10,580	\$3,500	\$3,720	\$42,580
Amber Glen Park	9 Empire Street	4	4	Granite Sand	221.53	Grass	79m	Sr.		2019	\$6,000	\$2,500	\$2,000	\$14,220	\$1,500	\$7,753.55	\$3,500	\$2,658.36	\$40,132
Morgan Park (North Pool)	11 Parkway Avenue	4	4	Granite Sand	395.84	Grass	77m	Jr./Sr.		2019	\$6,000	\$2,500	\$2,000	\$13,860		\$13,854.40	\$3,500	\$4,750	\$46,464
Morgan Park (South)	11 Parkway Avenue	4	4	Granite Sand	601.44	Wood	97m	Jr./Sr.		2019	\$6,000	\$2,500	\$4,000	\$17,460	\$10,500	\$21,050.40	\$3,500	\$7,217	\$72,228
Reesor Park	73 Wooten Way North	4	4	Granite Sand	385.74	Grass	83m	Sr.		2020	\$6,000	\$2,500	\$2,000	\$14,940	\$13,500.90	\$13,500.90	\$3,500	\$4,620	\$60,562
											Fences	Drainage	Sod	Curbs	Pathways	EWF	Ramps	Remove Sand	
Leitchcroft Park	381 South Park Road	8	1	Granite Sand	421.1	Curb	120m	Jr./Sr.		2017	\$6,000	\$2,500	\$4,000			\$14,738.50	\$3,500	\$5,053.20	\$35,792
Risebrough Park	97 Risebrough Circuit	8	2	Granite Sand	309.3	Wood	70m	Sr.		2017	\$6,000	\$2,500	\$4,000	\$12,600	\$1,800	\$10,825.50	\$3,500	\$4,911.60	\$46,137
Wilclay Park (East)	54 Hillcroft Drive	8	2	Granite Sand	94.85	75% Stone, 25% Curb	124m	Jr.	2017		\$6,000		\$4,000			\$3,319.75	\$3,500	\$1,138.20	\$17,958
Armada Park	2401 Denison Street	8	2	Granite Sand	439.5	50% Wood, 50% Asphalt	125m	Sr.		2018	\$6,000	\$2,500	\$3,000	\$22,500		\$15,382.50	\$3,500	\$5,274	\$58,157
Randall Park (North)	70 Randall Avenue	8	2	Granite Sand	231.8	60% Curb, 40% Grass	101m	Jr.		2018	\$6,000	\$2,500	\$4,000	\$18,180	\$2,100	\$8,113	\$7,000	\$2,781.60	\$50,675
Randall Park(South)	70 Randall Avenue	8	2	Granite Sand	93	Grass	80m	Sr.		2018	\$6,000	\$2,500	\$2,000	\$14,400	\$4,800	\$3,255	\$3,500	\$1,116	\$37,571
Highgate Park	37 Highgate Drive	8	2	Granite Sand	390	Wood	78m	Sr.		2019	\$6,000	\$2,500	\$4,000	\$14,040		\$13,650	\$3,500	\$4,680	\$48,370
Middleton Park	49 Risebrough Circuit	8	2	Granite Sand	188	Grass	49m	Sr.		2019	\$6,000	\$2,500	\$2,000	\$8,820	\$4,800	\$6,580	\$3,500	\$2,256	\$36,456
Van Horne Pond	71 Pond Drive	8	1	Granite Sand	225	Curb	57m	Sr.		2019	\$6,000	\$2,500	\$4,000			\$7,875	\$3,500	\$2,700	\$26,575

Funded by Ramp-Up - New project in 2023
For Pre-approval 100%

New Project Year 1 of 4	\$935,817
External Consulting	\$46,791
Contingency - 5%	\$49,130
Total Pre-Tax	\$1,031,738
HST Impact	\$18,159
Total Project Cost	\$1,049,897

Total Project (4 year) - inc. Contingency, External Consulting, HST Impact	\$3,848,337
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Market conditions uncertain;
Potential revision on cost

2023	Year 1	\$1,049,897
	Year 2	\$1,096,822
	Year 3	\$1,029,821
	Year 4	\$671,797
		\$3,848,337



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$942,300

Project Name: Boulevard/Park Trees Replacement

Repair/Replace

Commission: Community Services

Useful Life: 50 Pre Approval:

Department: Operations - Parks

Category: Annual

Project Mgr: Josh Van Kemp

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Boulevard/Park replacement tree planting is an annual program which enables the City to replace approximately 1150 dead, diseased or damaged trees. Cost per tree is approximately \$595 to plant with 2 year warranty and \$110 to grind the stump in preparation for planting. This funding will be requested each year to address tree loss through damage, accidents and normal mortality.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	810,750	0
Internal Charges:	117,263	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	928,013	0
HST Impact:	14,269	0
Total Project Cost:	942,300	0

NOTES

This is an annual program and funds will be requested each year. A 3-year review (2019-2021) of blvd/park trees removed an avg of 1,150 trees per year, therefore the number of stumps removed & trees planted will be increased to maintain a minimum 1:1 ratio of replacement to support the Council approved canopy coverage goal of 30%. 5 inspections are required for site, stump and tree planting condition/warranty inspections each year. 3 dedicated seasonal staff will be required each year to ensure accurate planning & quality control. Current 2022 cost of a seasonal parks labourer is approx. \$39K for a 150 day contract.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Operating Funded Life Cycle	942,300	0	0	0	0	0	0
TOTAL FUNDING	942,300					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="385,400"/>
				Amount Incl HST <input type="text" value="942,300"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
<input type="text" value="Life cycle is based on 700 trees at rate of \$424 to plant and \$106 to grind the stump."/>				

Project	Boulevard/Park Tree Replacement
2023 Capital Request	\$942,300
Funding Source	Life Cycle Reserve
Description of Program	Boulevard/Park replacement tree planting is an annual program to replace dead, diseased or damaged trees with mortality averaging 1150 trees. Cost per tree is approximately \$595 to plant with 2 year warranty and \$110 to grind the stump in preparation for planting. This funding will be requested yearly to address the previous year tree loss and add replacement canopy working to our goal of 30%.
Project Rationale	Boulevard/Park replacement tree planting is an annual program which enables the City to replace approximately 1150 dead, diseased or damaged trees. A 3-year review (2019-2021) of blvd/park trees removed an average of 1,150 trees per year, therefore the number of stumps removed & trees planted will be increased to maintain a minimum 1:1 ratio of replacement to support the Council approved canopy coverage goal of 30%. 5 inspections are required for site, stump and tree planting condition/warranty inspections each year.
Legislative Requirement	n/a
History	n/a
Future Phases	This funding is requested each year.
Total Project Cost	\$942,300
Related Projects	n/a
Related Maps	n/a
Alignment to the Strategic Plan	Safe & Sustainable Community



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$236,900

Project Name: Court Resurfacing/Reconstruction - Markham Tennis Club

Commission: Community Services

Repair/Replace

Department: Operations - Parks

Useful Life: 7 Pre Approval:

Project Mgr: Dean McDermid

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Rebuilding and resurfacing of all Markham Tennis Club courts based on condition assessment.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	232,776	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>232,776</u>	<u>0</u>
HST Impact:	4,097	0
Total Project Cost:	<u>236,900</u>	<u>0</u>

NOTES

The total cost of resurfacing and rebuilding the 6 courts at Markham Tennis Club (Reesor Park) will be shared equally between Markham Tennis Club, The City of Markham and Premier Racquet Club. Markham Tennis Club court replacement and resurfacing will proceed subject to satisfactory club and private company finance review and agreement of both parties to undertake repayment. This is an asset based program and is subject to condition assessment.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Operating Funded Life Cycle	78,968	0	0	0	0	0	0
Other External	157,932	0	0	0	0	0	0
TOTAL FUNDING	<u>236,900</u>					<u>0</u>	<u>0</u>

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="379,700"/>
				Amount Incl HST <input type="text" value="79,000"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

The resurfacing of three courts at Markham Tennis Club have been accelerated from 2024 to 2023 while the other three courts have been changed from resurfacing to rebuilding to address new drainage issues. The other tennis courts scheduled for resurfacing/reconstruction are included as part of a separate project request.

MARKHAM TENNIC CLUB - REBUILDING/ RESURFACING

Inventory Description	Facility	Rebuild or Resurface	2023 Inflated - Pre-Tax Markham Share	Club Share Pre-Tax	Premium Racquet Markham Share	Total Project Cost Pre-Tax	Total Project Cost Inc. HST Impact	Comment
Court Surfacing - Tennis/ Basketball	Reesor - Tennis #1 (North) - Rebuild	Rebuild	22,222	22,222	22,222	66,666	67,839	Revised from Resurface to Rebuild pending condition assessment; Cost provided by contractors - \$200k pre-tax for the 3 courts; Pending club consultation and financials
Court Surfacing - Tennis/ Basketball	Reesor - Tennis #2 (North) - Rebuild	Rebuild	22,222	22,222	22,222	66,666	67,839	Revised from Resurface to Rebuild pending condition assessment; Cost provided by contractors - \$200k pre-tax for the 3 courts; Pending club consultation and financials
Court Surfacing - Tennis/ Basketball	Reesor - Tennis #3 (North) - Rebuild	Rebuild	22,222	22,222	22,222	66,666	67,839	Revised from Resurface to Rebuild pending condition assessment; Cost provided by contractors - \$200k pre-tax for the 3 courts; Pending club consultation and financials
Court Surfacing - Tennis/ Basketball	Reesor - Tennis #4 (South) - Resurface	Resurface	3,642	3,642	3,642	10,926	11,118	Revised cost provided by contractor; Accelerate from 2024- per discussion with SAM
Court Surfacing - Tennis/ Basketball	Reesor - Tennis #5 (South) - Resurface	Resurface	3,642	3,642	3,642	10,926	11,118	Revised cost provided by contractor; Accelerate from 2024- per discussion with SAM
Court Surfacing - Tennis/ Basketball	Reesor - Tennis #6 (South) - Resurface	Resurface	3,642	3,642	3,642	10,926	11,118	Revised cost provided by contractor; Accelerate from 2024- per discussion with SAM
TOTAL			77,592	77,592	77,592	232,776	236,873	
TOTAL PROJECT COST (ROUNDED OFF)							236,900	

Summary:

Funding (Inc. HST Impact)	Details	Tennis Courts
Lifecycle	Resurface - 3 South Courts	11,118
External - Club	Resurface - 3 South Courts	11,118
External - Premium Racquet	Resurface - 3 South Courts	11,118
Lifecycle	Rebuild - 3 North Courts	67,839
External - Club	Rebuild - 3 North Courts	67,839
External - Premium Racquet	Rebuild - 3 North Courts	67,839
		236,873
TOTAL PROJECT COST (ROUNDED OFF)		236,900

Cost	232,776
HST Impact	4,097
Total Project Cost Inc. HST Impact	236,873
TOTAL PROJECT COST (ROUNDED OFF)	236,900

	Tennis Courts
Rebuild	203,518
Resurface	33,355
Total	236,873
TOTAL PROJECT COST (ROUNDED OFF)	236,900



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$491,000

Project Name: Court Resurfacing/Reconstruction/Maintenance

Commission: Community Services

Repair/Replace

Department: Operations - Parks

Useful Life: 7 Pre Approval:

Project Mgr: Dean McDermid

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Repair and resurfacing of basketball, public and club tennis courts based on condition assessment.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	482,514	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>482,514</u>	<u>0</u>
HST Impact:	8,492	0
Total Project Cost:	<u>491,000</u>	<u>0</u>

NOTES

The City contributes to the annual maintenance of the clay courts at Unionville Tennis Club to a maximum of \$3k per court (total of \$9k per year for 3 clay courts). The total cost of resurfacing/rebuilding courts at tennis clubs is shared 50:50 between the tennis club and the City. Tennis club court replacement/rehabilitation will proceed subject to satisfactory club finance review and agreement of the club to undertake repayment. This is an asset based program and is subject to condition assessment

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>	<u>Tennis Court</u>	<u>Basketball Court</u>	<u>Clay</u>			
Operating Funded Life Cycle	383,444	311,144	63,300	9,000	0	383,444	0
Other External	107,556	107,556	0	0	0	107,556	0
TOTAL FUNDING	<u>491,000</u>					<u>491,000</u>	<u>0</u>

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="379,700"/>
				Amount Incl HST <input type="text" value="383,400"/>
				Year in the study <input type="text" value="2023"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Denison Park basketball court - additional \$9K required for 2 poles, backboards and nets. Legacy Park basketball court - additional \$23K due to rebuild instead of scheduled resurface based on condition assessment. 3 courts at Reesor accelerated from 2024 to 2023 (resurface). 3 courts from Reesor changed from resurfacing to rebuild. The resurfacing of three courts at Markham Tennis Club have been accelerated from 2024 to 2023 while the other three courts have been changed from resurfacing to rebuilding to address new drainage issues and are included as part of a separate project request.

2023 COURT REBUILDING/RESURFACING

Inventory Description	Facility	Rebuild or Resurface	2023 Inflated - Pre-Tax Markham Share	Club Share Pre-Tax	Total Project Cost Pre-Tax	Total Project Cost Inc. HST Impact	Comment
Court Surfacing - Tennis/ Basketball	Ada Mackenzie - Tennis #1 - Resurface	Resurface	17,615		17,615	17,925	
Court Surfacing - Tennis/ Basketball	Ada Mackenzie - Tennis #2 - Resurface	Resurface	17,615		17,615	17,925	
Court Surfacing - Tennis/ Basketball	Box Grove - Tennis #1 - Resurface	Resurface	8,808	8,808	17,616	17,926	Pending club consultation and financials
Court Surfacing - Tennis/ Basketball	Box Grove - Tennis #2 - Resurface	Resurface	8,808	8,808	17,616	17,926	Pending club consultation and financials
Court Surfacing - Tennis/ Basketball	Carlton Park - Tennis #1 - Resurface	Resurface	8,808	8,808	17,616	17,926	Pending club consultation and financials
Court Surfacing - Tennis/ Basketball	Carlton Park - Tennis #2 - Resurface	Resurface	8,808	8,808	17,616	17,926	Pending club consultation and financials
Court Surfacing - Tennis/ Basketball	Carlton Park - Tennis #3 - Resurface	Resurface	8,808	8,808	17,616	17,926	Pending club consultation and financials
Court Surfacing - Tennis/ Basketball	Carlton Park - Tennis #4 - Resurface	Resurface	8,808	8,808	17,616	17,926	Pending club consultation and financials
Court Surfacing - Tennis/ Basketball	Carlton Park - Tennis #5 (Clay)		3,000		3,000	3,000	Not subject to HST
Court Surfacing - Tennis/ Basketball	Carlton Park - Tennis #6 (Clay)		3,000		3,000	3,000	Not subject to HST
Court Surfacing - Tennis/ Basketball	Carlton Park - Tennis #7 (Clay)		3,000		3,000	3,000	Not subject to HST
Court Surfacing - Tennis/ Basketball	Denison Park - Basketball #1 (full) - Resurface	Resurface	14,713		14,713	14,972	\$9k added - for two poles, backboards and nets.
Court Surfacing - Tennis/ Basketball	Frisby - Tennis #1 - Resurface	Resurface	17,615		17,615	17,925	
Court Surfacing - Tennis/ Basketball	Frisby - Tennis #2 - Resurface	Resurface	17,615		17,615	17,925	
Court Surfacing - Tennis/ Basketball	Legacy Park - Basketball #1 (full) - Rebuild	Rebuild	32,017		32,017	32,580	Updated cost - Requires rebuild instead of resurface as scheduled in
Court Surfacing - Tennis/ Basketball	Milliken Mills Park - Basketball #1(full) S - Resurface	Resurface	12,854		12,854	13,080	
Court Surfacing - Tennis/ Basketball	Pomona Valley - Tennis #1 - Resurface	Resurface	8,808	8,808	17,616	17,926	Pending club consultation and financials
Court Surfacing - Tennis/ Basketball	Pomona Valley - Tennis #2 - Resurface	Resurface	8,808	8,808	17,616	17,926	Pending club consultation and financials
Court Surfacing - Tennis/ Basketball	Pomona Valley - Tennis #3 - Resurface	Resurface	8,808	8,808	17,616	17,926	Pending club consultation and financials
Court Surfacing - Tennis/ Basketball	Pomona Valley - Tennis #4 - Resurface	Resurface	8,808	8,808	17,616	17,926	Pending club consultation and financials
Court Surfacing - Tennis/ Basketball	Pomona Valley - Tennis #5 - Resurface	Resurface	8,808	8,808	17,616	17,926	Pending club consultation and financials
Court Surfacing - Tennis/ Basketball	Pomona Valley - Tennis #6 - Resurface	Resurface	8,808	8,808	17,616	17,926	Pending club consultation and financials

Inventory Description	Facility	Rebuild or Resurface	2023 Inflated - Pre-Tax Markham Share	Club Share Pre-Tax	Total Project Cost Pre-Tax	Total Project Cost Inc. HST Impact	Comment
Court Surfacing - Tennis/ Basketball	Robinson - Tennis #1 - Rebuild	Rebuild	47,192		47,192	48,023	
Court Surfacing - Tennis/ Basketball	Robinson - Tennis #2 - Rebuild	Rebuild	47,192		47,192	48,023	
Court Surfacing - Tennis/ Basketball	Sablewood - Basketball #1 (half) - Resurface	Resurface	2,618		2,618	2,665	
Court Surfacing - Tennis/ Basketball	South Unionville Park Tennis - West #1 - Resurface	Resurface	17,615		17,615	17,925	
Court Surfacing - Tennis/ Basketball	South Unionville Park Tennis - West #2 - Resurface	Resurface	17,615		17,615	17,925	
	TOTAL		376,974	105,696	482,670	491,006	
	TOTAL PROJECT COST (ROUNDED OFF)					491,000	

Summary:

Funding (Inc. HST Impact)	Details	Tennis Courts	Basketball Court	Clay Court	Total
Lifecycle	Resurface - Denison, Milliken & Sablewood		30,717		30,717
Lifecycle	Rebuild - Legacy		32,580		32,580
Lifecycle	Clay Court - Unionville TC			9,000	9,000
Lifecycle	Resurface - TC-Boxgove, Pomona, Unionville	107,556			107,556
External - Club	Resurface - TC-Boxgove, Pomona, Unionville	107,556			107,556
Lifecycle	Resurface/ Rebuild - Public Courts - Aida MacKenzie, Frisby, Robinson and South Unionville Park West	203,596			203,596
		418,708	63,297	9,000	491,005
	TOTAL PROJECT COST (ROUNDED OFF)				491,000

Cost	482,514
HST Impact	8,492
Total Project Cost inc. HST Impact	491,006
TOTAL PROJECT COST (ROUNDED OFF)	491,000

	Tennis Courts	Basketball Court	Total
Rebuild	96,045	32,580	128,625
Resurface	322,664	30,717	353,381
Clay Court Maintenance	9,000		9,000
Total	427,709	63,297	491,006
TOTAL PROJECT COST (ROUNDED OFF)	427,700	63,300	491,000



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$86,800

Project Name: Fence (Tennis Courts)

Repair/Replace

Commission: Community Services

Useful Life: 35 Pre Approval:

Department: Operations - Parks

Category: Annual

Project Mgr: Dean McDermid

Cost Validation: Internal peer review

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Replacement of perimeter fencing of tennis courts helps to protect the playing surfaces from non-court uses while maintaining the limits of play and allowing securement of the courts when not available for users.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	85,334	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	85,334	0
HST Impact:	1,502	0
Total Project Cost:	86,800	0

NOTES

This is an asset based program and is subject to condition assessment. The 2023 locations are Simonston Park – (German Mills Tennis Club) and Robinson Park. Unit costs are based on original cost of construction plus inflation. There is no substantial backlog and the fences are in a state of good repair

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Operating Funded Life Cycle	86,800	0	0	0	0	0	0
TOTAL FUNDING	86,800					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="164,600"/>
				Amount Incl HST <input type="text" value="86,800"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: **23016**

Project Cost: **\$125,300**

Project Name: **Markham Trees for Tomorrow**

Commission: Community Services

New Asset/Expansion

Department: Operations - Parks

Useful Life: 50 Pre Approval:

Project Mgr: Matt Busato

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Internal peer review

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Initiated in 2007, the program focuses on supporting canopy core initiatives through the engagement of community and corporate volunteers and Non-Government Organizations. The program scope is developed annually based on changing priorities that focus on education to promote and maintain the health and longevity of our urban forest. To date, over 400,000 trees have been planted citywide since the program's inception. This is an annual program and funds will be requested each year.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	84,700	0
Internal Charges:	39,088	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	123,788	0
HST Impact:	1,491	0
Total Project Cost:	125,300	0

NOTES

Program focus is City tree planting projects that incorporate community engagement and partnership opportunities. 2023 Goals- 1. Tree planting to support to the City's 30% tree canopy goal 2. Continue NGO partnerships such as 10,000 Trees, Tree Canada, Friends of the Rouge and other corporate community engagement projects to promote education and stewardship opportunities. Internal Chargeback for 1 – 150 Day Staff. Funding source is Trees for Tomorrow Reserve. The balance in the Trees For Tomorrow reserve as of May 31, 2022 is \$669,768.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
	<u>Budget</u>				<u>TOTAL</u>		
Other Internal	125,300	0	0	0	0	0	0
TOTAL FUNDING	125,300				0		0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$151,300

Project Name: Pathways Resurfacing

Repair/Replace

Commission: Community Services

Useful Life: 15 Pre Approval:

Department: Operations - Parks

Category: Minor

Project Mgr: Dean McDermid

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Paving and repairs of aggregate pathways at various parks and locations. These locations are prone to wear and tear and washouts following heavy rain and flooding. Paving will help to alleviate this problem. Limestone pathways require additional material to be added and compacted. Locations will be assessed and determined based on condition assessment in spring. Staff will investigate environmental options for future considerations.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	148,681	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>148,681</u>	<u>0</u>
HST Impact:	<u>2,617</u>	<u>0</u>
Total Project Cost:	<u>151,300</u>	<u>0</u>

NOTES

This is an annual program and funds will be requested each year. Locations are subject to condition assessment to be done in spring 2023. Condition assessments are done in early spring when total quantities and materiality of repairs is determined. Asphalt park pathways are assessed for trip edges greater than 2.0cm as outlined in Prov Leg O.Reg. 239/02 for minimum maintenance standards. There is no substantial backlog and the pathways are in a state of good repair. 3yr avg is \$128K.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>							
Operating Funded Life Cycle	151,300	0	0	0	0	0	0	
TOTAL FUNDING	<u>151,300</u>					<u>0</u>	<u>0</u>	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="151,300"/>
				Amount Incl HST <input type="text" value="151,300"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: **23018**

Project Cost: **\$705,100**

Project Name: **Playstructure Replacement**

Repair/Replace

Commission: Community Services

Useful Life: 17 Pre Approval:

Department: Operations - Parks

Category: Minor

Project Mgr: Dave Plant

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Replacement of playground equipment, and safety surfacing as required, to maintain the current standards (CSA – Canadian Standards Association CAN/CSA-Z614-07. Children’s Playspaces and Equipment) and AODA compliance. There are 7 structures to be completed in 2023, which require the removal of the sand surfacing and installation of Engineered Wood Fiber (EWF).

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	692,951	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	692,951	0
HST Impact:	12,196	0
Total Project Cost:	705,100	0

NOTES

This is an asset based program with all locations subject to condition assessment. Funding changes yearly based on life cycle replacement of specific play structures. There is no backlog of play structure equipment upon completion of the 2023 project and the assets are in a state of good repair. There is a backlog of AODA compliant playground safety surfacing which requires removal and replacement with AODA compliant surfacing (EWF) by 2025 which will be addressed yearly with equipment replacements and a 4 year project starting in 2023.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Operating Funded Life Cycle	451,100	0	0	0	0	0	0
Ramp Up	254,000	0	0	0	0	0	0
TOTAL FUNDING	705,100					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="499,100"/>
				Amount Incl HST <input type="text" value="451,100"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
Locations scheduled for 2023 replacement in Lifecycle that will be deferred based on condition assessment: Colty Corners (1-Senior), Cornell Rouge Woods (1-Junior, 1 - Senior), E.B.F. Robinson Park (1-Senior), Frederick Peterson Park (1-Junior) and South Unionville Park (1-Senior).				
Locations accelerated from 2024 to 2023 based on condition assessment: Lloyd Robertson Park (1-Senior), Mintleaf Park (2-Senior) - 1-senior and 1-junior and Peace Park (1-Senior).				

Project	Play structure & Rubberized Surface Replacement
2023 Capital Request	\$705,100
Funding Source	Life Cycle Reserve
Description of Program	Replacement of playground equipment, and safety surfacing as required, to maintain the current standards (CSA – Canadian Standards Association CAN/CSA-Z614-07. Children’s Play spaces and Equipment) and AODA compliance. There are 9 structures to be completed in 2022, 2 of them with rubberized surfacing and 13 which require the removal of the sand surfacing and installation of Engineered Wood Fiber (EWF).
Project Rationale	These structures require replacement prior to any failures occurring, based on condition assessment to meet the CSA guidelines (Z614-07 Children's Play spaces and Equipment).
Legislative Requirement	City play structures are required to be CSA – Canadian Standards Association CAN/CSA-Z614-07 certified at the time of installation and throughout their useful life. Monthly inspections by certified playground inspectors combined with a yearly third party safety audit ensures compliance.
History	This project is reflective of play structures identified in the parks lifecycle and supported by condition assessment. Play structures are identified for inspection after 17 years of service with the total number of structures yearly being reflective of growth which occurred 17 years previously.
Future Phases	This funding is requested each year based on lifecycle.
Total Project Cost	n/a
Related Projects	Play Structure Rubberized Surface Replacement
Related Maps	n/a
Alignment to the Strategic Plan	The City provides safe use of outdoor recreation facilities for families which aligns with the guidelines established in the Integrated Leisure Master Plan.

2023 Playground Structure and Safety Surface

Inventory Description	Facility	2023 Inflated - Pre-Tax	Pre-Approval Amount	Comment
Playground Structure	Butternut Parkette	17,730	17,730	
Playground Structure	Hughson (1-Combined)	47,281	47,281	
Playground Structure	Joseph Ellerby (1-Senior, 1-Junior)	94,561	94,561	
Playground Structure	Ross Brown Park (1-Senior)	59,101	59,101	
Playground Structure	Lloyd Robertson Park (1-Senior)	59,124	59,124	Accelerated from 2024 to 2023 due to condition assessment
Playground Structure	Mintleaf Park (2-Senior) - s/b 1-senior and 1-junior	100,510	100,510	Accelerated from 2024 to 2023 due to condition assessment
Playground Structure	Peace Park (1-Senior)	65,036	65,036	Accelerated from 2024 to 2023 due to condition assessment
Playground Structure	AODA - Engineered Wood Fiber	249,608	249,608	
	Total	692,951	692,951	
	Total Pre - Tax	692,951	692,951	
	HST Impact	12,196	12,196	
	Total Inc. HST Impact	705,147	705,147	
	Total Project Cost (Rounded Off)	705,100	705,100	

Locations scheduled for 2023 replacement in Lifecycle that will be deferred based on condition assessment

Colty Corners (1- Senior)

Cornell Rouge Woods (1-Junior, 1 - Senior)

E.B.F. Robinson Park (1-Senior)

Frederick Peterson Park (1-Junior)

South Unionville Park (1-Senior)

Funding	Including Tax Impact
Lifecycle (7 - Playground Structures)	451,146
Ramp-Up - AODA - Engineered Wood Fiber	254,001
Total Inc. HST Impact	705,147
Total Project Cost (Rounded Off)	705,100



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$148,800

Project Name: Sportsfield Maintenance & Reconstruction

Commission: Community Services

Repair/Replace

Department: Operations - Parks

Useful Life: 5 Pre Approval:

Project Mgr: James Bingham

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Internal peer review

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Life cycle program includes top dressing, grass seed, sod, fertilizer, and irrigation upgrades as per contracts. Funds within this project may be reallocated to sportsfield maintenance materials and services that require immediate attention unforeseen at time of submission such as sodding of damaged fields. Locations to be determined each spring and again at the end of playing season based on inspection.

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<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	146,247	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	146,247	0
HST Impact:	2,574	0
Total Project Cost:	148,800	0

NOTES

This is an annual program and funds will be requested each year. There are 212 sportsfields existing in various parks and schools which consist of baseball diamonds, rugby, soccer, cricket and football fields. The lack of weeds on City fields is due largely to promoting healthy turf through sound cultural practices tailored to each field based on requirements. This is an annual program and funding will be requested each year. There is no substantial backlog within this program and assets are in a state of good repair. Project cost is based on existing contracts. 3 year avg is \$127K.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Operating Funded Life Cycle	148,800	0	0	0	0	0	0
TOTAL FUNDING	148,800					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="148,800"/>
				Amount Incl HST <input type="text" value="148,800"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$2,407,000

Project Name: Corporate Fleet Replacement - Non-Fire - Pre Approval

Repair/Replace

Commission: Community Services

Useful Life: 5 Pre Approval:

Department: Operations - Fleet

Category: Major

Project Mgr: Tanya Lewinberg/Tony Greco

Cost Validation: Internal peer review

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

2023 Annual Fleet Replacement Program based on the Council adopted Corporate Fleet Policy Guidelines. Life cycle costing targets optimal replacement intervals (ORI) which identifies the most cost effective time period for replacement. All vehicles and equipment contained in this program have reached or surpassed the ORI. User Departments were consulted with respect to the units in this program. Total units -20 units out of a total of 52 units.

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<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	2,365,368	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>2,365,368</u>	<u>0</u>
HST Impact:	<u>41,630</u>	<u>0</u>
Total Project Cost:	<u>2,407,000</u>	<u>0</u>

NOTES

Useful life varies - 4 to 12 years based on units types. Cost Validation- Most recent purchase of similar unit type; Requirement validation - Condition assessment, vehicle reliability & down time, & operating costs. Units specified in this program will be purchased with the most recent technology available at time of purchase providing maximized fuel economy with minimal emissions.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>				<u>TOTAL</u>	<u>Future Phases</u>	
	<u>Budget</u>	<u>Licensed (19)</u>	<u>Non Licensed (1)</u>				
Operating Funded Life Cycle	2,407,000	2,235,900	171,100	0	0	2,407,000	0
TOTAL FUNDING	<u>2,407,000</u>					<u>2,407,000</u>	<u>0</u>

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="3,267,200"/>
				Amount Incl HST <input type="text" value="2,407,000"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
<input type="text" value="20 units for pre approval (out of total of 52 units) including 3 licenced units accelerated from 2024 due to condition assessment."/>				

Project	Corporate Fleet Replacement – Non Fire
2023 Capital Request	\$2,407,000
Funding Source	Life Cycle Reserve
Description of Program	2023 Annual Fleet Replacement Program based on the Council adopted Corporate Fleet Policy Guidelines. Life cycle costing targets optimal replacement intervals (ORI) which identifies the most cost effective time period for replacement. All vehicles and equipment contained in this program have reached or surpassed the ORI. User Departments are consulted with respect to the units in this program. Total units - 20 units
Project Rationale	2023 Annual Fleet Replacement Program based on the Council adopted Corporate Fleet Policy Guidelines. To maintain current service levels for all users department
Legislative Requirement	n/a
History	
Future Phases	This funding is requested each year.
Total Project Cost	n/a
Related Projects	
Related Maps	n/a
Alignment to the Strategic Plan	Providing reliable fleet units allowing effective municipal services to local residents and businesses. Promoting the continued use of new technology along with alternate energy solutions that reduce fuel consumption and improved fleet efficiencies with reductions in overall fleet emissions.

2023 Corporate Fleet Replacement - Non-Fire (FOR PRE-APPROVAL)

Asset ID	Inventory Description	Mileage (Km)	Usage (Hours)	Facility	Category	Model Year	2023 Inflated Cost	Adjustment	2023 Updated Cost	Comments
1038	COMPACT PICK UP	95,722		ASSET MAN-Licensed	Licensed	2013	39,797		39,797	Deferred from 2021 to 2023; conversion to crew cab
1174	FULL SIZE WINDOW VAN	85,023		OPERATIONS-Licensed	Licensed	2012	56,631		56,631	Cost based on 185-T-20 Plus 10k - toolbox and inverter, plus inflation; Deferred from 2020 to 2023; Plus 10k - toolbox and inverter
1236	19,500 GVW FLATBED WITH 9' ARCTIC PLOW	95,272		OPERATIONS-Licensed	Licensed	2015	123,285		123,285	Price \$101,366 adjusted to align 047-T-22 - base price \$115,814, plus Markhamizing plus inflation
1253	FULL SIZE REG CAB PICK UP 4X4	154,946		OPERATIONS-Licensed	Licensed	2016		44,014	44,014	Accelerate from 2024 to 2023
1272	SINGLE AXLE ALLSEASON DUMP/PLOW/WING	78,311	4,545	OPERATIONS-Licensed	Licensed	2013	289,705		289,705	
1273	SINGLE AXLE ALLSEASON DUMP/PLOW/WING	82,598	5,056	OPERATIONS-Licensed	Licensed	2013	289,705		289,705	
1274	SINGLE AXLE ALLSEASON DUMP/PLOW/WING	80,941	4,966	OPERATIONS-Licensed	Licensed	2013	298,692		298,692	2017 add Pavement Edger implement
1422	ARTICULATED SIDEWALK TRACTOR 4X4		3,617	SIDEWALK-Non Licensed	Non Licensed	2013	168,171		168,171	
3238	FORESTRY BUCKET TRUCK	86,428	7,100	OPERATIONS / PARKS-Licensed	Licensed	2013	237,677		237,677	
3239	FORESTRY BUCKET TRUCK	88,103	7,061	OPERATIONS / PARKS-Licensed	Licensed	2013	237,677		237,677	
3326	FULL SIZE PICK UP 4X4	107,335		OPERATIONS / PARKS-Licensed	Licensed	2013	45,311		45,311	Deferred from 2021 to 2023
3342	19,500 GVW FLATBED WITH 9' ARCTIC PLOW	69,787		OPERATIONS-Licensed	Licensed	2016		123,285	123,285	Accelerate from 2024 to 2023 Price \$101,366 adjusted to align 047-T-22 - base price \$115,814, plus Markhamizing plus inflation
3355	COMPACT EXTENDED CAB PICK UP	68,896		OPERATIONS-Licensed	Licensed	2013	39,797		39,797	Deferred from 2021 to 2023; conversion to crew cab
3360	FULL SIZE SHORT BOX PICK UP 4X4	218,062		OPERATIONS-Licensed	Licensed	2013	65,327		65,327	
3377	FULL SIZE 2500 CREW CAB PICK UP 4X2 W/ 8' Box	125,789		OPERATIONS-Licensed	Licensed	2015	49,336		49,336	
6086	COMPACT CAR	66,668		ENFOR LIC-Licensed	Licensed	2014	58,444		58,444	Deferred from 2022 to 2023; conversion to PHEV hybrid - Bylaw vehicle
6096	COMPACT CAR	76,266		CLERK-1-Licensed	Licensed	2011	58,444		58,444	Deferred from 2019 to 2023; conversion to PHEV hybrid - Bylaw vehicle
6097	COMPACT CAR	80,732		CLERK-1-Licensed	Licensed	2011	58,444		58,444	Deferred from 2019 to 2023; conversion to PHEV hybrid - Bylaw vehicle
7037	COMPACT CREW CAB PICK UP	77,383		WASTE-Licensed	Licensed	2011	38,650		38,650	Deferred from 2019 to 2023; conversion to crew cab
7035	FULL SIZE 1500 REG CAB PICK UP 4X2		124,889	WASTE-1-Licensed	Licensed	2016		42,976	42,976	Accelerate from 2024 to 2023
Total Pre-Tax							2,155,093	210,275	2,365,368	
HST Impact							37,930		41,630	
Total Project Cost							2,193,023		2,406,998	
Rounded Off Project Cost							2,193,000		2,407,000	

ORIGINAL PROJECT COST

No. of Units	Category	Pre-Tax	HST Impact	Project Cost
16	Licensed	1,986,922	34,970	2,021,892
1	Non Licensed	168,171	2,960	171,131
		2,155,093	37,930	2,193,023
17			Rounded Off - Project Cost	2,193,000

UPDATED PROJECT COST

No. of Units	Category	Pre-Tax	HST Impact	Project Cost
19	Licensed	2,197,197	38,671	2,235,868
1	Non Licensed	168,171	2,960	171,131
		2,365,368	41,630	2,406,998
20			Rounded Off - Project Cost	2,407,000



2023 PROJECT FUNDING REQUEST FORM

Number: **23021**

Project Cost: **\$108,000**

Project Name: **Corporate Fleet Replacement - Waterworks**

Commission: Community Services

Repair/Replace

Department: Operations - Fleet

Useful Life: 8 Pre Approval:

Project Mgr: Tanya Lewinberg/Edgar Tovilla

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Part of the Annual Fleet Replacement Program based on the Council adopted Corporate Fleet policy guidelines. Life Cycle costing targets Optimal Replacement Intervals (ORI) which identifies the most cost effective time period for replacement. All vehicles and equipment (2 units) contained in this program have reached or surpassed the ORI. This is funded by Waterworks reserve.

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<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	106,160	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	106,160	0
HST Impact:	1,868	0
Total Project Cost:	108,000	0

NOTES

2 units - Requirement Validation - meeting the approved replacement criteria, pending condition assessment. All units in this request will be purchased with the most recent technology available at time of purchase providing maximum fuel economy with minimal emissions.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>	<u>Licensed (2)</u>	<u>Non Fleet</u>				
Waterworks	108,000	105,900	2,100	0	0	108,000	0
TOTAL FUNDING	108,000					108,000	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				

2023 Waterworks Fleet Replacement

Asset ID	Inventory Description	Mileage (Km)	Usage (Hours)	Facility	Model Year	2023 Inflated Pre-Tax	Adjustment	2023 Updated Cost	Comments
2174	FULL SIZE CARGO VAN	54,196		WATER- Licensed	2014	43,052		43,052	Deferred from 2022 to 2023; Price aligned with 2188
2174	Specification Change			WATER- Licensed		8,967		8,967	Specification change to F250
2181	COMPACT VAN	56,604		WATER- Licensed	2014	48,032	(48,032)	-	Based on PD22036; Deferred from 2022 to 2024;
2182	COMPACT VAN	52,842		WATER- Licensed	2014	48,032	(48,032)	-	Based on PD22036; Deferred from 2022 to 2024;
2188	FULL SIZE CARGO VAN	57,057		WATER- Licensed	2016		43,052	43,052	Accelerate from 2024 to 2023
2188	Specification Change			WATER- Licensed			8,967	8,967	Specification change to F250
2245	PORTABLE DIESEL GENERATOR 35 KV		125	WATER- Non Licensed (Tools & Equip)	2008	63,464	(63,464)	-	Deferred from 2021 to 2024; Cost based on quote from Sommers Generators Systems
2246	FORKLIFT PROPANE POWERED		738	WATER- Non Licensed (Tools & Equip)	2010	35,587	(35,587)	-	Deferred from 2022 to 2024; PD 17120
	Waterworks Non Fleet < \$5,000 or Misc			WATER - Waterworks Non Fleet < \$5,000 or Misc		2,122		2,122	
						249,256	(143,096)	106,160	
						Total Pre-Tax		106,160	
						HST impact		1,868	
						Total Project Cost		108,027	
						Rounded Off Project Cost		108,000	

ORIGINAL PROJECT COST

No. of Units	Category	Pre-Tax	HST Impact	Project Cost
3	Licensed	148,083	2,606	150,689
2	Non Licensed (Tools & Equipment)	99,051	1,743	100,794
	Waterworks Non Fleet < \$5,000 or Misc	2,122	37	2,159
		249,256	4,387	253,643
5			Rounded Off Project Cost	253,600

UPDATED PROJECT COST

No. of Units	Category	Pre-Tax	HST Impact	Project Cost
2	Licensed	104,038	1,831	105,869
0	Non Licensed (Tools & Equipment)		-	-
	Waterworks Non Fleet < \$5,000 or Misc	2,122	37	2,159
		106,160	1,868	108,028
2			Rounded Off - Project Cost	108,000



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$11,200

Project Name: New Fleet - Parks - Pre Approval

New Asset/Expansion

Commission: Community Services

Useful Life: 8 Pre Approval:

Department: Operations - Fleet

Category: Annual

Project Mgr: Tanya Lewinberg/David Plant

Cost Validation: Internal peer review

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Supply & delivery of (1) Hydraulic Snow Blower with Skid Steer.

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<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	11,006	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>11,006</u>	<u>0</u>
HST Impact:	<u>194</u>	<u>0</u>
Total Project Cost:	<u>11,200</u>	<u>0</u>

NOTES

Hydraulic snow blower with Skid Steer - For monolithic sidewalk clearing.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>				<u>TOTAL</u>		
DCA	11,200	0	0	0	0	0	
TOTAL FUNDING	<u>11,200</u>				<u>0</u>	<u>0</u>	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$1,629	\$0	\$1,629

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
Name				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
<input type="text"/>				



2023 PROJECT FUNDING REQUEST FORM

Number: 23023

Project Cost: \$32,600

Project Name: New Fleet - Roads

New Asset/Expansion

Commission: Community Services

Useful Life: 20 Pre Approval:

Department: Operations - Fleet

Category: Annual

Project Mgr: Tony Greco/Steven Dollmaier

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Purchase of one (1) new Slip In Water Tank for "Pro-Line" Body

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<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	32,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	32,000	0
HST Impact:	563	0
Total Project Cost:	32,600	0

NOTES

In the winter, bridges get dirty from the sand, salt and anti-icing chemicals that are spread on roads. Salt eats away at steel, which makes up much of a bridge's structure. Spring cleaning prolongs the life of our bridges and enhance the annual bridge maintenance program. The tank will also be used for Direct Liquid Applications during the winter months to prevent snow and ice from bonding to the pavement. This will help the City staff address hot spots, areas of concern and legislation changes to the MMS within the City as currently we have to give the contractor 24 hours' notice to be deployed. This will allow staff to address within the 24hours.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
DCA	32,600	0	0	0	0	0	0	
TOTAL FUNDING	32,600					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>		<u>Amount in</u>	<u>Life Cycle</u>
Name	Year	Amount	Study
			Amount in Study: <input style="width: 80px;" type="text"/>
			Amount Incl HST <input style="width: 80px;" type="text"/>
			Year in the study <input style="width: 80px;" type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: **23024**

Project Cost: **\$30,500**

Project Name: **Upfit of Fleet Services Mobile Van**

Commission: Community Services

New Asset/Expansion

Department: Operations - Fleet

Useful Life: 16 Pre Approval:

Project Mgr: Tony Greco

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Based on operational requirements, Fleet is making the request to upfit the Fleet mobile service van unit 5121 with the following:
1.) Mobile power unit equipped with air compressor, welding unit and vehicle booster
2.) Anti-slip heavy duty flooring
3.) Shelving unit to store various supplies
4.) Rear cargo door tool holder
5.) LED track lighting front to back in cargo area
6.) Front and rear LED emergency lights for roadside safety

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PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	30,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	30,000	0
HST Impact:	528	0
Total Project Cost:	30,500	0

NOTES

Fleet currently has a full size high roof cargo van used as a mobile service vehicle to repair vehicles/equipment and breakdowns in the field and at various City facilities including Civic Centre, 8100 Warden Ave. and Markham East yard. Having a fully equipped mobile service vehicle will aid in repairing units in the field reducing the need for towing, minimizing return trips to Fleet and increasing our current service levels to the various City departments.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
DCA	30,500	0	0	0	0	0	0	
TOTAL FUNDING	30,500					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: 23025

Project Cost: \$82,800

Project Name: German Mills Meadow Environmental Monitoring Program

Studies/Pilot Programs

Commission: Community Services

Useful Life: 0 Pre Approval:

Department: Operations - Utility Inspection & Survey

Category: Major

Project Mgr: Negar Mahmoudi

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Hire a consultant for the management of the German Mills Meadow and Natural Habitat. Work includes condition assessment, monitoring systems to ensure that appropriate protection is provided to abutting properties and German Mills Creek. This request is to hire a consultant to monitor for 1 year to ensure methane gas concentrations are below MOE (Ministry of Environment) compliance levels and German Mills Creek is not adversely affected by the leachate.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	81,368	0
Contingency %: 0	0	0
Sub Total:	81,368	0
HST Impact:	1,432	0
Total Project Cost:	82,800	0

NOTES

This request is for year 1 of a 3 year program.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
Operating Funded Life Cycle	82,800	0	0	0	0	0	0	
TOTAL FUNDING	82,800					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: 357,600
				Amount Incl HST 82,800
				Year in the study 2023
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
Request is for one year monitoring.				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$81,600

Project Name: Bridges and Culverts - Condition Inspection

Studies/Pilot Programs

Commission: Community Services

Useful Life: 0 Pre Approval:

Department: ES - Infrastructure

Category: Minor

Project Mgr: Hossein Sharif

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Hire a consultant to inspect vehicular bridges (14), pedestrian bridges (44), culverts (74) and boardwalks (9) as mandated by Public Transportation and Highway Act - Regulation 104/97 to ensure public safety. A total of 141 structures will be inspected out of 365. This program ensures inspections take place within the regulated timelines.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	80,200	0
Contingency %: 0	0	0
Sub Total:	80,200	0
HST Impact:	1,412	0
Total Project Cost:	81,600	0

NOTES

This is an annual program. There is no backlog and structures are in a state of good repair. Operations is responsible for preventative maintenance on bridges/culverts such as minor grading, patching, sealing of approaches and decks, and siltation removal from culverts, while Env. Services is responsible for its inspection, rehabilitation and replacement. Unit cost is consistent with recent award plus inflation. Amount requested is consistent with 2022 Life Cycle Reserve Study Update.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Operating Funded Life Cycle	81,600	0	0	0	0	0	0
TOTAL FUNDING	81,600					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="81,600"/>
				Amount Incl HST <input type="text" value="81,600"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$756,600

Project Name: Storm and Sanitary Sewer CCTV Inspection

Studies/Pilot Programs

Commission: Community Services

Useful Life: 0 Pre Approval:

Department: ES - Infrastructure

Category: Major

Project Mgr: Philip Zhang

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Program to determine the condition of the storm and sanitary sewers using closed circuit television (CCTV) inspection. Pipe rehabilitation/ replacement programs will be developed based on the condition inspection results. 2023 Program includes:
a) 107 km storm sewers out of total 940 km (Life Cycle funded); b) 106 km sanitary sewers out of total 931 km (Waterworks funded). Map is attached.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	676,400	3,333,000
Internal Charges:	0	0
External Consulting:	67,100	0
Contingency %: 0	0	0
Sub Total:	<u>743,500</u>	<u>3,333,000</u>
HST Impact:	<u>13,086</u>	<u>58,661</u>
Total Project Cost:	<u>756,600</u>	<u>3,391,700</u>

NOTES

This is an annual program (10 year cycle) - Phase 5 of 10. Program will be re-evaluated at the end of the 10 year cycle. External consultant is retained to identify deficiencies on CCTV inspection. Unit cost is consistent with recent award.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>	<u>Contractor</u>	<u>Consultant</u>				
Operating Funded Life Cycle	262,600	238,900	23,700	0	0	262,600	1,219,700
Waterworks	494,000	449,400	44,600	0	0	494,000	2,172,000
TOTAL FUNDING	<u>756,600</u>					<u>756,600</u>	<u>3,391,700</u>

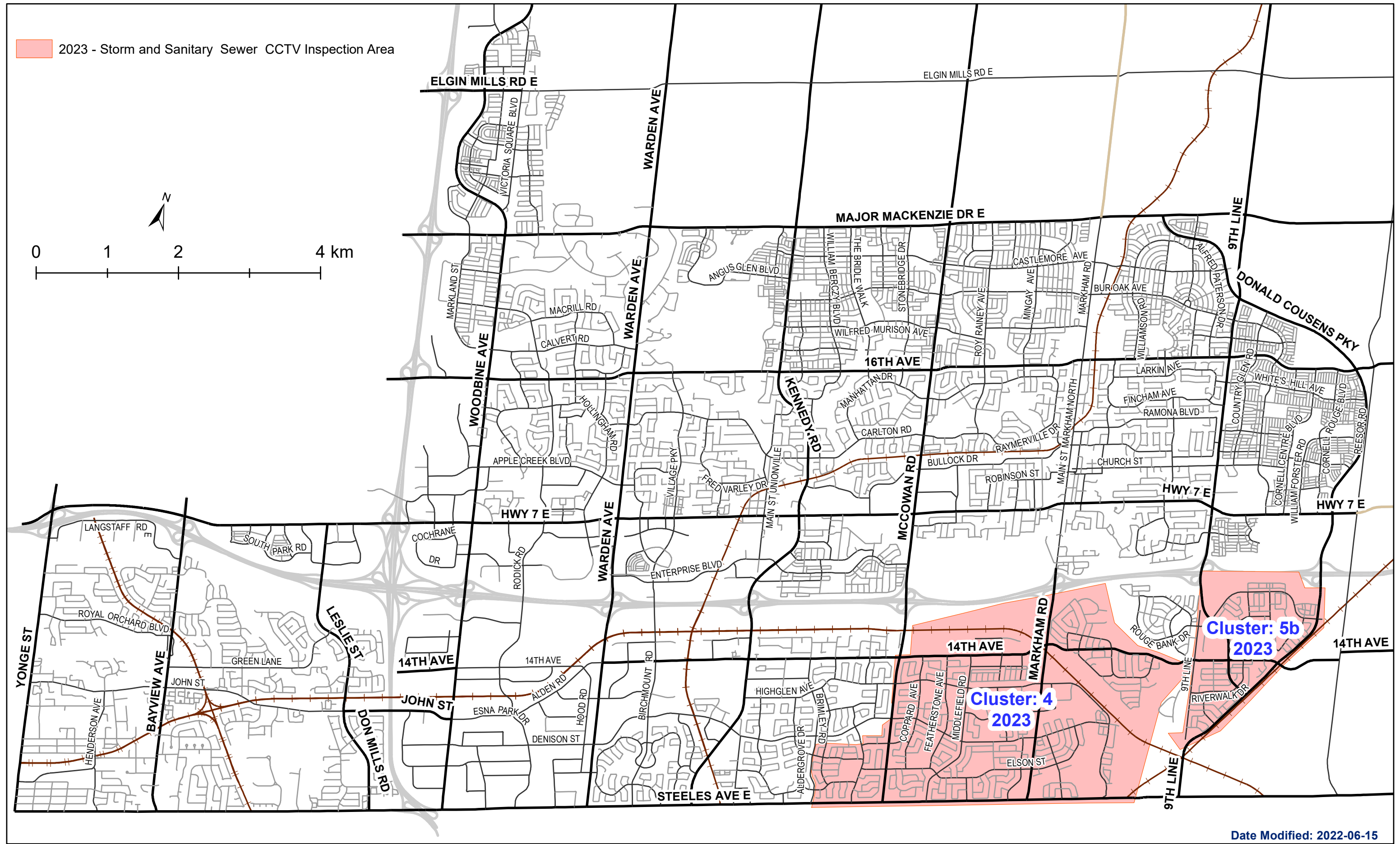
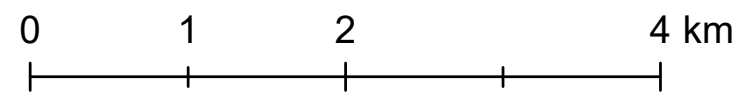
<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="262,600"/>
				Amount Incl HST <input type="text" value="262,600"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
Total Cost: \$756,600 \$494,000 (65%) is funded through Sanitary Lifecycle (Water Rate) \$262,600 (35%) is funded through Storm Lifecycle				

MARKHAM STORM AND SANITARY SEWER CCTV INSPECTION

2023 - Storm and Sanitary Sewer CCTV Inspection Area



Cluster: 5b
2023

Cluster: 4
2023

Date Modified: 2022-06-15

Program Name: Storm and Sanitary CCTV Inspection								
Department: Environmental Services								
Phase #	Inspection year	Project #	Past	2023	Future	Total	Comments	
Phase 1	2019	#19225 / #19248/ 760-510-5300	\$524,003			\$524,003	52 km storm; 52 km sanitary; 1,400 laterals	
Phase 2	2020	#20237	\$1,585,200			\$1,585,200	90 km storm; 91 km sanitary; 6,946 laterals	
Phase 3	2021	#21149	\$652,800			\$652,800	80 km storm; 94 km sanitary	
Phase 4	2022	#22186	\$625,800			\$625,800	82.3 km storm; 80.8 km sanitary	
Phase 5	2023	#23xxx (This request)		\$756,600		\$756,600	107 km storm; 106 km sanitary	
Phase 6 to Phase 10	2024 - 2028				\$3,391,700	\$3,391,700		
Total Cost			\$3,387,803	\$756,600	\$3,391,700	\$7,536,103		
Description of Program								
Program to determine the condition of the storm and sanitary sewers using closed circuit television (CCTV) inspection								
What was completed in the past								
4 phases have been completed or in progress (out of 10 phases): \$3.39M								
Current ask								
CCTV inspection of 107 km storm sewers (out of 940 km) and 106 km sanitary sewers (out of 931 km) - \$756,600								
Future Phases								
Phases 6 to 10 between 2024 - 2028: \$3.39M								
Related 2023 Project(s)								
Sanitary Sewer Rehabilitation (#23xxx): \$846,600								
Map	Attached							



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$149,200

Project Name: Structures Program-Full-time Staff

Studies/Pilot Programs

Commission: Community Services

Useful Life: 0 Pre Approval:

Department: ES - Infrastructure

Category: Annual

Project Mgr: Paul Ahn

Cost Validation: Other(specify in Notes)

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This funds one Senior Project Engineer (existing Permanent Full-Time staff) position.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	0	0
Internal Charges:	149,200	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	149,200	0
HST Impact:	0	0
Total Project Cost:	149,200	0

NOTES

This is an annual program. The annual structures (bridges and culverts) program includes detailed visual inspection, condition survey/design, and cost effective maintenance program. The results are used to identify the structures that require rehabilitation. Rehabilitation of structures improves the overall condition and increases the service life. The amount requested is consistent with the 2022 Life Cycle Reserve Study Update. Requirement validation: This position is critical to support structures rehabilitation projects for the City-owned structures.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
Operating Funded Life Cycle	149,200	0	0	0	0	0	0	
TOTAL FUNDING	149,200					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="149,200"/>
				Amount Incl HST <input type="text" value="149,200"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: **23029**

Project Cost: **\$14,522,500**

Project Name: **West Thornhill Flood Control Implementation Ph 4B Constr.**

Commission: Community Services

Repair/Replace

Department: ES - Infrastructure

Useful Life: 100 Pre Approval:

Project Mgr: Paul Ahn

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

To continue with the flood remediation program in the West Thornhill area based on Class EA study recommendations. This budget request is for upgrading the storm sewer pipes in Phase 4B area (Romfield Circuit area). See attached location map. Program is as follows:
• Est. West Thornhill program cost is \$110M (as of April 2019)
• Previous budget approved (up to 2022) represents 76% of West Thornhill Program cost.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	13,244,013	12,140,700
Internal Charges:	612,199	0
External Consulting:	425,678	0
Contingency %: 0	0	0
Sub Total:	<u>14,281,890</u>	<u>12,140,700</u>
HST Impact:	<u>240,587</u>	<u>213,676</u>
Total Project Cost:	<u>14,522,500</u>	<u>12,354,400</u>

NOTES

Requirement: Council direction to upgrade the storm sewer system in West Thornhill to 100 year level protection.
Funding Source: Stormwater Reserve. External consulting includes contract administration. The City will receive 40% of the eligible cost through DMAF Grant. Net cost to the City will be 60%.
Future phases are 4C & 4D - (Royal Orchard - between Yonge St. and Bay Thorn Dr, Wild Cherry Ln, Apple Orchard Path, Silver Aspen Dr, Normark Dr and Donalbain Cr).

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	CA	Construction	Int charge			
Gas Tax	2,000,000	0	2,000,000	0	0	2,000,000	0
Infrastructure Grant	5,564,111	173,268	5,390,843	0	0	5,564,111	0
Reserve Fund	6,958,389	259,902	6,086,288	612,199	0	6,958,389	12,354,400
TOTAL FUNDING	<u>14,522,500</u>					<u>14,522,500</u>	<u>12,354,400</u>

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA
Name

Year **Amount** **Amount in Study**

Life Cycle

Amount in Study:

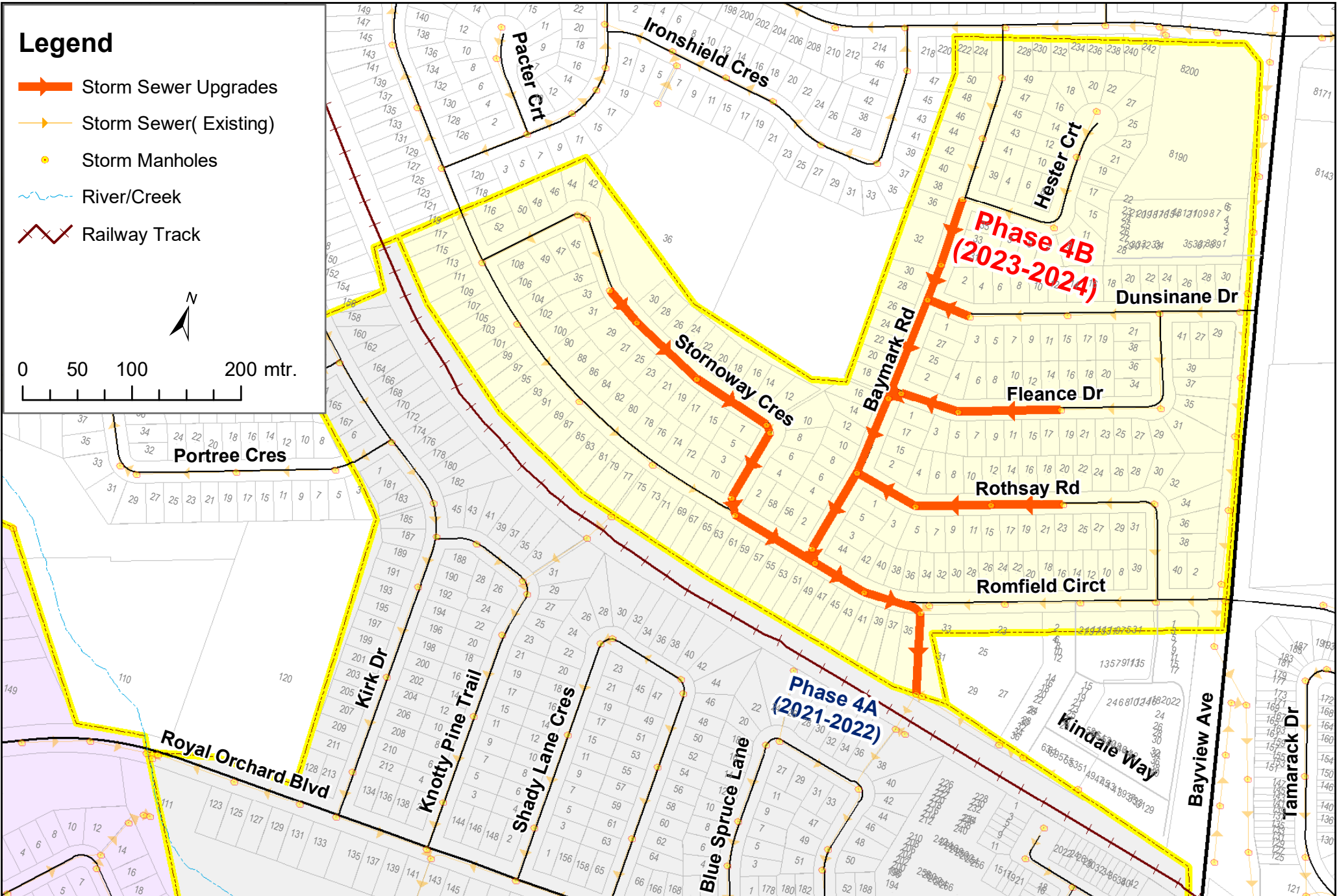
Amount Incl HST

Year in the study

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



West Thornhill Flood Control Implementation – Phase 4B Construction



Program Name: West Thornhill Flood Control Implementation					
Department: Environmental Services					
Component	Project #	Past	2023	Future	Total
Phase 1 (East of Bayview, North of Steeles, SW of CN tracks)	#8530, #9330, #14271, #15014	\$19,310,616			\$19,310,616
Phase 2 (West of Bayview, East of Yonge, N of Steeles, S of CN Tracks)	#16210, #17201, #18279, #19232	\$26,051,767			\$26,051,767
Phase 3 (West of Bayview, East of Yonge, S of John, N of CN tracks)	#16211, #20252, #21164, #22190 (This Request)	\$26,348,353			\$26,348,353
staff recovery					
Contingency for Ph 3					
Phase 4 (Royal Orchard/ Romfield - West of Bayview, East of Yonge)	#18280, #21165, #23xxx	\$12,412,539	\$14,522,500	\$12,354,226	\$39,289,265
Total Cost		\$84,123,275	\$14,522,500	\$12,354,226	\$111,000,000
Description of Program					
To upgrade the storm sewer system in West Thornhill to 100 year level protection					
What was completed in the past					
11 phases have been completed or in progress (out of 14 phases) since 2013 - 2022: \$84.1M					
Current ask					
Phase 4B Construction (#23xxx): \$14,522,500					
Future Phases					
Phases 4C, 4D Construction 2024 - 2026 - \$12.4M					
Related 2022 Project(s)					
CI watermain Replacement - West Thornhill Phase 3C Construction (#22204): \$3,102,500					
Map					
Attached					
PROGRAM STATUS					
Phases	Project Status				
1A (Doncrest Dr and Daffodil Ave)	Total completion in Aug 2017				
1B (Laureleaf Rd, Poinsetta Dr, Multiflora Pl)	Total completion in Aug 2018				
1C (Canadiana Dr)	Total completion in Dec 2018				
2A (Grandview Ave, Brightbay Cr, Courtham Ave, Rayneswood Cr, Pineval Dr, Elspeth Pl)	Total completion in Dec 2018				
2B (Grandview Park, Henderson Ave and Proctor Ave)	Total completion in Dec 2019				
2C (Grandview Ave/ Woodward Ave/ Highland Park Blvd - between Jewll St and Yonge St, Meadow Ave, Willowdale Blvd, Dudley Ave, Jewell St)	Total completion in Nov 2021				
2D (Grandview Ave/ Woodward Ave/Highland Park Blvd - between Henderson Ave and Jewell St.; Dalmeny Rd, Delcair Cr, Henderson Ave between Grandview Ave and Dalmeny Rd)	Total completion in Nov 2021				
3A (Morgan Ave - between Henderson ad Yonge; Clark Ave - between Hendwerson and Johnson)	Under warranty until Aug 2023				
3B (Johnson St, Vanwood Rd, St. Andreas Crt, Ida St, Dove Ln, Wlarton Crt)	Under warranty until Nov 2023				
4A (Royal Orchard - between Doral Gate to Pomona Creek, Kirk Dr, Knotty Pine Trail, Blus Spruce Ln, Doral Gate, Augusta Crt)	Project commenced in May 2021; Anticipated Substantial completion in Nov 2022				
3C (Clark Ave and Glen Cameron Rd, Lillian Ave, Mira Road, Pheasant Valley Crt)	Project commenced in May 2022;				
4B (This Request) (Romfield Cir Area)	Design 90% completed; Construction in 2023 - 2024				
4C & 4D (Royal Orchard - between Yonge St. and Bay Thorn Dr, Wild Cherry Ln, Apple Orchard Path, Silver Aspen Dr, Normark Dr, Donalbain Cr)	Design 90% completed; Construction in 2024 - 2026				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$28,100

Project Name: SWM Ponds - Condition Inspection

Studies/Pilot Programs

Commission: Community Services

Useful Life: 0 Pre Approval:

Department: ES - Stormwater

Category: Major

Project Mgr: Rob Muir

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Condition assessment of inlet/outlet control structures and measurement of sediment level on selected stormwater management (SWM) ponds in order to update the SWM Pond database, and to develop an effective pond SWM maintenance program.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	27,600	0
Contingency %: 0	0	0
Sub Total:	<u>27,600</u>	<u>0</u>
HST Impact:	534	0
Total Project Cost:	<u>28,100</u>	<u>0</u>

NOTES

This program runs every other year. Prior to request for funding for sediment cleaning, SWM ponds will be inspected and surveyed to determine maintenance requirements and priority rankings.

Approximately 15 ponds will be surveyed out of total 70 wet ponds. Operations is responsible for minor above ground maintenance on SWM ponds while Environmental Services is responsible for all other aspects including inspection, sediment cleaning, rehabilitation and flood control strategies. There is no backlog.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Operating Funded Life Cycle	28,100	0	0	0	0	0	0
TOTAL FUNDING	<u>28,100</u>					<u>0</u>	<u>0</u>

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="28,100"/>
				Amount Incl HST <input type="text" value="28,100"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$77,300

Project Name: Water Quality Improvements

Studies/Pilot Programs

Commission: Community Services

Useful Life: 0 Pre Approval:

Department: ES - Stormwater

Category: Major

Project Mgr: Zahra Parhizgari

Cost Validation: Internal peer review

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to carry out the geese control program at Swan Lake (Ward 5) and Toogood Pond (Ward 3). This program is intended to manage recurring water quality complaints and to reduce nutrient loading into Swan Lake and Toogood Pond.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	76,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	76,000	0
HST Impact:	1,338	0
Total Project Cost:	77,300	0

NOTES

This is an annual program to carry out geese control at Swan Lake and Toogood Pond. Program has been enhanced on geese management, fish removal as per Markham Sub Committee report dated Nov 16, 2021 which was approved by the Council. Requirement Validation: To protect the water quality.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
Operating Funded Life Cycle	77,300	0	0	0	0	0	0	
TOTAL FUNDING	77,300					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="77,300"/>
				Amount Incl HST <input type="text" value="77,300"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$30,900

Project Name: Water Quality Monitoring at Swan Lake

Studies/Pilot Programs

Commission: Community Services

Useful Life: 0 Pre Approval:

Department: ES - Stormwater

Category: Major

Project Mgr: Zahra Parhizgari

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This request is to continue with the water quality sampling and analysis at Swan Lake.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	30,400	0
Contingency %: 0	0	0
Sub Total:	<u>30,400</u>	<u>0</u>
HST Impact:	<u>535</u>	<u>0</u>
Total Project Cost:	<u>30,900</u>	<u>0</u>

NOTES

Requirement: In June 2020, Council approved continuation of monitoring at Swan Lake.
Unit cost is consistent with recent budget plus inflation. Amount requested is consistent with 2022 Life Cycle Reserve Study Update.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
Operating Funded Life Cycle	30,900	0	0	0	0	0	0	
TOTAL FUNDING	<u>30,900</u>					<u>0</u>	<u>0</u>	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="30,900"/>
				Amount Incl HST <input type="text" value="30,900"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$203,500

Project Name: West Thornhill Flood Control - Ph 4C & 4D Addl. Design

Repair/Replace

Commission: Community Services

Useful Life: 100 Pre Approval:

Department: ES - Stormwater

Category: Major

Project Mgr: Timothy Ng

Cost Validation: Internal peer review

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This budget request is for additional detailed design work required for Phase 4C & 4D. Map is attached.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	200,000	0
Contingency %: 0	0	0
Sub Total:	<u>200,000</u>	<u>0</u>
HST Impact:	<u>3,520</u>	<u>0</u>
Total Project Cost:	<u>203,500</u>	<u>0</u>

NOTES

Additional design is required for Phase 4C & 4D due to following:

- To accommodate new developments around Yonge Street and Royal Orchard subway station areas, revisions to original sanitary sewer alignment, and increase in capacity is required
- Excess soil management O. Reg. 406/19 has been implemented in 2022 that dictates additional testing of soils and tracking
- Storm sewer outfall redesign and diversion are required to accommodate adjacent property owners (Ladies Golf Club Toronto) and revise the original EA alignment

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Reserve Fund	203,500	0	0	0	0	0	0
TOTAL FUNDING	<u>203,500</u>					<u>0</u>	<u>0</u>

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

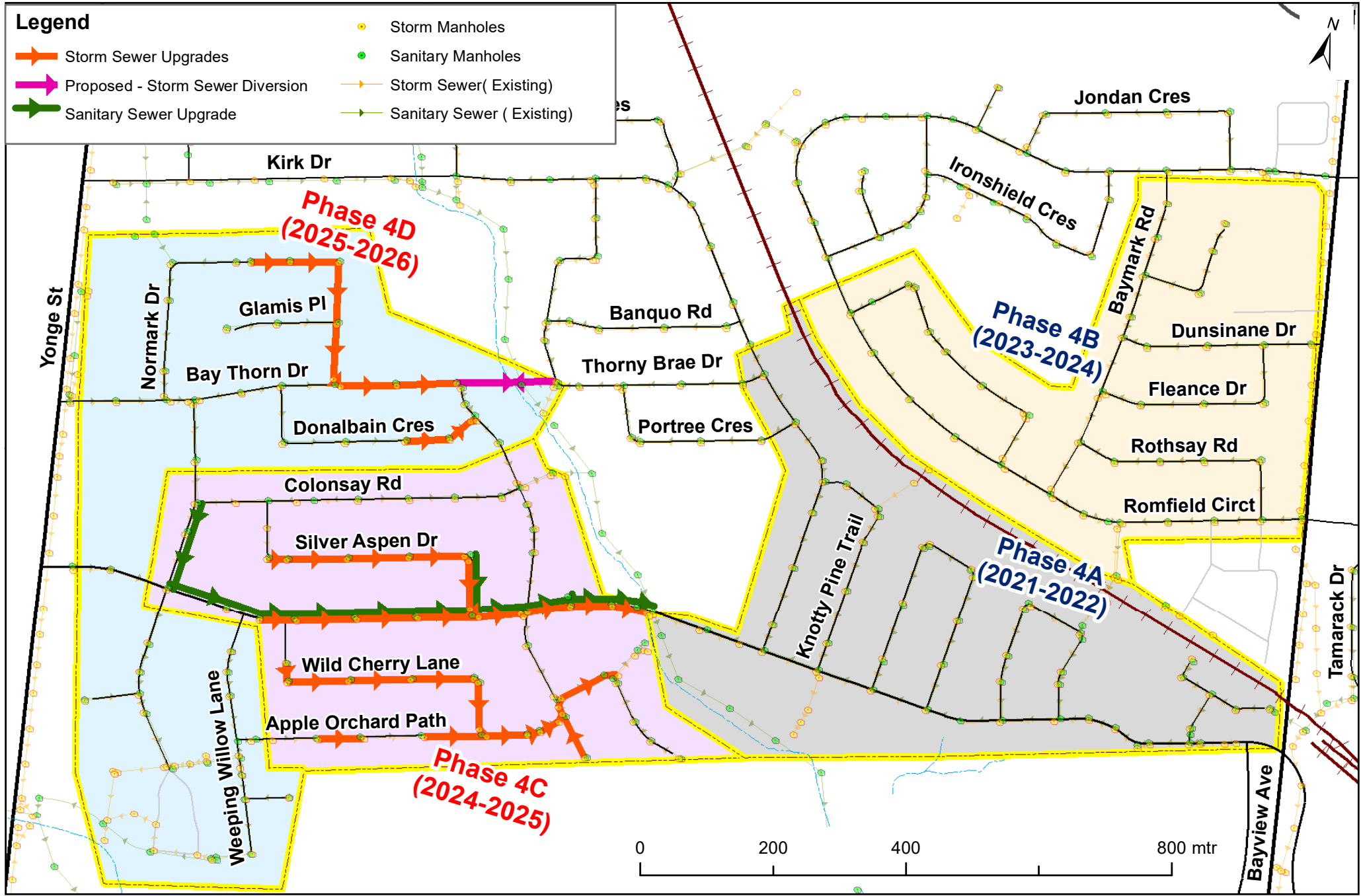
DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



West Thornhill Flood Control – Phases 4C & 4D Additional Design





2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$110,700

Project Name: Asset Management Analyst - Full Time Staff

Studies/Pilot Programs

Commission: Community Services

Useful Life: 0 Pre Approval:

Department: ES - Waterworks

Category: Annual

Project Mgr: Shipra Singh

Cost Validation: Other(specify in Notes)

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This funds one permanent full time staff position.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	0	0
Internal Charges:	110,700	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	110,700	0
HST Impact:	0	0
Total Project Cost:	110,700	0

NOTES

This position will assist the IMS/ Capital Planning Manager to effectively manage data and capital planning for all ES assets with a value of \$7.6B (78% of City assets value) and enhance the service level.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Waterworks	110,700	0	0	0	0	0	0
TOTAL FUNDING	110,700					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="110,700"/>
				Amount Incl HST <input type="text" value="110,700"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$995,100

Project Name: Cathodic Protection of Ductile Iron Watermains

Repair/Replace

Commission: Community Services

Useful Life: 20 Pre Approval:

Department: ES - Waterworks

Category: Minor

Project Mgr: Richard Kit

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Program to install corrosion protection material (anodes) to ductile iron (DI) watermains to reduce/ prevent corrosion. Renewal of corrosion protection is necessary to replace the depleted anodes (18-20 years old) and test stations. Map attached.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	977,900	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	977,900	0
HST Impact:	17,211	0
Total Project Cost:	995,100	0

NOTES

This is an annual program. Program commenced in 1993 with an avg. of 120 watermain breaks/year which has reduced to an avg. of 19 breaks/ year in last five years. Second cycle of ductile and cast iron watermains corrosion protection commenced in 2014. This request is to install anodes for approx. 20 km length of DI watermain (Refer to attached map). Unit cost is consistent with recent award plus inflation.

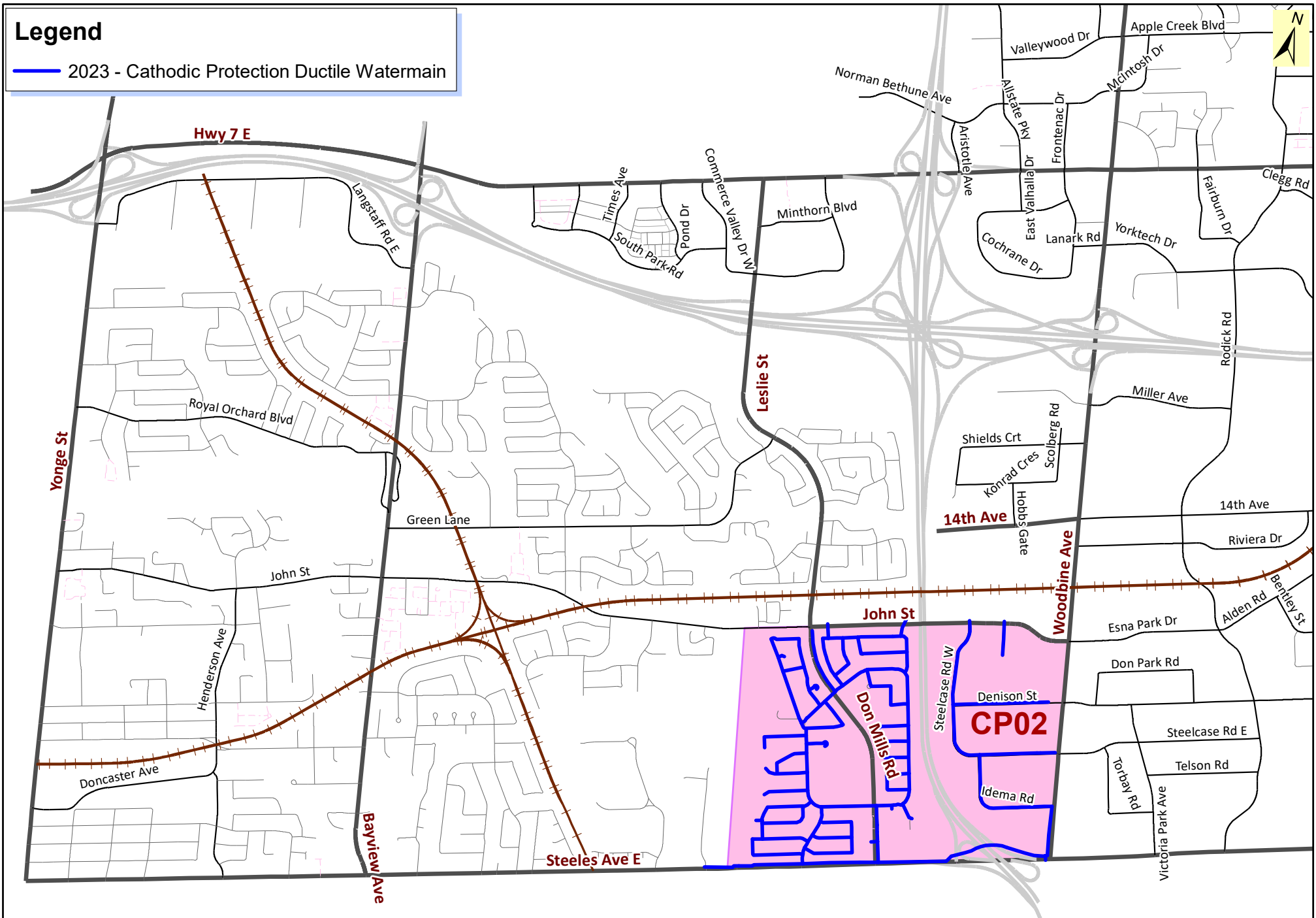
<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Waterworks	995,100	0	0	0	0	0	0
TOTAL FUNDING	995,100					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="995,100"/>
				Amount Incl HST <input type="text" value="995,100"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				

MARKHAM Cathodic Protection of Ductile Iron Watermain



Program Name: Cathodic Protection of Iron Watermains						
Department: Environmental Services						
Year	Project #	Past	2023	Future	Total	Remarks
2019	#19241	\$427,800			\$427,800	10.4 km Cast Iron
2020	#20255	\$378,900			\$378,900	11 km Cast Iron
2021	#21167	\$493,100			\$493,100	15 km Ductile Iron
2022	#22201	\$444,000			\$444,000	12 km Ductile Iron
2023	#23xxx		\$995,100		\$995,100	20 km Ductile Iron
2024 Onwards				varies	varies	
Total		\$1,743,800	\$995,100			
Description of Program						
Program to install corrosion protection material (anodes) to ductile iron (DI) and Cast Iron (CI) watermains to reduce/ prevent corrosion. This is an annual program.						
What was completed in the past						
See above table						
Current ask						
\$995,100						
Future Phases						
Varies						
Related 2023 Project(s)						
N/A						
Map	Attached					



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$9,811,400

Project Name: CI Watermain Replacement - Construction

Commission: Community Services

Repair/Replace

Department: ES - Waterworks

Useful Life: 0 Pre Approval:

Project Mgr: Jawaid Khan

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Replacement of approx. 3.5 km cast iron (CI) watermain in Drakefield Rd/ Banfield Ave./ Princess St/ Dublin St Area (refer to attached map).

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	9,193,800	65,194,870
Internal Charges:	149,200	0
External Consulting:	301,300	0
Contingency %: 0	0	0
Sub Total:	<u>9,644,300</u>	<u>65,194,870</u>
HST Impact:	<u>167,114</u>	<u>1,147,430</u>
Total Project Cost:	<u>9,811,400</u>	<u>66,342,300</u>

NOTES

This is an annual program (Phase 5b of 15; ending in 2032). Total CI Watermain: 54.1 km. As part of the CI watermain replacement program, 92% of aged CI watermain will be replaced with PVC and 8% will be rehabilitated with CIPP liner. This request is for construction of 3.5km cast iron watermain. Design was requested through 2022 capital budget request.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>	<u>CA</u>	<u>Construction</u>	<u>Internal staff</u>			
Waterworks	9,811,400	306,600	9,355,600	149,200	0	9,811,400	66,342,300
TOTAL FUNDING	<u>9,811,400</u>					<u>9,811,400</u>	<u>66,342,300</u>


<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

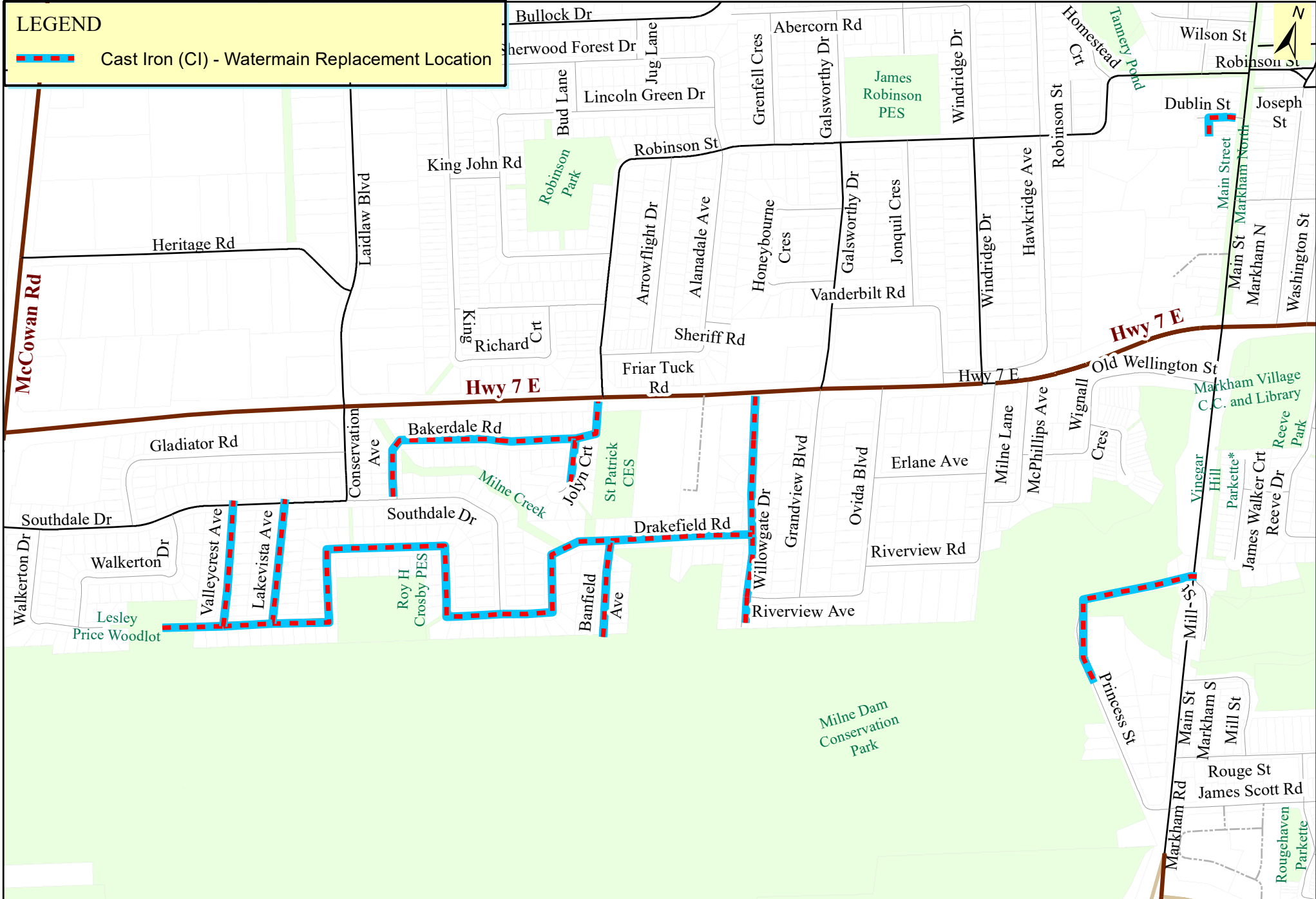
DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="9,688,200"/>
				Amount Incl HST <input type="text" value="9,811,400"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
<input type="text" value="Cost has been increased based on the current tender rates."/>				

MARKHAM Cast Iron (CI) Watermain Replacement - Construction

LEGEND

 Cast Iron (CI) - Watermain Replacement Location



Program Name: CI Watermain Rehabilitation / Replacement					
Department: Environmental Services					
Component	Project #	Past	2023	Future	Total
Phase 1 (West Thornhill Ph 2D; McCowan Rd & Heritage St.; Old English Lane & Limcombe Dr Area)	#19245, #19243	\$13,624,200			\$13,624,200
Phase 2 (West Thornhill Ph 3A; Laureleaf Area / Milmar Crt Area)	#19242, #20257, #20258	\$12,034,200			\$12,034,200
Phase 3a (John St & 14th Ave end Section (Re-Lining))	#20256, #21168	\$7,060,400			\$7,060,400
Phase 3b (West Thornhill Area - Phase 3B)	#21170	\$4,036,300			\$4,036,300
Phase 4a (Gladiotor Rd / Bakerdale / Southdale / Bakerdale Area)	#21169, #22202	\$5,746,300			\$5,746,300
Phase 4b (West Thornhill Area - Phase 3C)	#22204	\$3,412,700			\$3,412,700
Phase 5a - Design (Drakefield Rd/ Banfield Ave./ Princess St. / Dublin St. Area)	#22203	\$297,200			\$297,200
Phase 5b - Construction (Drakefield Rd/ Banfield Ave./ Princess St. / Dublin St. Area)	#23xxx (This request)		\$9,811,400		\$9,811,400
Phase 6 to Phase 15	N/A			\$66,342,300	\$66,342,300
Total		\$46,211,300	\$9,811,400	\$66,342,300	\$122,365,000
Description of Program					
To replace aged cast iron watermain (current age: 58 years; service life: 60 years) with PVC watermain (service life: 90 years)					
What was completed in the past					
4 phases (Phase 1, 2, 3 & 4) have been completed (out of 15 phases) since 2019 - \$45.9M					
Phase 5a (design) completed - \$0.3M					
Total (2019-2022): \$46.2M					
Current ask					
Phase 5b - Construction (Drakefield Rd/ Banfield Ave./ Princess St. / Dublin St. Area) (#23xxx): \$9,811,400					
Future phases					
Phase 6 to Phase 15 (2024- 2032) - \$66.3M					
Related 2023 project(s)					
None					
Map					
Attached					
PROGRAM STATUS					
Phases		Project Status			
Phase 1		Completed in 2019			
Phase 2a (Design) (Laureleaf Area / Milmar Crt & Alden Rd)		Completed in 2019			
Phase 2a (Construction) (Laureleaf Area / Milmar Crt & Alden Rd)		Completed in 2020			
Phase 2b (West Thornhill Area - Phase 3A: Morgan Ave - between Henderson and Yonge; Clark Ave - between Hendwerson and Johnson)		Completed in 2020			
Phase 3a (Design) (John St & 14th Ave end Section (Re-Lining))		Completed in 2020			
Phase 3a (Construction) (John St & 14th Ave end Section (Re-Lining))		Completed in 2021			
Phase 3b (Construction) (West Thornhill Area - Phase 3B: Johnson St, Vanwood Rd, St. Andreas Crt, Ida St, Dove Ln, Wiarion Crt)		Completed in 2021			
Phase 4a (Design) (Gladiotor Rd / Bakerdale / Southdale / Bakerdale Area)		Completed in 2021			
Phase 4a (Construction) (Gladiotor Rd / Bakerdale / Southdale / Bakerdale Area)		2022			
Phase 4b (Construction) (West Thornhill Area - Phase 3C (Glen Cameron Rd, Lilian Ave, Mira Road, Pheasant Valley Crt)		2022			
Phase 5a - Design (Drakefield Rd/ Banfield Ave./ Princess St. / Dublin St. Area)		2022			
Phase 5b - Construction (This Request) (Drakefield Rd. / Banfield Ave./ Princess St. / Dublin St. Area)		2023			
Phase 6 to Phase 15 (various streets)		2024 - 2032			



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$312,000

Project Name: SCADA Instrumentation and Replacement

Commission: Community Services

Repair/Replace

Department: ES - Waterworks

Useful Life: 0 Pre Approval:

Project Mgr: Edgar Tovilla

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Added/replacement of instrumentation equipment for all 5 sanitary pumping stations, and increased the cost of SCADA programming and AM Integration study.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	306,604	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>306,604</u>	<u>0</u>
HST Impact:	<u>5,396</u>	<u>0</u>
Total Project Cost:	<u>312,000</u>	<u>0</u>

NOTES

Plan to apply priorities 1 to 3 from the SUMMA Engineering report (June 2022). These priorities include: centralized SCADA system upgrade to latest version of software, new reporting software configuration (no license required), investigation of backup alarming and remote terminal units communication reliability, remote SCADA system upgrade to latest software, remote SCADA system upgrade hardware for the 5 stations, field devices comms. hardware (generator, monitor, relays, VFD), and upgrade of HMI screens, historian & Win 911 modifications.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Operating Funded Life Cycle	312,000	0	0	0	0	0	0
TOTAL FUNDING	<u>312,000</u>					<u>0</u>	<u>0</u>

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="317,500"/>
				Amount Incl HST <input type="text" value="312,000"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$1,067,600

Project Name: Water Meters - Replacement Program

Repair/Replace

Commission: Community Services

Useful Life: 20 Pre Approval:

Department: ES - Waterworks

Category: Minor

Project Mgr: Vikas Thakur

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Replacement of Residential, Multi Residential and Industrial/ Commercial/ Institutional (ICI) water meters that have reached the end of their service life.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	1,049,100	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>1,049,100</u>	<u>0</u>
HST Impact:	<u>18,464</u>	<u>0</u>
Total Project Cost:	<u>1,067,600</u>	<u>0</u>

NOTES

This is an annual program. Total inventory: 83,614. This request is to replace approx. 3,927 water meters (3,800 residential, 22 multi residential and 105 ICI) and perform random testing of approx. 5% of meters for accuracy per AWWA C700 (Recommendation #1 for Improvement on Metering Practices, 2015 by Region of York). There is no substantial backlog and water meters are in a state of good repair. Unit cost is consistent with recent award plus inflation.

<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>					<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>				<u>TOTAL</u>	<u>Phases</u>	
Waterworks	1,067,600	0	0	0	0	0	
TOTAL FUNDING	<u>1,067,600</u>				<u>0</u>	<u>0</u>	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="1,067,600"/>
				Amount Incl HST <input type="text" value="1,067,600"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				

Program Name: Water Meters - Replacement Program					
Department: Environmental Services					
Year	Project #	Past	2023	Future	Total
2019	#19253	\$802,500			\$802,500
2020	#20266	\$996,700			\$996,700
2021	#21175	\$1,013,200			\$1,013,200
2022	#22209	\$936,400			\$936,400
2023	#23xxx		\$1,067,600		\$1,067,500
2024 Onwards				varies	varies
Total		\$3,748,800	\$1,067,600		
Type of Water Meter	Total Inventory (as of Jan 2022)	2023 Program			
Residential	80,897	3,800	4.7%		
Multi Residential	588	22	3.7%		
Industrial/ Commercial/ Institutional (ICI)	2,129	105	4.9%		
Total	83,614	3,927	4.7%		
Description of Program					
Replacement of Residential, Multi-Residential and Industrial/Commercial/Institutional (ICI) water meters that have reached the end of their service life (20 years)					
What was completed in the past					
See above table					
Current ask					
Water Meters - Replacement Program (#23xxx): \$1,067,600					
Future Phases					
Varies					
Related 2023 Project(s)					
N/A					
Map	N/A				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$1,526,400

Project Name: In Camera Project

New Asset/Expansion

Commission: Corporate-Wide

Useful Life: _____ Pre Approval:

Department: Corporate-Wide

Category: Major

Project Mgr: _____

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: _____

DETAILED DESCRIPTION (SCOPE OF PROJECT):

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BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

PROJECT COSTS (\$)	2022	Future Phases
Cost/Quote:	1,526,400	0
Internal Charges:	0	0
External Consulting:	0	0
Sub Total:	<u>1,526,400</u>	<u>0</u>
HST Impact:	0	0
Total Project Cost:	<u>1,526,400</u>	<u>0</u>

NOTES

Please refer to confidential Council report for additional information.

Culture



2023 PROJECT FUNDING REQUEST FORM

Number: **23052**

Project Cost: **\$248,000**

Project Name: **Culture Public Art Master Plan Implementation Phase 4 of 5**

Commission: Development Services

New Asset/Expansion

Department: Culture

Useful Life: 0 Pre Approval:

Project Mgr: Niamh O'Laoghaire

Category: _____

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Internal peer review

Requirement Validation: _____

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

With Council's approval of the Public Art Master Plan and Implementation Plan, funding is now required to implement the plan. This will be a recurring expense for 5-years to meet the objectives of the Master Plan, funded by reserves, and the goals of BMFT. In 2023 it will fund annually recurring expenses and 2 new projects: a Rouge trails project and a community based park project in an underserved area.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	243,700	248,000
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	243,700	248,000
HST Impact:	4,289	4,365
Total Project Cost:	248,000	252,400

NOTES

2023 projects: Annually recurring expenses for maintenance, repair and acquisition for indoor collection \$48,000; Implementation of phases 2 and 3 of Façade Project with YorkU at the Pan Am Centre: \$40,000; Roll out of two-stage competition for Main Street Unionville Integrated Public Art \$50,000; Trails activation exhibition \$25,000; Across Ward Walking Routes Project \$50,000; Initiate Henderson Bridge new commission \$30,000

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget					TOTAL	
Carry Forward	248,000	0	0	0	0	0	252,400
TOTAL FUNDING	248,000					0	252,400

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

City of Markham Council-approved Public Art Master Plan and Public Art Implementation Plan, which assumes \$250,000 per year for 5 years.

Project: Markham Public Art Implementation Plan
Status of open projects

Phase 1 of the project has been completed

Phase 2 - Project # 21001

Budget Remaining - \$10,442

The remaining amount is for the maintenance and documentation of the Public Art Circulating Collection that is mostly on display at the Civic Centre. It will be completed by mid December 2022.

Phase 3 - Project # 22001

Budget Remaining - \$177,052

The remaining balance is to cover the following projects:

- i) Façade* , photo mural project at the PanAm Centre, co-presentation with York University (\$119,075, project will be completed in 2024, but all the required POs will be created by the end of 2022)
- ii) Our Park* , a community art project grant program, co-presentation with York Region Arts Council (\$10,000 plus PP22324, project will be completed in June 2023)
- iii) Main Street Unionville Integrated Public Art engagement process* (\$7000 plus PP22297, project will be completed in December 2022)
- iv) Rouge trail public art program* (\$38,000, project will be completed in mid/late 2023, but all the required POs will be created by the end of 2022)
- v) Public artwork Living Light* installation (\$3,000, project will be completed by December 2022, weather pending)

Museum



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$258,400

Project Name: Museum - Various Buildings

Commission: Development Services

Repair/Replace

Department: Museum

Useful Life: 0 Pre Approval:

Project Mgr: Vicky Chan / Cathy Molloy

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Internal peer review

Requirement Validation: Documentation of life cycle years

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Building maintenance of selected building to maintain good repair of all Museum structures.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	253,930	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	253,930	0
HST Impact:	4,469	0
Total Project Cost:	258,400	0

NOTES

Maxwell Cabin, security alarm panel \$2,040; Strickler House, security alarm panel \$3,070; Annual pest management program \$20,440; Burkholder, exterior maintenance and repairs \$40,880; 6 ground-source heat pumps replacement including design at the Collection Building \$187,900.

SOURCE(S) OF FUNDING (\$)	Components					HST TOTAL	Future Phases
	Budget	Security/Repairs	Pest Control	Heat Pump			
Operating Funded Life Cycle	0	0	0	0	0	0	0
	258,400	45,990	20,440	187,500	4,470	258,400	0
TOTAL FUNDING	258,400					258,400	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="258,400"/>
				Amount Incl HST <input type="text" value="258,400"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: **\$35,000**

Project Name: **Museum Maintenance**

Commission: Development Services

Repair/Replace

Department: Museum

Useful Life: 0 Pre Approval:

Project Mgr: Cathy Molloy

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Internal peer review

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

General Maintenance upkeep and repair of various Museum assets.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	34,400	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	34,400	0
HST Impact:	605	0
Total Project Cost:	35,000	0

NOTES

Annual radio replacement, 2,400. Baptist Church, front and back door replacement, 10,000. Mt Joy Lighting, 10,000. Pottery door, 7,000. Transportation painting, \$5,000.

SOURCE(S) OF FUNDING (\$)	Components					HST	TOTAL	Future Phases
	Budget	Radio and Lighting	Doors	Painting				
Operating Funded Life Cycle	35,000	12,400	17,000	5,000	600	35,000	0	
TOTAL FUNDING	35,000					35,000	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="57,100"/>
				Amount Incl HST <input type="text" value="35,000"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				

Theatre



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$85,600

Project Name: Theatre-Water Pump Room Replacement

Repair/Replace

Commission: Development Services

Useful Life: 20 Pre Approval:

Department: Theatre

Category: _____

Project Mgr: Andrew Rosenfarb

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project includes design/consultation and replacement of 2 hot water pumps, piping, insulation, electrical and adds the buildings radiator heating onto the building automation system for control and efficiency.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	67,000	0
Internal Charges:	5,000	0
External Consulting:	5,000	0
Contingency %: 10	7,200	0
Sub Total:	84,200	0
HST Impact:	1,394	0
Total Project Cost:	85,600	0

NOTES

Majority of water pump room's equipment is original to building (1985). Pumps require annual maintenance of approximately \$5,000 due to age of equipment. Radiator heating which is common in the building is not adequately controlled by the building automation system which this project addresses.

SOURCE(S) OF FUNDING (\$)	Components					HST	TOTAL	Future Phases
	Budget	Consultant/Design	Internal Chargeback	Construction w/ contingency				
Operating Funded Life Cycle	85,600	5,000	5,000	74,200	1,400	85,600	0	
TOTAL FUNDING	85,600					85,600	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="1,333,700"/>
				Amount Incl HST: <input type="text" value="85,600"/>
				Year in the study: <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$67,200

Project Name: Theatre-Lighting & Video Equipment

Commission: Development Services

Repair/Replace

Department: Theatre

Useful Life: 8 Pre Approval:

Project Mgr: Andrew Rosenfarb

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Project includes replacement of lobby video wall used for show advertisements & events and replacement of 6 cyclorama LED lights which light the white PVC backdrop background onstage.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	60,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 10	6,000	0
Sub Total:	66,000	0
HST Impact:	1,162	0
Total Project Cost:	67,200	0

NOTES

Amount requested is consistent with 2023 life cycle. Lobby video wall donated in 2017 (\$26,000) requires replacement to a higher quality video wall. Current video wall is damaged and produces poor quality images. Television sets are damaged and have been discontinued from manufacturer. System issues also include poor programming software and vendor support. Cyc lights (2013) (\$34,000) require replacement. Multiple fixtures are broken and unrepairable. Various other units have broken irreplaceable LED nodes and are not functioning as required.

SOURCE(S) OF FUNDING (\$)	Components					Future Phases	
	Budget	Video Wall	Cyc lights	Cont	TOTAL		
Operating Funded Life Cycle	67,200	26,000	34,000	6,000	1,200	67,200	0
TOTAL FUNDING	67,200					67,200	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="1,333,700"/>
				Amount Incl HST <input type="text" value="67,200"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$89,900

Project Name: Theatre-Stage & Building Maintenance

Commission: Development Services

Repair/Replace

Department: Theatre

Useful Life: 20 Pre Approval:

Project Mgr: Andrew Rosenfarb

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project consists of stage rigging safety inspections, electrical panel replacements, touring show additional 100 amp electrical panel, upper courtyard drain design & installation, replacement of dance floor, installation of guardrails in the lower courtyard and replacement of 2 glass/aluminum doors.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	80,300	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 10	8,030	0
Sub Total:	88,330	0
HST Impact:	1,555	0
Total Project Cost:	89,900	0

NOTES

Amount requested is consistent with 2023 life cycle. Useful life varies depending on item 1-20 years. Stage rigging safety inspections (2021) (\$4,000), Electrical panel replacement (1985) (\$16,000), Upper Courtyard Drain (2018) (\$24,100) Dance Floor (2007) (\$8,200), Guardrails (Year-N/A) (\$12,000) 2 aluminum/glass door replacements (1985) (\$16,000)

SOURCE(S) OF FUNDING (\$)

Funding Type	Budget	Components				TOTAL	Future Phases
		Electrical & Rigging	Drainage and Guardrails	Dance Floor & Doors	Contingency & HST		
Operating Funded Life Cycle	89,900	20,000	36,100	24,200	9,600	89,900	0
TOTAL FUNDING	89,900					89,900	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="1,333,700"/>
				Amount Incl HST <input type="text" value="89,900"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				

Arts Centres



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$56,700

Project Name: Gallery Varley and McKay Maintenance and Repair

Repair/Replace

Commission: Development Services

Useful Life: 10 Pre Approval:

Department: Arts Centres

Category: Minor

Project Mgr: _____

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: _____

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Maintenance and repair of the McKay Art Centre and Varley Art Gallery to create, clean, secure, multi-functional spaces and equipment attractive to the community, to renters and program registrants. Purchase of new outdoor furniture for Varley courtyard to create inviting environment for the community.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	53,038	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 5	2,652	0
Sub Total:	55,690	0
HST Impact:	980	0
Total Project Cost:	56,700	0

NOTES

McKay Art Centre: Interior painting of basement and main floor \$4,000; replace existing hanging system \$7180; Replace 7 existing CCTV cameras \$4,800; Varley Art Gallery: Replace programs and rental furniture and equipment \$3,700; Purchase outdoor furniture for courtyard, \$10,090. Refurbish lobby and adjacent floors, \$25,920. Combined total: \$55,690.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	56,700	0	0	0	0	0	0	
TOTAL FUNDING	56,700					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle	
				Amount in Study:	Year in the study
				<input type="text" value="115,700"/>	<input type="text" value="2023"/>
				<input type="text" value="56,700"/>	

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Building Services



2023 PROJECT FUNDING REQUEST FORM

Number: **23058**

Project Cost: **\$101,800**

Project Name: **Development Service ePlan Portal Replacement**

Commission: Development Services

Repair/Replace

Department: Building Services

Useful Life: 0 Pre Approval:

Project Mgr: Stephanie Di Perna

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The current ePlan portal is about 7 years old, has never been updated and has major functionally issues. The functionally issues affect everyday customer service resulting in increase non value added resources and high customer dissatisfaction with the product. This affects all services within the Development Services commission. It also affects the ability to meet legislated timeframes.

BUILDING MARKHAM'S FUTURE TOGETHER: Stewardship of Money & Resources

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	100,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	100,000	0
HST Impact:	1,760	0
Total Project Cost:	101,800	0

NOTES

There will be yearly cost for the new portal software in an annual net amount of \$7,815 for subscription and maintenance.

<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
Building Fees	101,800	0	0	0	0	0	0	
TOTAL FUNDING	101,800					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$7,815	\$0	\$7,815

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: **23059**

Project Cost: **\$213,700**

Project Name: **ProjectDOX conversion to cloud and upgrade to 9.2**

Commission: Development Services

New Asset/Expansion

Department: Building Services

Useful Life: 0 Pre Approval:

Project Mgr: Stephanie Di Perna

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The current ProjectDox 9.1 environment that is used within the ePlan service is on premise. The on premise version is the last supported by the vendor. Going forward the environment will need to be moved to a cloud based solution. With the cloud based solution, future upgrades are included and unlimited workflows are provided. This product is used by Building, Planning and Engineering for the processing of all development approval applications and building permits.

BUILDING MARKHAM'S FUTURE TOGETHER: Stewardship of Money & Resources

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	210,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	210,000	0
HST Impact:	3,696	0
Total Project Cost:	213,700	0

NOTES

Cloud based solution will incur annual incremental cost in the amount of \$76,078. These cost can be offset by the unlimited workflow and upgrade features of the cloud based system along with the current software trade in value.

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget					TOTAL	
Building Fees	213,700	0	0	0	0	0	0
TOTAL FUNDING	213,700					0	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$76,078	\$0	\$76,078

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: **23060**

Project Cost: **\$122,100**

Project Name: **Remote in field inspection app**

Commission: Development Services

New Asset/Expansion

Department: Building Services

Useful Life: 0 Pre Approval:

Project Mgr: Stephanie Di Perna

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

In field inspection tracking through an app that reads directly into the AMANDA back off is required to facilitate in field inspections. This app can be used by other departments with in field inspections like urban design, engineering, by-laws and fire. This will streamline task performed in field and provide real-time updates of inspection results. The app will assist in the completion of legislated inspection types and reduce the time spent by the inspector to enter in results manually.

BUILDING MARKHAM'S FUTURE TOGETHER: Stewardship of Money & Resources

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	120,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	120,000	0
HST Impact:	2,112	0
Total Project Cost:	122,100	0

NOTES

There will be a yearly cost related to the app in the amount of \$25,000.

SOURCE(S) OF FUNDING (\$)		Components					Future Phases
Funding Type	Budget				TOTAL	Phases	
Building Fees	122,100	0	0	0	0	0	
TOTAL FUNDING	122,100				0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$25,000	\$0	\$25,000

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				

Planning



2023 PROJECT FUNDING REQUEST FORM

Number: **23061**

Project Cost: **\$1,017,500**

Project Name: **2023 - Official Plan Review**

Commission: Development Services

Studies/Pilot Programs

Department: Planning

Useful Life: 0 Pre Approval:

Project Mgr: Duran Wedderburn

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Other(specify in Notes)

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The Planning Act requires municipalities review and update their Official Plan every 5 years to conform with new and updated provincial and regional policies. Further the 2023-2025 Departmental Business Plan for Policy and Research identifies the initiation of the Markham Official Plan Review as a strategic objective for 2023. This budget request is to launch the Markham Official Plan Review in 2023 to conform with statutory requirements.

The funds will be utilized to retain a consulting team and a Senior Planner II on a two year contract to support the co-ordination of the project, public and stakeholder engagement, and technical planning studies. The Official Plan Review will cover thematic areas including but not limited to Managing Growth, Housing, Urban Design/Sustainable Development, and Transportation and Mobility. Future work will be informed by discussion papers, public engagement, and direction from Council.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	0	0
Internal Charges:	244,111	0
External Consulting:	690,900	0
Contingency %: 10	69,090	0
Sub Total:	1,004,101	0
HST Impact:	13,376	0
Total Project Cost:	1,017,500	0

NOTES

Statutory review and update of the 2014 Markham Official Plan to meet conformity requirements with Provincial and Regional planning policies. Costs are derived from examining the 2014 Official Plan Review-

Budget includes Internal Chargebacks for 1 additional staff on a two year contract:

Senior Planner II (Year 1 Salary/benefits cost) - \$120,847

Senior Planner II (Year 2 Salary/benefits cost) -\$123,264

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
DCA	1,017,500	0	0	0	0	0	0	
TOTAL FUNDING	1,017,500					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

Amount in Study

Life Cycle

GENERAL GOVERNMENT - Studies - Various Studies 2023 1,017,500 2,165,000

Amount in Study:

Amount Incl HST

Year in the study

TOTAL FUNDING

1,017,500 2,165,000

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Project	2023 - Official Plan Review
2023 Capital Request	2023 - Official Plan Review
Funding Source	Development Charges Act
Description of Program	Statutory review and update of the 2014 Markham Official Plan to meet conformity requirements with Provincial and Regional planning policies. The Official Plan Review will cover thematic areas including but not limited to Managing Growth, Housing, Urban Design/Sustainable Development, and Transportation and Mobility. Future work will be informed by discussion papers, public engagement, and direction from Council.
Project Rationale	The 2023-2025 Departmental Business Plan for Policy and Research identifies the initiation of The Markham Official Plan Review as a strategic objective for 2023. Updating the Official Plan will ensure the planning policies that guide growth and development in Markham is in compliance with Provincial and Regional requirements and reflects the community vision
Legislative Requirement	The Planning Act requires municipalities to review and update their Official Plans every 5 to 10 years. In addition, municipalities are required to update their Official Plan to conform with the Plans of upper -tier municipalities. York Region adopted a new Regional Official Plan in June, 2022 and Markham is required to update its Official Plan policies to conform.
History	The last update to the Markham Official Plan was completed in 2014 and was based on a planning period to 2031. Since that time, several Provincial and Regional land use plans have been updated to reflect a new planning period to 2051, current growth and development trends, and provincial/regional planning priorities.
Future Phases	N/A
Total Project Cost	1,017,500
Related Projects	The Official Plan Review will run concurrently with other major city-wide studies to support growth such as a Transportation Strategic Plan and Water and Wastewater Master Plan.
Related Maps	The OP Review if applicable to all lands within the City
Alignment to the Strategic Plan	Safe, Sustainable, and Complete Communities



2023 PROJECT FUNDING REQUEST FORM

Number: **23062**

Project Cost: **\$30,000**

Project Name: **Designated Heritage Prop. Grant Prog.-Residential -2023**

Studies/Pilot Programs

Commission: Development Services

Useful Life: Pre Approval:

Department: Planning

Category: Major

Project Mgr: Regan Hutcheson

Cost Validation: Other(specify in Notes)

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Grant assistance (50/50) to a maximum of \$5,000/property for restoration work on designated residential properties. Program is proposed to be extended for three years (2023-2025) subject to Council approval later this year

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	30,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	30,000	0
HST Impact:	0	0
Total Project Cost:	30,000	0

NOTES

Program was initiated in 2010 for four years (2010-2013) at \$30,000 per year. It was renewed for another three years (2014-2016) and for an additional three years (2017-2019 and 2020-2022) all at \$30,000 per year. Proposal is to extend the Program for 2023-2025 at \$30K per year. Project classified as major due to 2 year timeline granted to property owners.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Heritage Reserve	30,000	0	0	0	0	0	0
TOTAL FUNDING	30,000					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: 23063

Project Cost: \$399,900

Project Name: Ecological Restoration of City-owned/Managed Natural Area

Studies/Pilot Programs

Commission: Development Services

Useful Life: 0 Pre Approval:

Department: Planning

Category: Minor

Project Mgr: Patrick Wong

Cost Validation: Other(specify in Notes)

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Ecological restoration projects to be funded through developer compensation cash-in-lieu collected for natural heritage/tree removals through development approvals. Planned deliverables for 2023 include: 10,000 trees/shrubs planted (4 hectares of natural habitat restoration) and 0.3 hectares of invasive species control.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	393,000	0
Contingency %: 0	0	0
Sub Total:	<u>393,000</u>	<u>0</u>
HST Impact:	<u>6,917</u>	<u>0</u>
Total Project Cost:	<u>399,900</u>	<u>0</u>

NOTES

Works to be funded from existing funds in the Wetland/Woodlot Restoration Compensation - #031-2220091 account (\$14,185) and balance (\$385,715) from Landscape Recovery - #031-2220094 account.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
Other Internal	399,900	0	0	0	0	0	0	
TOTAL FUNDING	<u>399,900</u>					<u>0</u>	<u>0</u>	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
<u>Name</u>				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: **23064**

Project Cost: **\$223,900**

Project Name: **ePLAN Project Dox Development Application Workflows**

New Asset/Expansion

Commission: Development Services

Useful Life: _____ Pre Approval:

Department: Planning

Category: Minor

Project Mgr: John Yeh

Cost Validation: Internal peer review

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Process enhancements to the City's electronic development application system (ePLAN Project Dox) is required in 2023 to implement results from the LEAN review (undertaken through provincial funding) and to address provincial legislative changes to the planning process through Bill 109 - More Homes for Everyone Act, 2022 which requires return of development application fees if certain application types are not approved or no decision within a prescribed time period, and Bill 23 More Homes Built Faster Act, 2022. The ProjectDox software that's used to review development applications currently has 2 workflows in use and 1 unused workflow. To implement the process changes, the 2 existing workflows would be modified, the 1 existing workflow would be used, and an additional estimated 5 new workflows are needed. This project will require professional services to modify, customize, and prepare the required workflows. In addition an external consultant is likely required to support Planning and ITS with integration between Project Dox and other software including AMANDA.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	200,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 10	20,000	0
Sub Total:	220,000	0
HST Impact:	3,872	0
Total Project Cost:	223,900	0

NOTES

Estimated cost is \$100,000 for professional services and \$100,000 for an external consultant to assist with implementing integration between Project Dox and other City software including AMANDA. Annual operating cost already includes unlimited workflows under current licence agreement. Development fees to cover the cost. If the Province extends the Streamline Development Approval Fund beyond February 2023, the approximately remaining \$90,000 from Fund may partly fund this project.

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
Funding Type	Budget					TOTAL	Phases
Development Fees	223,900	0	0	0	0	0	0
TOTAL FUNDING	223,900					0	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u> Name	Year	Amount	Amount in Study
--------------------	------	--------	--------------------

<u>Life Cycle</u>
Amount in Study: <input type="text"/>
Amount Incl HST <input type="text"/>
Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: 23065

Project Cost: \$30,000

Project Name: Heritage Façade Improvements/Sign Replacement - 2023

Studies/Pilot Programs

Commission: Development Services

Useful Life: _____ Pre Approval:

Department: Planning

Category: Major

Project Mgr: Regan Hutcheson

Cost Validation: Other(specify in Notes)

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Annual grants to commercial property owners in heritage areas to make improvements to facades. Matching grant of up to \$10,000 for non-heritage and up to \$15,000 for heritage buildings. Approval will allow City to continue with the program, as approved by Council.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	30,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>30,000</u>	<u>0</u>
HST Impact:	<u>0</u>	<u>0</u>
Total Project Cost:	<u>30,000</u>	<u>0</u>

NOTES

It is recommended that for 2023, the amount be \$30,000 based on eligible grant requests from 2021 (\$42,000) and 2022 (\$43,000). Council awarded \$30,600 in 2021 and \$25,000 in 2022. Requests have increased substantially in last two years. Category is Major as projects can take up to two years to complete and provide grant.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Operating Funded Life Cycle	30,000	0	0	0	0	0	0
TOTAL FUNDING	<u>30,000</u>					<u>0</u>	<u>0</u>

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: **23066**

Project Cost: **\$106,300**

Project Name: **Housing Strategy - Implementation**

Studies/Pilot Programs

Commission: Development Services

Useful Life: 0 Pre Approval:

Department: Planning

Category: Minor

Project Mgr: Duran Wedderburn

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

In July 2021, Council adopted the Affordable Housing and Rental Strategy (AHS) - Project # 19020. The AHS identifies 35 actions of which 5 are identified as priorities to support the advancement of Affordable Housing in the City of Markham. This request will support the advancement of three priorities:

- Develop an Inclusionary Zoning By-law for Major Transit Station Areas
- Use public lands for affordable housing
- Develop incentives package for affordable/supportive housing

Funds will support tasks such as stakeholder engagement, education opportunities (i.e. Council workshops), and retain consultants to undertake research and technical studies including those required by statutory provincial plans and regulations.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	95,000	0
Contingency %: 10	9,500	0
Sub Total:	104,500	0
HST Impact:	1,839	0
Total Project Cost:	106,300	0

NOTES

This request consolidates Project Number 21012 (Housing Strategy - Inclusionary Zoning) to support the implementation of the housing strategy.

Council has requested staff advance the priority action on 'public lands for affordable housing' and report back on this item by Q2 2023.

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget	TOTAL				Future Phases	
DCA	95,670	0	0	0	0	0	0
Development Fees	10,630	0	0	0	0	0	0
TOTAL FUNDING	106,300				0	0	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

Amount in Study

Life Cycle

GENERAL GOVERNMENT - Studies - Various Studies 2023 95,670 2,165,000

Amount in Study:

Amount Incl HST

Year in the study

TOTAL FUNDING

95,670 2,165,000

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: 23067

Project Cost: \$866,400

Project Name: Planning & Design Staff Salary Recovery

Studies/Pilot Programs

Commission: Development Services

Useful Life: 0 Pre Approval:

Department: Planning

Category: _____

Project Mgr: Biju Karumanchery

Cost Validation: Internal peer review

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The purpose is to recover salaries of Planning and Urban Design Staff which relate to growth related works.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	0	0
Internal Charges:	866,400	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	866,400	0
HST Impact:	0	0
Total Project Cost:	866,400	0

NOTES

A significant amount of time is spent by planners (both development and policy staff) and urban designers on growth related hard infrastructure such as roads, storm water ponds, bridges etc. during the subdivision and secondary plan process and in one-off construction projects such as bridge construction and street re-construction. This project is to recover salaries of existing staff that assist in the delivery of growth related hard infrastructure.

<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>					<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>				<u>TOTAL</u>		
		0	0	0	0	0	
DCA	866,400	0	0	0	0	0	
TOTAL FUNDING	866,400				0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
Name				
GENERAL GOVERNMENT - Studies - Various Studies	2023	866,400	2,165,000	Amount in Study: <input type="text"/>
TOTAL FUNDING		866,400	2,165,000	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Parks Design & Construction



2023 PROJECT FUNDING REQUEST FORM

Number: **23068**

Project Cost: **\$3,564,600**

Project Name: **Ada Mackenzie Park Phase 3 Design and Construction**

Commission: Development Services

New Asset/Expansion

Department: Parks Design & Construction

Useful Life: 25 Pre Approval:

Project Mgr: Richard Fournier

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to design and construct the 1.84 ha park located on South Park Road west of the existing Ada Mackenzie Park. Anticipated park amenities include soccer fields, pickleball courts, a washroom building, a shade structures, site furnishings, pathways and associated landscape works.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	2,840,446	0
Internal Charges:	255,640	0
External Consulting:	227,235	0
Contingency %: 6	184,061	0
Sub Total:	3,507,382	0
HST Impact:	57,231	0
Total Project Cost:	3,564,600	0

NOTES

Cost per ha \$1,937,282 (Total Project Cost / 1.84 ha) or \$783,428 / acre. Annualized operating cost is \$17,914 (\$9,736 x 1.84 ha) starting in 2025. Estimated in-service date: Q3 2025. Lifecycle cost is \$2,272,357 (\$2,840,446 x 80%) spread over 25 years. Costs will be included in the lifecycle reserve study at time of completion based on updated replacement cost. This site is on the short-list for potential off-leash areas. If selected the allocated Ward 8 Off-Leash Dog Area budget will be transferred to this project.

<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
DCA	3,564,600	0	0	0	0	0	0	
TOTAL FUNDING	3,564,600					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$17,914	\$0	\$17,914

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
Name				Amount in Study: <input type="text"/>
PARKS - Leitchcroft Community Park Block 49	2024	3,564,600	2,836,118	Amount Incl HST <input type="text"/>
Washroom Facilities - Leitchcroft Community Park Block 49	2024	0	731,946	Year in the study <input type="text"/>
TOTAL FUNDING		3,564,600	3,568,064	

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Shortfall to be recovered through savings on other projects



2023 PROJECT FUNDING REQUEST FORM

Number: **23069**

Project Cost: **\$208,700**

Project Name: **Berczy Glen Northwest Parkette Design and Construction**

Commission: Development Services

New Asset/Expansion

Department: Parks Design & Construction

Useful Life: 25 Pre Approval:

Project Mgr: Richard Fournier

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This Project is to design and construct the 0.21 ha (0.52 acres) park located on the south side of Elgin Mills Road west of Beaverbrae Drive. Anticipated park amenities include a shade structures, site furnishings, pathways and associated landscape works.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	164,822	0
Internal Charges:	14,834	0
External Consulting:	13,186	0
Contingency %: 7	12,461	0
Sub Total:	205,303	0
HST Impact:	3,352	0
Total Project Cost:	208,700	0

NOTES

Cost per ha \$993,810 (Total Project Cost / 0.21 ha) or \$4,013,461 / acre. Annualized operating cost is \$2,045 (\$9,736 x 0.21 ha) starting in 2025. Estimated in-service date: Q3 2024. Lifecycle cost is \$131,858 (\$164,822 x 80%) spread over 25 years. Costs will be included in the lifecycle reserve study at time of completion based on updated replacement cost. This is a developer upfronted design and build project.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
DCA	208,700	0	0	0	0	0	0
TOTAL FUNDING	208,700					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$2,045	\$0	\$2,045

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Amount in</u>			<u>Life Cycle</u>
<u>Name</u>	<u>Year</u>	<u>Amount</u>	<u>Study</u>	
PARKS - Berczy Glen Northwest Parkette - Block 170	2022	208,700	219,980	Amount in Study: <input type="text"/>
TOTAL FUNDING		208,700	219,980	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: **23070**

Project Cost: **\$780,300**

Project Name: **Berczy Glen West Parkette Design and Construction**

Commission: Development Services

New Asset/Expansion

Department: Parks Design & Construction

Useful Life: 25 Pre Approval:

Project Mgr: Richard Fournier

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to design and construct the 0.53 ha (1.3 acre) park located off of Beaverbrae Dr. and Rinas Ave. Anticipated park amenities include a junior/senior playground, shade structure, site furnishings, pathways and associated landscape works.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	611,109	0
Internal Charges:	55,000	0
External Consulting:	48,889	0
Contingency %: 8	52,800	0
Sub Total:	767,798	0
HST Impact:	12,545	0
Total Project Cost:	780,300	0

NOTES

Cost per ha \$1,472,264 (Total Project Cost / 0.53 ha) or \$600,231 / acre. Annualized operating cost is \$5,160 (\$9,736 x 0.53 ha) starting in 2025. Estimated in-service date: Q3 2024. Lifecycle cost is \$488,887 (\$611,109 x 80%) spread over 25 years. Costs will be included in the lifecycle reserve study at time of completion based on updated replacement cost. This is a developer upfronted design and build project.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
DCA	780,300	0	0	0	0	0	0
TOTAL FUNDING	780,300					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$5,160	\$0	\$5,160

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Amount in Study</u>			<u>Life Cycle</u>
<u>Name</u>	<u>Year</u>	<u>Amount</u>	<u>Study</u>	
PARKS - Berczy Glen West Parkette - Block 171	2022	780,300	826,776	Amount in Study: <input type="text"/>
TOTAL FUNDING		780,300	826,776	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Price difference from DCA study due to firmer cost estimates at this time



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$45,800

Project Name: Community Garden Maintenance

Commission: Development Services

Repair/Replace

Department: Parks Design & Construction

Useful Life: 0 Pre Approval:

Project Mgr: Richard Fournier

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Internal peer review

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

General maintenance of city-owned community and allotment gardens to maintain a state of good repair and standing. 100+ families cultivate garden spaces with the City, leading to wear and tear of tools, site infrastructure, and overall landscaping. Annual maintenance required to uphold garden standards, customer service and community engagement. Budget request based on previous year's outsourced maintenance at Kirkham Allotment Garden.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	45,007	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	45,007	0
HST Impact:	792	0
Total Project Cost:	45,800	0

NOTES

\$45,800 – gardening tools and maintenance at existing gardens located at Kirkham Community Gardens (120 Kirkham Drive) and Cornell Community Garden (116 Almira Avenue). Can include: infrastructure repairs, tool replacements, landscaping, general upkeep, workshops, community engagement, etc.

Staff completes annual assessment of inventory and infrastructure to determine what is needed for the upcoming season. Amount is validated and consistent with the Life Cycle Reserve Study.

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	Tools & Maintenance	Education & Support				
Operating Funded Life Cycle	20,800	20,800	0	0	0	20,800	0
Tax	25,000	0	25,000	0	0	25,000	0
TOTAL FUNDING	45,800					45,800	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="20,800"/>
				Amount Incl HST <input type="text" value="20,800"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: **23072**

Project Cost: **\$61,100**

Project Name: **Frisbee Golf - Mildred Temple Park**

Commission: Development Services

Repair/Replace

Department: Parks Design & Construction

Useful Life: 15 Pre Approval:

Project Mgr: Tanya Lewinberg

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: External peer review

Requirement Validation: Visual inspection

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Expressing Markham's commitment to ongoing development and enhancement of existing parks and open spaces, the Park Renaissance Program develops projects to create improvements to our existing inventory, that is ten years or older. The program's projects strive to maintain the high standard of quality reflected in Markham's newer parks with a high level of design and visual appeal as it rejuvenates Markham's older parks.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	60,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	60,000	0
HST Impact:	1,056	0
Total Project Cost:	61,100	0

NOTES

Frisbee Golf is a fast growing sport which attracts tourism. This asset will not only attract local residents, but will also attract people from all over the GTA. As the first Frisbee Golf course in Markham, this will be a pilot to help understand the demand for Frisbee Golf in the City of Markham. It would be one of the First Frisbee Golf Courses in Ontario.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
DCA	61,100	0	0	0	0	0	0	
TOTAL FUNDING	61,100					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
Park Development - Community/City-Wide - City-wide Growth Related Capital Program & Delivery	2023	61,100	2,510,170	Amount in Study: <input type="text"/>
TOTAL FUNDING		61,100	2,510,170	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: **23073**

Project Cost: **\$56,000**

Project Name: **Hughson Park**

Commission: Development Services

Repair/Replace _____

Department: Parks Design & Construction

Useful Life: 17 Pre Approval:

Project Mgr: Tanya Lewinberg

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Expressing Markham's commitment to ongoing development and enhancement of existing parks and open spaces, the Park Renaissance Program develops projects to create improvements to our existing inventory, that is ten years or older. The program's projects strive to maintain the high standard of quality reflected in Markham's newer parks with a high level of design and visual appeal as it rejuvenates Markham's older parks.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	55,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	55,000	0
HST Impact:	968	0
Total Project Cost:	56,000	0

NOTES

The improvements for Hughson Park have been requested by the Community who is very active and eager to participate in the design development. Work to be completed includes;
1) Playground enhancement

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
DCA	56,000	0	0	0	0	0	0	
TOTAL FUNDING	56,000					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
Park Development - Community/City-Wide - City-wide Growth Related Capital Program & Delivery	2023	56,000	2,510,170	Amount in Study: <input type="text"/>
TOTAL FUNDING		56,000	2,510,170	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: **23074**

Project Cost: **\$120,900**

Project Name: **Off-Leash Dog Area Policy & Implementation Plan**

Commission: Development Services

Studies/Pilot Programs

Department: Parks Design & Construction

Useful Life: 0 Pre Approval:

Project Mgr: Richard Fournier

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: _____

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The Off-Leash Dog Area and Implementation Plan will identify the key considerations and criteria for selecting potential sites for off-leash dog areas. The Implementation Plan will apply the selection criteria to identify potential locations in each ward and present these to the public for consultation and feedback. The preferred location within each ward will be identified, and a final recommendation report will be brought forward for approval by Council.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	0
Internal Charges:	9,000	0
External Consulting:	100,000	0
Contingency %: 10	10,000	0
Sub Total:	119,000	0
HST Impact:	1,936	0
Total Project Cost:	120,900	0

NOTES

The Implementation Plan will commence upon completion of the Off-Leash Dog Area Policy, which is currently in the procurement stage. The Implementation Plan is anticipated to be completed by Q3 2023.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
DCA	120,900	0	0	0	0	0	0	
TOTAL FUNDING	120,900					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
Park Development - Community/City-Wide - City-wide Growth Related Capital Program & Delivery	2023	120,900	2,510,170	Amount in Study: <input type="text"/>
TOTAL FUNDING		120,900	2,510,170	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: 23075

Project Cost: \$183,200

Project Name: Paddock Park/Flowervale CC

Commission: Development Services

Repair/Replace

Department: Parks Design & Construction

Useful Life: 20 Pre Approval:

Project Mgr: Tanya Lewinberg

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Expressing Markham's commitment to ongoing development and enhancement of existing parks and open spaces, the Park Renaissance Program develops projects to create improvements to our existing inventory, that is ten years or older. The program's projects strive to maintain the high standard of quality reflected in Markham's newer parks with a high level of design and visual appeal as it rejuvenates Markham's older parks.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	180,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	180,000	0
HST Impact:	3,168	0
Total Project Cost:	183,200	0

NOTES

The improvements for Paddock Park have been requested by the Community who is very active and eager to participate in the design development. Work to be completed includes;
1) New 1.5m wide Concrete Pathways 530 lm
2) 5 Benches and Concrete Pads
3) 2 Waste Receptacles Including Recycling Bin and Concrete Pads
4) Tree Planting(48 trees)
5)2 Bike Racks
Other Internal: Landscape Recovery (031-2220094)

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	Concrete Pathway	Trees	Garbage/Bike Racks/Benches			
DCA	132,800	110,300	0	22,500	0	132,800	0
Other Internal	50,400	0	50,400	0	0	50,400	0
TOTAL FUNDING	183,200					183,200	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
Park Development - Community/City-Wide - City-wide Growth Related Capital Program & Delivery	2023	132,800	2,510,170	Amount in Study: <input type="text"/>
TOTAL FUNDING		<u>132,800</u>	<u>2,510,170</u>	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: **23076**

Project Cost: **\$247,900**

Project Name: **Park Redevelopment Strategy & Implementation Plan**

Studies/Pilot Programs

Commission: Development Services

Useful Life: 0 Pre Approval:

Department: Parks Design & Construction

Category: Major

Project Mgr: Richard Fournier

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

A comprehensive strategy is needed to address Markham's aging parks and amenities, which will require capital repair/replacement, as well as new amenities in the coming years. Population growth, changing demographics and recreational habits is placing pressure on existing parks and many are being used at levels that they weren't designed for or are missing amenities desired by residents. A Parks Redevelopment Strategy & Imp. Plan is needed to optimize existing parks, identify a funding model and respond to changing needs.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	0
Internal Charges:	18,450	0
External Consulting:	205,000	0
Contingency %: 10	20,500	0
Sub Total:	243,950	0
HST Impact:	3,969	0
Total Project Cost:	247,900	0

NOTES

The budget was determined based on informal discussions with other municipalities that have completed similar studies, as well as budget needs for similar projects undertaken in the past. The anticipated completion date of the strategy is Q1 2024.

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget				TOTAL		
DCA	161,136	0	0	0	0	0	0
Non-DC Growth	43,382	0	0	0	0	0	0
Other Internal	43,382	0	0	0	0	0	0
TOTAL FUNDING	247,900				0	0	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

Amount in Study

Life Cycle

Park Development - Community/City-Wide - City-wide
Growth Related Capital Program & Delivery

2023

161,136

2,510,170

Amount in Study:

Amount Incl HST

Year in the study

TOTAL FUNDING

161,136

2,510,170

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: 23077

Project Cost: \$498,100

Project Name: Parks Salary Recovery

Studies/Pilot Programs

Commission: Development Services

Useful Life: 0 Pre Approval:

Department: Parks Design & Construction

Category: _____

Project Mgr: Richard Fournier

Cost Validation: Internal peer review

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The purpose is to recover salaries of Planning and Urban Design Staff which relate to growth related work.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	0	0
Internal Charges:	498,122	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	498,122	0
HST Impact:	0	0
Total Project Cost:	498,100	0

NOTES

A significant amount of time is spent by planners and urban designers on growth related to Parks Planning, Design and Construction.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
DCA	498,100	0	0	0	0	0	0	
TOTAL FUNDING	498,100					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
Name				Amount in Study: <input type="text"/>
Park Development - Community/City-Wide - City-wide	2023	498,100	2,510,170	Amount Incl HST <input type="text"/>
Growth Related Capital Program & Delivery				Year in the study <input type="text"/>
TOTAL FUNDING		498,100	2,510,170	

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: **23078**

Project Cost: **\$118,400**

Project Name: **Planner Salary**

Commission: Development Services

New Asset/Expansion

Department: Parks Design & Construction

Useful Life: 0 Pre Approval:

Project Mgr: Tanya Lewinberg

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Expressing Markham's commitment to ongoing development and enhancement of existing parks and open spaces, the Park Renaissance Planner develops projects to create improvements to our existing park inventory, that is ten years or older. The projects are intended to add interest and new features to rejuvenate Markham's older parks. The Park Renaissance Planner designs, and plans all aspects of the projects and oversees their implementation.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	0
Internal Charges:	118,417	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	118,417	0
HST Impact:	0	0
Total Project Cost:	118,400	0

NOTES

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget					TOTAL	
DCA	118,400	0	0	0	0	0	0
TOTAL FUNDING	118,400					0	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
Park Development - Community/City-Wide - City-wide Growth Related Capital Program & Delivery	2023	118,400	2,510,170	Amount in Study: <input type="text"/>
TOTAL FUNDING		118,400	2,510,170	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$38,800

Project Name: Public Realm - Light Post Banners

New Asset/Expansion

Commission: Development Services

Useful Life: 10 Pre Approval:

Department: Parks Design & Construction

Category: Minor

Project Mgr: Tanya Lewinberg

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Manufacturing of Vinyl Light Post Banners to support current city initiatives for 2023. Markham's Public Realm is a long term program to create dynamic, beautiful public spaces that reflect our diverse social and cultural identity.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	38,100	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	38,100	0
HST Impact:	671	0
Total Project Cost:	38,800	0

NOTES

Work with City departments to develop themes to align with the City's vision. Work with Unionville High School Students to develop banner graphics. The loctions of the banners will be Town Centre Blvd, (42), Main St Markham (57), Main Street Unionville (26), Yonge St (36), Warden & Hwy 7 (34), Aaniin CC (6), Milliken Mills CC (7), Cornell CC (6), Angus Glen CC (6), and Victoria Square CC (6). Other Internal : Project 22320,22323,22324,22325,22327,22328.

<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>					<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>				<u>TOTAL</u>	<u>Phases</u>	
Other Internal	38,800	0	0	0	0	0	
TOTAL FUNDING	38,800				0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$250	\$0	\$250

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: 23080

Project Cost: \$20,400

Project Name: Public Realm - Median Streetscape Enhancement

Commission: Development Services

New Asset/Expansion

Department: Parks Design & Construction

Useful Life: 20 Pre Approval:

Project Mgr: Tanya Lewinberg

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Multiple(specify)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Median streetscape enhancement for Highway 7 and Main Street Markham includes installation of unit pavers on concrete base and banner poles. Project cost pertains to City of Markham share, for banner poles only, under the cost sharing of Municipal Streetscape Partnership Program for up to 50% capital cost.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	20,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	20,000	0
HST Impact:	352	0
Total Project Cost:	20,400	0

NOTES

Markham's portion will be the Banner poles only. O & M will be \$1400.00 per year for 10 years and then the Region of York will be responsible for maintenance and replacement. Other internal: Project 22323 CIP.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Other External	10,200	0	0	0	0	0	0
Other Internal	10,200	0	0	0	0	0	0
TOTAL FUNDING	20,400					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$1,400	\$0	\$1,400

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: 23081

Project Cost: \$11,200

Project Name: Public Realm - Town Centre Blvd. Banner Arm Replacement

Repair/Replace

Commission: Development Services

Useful Life: 15 Pre Approval:

Department: Parks Design & Construction

Category: Minor

Project Mgr: Tanya Lewinberg

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
 5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Supply and installation of 84 black coated galvanized steel banner arms and 42 top & bottom banner arms. Markham's Public Realm is a long term program to create dynamic, beautiful public spaces that reflect our diverse social and cultural identity.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	11,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	11,000	0
HST Impact:	194	0
Total Project Cost:	11,200	0

NOTES

The banner arms on Town Centre Boulevard, create a diagonal pull line in the banners as they are hung, because the banner arms are bent. The banner arms require replacement to resolve the pulling issue. It is recommended these arms are replaced with galvanized steel arms. 84 black coated galvanized steel banner arms \$63.40 each = \$5,325.60, installation of top and bottom banner arm using stainless steel strapping, includes removal of existing banner arms and banner, and installation of banner on new hardware \$110.00 each = \$4,620.00. Prices noted are as of 2022. Other Internal: Project 22328 CIP

<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>	
Other Internal	11,200	0	0	0	0	0	0	
TOTAL FUNDING	11,200					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>			<u>Amount in</u>	<u>Life Cycle</u>
<u>Name</u>	<u>Year</u>	<u>Amount</u>	<u>Study</u>	
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$8,000

Project Name: Public Realm - Traffic Wraps

Commission: Development Services

New Asset/Expansion

Department: Parks Design & Construction

Useful Life: 10 Pre Approval:

Project Mgr: Tanya Lewinberg

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Supply and installation Traffic Wraps on 8 new City-owned traffic control cabinets in various locations. Markham's Public Realm is a long term program to create dynamic, beautiful public spaces that reflect our diverse social and cultural identity.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	7,900	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	7,900	0
HST Impact:	139	0
Total Project Cost:	8,000	0

NOTES

There are 6 intersections that have new traffic control cabinets.
Bullock Dr @ 200 Bullock Dr (Loblaws Entrance)
Denison St and Hillcroft Rd
Denison St and Victoria Park Ave
Golden Ave and Fonda Rd
John St and Aileen Rd
John St and Bayview Fairways Dr
Cost per cabinet will be approx \$987

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Operating Funded Life Cycle	8,000	0	0	0	0	0	0
TOTAL FUNDING	8,000					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
<u>Name</u>				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: **23083**

Project Cost: **\$779,300**

Project Name: **Russell Carter Tefft Pedestrian Bridge D&C**

Commission: Development Services

New Asset/Expansion

Department: Parks Design & Construction

Useful Life: 25 Pre Approval:

Project Mgr: Richard Fournier

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to design and construct a pedestrian bridge connection between Russell Carter Tefft Park to Bruce Boyd Parkette.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	600,000	0
Internal Charges:	54,000	0
External Consulting:	60,000	0
Contingency %: 8	52,800	0
Sub Total:	766,800	0
HST Impact:	12,545	0
Total Project Cost:	779,300	0

NOTES

Annualized operating cost is \$292 (\$9,736 x 0.03 ha) starting in 2025. Estimated in-service date: Q2 2024. Lifecycle cost is \$480,000 (\$600,000 x 80%) spread over 25 years. Costs will be included in the lifecycle reserve study at time of completion based on updated replacement cost. Funding is 65% DC, 17.5% non-DC growth reserve and 17.5% community benefits

<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>		
DCA	506,545	0	0	0	0	0	0	
Non-DC Growth	136,377	0	0	0	0	0	0	
Other Internal	136,378	0	0	0	0	0	0	
TOTAL FUNDING	779,300					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$292	\$0	\$292

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
Name				Amount in Study: <input type="text"/>
Park Development - Community/City-Wide - City-wide	2023	506,545	2,510,170	Amount Incl HST <input type="text"/>
Growth Related Capital Program & Delivery				Year in the study <input type="text"/>
TOTAL FUNDING		506,545	2,510,170	

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: **23084**

Project Cost: **\$1,060,100**

Project Name: **South Cornell Parkette 156 Design and Construction**

Commission: Development Services

New Asset/Expansion

Department: Parks Design & Construction

Useful Life: 25 Pre Approval:

Project Mgr: Richard Fournier

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to design and construct the 0.4 ha (0.99 acre) park located Southwest of Highway 7 and Donald Cousens Blvd on Fred Lablanc Dr. Anticipated park amenities include a junior/senior playground, shade structures, site furnishings, pathways and associated landscape works.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	830,224	0
Internal Charges:	74,720	0
External Consulting:	66,418	0
Contingency %: 8	71,731	0
Sub Total:	1,043,093	0
HST Impact:	17,043	0
Total Project Cost:	1,060,100	0

NOTES

Cost per ha \$2,650,250 (Total Project Cost / 0.4 ha) or \$1,070,808 / acre. Annualized operating cost is \$3,894 (\$9,736 x 0.4 ha) starting in 2025. Estimated in-service date: Q3 2024. Lifecycle cost is \$664,179 (\$830,224 x 80%) spread over 25 years. Costs will be included in the lifecycle reserve study at time of completion based on updated replacement cost.

<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
DCA	1,060,100	0	0	0	0	0	0	
TOTAL FUNDING	1,060,100					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$3,894	\$0	\$3,894

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
Name				Amount in Study: <input type="text"/>
PARKS - South Cornell Parkette - Block 156	2024	1,060,100	1,138,225	Amount Incl HST <input type="text"/>
TOTAL FUNDING		<u>1,060,100</u>	<u>1,138,225</u>	Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: **23085**

Project Cost: **\$181,400**

Project Name: **Urban Parks Strategy**

Commission: Development Services

Studies/Pilot Programs

Department: Parks Design & Construction

Useful Life: 0 Pre Approval:

Project Mgr: Richard Fournier

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: _____

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

A comprehensive strategy is needed to address Markham's emerging need to develop comprehensive approach to plan, design, build and maintain urban parks in Markham. This study will identify the unique needs of urban parks and considerations for alternative park typologies such as stratified parks, parks encumbered with SWM facilities and POPS. The strategy will provide recommendations related to the technical requirements, legal implications, financial impacts and the appropriate parkland credit.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	0
Internal Charges:	13,500	0
External Consulting:	150,000	0
Contingency %: 10	15,000	0
Sub Total:	178,500	0
HST Impact:	2,904	0
Total Project Cost:	181,400	0

NOTES

The budget was determined based on informal discussions with other municipalities that have completed similar studies, as well as budget needs for similar projects undertaken in the past. The anticipated completion of this project is Q1 2024. The Urban Parks Strategy will commence following the completion of the Urban Parks Stragy Background Analysis that is currently in the planning stage.

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget				TOTAL		
DCA	181,400	0	0	0	0	0	0
TOTAL FUNDING	181,400				0	0	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
Park Development - Community/City-Wide - City-wide Growth Related Capital Program & Delivery	2023	181,400	2,510,170	Amount in Study: <input type="text"/>
TOTAL FUNDING		181,400	2,510,170	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: **23086**

Project Cost: **\$1,479,200**

Project Name: **Villages of Fairtree East NP - Construction**

Commission: Development Services

New Asset/Expansion

Department: Parks Design & Construction

Useful Life: 25 Pre Approval:

Project Mgr: Richard Fournier

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to construct a 7.48 acre (3.0 ha) neighborhood park in the Villages of Fairtree East on west side of Kirkham Drive, north of Steeles Ave. 1.5 ha of the site area is woodlot. Anticipated program amenities include jr/sr playground, recreational court, shade structure, exercise equipment, pathways and associated landscape works.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	1,247,309	0
Internal Charges:	112,258	0
External Consulting:	20,000	0
Contingency %: 6	76,039	0
Sub Total:	1,455,606	0
HST Impact:	23,643	0
Total Project Cost:	1,479,200	0

NOTES

Cost per ha is \$493,067 (\$1,479,200/ 3.0 ha) or.\$166,753 per acre. Annualized operating cost \$29,208 (3.0 ha x \$9,736). Estimated in-service date is Q3 2024. Lifecycle cost is \$997,847 (\$1,247,309 x 80%) spread over 25 years. Costs will be included in the Lifecycle Reserve Study at the time of park assumption based on updated replacement cost for each amenity.

<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>	
DCA	1,479,200	0	0	0	0	0	0	
TOTAL FUNDING	1,479,200					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$29,208	\$0	\$29,208

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
Name				Amount in Study: <input type="text"/>
PARKS - Villages Of Fairtree East Neighbourhood Park	2023	1,479,200	1,659,665	Amount Incl HST <input type="text"/>
TOTAL FUNDING		1,479,200	1,659,665	Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: 23087

Project Cost: \$44,700

Project Name: Ward 2 - Off Leash Area - Design

Commission: Development Services

New Asset/Expansion

Department: Parks Design & Construction

Useful Life: 25 Pre Approval:

Project Mgr: Richard Fournier

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to design an off-leash dog area in an existing park or other site in Ward 2 to be determined by the Off-Leash Dog Area Implementation Plan. Anticipated amenities include enclosed off-leash area with mulch surfacing, perimeter fencing, water service, shade structure, accessible walkway, parking and associated landscape works. A budget request for construction is anticipated to be requested as part of the 2024 Capital Budget.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	0
Internal Charges:	3,326	0
External Consulting:	36,957	0
Contingency %: 10	3,696	0
Sub Total:	43,979	0
HST Impact:	715	0
Total Project Cost:	44,700	0

NOTES

Construction funding for this off-leash area to be requested as part of 2024 budget.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
DCA	44,700	0	0	0	0	0	0	
TOTAL FUNDING	44,700					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
PARKS - Ward 2 Off Leash Dog Park	2023	44,700	599,902	Amount in Study: <input type="text"/>
TOTAL FUNDING		<u>44,700</u>	<u>599,902</u>	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Price difference from DCA study due to firmer cost estimates at this time



2023 PROJECT FUNDING REQUEST FORM

Number: 23088

Project Cost: \$584,800

Project Name: Ward 3 Off-Leash Dog Area - Design and Construction

Commission: Development Services

New Asset/Expansion

Department: Parks Design & Construction

Useful Life: 25 Pre Approval:

Project Mgr: Richard Fournier

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to design and construct an off-leash dog area in an existing park or other site in Ward 3 to be determined by the Off-Leash Dog Area Implementation Plan. Anticipated amenities include enclosed off-leash area with mulch surfacing, perimeter fencing, water service, shade structure, accessible walkway, parking and associated landscape works.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	461,961	0
Internal Charges:	41,577	0
External Consulting:	36,957	0
Contingency %: 7	34,924	0
Sub Total:	575,419	0
HST Impact:	9,396	0
Total Project Cost:	584,800	0

NOTES

Cost per ha \$1,949,333 (Total Project Cost / 0.3 ha) or \$624,272 per acre. Lifecycle cost is \$369,569 (\$461,961 X 80%) spread over 25 years starting in 2025. Estimated in-service date: Q3 2024. Costs will be included in the lifecycle reserve study at time of completion based on updated replacement cost.

<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
DCA	584,800	0	0	0	0	0	0	
TOTAL FUNDING	584,800					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
Name				Amount in Study: <input type="text"/>
PARKS - Ward 3 Off Leash Dog Park	2023	584,800	599,902	Amount Incl HST <input type="text"/>
TOTAL FUNDING		584,800	599,902	Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
<input type="text" value="Price difference from DCA study due to firmer cost estimates at this time"/>				



2023 PROJECT FUNDING REQUEST FORM

Number: 23089

Project Cost: \$44,700

Project Name: Ward 4 - Off Leash Area - Design

Commission: Development Services

New Asset/Expansion

Department: Parks Design & Construction

Useful Life: 25 Pre Approval:

Project Mgr: Richard Fournier

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to design an off-leash dog area in an existing park or other site in Ward 4 to be determined by the Off-Leash Dog Area Implementation Plan. Anticipated amenities include enclosed off-leash area with mulch surfacing, perimeter fencing, water service, shade structure, accessible walkway, parking and associated landscape works. A construction budget request is anticipated to be requested as part of the 2024 Capital Budget.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	0
Internal Charges:	3,326	0
External Consulting:	36,957	0
Contingency %: 10	3,696	0
Sub Total:	43,979	0
HST Impact:	715	0
Total Project Cost:	44,700	0

NOTES

Construction funding for this park to be requested as part of 2024 budget request.

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget					TOTAL	
DCA	44,700	0	0	0	0	0	0
TOTAL FUNDING	44,700					0	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
PARKS - Ward 4 Off Leash Dog Park	2023	44,700	599,902	Amount in Study: <input type="text"/>
TOTAL FUNDING		<u>44,700</u>	<u>599,902</u>	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Price difference from DCA study due to firmer cost estimates at this time



2023 PROJECT FUNDING REQUEST FORM

Number: **23090**

Project Cost: **\$584,800**

Project Name: **Ward 6 Off-Leash Dog Area - Design and Construction**

Commission: Development Services

New Asset/Expansion

Department: Parks Design & Construction

Useful Life: 25 Pre Approval:

Project Mgr: Richard Fournier

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to design and construct an off-leash dog area in an existing park or other site in Ward 6 to be determined by the Off-Leash Dog Area Implementation Plan. Anticipated amenities include enclosed off leash area with mulch surfacing, perimeter fencing, water service, shade structure, accessible walkway, parking and associated landscape works.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	461,961	0
Internal Charges:	41,577	0
External Consulting:	36,957	0
Contingency %: 7	34,924	0
Sub Total:	575,419	0
HST Impact:	9,396	0
Total Project Cost:	584,800	0

NOTES

Cost per ha \$1,949,333 (Total Project Cost / 0.3 ha) or \$624,272 per acre. Lifecycle cost is \$369,569 (\$461,961 X 80%) spread over 25 years starting in 2025. Estimated in-service date: Q3 2024. Costs will be included in the lifecycle reserve study at time of completion based on updated replacement cost.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
DCA	584,800	0	0	0	0	0	0
TOTAL FUNDING	584,800					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
Name				Amount in Study: <input type="text"/>
PARKS - Ward 6 Off Leash Dog Park	2023	584,800	599,902	Amount Incl HST <input type="text"/>
TOTAL FUNDING		584,800	599,902	Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
Price difference from DCA study due to firmer cost estimates at this time				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$584,800

Project Name: Ward 8 - Off Leash Area - Design and Construction

Commission: Development Services

New Asset/Expansion

Department: Parks Design & Construction

Useful Life: 25 Pre Approval:

Project Mgr: Richard Fournier

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: _____

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to design and construct an off-leash dog area in an existing park or other site in Ward 8 to be determined by the Off-Leash Dog Area Implementation Plan. Anticipated amenities include enclosed off-leash area with mulch surfacing, perimeter fencing, water service, shade structure, accessible walkway, parking and associated landscape works.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	461,961	0
Internal Charges:	41,577	0
External Consulting:	36,957	0
Contingency %: 7	34,924	0
Sub Total:	575,419	0
HST Impact:	9,396	0
Total Project Cost:	584,800	0

NOTES

Cost per ha \$1,949,333 (Total Project Cost / 0.3 ha) or \$624,272 per acre. Lifecycle cost is \$369,569 (\$461,961 X 80%) spread over 25 years starting in 2025. Estimated in-service date: Q3 2024. Costs will be included in the lifecycle reserve study at time of completion based on updated replacement cost.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
DCA	584,800	0	0	0	0	0	0
TOTAL FUNDING	584,800					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
Name				Amount in Study: <input type="text"/>
PARKS - Ward 8 Off Leash Dog Park	2023	584,800	599,902	Amount Incl HST <input type="text"/>
TOTAL FUNDING		584,800	599,902	Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Price difference from DCA study due to firmer cost estimates at this time

Engineering



2023 PROJECT FUNDING REQUEST FORM

Number: **23092**

Project Cost: **\$670,100**

Project Name: **Birchmount Bridge over Rouge River- Bridge Repair**

Repair/Replace

Commission: Development Services

Useful Life: 0 Pre Approval:

Department: Engineering

Category: Major

Project Mgr: Alberto Lim

Cost Validation: Multiple(specify)

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The proposed budget request is to fund the repair of the approach slabs of Birchmount Bridge over Rouge River. The bridge was designed in 2011 and construction commenced in 2012. The original design of the bridge was based on an MTO standard (1996). Subsequent to the completion of the construction of bridge in 2014, a minor deficiency started to occur within the approach slabs within a year. Staff has completed the peer review of the original structural design and has confirmed that the design was completed in accordance to MTO standards at that time. It is however noted that MTO standards has been updated in 2014.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	550,000	0
Internal Charges:	54,450	0
External Consulting:	0	0
Contingency %: 10	55,000	0
Sub Total:	659,450	0
HST Impact:	10,648	0
Total Project Cost:	670,100	0

NOTES

The proposed work include the retrofit of the existing expansion joints including removal of approach slabs and construction of a new concrete and sleeper slabs with expansion joints. \$402k of expenditure is anticipated in 2023 and \$268k in 2024.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>							
Operating Funded Life Cycle	670,100	0	0	0	0	0	0	
TOTAL FUNDING	670,100					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
<u>Name</u>				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: **23093**

Project Cost: **\$2,354,800**

Project Name: **Centurian/Frontenac Intersection and Sidewalk**

Commission: Development Services

New Asset/Expansion

Department: Engineering

Useful Life: 0 Pre Approval:

Project Mgr: Andrew Crickmay

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Other(specify in Notes)

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Construction and contract administration to upgrade the existing signalized intersection at Centurian Drive and Frontenac Drive to be fully accessible for pedestrians, as well as the construction of the sidewalk on the east side of Frontenac Drive, from Hwy 7 to Centurian Drive as identified in the sidewalk gapping program.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	1,828,169	0
Internal Charges:	191,345	0
External Consulting:	104,612	0
Contingency %: 10	193,278	0
Sub Total:	2,317,404	0
HST Impact:	37,419	0
Total Project Cost:	2,354,800	0

NOTES

The budget request includes tender preparation, contract administration, property acquisition and construction of the intersection and sidewalk location. Tender to be issued in March 2023 and construction to commence in May 2023, subject to acquisition of permit to enter agreements and to be completed by December 2023. The proposed budget includes a carryover from 2018 account (#18044) in the amount of \$607,880. Remaining request split DC 65%, non DC Growth 17.5%, CBC 17.5%. \$1.63M of expenditure is anticipated in 2023 and \$700k in 2024.

<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>	
Carry Forward	607,880	0	0	0	0	0	0	
DCA	1,135,498	0	0	0	0	0	0	
Non-DC Growth	305,711	0	0	0	0	0	0	
Other Internal	305,711	0	0	0	0	0	0	
TOTAL FUNDING	2,354,800					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

Amount in Study

Life Cycle

Hard - Intersection - Centurian Drive		265,499	807,998
Hard - Sidewalks - Sidewalk Gapping Program		315,632	22,421,418
Hard - Properties Acquisition - Roads & Structures - City-wide Land Acquisition (Roads)		554,367	9,419,250
TOTAL FUNDING		<u>1,135,498</u>	<u>32,648,666</u>

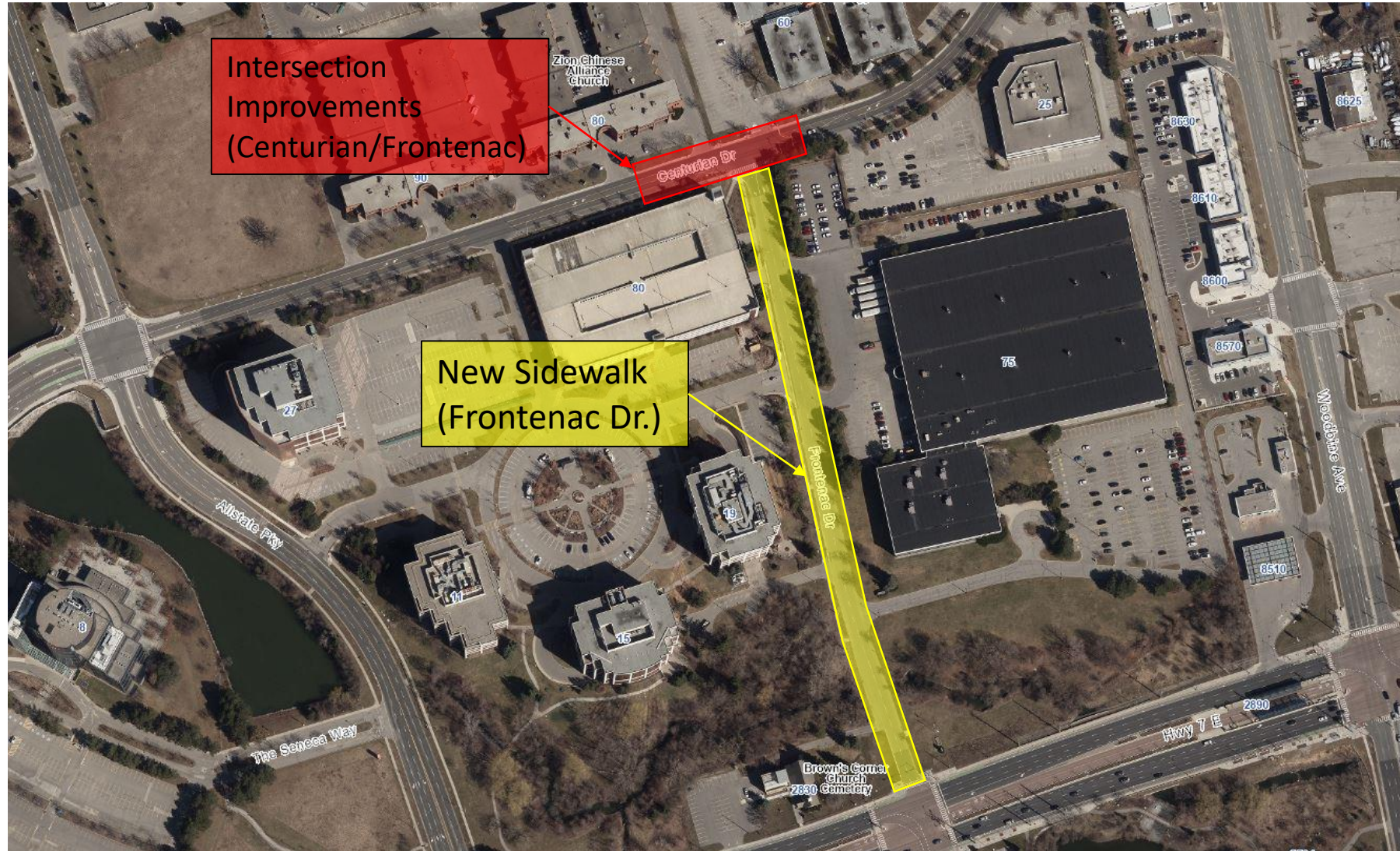
Amount in Study:

Amount Incl HST

Year in the study

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Intersection Improvements and New Sidewalk Construction Centurian Drive and Frontenac Drive





2023 PROJECT FUNDING REQUEST FORM

Number: **23094**

Project Cost: **\$28,000**

Project Name: **Cycling and Pedestrian Advisory Committee (CPAC)**

Studies/Pilot Programs

Commission: Development Services

Useful Life: 0 Pre Approval:

Department: Engineering

Category: Annual

Project Mgr: Fion Ho

Cost Validation: Internal peer review

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

CPAC was established in September 2003, as per the direction of the Transportation Committee. In the Terms of Reference, the specific duties of CPAC is to include, but not limited, the following: (i) Advising staff of various departments and Council on the design, development and delivery of cycling and pedestrian policies, programs and facilities to promote and enhance cycling and walking; (ii) Compiling research and statistics on cycling and pedestrian issues; (iii) Working with local neighborhoods by collecting distributing information related to cycling and walking; (iv) Promoting an increased public awareness of cycling and walking as environmentally forms of transportation; (v) Assisting in fundraising opportunities; (vi) Discussing and resolving and issues between cyclist and pedestrians; (Vii) Assisting in the integration of bicycle and pedestrian facilities into significant development proposals as they rise.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	25,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 10	2,500	0
Sub Total:	27,500	0
HST Impact:	484	0
Total Project Cost:	28,000	0

NOTES

65% funded from DCA
17.5% funded from Non-DC Growth
17.5% funded from CBC's

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
DCA	18,200	0	0	0	0	0	0
Non-DC Growth	4,900	0	0	0	0	0	0
Other Internal	4,900	0	0	0	0	0	0
TOTAL FUNDING	28,000					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

Amount in Study

Life Cycle

Hard - Special Projects - Bike Lanes on Collector / Arterial Roads

18,135

3,690,232

Amount in Study:

Amount Incl HST

Year in the study

TOTAL FUNDING

18,135

3,690,232

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: **23095**

Project Cost: **\$1,889,800**

Project Name: **Downstream Improvements Program (Construction)**

Commission: Development Services

New Asset/Expansion

Department: Engineering

Useful Life: 0 Pre Approval:

Project Mgr: Nehal Azmy

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Other(specify in Notes)

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Project is required to mitigate watercourse erosion and sedimentation resulting from upstream development, and to protect fish habitat. This project will reduce risk of flooding and provide various erosion protection and sediment removal to various streams in the City. Locations include Rouge River (R-ES-45), Rouge River (ROU.-122) & Berczy (BER-25). The detailed design has been completed and the latest estimated construction costs increase compared to the original budget included in Capital Account (22028) for the three locations. Construction costs have increased due to significantly higher fuel prices and increased cost of labour.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	1,444,448	0
Internal Charges:	153,560	0
External Consulting:	106,667	0
Contingency %: 10	155,112	0
Sub Total:	1,859,787	0
HST Impact:	30,030	0
Total Project Cost:	1,889,800	0

NOTES

Staff recommend that the fund in the account 22028 Downstream Improvements Program (Construction) be carried over to this request and the outfall in the budget for the construction of to be approved in the as part of this request. All funds to be included in one account. The tender to be issued in May 2023, Construction to commence in July 2023 and to be completed by May 2024. \$1.51M of expenditure is anticipated in 2023 and \$378k in 2024.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Carry Forward	1,486,812	0	0	0	0	0	0
DCA	261,942	0	0	0	0	0	0
Operating Funded Life Cycle	141,046	0	0	0	0	0	0
TOTAL FUNDING	1,889,800					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

Amount in Study

Life Cycle

Hard - Storm Water Management - City's Watercourses -
Erosion Control

261,942 13,388,800

Amount in Study:

Amount Incl HST

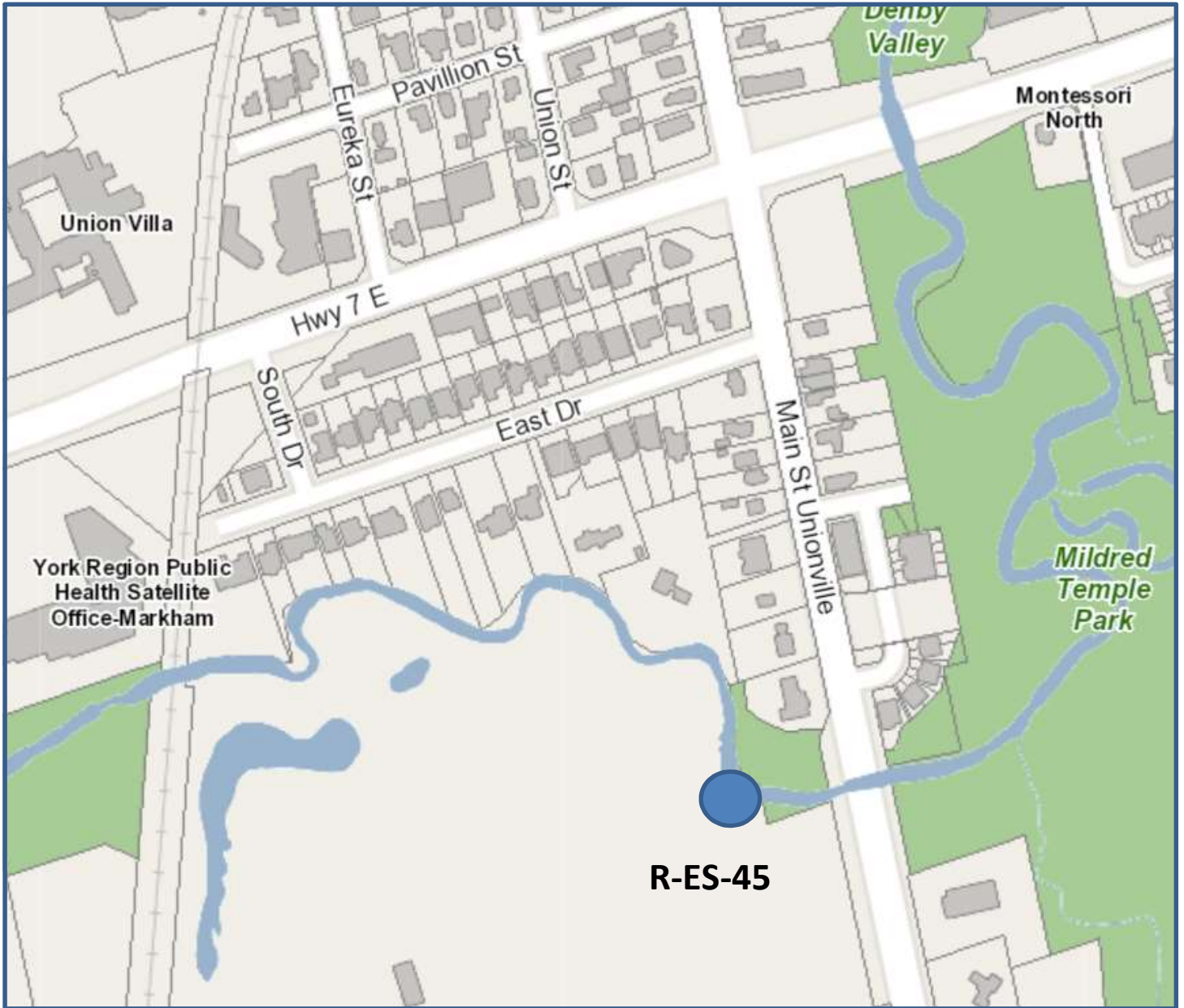
Year in the study

TOTAL FUNDING

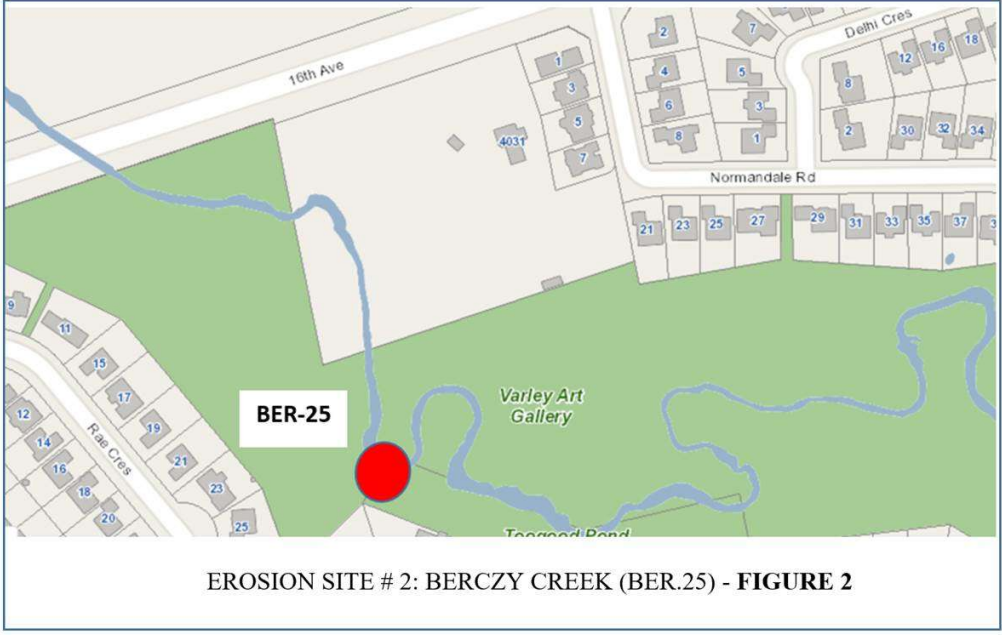
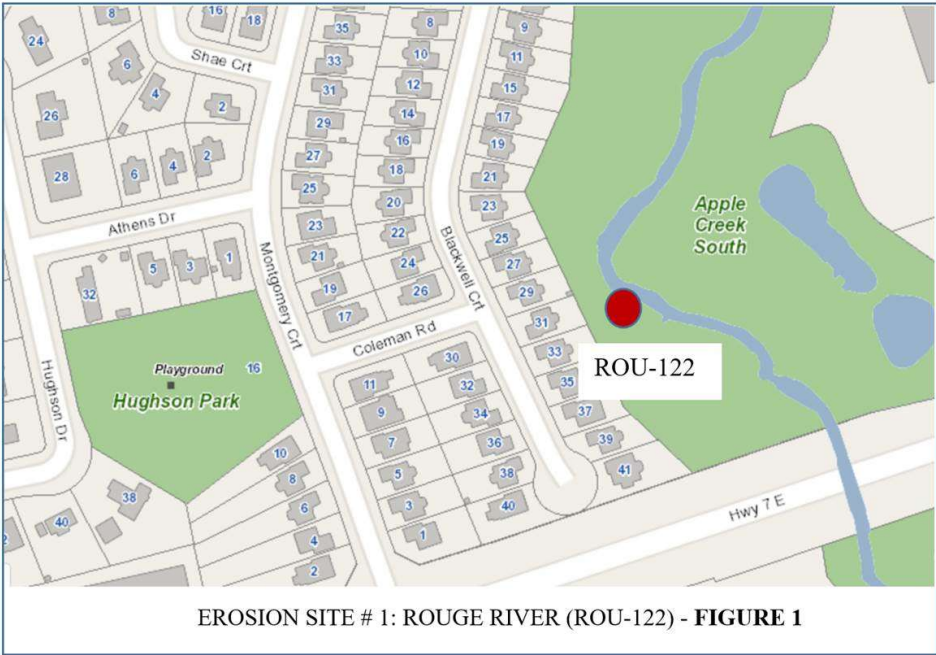
261,942 13,388,800

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Downstream Improvements – Construction



EROSION RESTORATION (SITE 1 – R-ES-45)





2023 PROJECT FUNDING REQUEST FORM

Number: **23096**

Project Cost: **\$1,145,900**

Project Name: **Downstream Improvements Program (Design)**

Commission: Development Services

New Asset/Expansion

Department: Engineering

Useful Life: 0 Pre Approval:

Project Mgr: Nehal Azmy

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Project is required to mitigate watercourse erosion and sedimentation resulting from upstream development and to protect fish habitat. This project will reduce risk of flooding and provide various erosion protection and sediment removal to various streams in the City.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	0	7,837,562
Internal Charges:	93,110	775,919
External Consulting:	940,508	0
Contingency %: 10	94,051	783,756
Sub Total:	<u>1,127,669</u>	<u>9,397,237</u>
HST Impact:	<u>18,208</u>	<u>151,735</u>
Total Project Cost:	<u>1,145,900</u>	<u>9,549,000</u>

NOTES

The East Don River Tributary Erosion Control – Proctor Ave to Steeles Ave EA Study was completed in November 2020. The 2023 budget request for the detail design of Phases 1, 2, 3 and 4 of the East Don Tributary Erosion Control. The RFP to be issued in May 2023 and design to commence in July 2023 and to be completed by May 2024. \$343k of expenditure is anticipated in 2023 and \$802k in 2024.

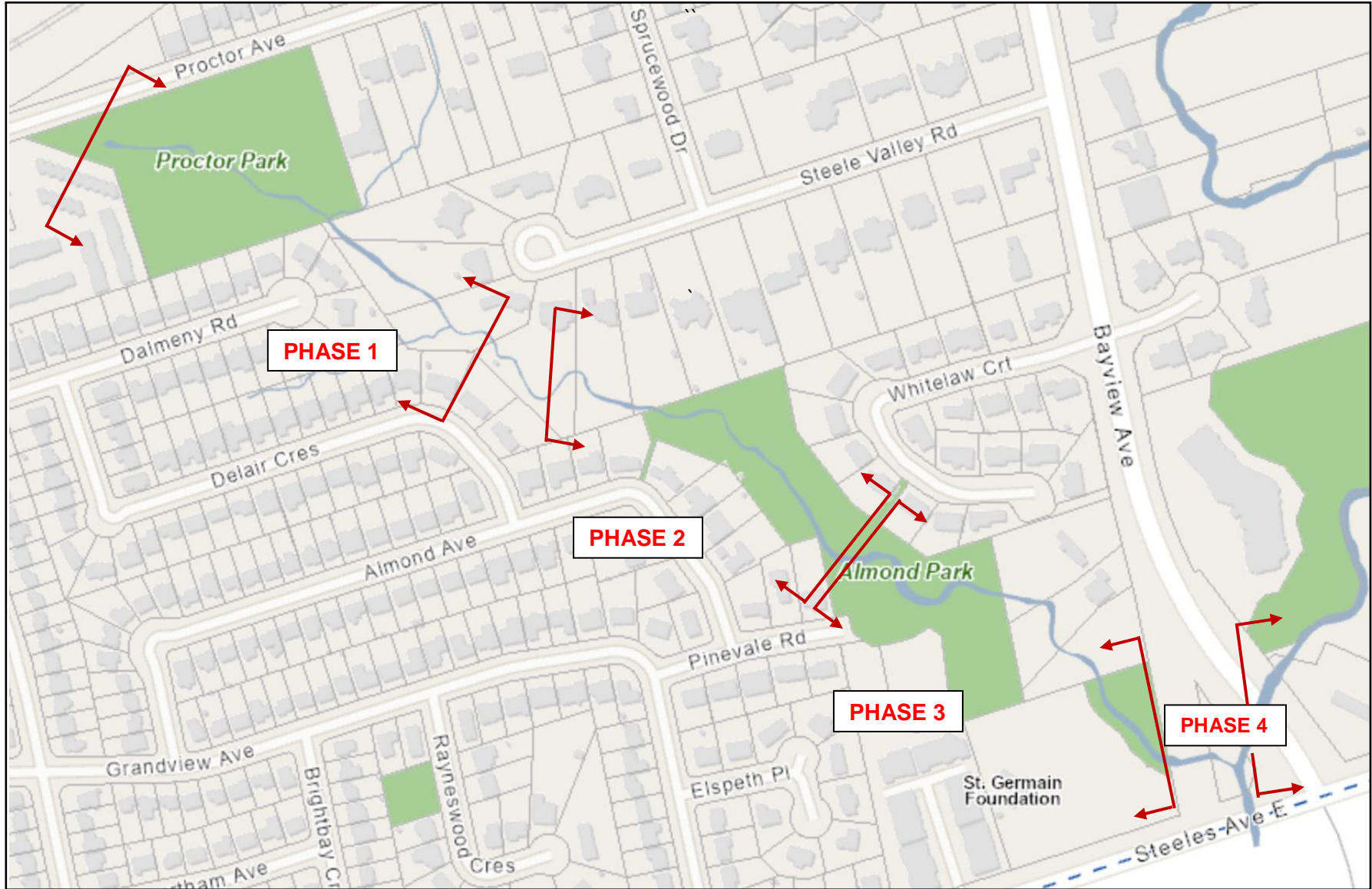
<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>					<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>				<u>TOTAL</u>		
DCA	744,835	0	0	0	0	6,206,850	
Operating Funded Life Cycle	401,065	0	0	0	0	3,342,150	
TOTAL FUNDING	<u>1,145,900</u>				<u>0</u>	<u>9,549,000</u>	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
<u>Name</u>				
Hard - Storm Water Management - City's Watercourses - Erosion Control		744,835	13,388,800	Amount in Study: <input type="text"/>
TOTAL FUNDING		<u>744,835</u>	<u>13,388,800</u>	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



DOWNSTREAM IMPROVEMENT (TED 1, TED 2, TED 3, TED 4)

LOCATION MAP



2023 PROJECT FUNDING REQUEST FORM

Number: 23097

Project Cost: \$433,700

Project Name: Engineering Staff Salary Recovery

Studies/Pilot Programs

Commission: Development Services

Useful Life: 0 Pre Approval:

Department: Engineering

Category: Annual

Project Mgr: Ali Hasan

Cost Validation: Other(specify in Notes)

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Cost recovery for engineering staff on projects related to Region of York or Metrolinx projects or other Jurisdictions. The list of projects are as follows: Metrolinx Projects, Denison Grade Separation, Kennedy Rd Grade Separation, TPAP, Region of York EA for Kennedy Road, McCowan Road, 16th Avenue, Warden Avenue and Ninth Line, Active Transportation Plan, CPAC, Regional TMP, Bridge TOC, Active School Travel Plan, Smart Commute and Regional Road Acceleration program.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	0
Internal Charges:	433,665	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	433,665	0
HST Impact:	0	0
Total Project Cost:	433,700	0

NOTES

Staff salary recovery equivalent to 3 FTE staff

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
DCA	433,700	0	0	0	0	0	0	
TOTAL FUNDING	433,700					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
Hard - Studies - Trans., Servicing, Enviro., Cycling, Traffic Calming, Noise, Subwatershed, Erosion Study Update etc.		433,700	18,003,000	Amount in Study: <input type="text"/>
TOTAL FUNDING		433,700	18,003,000	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: **23098**

Project Cost: **\$127,400**

Project Name: **Establish Design Standards for Underground SWM Tanks**

Studies/Pilot Programs

Commission: Development Services

Useful Life: 0 Pre Approval:

Department: Engineering

Category: Minor

Project Mgr: Ivy Poon

Cost Validation: Other(specify in Notes)

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Based on the June 13, 2022 Council's direction, the Engineering Department needs to obtain consultant services to establish design criteria and standards for future underground SWM facilities in consultation with the development industry and impacted City departments. Design criteria and standards will include where and when an underground SWM tank would be allowed instead of an open SWM pond. The Design criteria and standards will also provide specifications on the type of material allowed for the underground SWM tank and any additional operation and maintenance costs that are typically not required for open SWM ponds. The final design criteria and standards will guide the City on future land development proposals that would propose underground SWM tanks instead of open ponds.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	0
Internal Charges:	10,350	0
External Consulting:	100,000	0
Contingency %: 15	15,000	0
Sub Total:	125,350	0
HST Impact:	2,024	0
Total Project Cost:	127,400	0

NOTES

Cost is based on consultation with and quotes from 3 Engineering firms currently involved in designing underground SWM tanks who have some experience in this type of work. Project is anticipated to start in June 2023 and to be completed by March 2024

SOURCE(S) OF FUNDING (\$)		Components					Future Phases
Funding Type	Budget				TOTAL		
DCA	127,400	0	0	0	0	0	
TOTAL FUNDING	127,400				0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

Amount in Study

Life Cycle

Hard - Studies - Trans., Servicing, Enviro., Cycling, Traffic Calming, Noise, Subwatershed, Erosion Study Update etc.

127,400

18,003,000

Amount in Study:

Amount Incl HST

Year in the study

TOTAL FUNDING

127,400

18,003,000

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: 23099

Project Cost: \$53,552,100

Project Name: Highway 404 MBC, N of 16th Avenue (Construction)

Commission: Development Services

New Asset/Expansion

Department: Engineering

Useful Life: 0 Pre Approval:

Project Mgr: Andrew Crickmay

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Other(specify in Notes)

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This budget request is for the 2023 construction budget required for Markham's share of the project costs. The majority of the budget request is for the construction component of the Mid-Block Crossing (MBC) project. The construction for the Mid-Block Crossing, Cachet Woods Court extension, Markland Street reconstruction and Markland bridge crossing is scheduled for 2023.

Based on the recent information from Region staff, the project is being tendered late fall 2022 and construction to start in 2023.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	46,850,000	0
Internal Charges:	1,110,080	0
External Consulting:	0	0
Contingency %: 10	4,685,000	0
Sub Total:	52,645,080	0
HST Impact:	907,016	0
Total Project Cost:	53,552,100	0

NOTES

Region and City of Richmond Hill. The total project cost - \$113,608,000, Richmond Hill Share - \$28,792,300, York Region Share - \$17,723,400, Markham Share - \$67,092,300, Previously approved budget - \$13,540,200 (Design, property and utility relocation), 2023 Budget Request - \$53,552,100. The share is higher due to additional property acquisition and bridge structure over Rouge River (Markland Street extension) which is outside the cost shared area. Cashflow projections has been provided by Region: \$10.57M of expenditure is anticipated in 2023, \$12.75M in 2024, \$12.75M in 2025, \$14.08M in 2026 and \$3.35M in 2027.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
DCA	53,552,100	0	0	0	0	0	0	
TOTAL FUNDING	53,552,100					0	0	

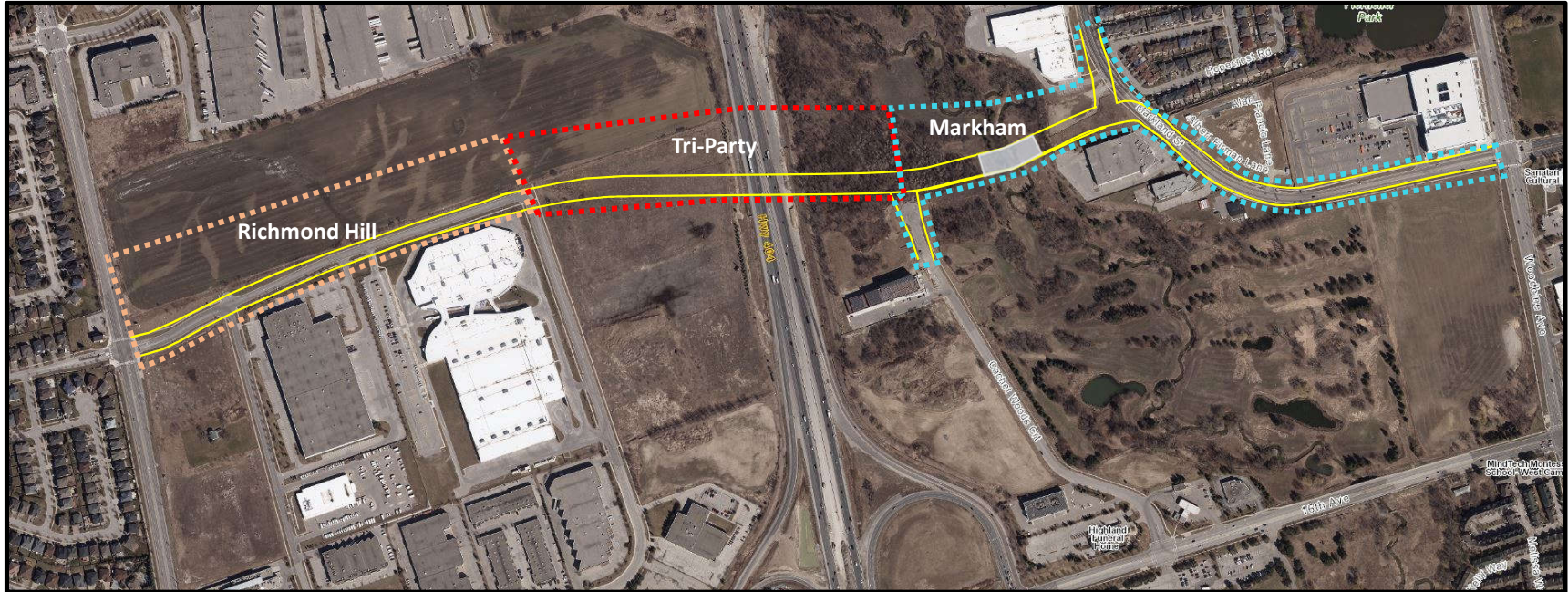
OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
Hard - Structures - Hwy 404 Mid-block Crossing North of 16th Avenue	2022	7,100,165	7,100,165	Amount in Study: <input type="text"/>
Hard - Structures - Markland St. Extension - Structure over Rouge River	2022	13,244,435	13,244,435	Amount Incl HST <input type="text"/>
Hard - Structures - Cachet Woods Ramp to Mid-block Crossing	2022	8,773,800	8,773,800	Year in the study <input type="text"/>
Hard - Roads - Markland Extension	2022	7,536,297	7,536,297	
Hard - Structures - City Wide bridge/crossing projects (minor collectors)	2022	6,310,000	6,310,000	
TOTAL FUNDING			42,964,697	

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Mid-Block Crossing Preferred Alignment (North of 16th Avenue)





2023 PROJECT FUNDING REQUEST FORM

Number: 23100

Project Cost: \$60,900

Project Name: Indigenous Community Consultation (Capital Projects)

Studies/Pilot Programs

Commission: Development Services

Useful Life: 0 Pre Approval:

Department: Engineering

Category: Major

Project Mgr: Julie Sharma

Cost Validation: Multiple(specify)

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Multiple(specify)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The City proposes to expand and improve on the current engagement processes with Indigenous Communities who may be impacted by City-initiated projects (i.e. Capital Projects). The Departments impacted by this work are Engineering, Environmental Services and Operation. Staff is preparing a draft agreement to be used on Capital projects to engage with Indigenous Communities to provide a framework for consultation and reimbursement for costs, on a case by case basis and where applicable. This proposed engagement is only specific to Capital Projects. A separate process and budget will be requested for indigenous community engagement for the planning and real property initiatives.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	0	0
Internal Charges:	4,950	0
External Consulting:	50,000	0
Contingency %: 10	5,000	0
Sub Total:	59,950	0
HST Impact:	968	0
Total Project Cost:	60,900	0

NOTES

The budget request is for the procurement of external consultant services in finalizing the agreements required with indigenous communities for capital projects. The budget also includes the cost associated with indigenous consultation (i.e. review document and site visits) for existing capital projects.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>							
DCA	60,900	0	0	0	0	0	0	
TOTAL FUNDING	60,900					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
Name				Amount in Study: <input type="text"/>
Hard - Studies - Trans., Servicing, Enviro., Cycling, Traffic Calming, Noise, Subwatershed, Erosion Study Update etc.		60,900	18,003,000	Amount Incl HST <input type="text"/>
TOTAL FUNDING		60,900	18,003,000	Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: **23101**

Project Cost: **\$485,500**

Project Name: **Installation of Wayfinding Signs at Rouge Valley Trail**

Commission: Development Services

New Asset/Expansion

Department: Engineering

Useful Life: 0 Pre Approval:

Project Mgr: Dereje Tafesse

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Internal peer review

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This request is for Rouge Valley Trail proposed signage construction work which will include signage implementation program to provide both cyclist and pedestrians a safe and consistent information leading them along their route. The signage work includes directional/regulatory signs and pavement markings includes bike and pedestrian symbols. The detail design has been completed; however, pole material type is revised from 4x4 wooden post to round galvanized steel pole to accurately position the directional signs to the intended directions.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	347,460	0
Internal Charges:	39,453	0
External Consulting:	51,059	0
Contingency %: 10	39,852	0
Sub Total:	477,824	0
HST Impact:	7,715	0
Total Project Cost:	485,500	0

NOTES

The latest estimated construction cost has increased comparing to the original budget included in Capital Account (21027). Construction costs have increased due to material substitution, higher fuel prices and increased cost of labour. Staff recommend that the fund in the account 21027 Installation of Way Finding Signs at Rouge Valley Trail be carried over to this request. All funds to be included in one account. The tender to be issued in April 2023, Construction to commence in June 2023 and to be completed by December 2023. Carry forward: Project 21027

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>				<u>TOTAL</u>		<u>Phases</u>
Carry Forward	193,970	0	0	0	0	0	0
DCA	189,495	0	0	0	0	0	0
Non-DC Growth	102,035	0	0	0	0	0	0
TOTAL FUNDING	485,500				0		0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

Amount in Study

Life Cycle

Hard - Special Projects - Bike Lanes on Collector / Arterial Roads

189,495

3,690,232

Amount in Study:

Amount Incl HST

Year in the study

TOTAL FUNDING

189,495

3,690,232

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: 23102

Project Cost: \$916,800

Project Name: Markham Centre Trails Phase 3 - Construction

Commission: Development Services

New Asset/Expansion

Department: Engineering

Useful Life: 0 Pre Approval:

Project Mgr: Lily Li

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Other(specify in Notes)

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Construction of Markham Centre Trails Phase 3 on the south side of the Rouge River from Warden Avenue to Verdale Crossing, approximately 400m in length.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	700,000	0
Internal Charges:	74,497	0
External Consulting:	52,500	0
Contingency %: 10	75,250	0
Sub Total:	902,247	0
HST Impact:	14,568	0
Total Project Cost:	916,800	0

NOTES

Tender to be issued in Aug 2023, construction to commence in May 2024 and to be completed by Aug 2024.
Final location is subject to change upon Director's approval based on design and pending property availability, utility relocations and other site conditions.
17.5% funded from CBCs funding.
17.5% funded from Non-DC Growth.
65% funded from DCA
\$94k of expenditure is anticipated in 2023 and \$870k in 2024.

<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>	
DCA	595,920	0	0	0	0	0	0	
Non-DC Growth	160,440	0	0	0	0	0	0	
Other Internal	160,440	0	0	0	0	0	0	
TOTAL FUNDING	916,800					0	0	

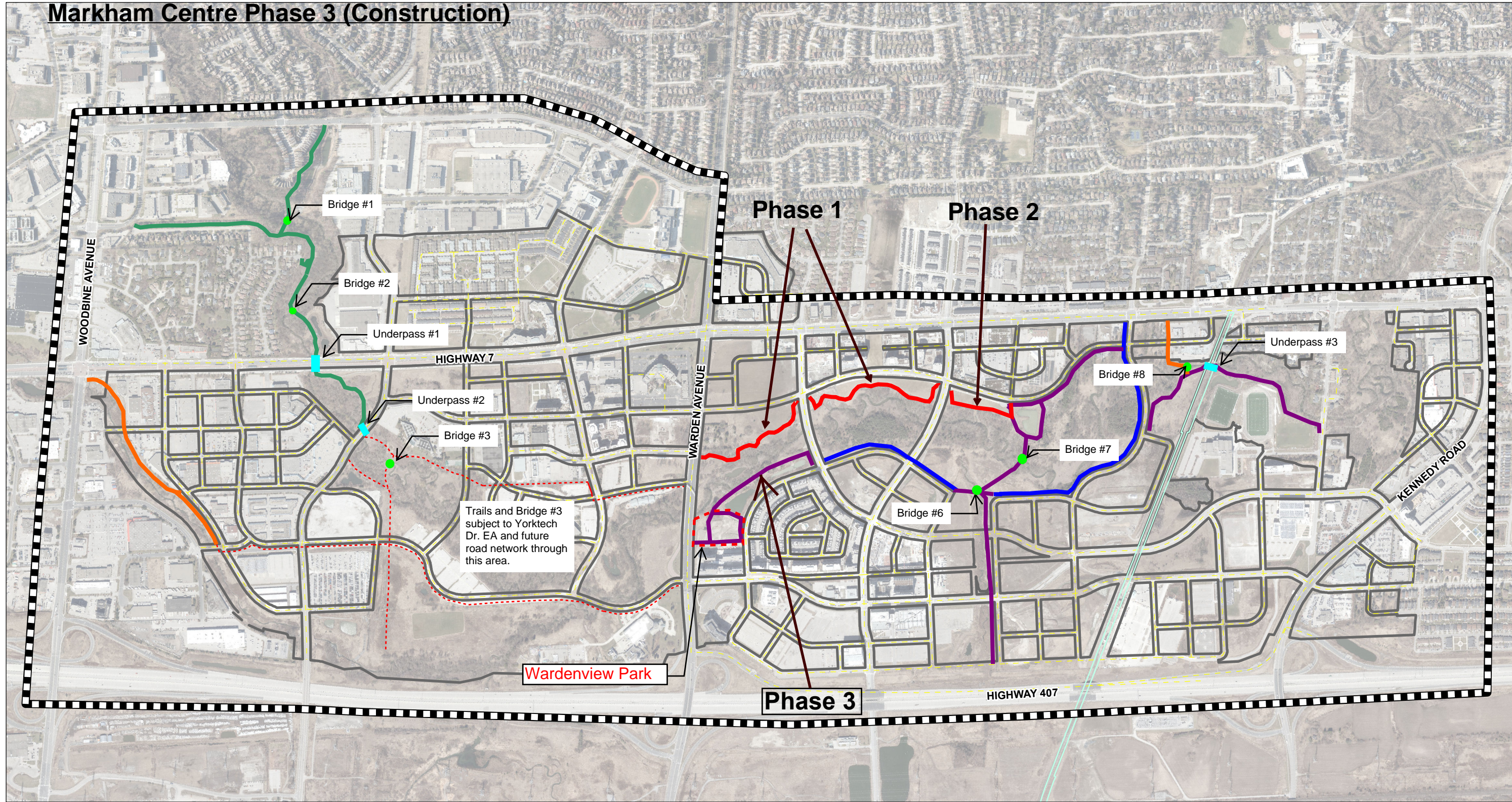
<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
Hard - Special Projects - MUP on Collector / Arterial Roads		595,920	14,657,245	Amount in Study: <input type="text"/>
TOTAL FUNDING		595,920	14,657,245	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Markham Centre Phase 3 (Construction)



Datum: North American 1983 CSRS
 Coord. System: NAD 1983 CSRS UTM Zone 17N
 Projection: Transverse Mercator
 Central Meridian: 81°0'0.00"W
 False Easting: 500,000m | False Northing: 0m
 Page Orientation: -16.5° | Scale Factor: 0.99960

True North

- Railway
- Centre Line
- Newly Proposed Roads
- Study Area

Client
CITY OF MARKHAM

Figure Title
MARKHAM CENTRE TRAILS EA
 Alternative 2- Trail Design Types

Drawn	Checked	Date	Figure No. X
MD	TR	2021/07/14	
Scale	Project No.		
H 1:12,500			300050254



2023 PROJECT FUNDING REQUEST FORM

Number: **23103**

Project Cost: **\$16,800**

Project Name: **Markham Cycles**

Studies/Pilot Programs

Commission: Development Services

Useful Life: 0 Pre Approval:

Department: Engineering

Category: Annual

Project Mgr: Fion Ho

Cost Validation: Other(specify in Notes)

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This program is to support, promote and encourage active transportation in Markham through community outreach and education. Through partnership with The Centre for Active Transportation, the activities of this community bike hub provide a gathering place for residents and newcomers to explore and experience cycling in terms of equipment, maintenance needs, cycling safety and other basic cycling needs. Initiatives such as Markham Cycles are recommended in the Active Transportation Master Plan to encourage cycling for short trips and cycling access to promote greater use of public transit.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	15,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 10	1,500	0
Sub Total:	16,500	0
HST Impact:	290	0
Total Project Cost:	16,800	0

NOTES

Markham Cycles is a project of The Centre for Active Transportation (TCAT), with Markham contributing \$15K and York Region contributing \$30K to a larger annual budget. 65% DC 17.5% Non DC Growth, 17.5% CBC

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
	<u>Budget</u>				<u>TOTAL</u>		
DCA	10,920	0	0	0	0	0	0
Non-DC Growth	2,940	0	0	0	0	0	0
Other Internal	2,940	0	0	0	0	0	0
TOTAL FUNDING	16,800				0	0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

Amount in Study

Life Cycle

Hard - Special Projects - Bike Lanes on Collector / Arterial Roads

10,920

3,690,232

Amount in Study:

Amount Incl HST

Year in the study

TOTAL FUNDING

10,920

3,690,232

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: 23104

Project Cost: \$11,200

Project Name: Markham Cycling Day

Studies/Pilot Programs

Commission: Development Services

Useful Life: 0 Pre Approval:

Department: Engineering

Category: Annual

Project Mgr: Fion Ho

Cost Validation: Other(specify in Notes)

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The Annual Markham Cycling Day event is a major GTA cycling event and the largest in York Region, attracting participants from across the GTA. It includes events for children and cycling group rides of different distances. It is led by the Cycling and Pedestrian Advisory Committee with staff support. CPAC also helps to organize an army of volunteers necessary to prepare and run the event.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	10,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 10	1,000	0
Sub Total:	11,000	0
HST Impact:	194	0
Total Project Cost:	11,200	0

NOTES

The project has a bigger budget but Markham will contribute \$10K only and the rest will be fundraised. Pre-pandemic, the event is held in mid-September with the Civic Centre as the staging ground and location for the children's events. Sponsor and event booths as well as an entertainment stage also takes up major parts of the Civic Centre parking lot. Corporate Communications and Events groups are relied on heavily in supporting this annual event. CPAC and staff expect the 2023 event to be more like the pre-pandemic format. 65% funded from DCA, 17.5% funded from Non-DC Growth and 17.5% funded from CBC's.

<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>	
DCA	7,280	0	0	0	0	0	0	
Non-DC Growth	1,960	0	0	0	0	0	0	
Other Internal	1,960	0	0	0	0	0	0	
TOTAL FUNDING	11,200					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
Name				Amount in Study: <input type="text"/>
Hard - Special Projects - Bike Lanes on Collector / Arterial Roads		7,280	3,690,232	Amount Incl HST <input type="text"/>
TOTAL FUNDING		7,280	3,690,232	Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: **23105**

Project Cost: **\$974,700**

Project Name: **Markham Transportation Strategic Plan (MTSP) Update**

Studies/Pilot Programs

Commission: Development Services

Useful Life: 0 Pre Approval:

Department: Engineering

Category: Major

Project Mgr: Samson Wat

Cost Validation: Internal peer review

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This study is to update the 2012 Markham Transportation Strategic Plan and to prepare and develop updated transportation policies for incorporation into the City Official Plan (OP) Update process that is being initiated in 2023. This study will build upon strategic transportation studies and plans already completed by the City and external agencies such as York Region, Metrolinx and MTO, that are relevant to the transportation system in Markham. Those relevant studies and plans include the City's ATMP, sidewalk program, Parking Strategy, various secondary plans and Road Safety Strategy, York Region's Transportation Master Plan, and MTO's Greater Golden Horseshoe Transportation Plan. Its scope will include: 1) transportation vision, modal hierarchy and strategic policies; 2) the development of a mobility strategy that includes micro-mobility and electrification strategy of the transportation system in the City of Markham; 3) road classification and design guidelines. This budget is to procure consulting services to undertake the development of a new Markham Transportation Strategic Plan. This consultant-assisted study is contingent upon a new FTE being available to project manage this study, which will be multi-year and multi-disciplinary, and involves a very comprehensive public and stakeholder consultation program, and will include multiple progress reports and workshops with Council.

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<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	0	0
Internal Charges:	79,200	0
External Consulting:	800,000	0
Contingency %: 10	80,000	0
Sub Total:	959,200	0
HST Impact:	15,488	0
Total Project Cost:	974,700	0

NOTES

This study schedule will be linked to the City's OP Update process and schedule over the next 2 years, which requires transportation policy input to meet Provincial Planning Act requirements. Expected schedule (assuming schedule coordination with OP review process): RFP to be issued in May 2023, study to commence in Aug 2023 and to be completed by Dec 2024. \$389k of expenditure is anticipated in 2023 and \$584k in 2024.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
DCA	974,700	0	0	0	0	0	0	
TOTAL FUNDING	974,700					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$146,274	\$0	\$0	\$146,274

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

Amount in Study

Life Cycle

Hard - Special Projects - Travel Demand Management

974,700

3,396,182

Amount in Study:

TOTAL FUNDING

974,700

3,396,182

Amount Incl HST

Year in the study

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Markham Transportation Strategic Plan (MTSP) Update – Supplementary Information

The MTSP is essentially the City of Markham's transportation master plan. It establishes a long-term vision for Markham's transportation network, strategies and initiatives with the primary goal of developing a multi-modal transportation system that supports existing and future residents, businesses and visitors while aligning with the City's strategic goals and policies. The last update of the City-wide Transportation Strategic Plan was completed in 2012. An update of the MTSP is needed to address Provincial and Regional changes over the past 10 years in land use and transportation plans and policies affecting Markham, as well as new urban transportation technologies that are in use or are emerging that are applicable to Markham. It will also bring recent City transportation plans and policies on active transportation into a new mobility strategy for the City of Markham.

This study will be developed in conjunction with the City's Official Plan update being initiated by the Planning Department in 2023.





2023 PROJECT FUNDING REQUEST FORM

Number: **23106**

Project Cost: **\$121,800**

Project Name: **New Traffic Signals (Design)**

Commission: Development Services

New Asset/Expansion

Department: Engineering

Useful Life: 0 Pre Approval:

Project Mgr: Justin Chin

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Design for new traffic signals at the following three intersections: (1) Bur Oak @ Willamson, (2) Bur Oak @ Country Ridge/Fred McLaren and (3) Carlton @ Central Park. These intersections meet the MTO criteria to warrant traffic signals and are therefore recommended by staff in order improve intersection safety, operations and accommodate future growth needs. The intersection will also include civil works to incorporate design elements as per the Accessibility for Ontarians with Disabilities Act (AODA). Design is to be completed in 2023; budget request for construction to be submitted for 2024.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	0	795,507
Internal Charges:	9,900	78,755
External Consulting:	100,000	0
Contingency %: 10	10,000	79,551
Sub Total:	119,900	953,813
HST Impact:	1,936	15,401
Total Project Cost:	121,800	969,200

NOTES

Attachment lists warranted locations based on safety ranking. Total costs specified in the DCA Study is identified as follows for each intersection, listed under "Intersection Improvements": Bur Oak/Williamson (Future Signalized Intersections (4) at Greensborough); Bur Oak @ Country Ridge/Fred McLaren (Future Signalized Intersections (7) at Wismer); and Carlton Rd @ Central Park. Project is substantially funded through DC Study. Budget for the design of the additional locations will be submitted over the next 2-3 yrs, pending consultation with local Councillors. Future phase amount of \$969,200 is for signal construction in 2024.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	
DCA	121,800	0	0	0	0	0	969,200
TOTAL FUNDING	121,800					0	969,200

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA

<u>Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
Hard - Intersection - Future Signalized Intersections (4)		40,600	1,352,219	Amount in Study: <input type="text"/>
Hard - Intersection - Future Signalized Intersections (2)		40,600	685,110	Amount Incl HST <input type="text"/>
Hard - Intersection - City-wide Interesection Pedestrian Signal (Lump Sum) - 10		40,600	2,300,217	Year in the study <input type="text"/>
TOTAL FUNDING		<u>121,800</u>	<u>4,337,546</u>	

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: 23107

Project Cost: \$396,000

Project Name: Pedestrian Cross-Over (PXO) Design & Construction

Commission: Development Services

New Asset/Expansion

Department: Engineering

Useful Life: 0 Pre Approval:

Project Mgr: Justin Chin

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The objective of this project is to prepare a detailed design and construct a formal pedestrian crossover (PXO) at two locations: (1) 9th Line north of 14th Avenue, and (2) Village Parkway south of Briarwood/Rae Crescent. Both locations meet the Provincial warrant criteria for the implementation of a PXO. Project includes feasibility review of appropriate PXO treatment, photometric review of streetlights, electrical design for streetlights and PXO equipment, arborist review of impacted trees, necessary civil work required to comply with the AODA, development of project tender specifications and detailed construction cost estimate.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	250,000	0
Internal Charges:	32,175	0
External Consulting:	75,000	0
Contingency %: 10	32,500	0
Sub Total:	389,675	0
HST Impact:	6,292	0
Total Project Cost:	396,000	0

NOTES

Project costs include detailed design (\$50k) and associated contract administration (\$25k), and (\$175k) for construction. Design anticipated to be complete by summer, with construction to be completed by end of 2023. 65% funded from DCA, 17.5% funded from Non-DC Growth and 17.5% funded from CBC's.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Future Phases</u>
DCA	257,400	0	0	0	0	0	0
Non-DC Growth	69,300	0	0	0	0	0	0
Other Internal	69,300	0	0	0	0	0	0
TOTAL FUNDING	396,000					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

Amount in Study

Life Cycle

Hard - Studies - Trans., Servicing, Enviro., Cycling, Traffic Calming, Noise, Subwatershed, Erosion Study Update etc.

257,400 18,003,000

Amount in Study:

Amount Incl HST

Year in the study

TOTAL FUNDING

257,400 18,003,000

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: **23108**

Project Cost: **\$342,400**

Project Name: **RVT Extension - Under Hwy 7 & Bullock (Design)**

Commission: Development Services

New Asset/Expansion

Department: Engineering

Useful Life: 0 Pre Approval:

Project Mgr: Lily Li

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Other(specify in Notes)

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Detailed design of trail under the highway 7 bridge to connect Mildred Temple Park to Denby Valley Park. The design will include in-water work and extensive consultation with external agencies, including the TRCA, MESP, DFO, etc. Furthermore, the budget will include detailed design of a pedestrian pathway on the north side of Highway 7, from north-west corner bus stop at Bullock and Highway 7 to Austin Drive Park.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	0
Internal Charges:	28,980	0
External Consulting:	280,000	0
Contingency %: 10	28,000	0
Sub Total:	336,980	0
HST Impact:	5,421	0
Total Project Cost:	342,400	0

NOTES

Design to commence in April 2023 and to be completed by March 2024.
Funding split DC 65%, Non DC growth 17.5%, CBC 17.5%.
\$250K expenditure is anticipated in 2023 and \$92k in 2024.

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget	TOTAL				Future Phases	
DCA	222,560	0	0	0	0	0	0
Non-DC Growth	59,920	0	0	0	0	0	0
Other Internal	59,920	0	0	0	0	0	0
TOTAL FUNDING	342,400				0	0	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

Amount in Study

Life Cycle

Hard - Special Projects - Bike Lanes on Collector / Arterial Roads

222,560

3,690,232

Amount in Study:

Amount Incl HST

Year in the study

TOTAL FUNDING

222,560

3,690,232

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: 23109

Project Cost: \$76,300

Project Name: Smart Commute Markham-Richmond Hill

Studies/Pilot Programs

Commission: Development Services

Useful Life: 0 Pre Approval:

Department: Engineering

Category: Annual

Project Mgr: Fion Ho

Cost Validation: Other(specify in Notes)

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Markham is a founding member and funding partner of Smart Commute Markham-Richmond Hill. Other funding partners are York Region and City of Richmond Hill. Smart Commute Markham-Richmond Hill offers services and programs to local employers and their employees to reduce use of private cars in commuting to and from work. Alternative modes includes carpooling, transit incentives, cycling, telework, emergency ride home program and more.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	75,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	75,000	0
HST Impact:	1,320	0
Total Project Cost:	76,300	0

NOTES

This is an annual program and relies on all three funding partners contributing our mutually agreed-upon share for the annual operation of Smart Commute Markham-Richmond Hill. The attachment provides additional information on the work done through this project and the outcomes obtained.

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
Funding Type	Budget					TOTAL	Phases
DCA	76,300	0	0	0	0	0	0
TOTAL FUNDING	76,300					0	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
Hard - Special Projects - Travel Demand Management		76,300	3,396,182	Amount in Study: <input style="width: 80px;" type="text"/>
TOTAL FUNDING		76,300	3,396,182	Amount Incl HST <input style="width: 80px;" type="text"/>
				Year in the study <input style="width: 80px;" type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$430,000

Project Name: Traffic Asset Replacement

Repair/Replace

Commission: Development Services

Useful Life: 0 Pre Approval:

Department: Engineering

Category: Annual

Project Mgr: Justin Chin

Cost Validation: Internal peer review

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Replacement of existing Traffic Assets, as identified in the Traffic Life Cycle Reserve Study and in-field conditions assessment. Project includes replacement of various traffic signal system components and speed monitoring equipment. List of affected locations and respective assets to be replaced is attached. Project to be tendered summer 2023, with project to be completed by end of 2023 construction season.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	384,148	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 10	38,415	0
Sub Total:	422,563	0
HST Impact:	7,437	0
Total Project Cost:	430,000	0

NOTES

Work includes: audible pedestrian push buttons and CCU's at 6 intersections (\$83k); traffic controller cabinets at 6 intersections (\$133k), LED replacements at 10 intersections (\$50k); emergency pre-emption detectors at 9 intersections (\$23.5k) & detector cards at 8 intersections (\$33k); a video detection camera & card at 1 intersection (\$9k); vehicular pole assemblies at 2 intersections (\$38.5k); pedestrian pole assemblies at 1 intersection (\$7k); solar powered flashers at 4 locations (\$8.5k). Cabinet wraps for traffic controller cabinets to be funded and completed by Operations.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	430,000	0	0	0	0	0	0	
TOTAL FUNDING	430,000					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="728,900"/>
				Amount Incl HST <input type="text" value="430,000"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
<input type="text" value="Due to amount in study capturing 2021/2023 assets, however 2021 asset replacement will be serviced under project# 22048."/>				



2023 PROJECT FUNDING REQUEST FORM

Number: 23111

Project Cost: \$182,800

Project Name: Traffic Calming of Main Street Markham & Carlton Road

Commission: Development Services

New Asset/Expansion

Department: Engineering

Useful Life: 0 Pre Approval:

Project Mgr: Justin Chin

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This is a traffic calming pilot project responding to complaints and concerns regarding traffic speeding and traffic volumes on two major collector roads. The scope of work for this project will involve retaining professional engineering consultant services to undertake a comprehensive feasibility review, public consultation and detailed design for the traffic calming design (likely road diets) on Main St. Markham (Bullock Drive - 16th Avenue) and Carlton Rd. (Kennedy Rd - McCowan Rd). Both streets are 4-lanes with no dedicated cycling facilities. The conceptual design proposal for both road sections is a lane reduction to 3-lanes (one lane per direction, including centre turn lane), and on-road dedicated cycling facilities. A road diet on Main Street Markham will be an interim condition, until such time that the City and community is in a position to conduct a full re-design of the corridor to invite a more urban design/form and streetscape plan, consistent with sections to the south of Bullock Drive.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	0	0
Internal Charges:	14,850	0
External Consulting:	150,000	0
Contingency %: 10	15,000	0
Sub Total:	<u>179,850</u>	<u>0</u>
HST Impact:	2,904	0
Total Project Cost:	<u>182,800</u>	<u>0</u>

NOTES

Based on traffic data collected from Copper Creek Road Diet pilot project from 2021, a road diet (if identified as the preferable traffic calming treatment) can be effective at reducing operating speeds. For Copper Creek, operating speeds reduced by 5 - 11 km/h (10% - 15%), depending on road section. RFP to be issued in April 2023. Contract award June 2023. Initiate public consultation in October 2023, following development of conceptual plan(s). \$91.4k of expenditure is anticipated in 2023 and \$91.4k in 2024. Funding split DC 65%, Non-DC Growth 17.5%, CBC 17.5

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>							<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>		
DCA	118,820	0	0	0	0	0	0	
Non-DC Growth	31,990	0	0	0	0	0	0	
Other Internal	31,990	0	0	0	0	0	0	
TOTAL FUNDING	<u>182,800</u>					<u>0</u>	<u>0</u>	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

Amount in Study

Life Cycle

Hard - Special Projects - City-wide Street Safety and Traffic
Calming, various locations

118,820

3,964,174

Amount in Study:

Amount Incl HST

Year in the study

TOTAL FUNDING

118,820

3,964,174

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: 23112

Project Cost: \$57,000

Project Name: Traffic Operational Improvements

Commission: Development Services

New Asset/Expansion

Department: Engineering

Useful Life: 0 Pre Approval:

Project Mgr: David Porretta

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Internal peer review

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project accomodates initiatives and requests that arise throughout the year from staff, residents or Council to improve traffic operations and safety for all users of the City's transportation network. Improvements include sign and traffic control devices, pavement markings for roadways and cycling facilities, and minor concrete and asphalt civil works to address and/or enhance pedestrian and cyclist safety.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	50,904	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 10	5,090	0
Sub Total:	55,994	0
HST Impact:	985	0
Total Project Cost:	57,000	0

NOTES

Budget request includes traffic control signs/devices/equipment (\$20k); road/cycling pavement markings (\$15k), minor concrete/asphalt civil works (\$15k).

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	Traffic Control Equipment	Concrete/Asphalt civil works	Road/cycling pavement marking			
DCA	39,177	22,387	16,790	0	0	39,177	0
Non-DC Growth	17,823	0	0	17,823	0	17,823	0
TOTAL FUNDING	57,000					57,000	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
Hard - Special Projects - City-wide Street Safety and Traffic Calming, various locations		39,177	3,964,174	Amount in Study: <input type="text"/>
TOTAL FUNDING		39,177	3,964,174	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: 23113

Project Cost: \$21,442,700

Project Name: Victoria Square Boulevard - Phase 1 Construction

Commission: Development Services

New Asset/Expansion

Department: Engineering

Useful Life: 0 Pre Approval:

Project Mgr: Alberto Lim

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Other(specify in Notes)

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Construction for road improvements of Victoria Square Boulevard - Phase I (from Woodbine Avenue (South) to south of Elgin Mills Rd.). The improvements include single lane roadway each way, a continuous left-turn lane, selected parking spaces and complete boulevard on both sides with separate cycle track and sidewalk and double rows of trees. Underground works include storm drainage system (catchbasins and storm sewers), watermain extension and sanitary sewer for local residents.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	14,923,759	12,583,866
Internal Charges:	1,742,368	799,823
External Consulting:	1,209,282	755,032
Contingency %: 20	3,226,608	2,667,780
Sub Total:	<u>21,102,017</u>	<u>16,806,501</u>
HST Impact:	<u>340,730</u>	<u>281,718</u>
Total Project Cost:	<u>21,442,700</u>	<u>17,088,200</u>

NOTES

Design will be completed by March 2023, construction to commence in Aug 2023 and to be completed by Dec 2024. The 20% contingency is recommended as consultant provided the detailed cost estimate based on the 90% design completed in 2021. Assuming if project commence in June 2023, \$8.52M of expenditure anticipated in Year 2023 and \$12.92M in Year 2024

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
DCA	21,442,700	0	0	0	0	0	17,088,200	
TOTAL FUNDING	<u>21,442,700</u>					<u>0</u>	<u>17,088,200</u>	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
Hard - Roads - Victoria Square Boulevard	2023	14,040,319	14,040,319	Amount in Study: <input type="text"/>
Hard - Roads - Victoria Square Boulevard	2025	7,402,381	14,502,793	Amount Incl HST <input type="text"/>
TOTAL FUNDING		<u>21,442,700</u>	<u>28,543,112</u>	Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Legal Services



2023 PROJECT FUNDING REQUEST FORM

Number: **23114**

Project Cost: **\$76,300**

Project Name: **Internal Document Management Software**

Commission: CAO, Legal, HR & Fire

Department: Legal Services

Project Mgr: Claudia Storto

Useful Life: 0 Pre Approval:

Category: _____

Cost Validation: _____

Requirement Validation: _____

Ward(s): CW 1 2 3 4
5 6 7 8

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Acquisition and implementation of third-party document management software to assist with: (i) electronic management of various legal documents and agreements; (ii) development and monitoring of KPIs; and (iii) City-wide personnel succession planning.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	75,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	75,000	0
HST Impact:	1,320	0
Total Project Cost:	76,300	0

NOTES

There is a growing demand within the City to implement Document Management/Process Tracking Software. The Legal Department is seeking to apply such software to its Legal Documents. The budget requested is only for software, and there are potential annual operating cost implications which are unknown at this time.

SOURCE(S) OF FUNDING (\$)		Components						Future Phases
Funding Type	Budget							TOTAL
Development Fees	57,225	0	0	0	0	0	0	
Tax	19,075	0	0	0	0	0	0	
TOTAL FUNDING	76,300						0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: 23115

Project Cost: \$356,200

Project Name: OLT - Growth Related Hearings

Studies/Pilot Programs

Commission: CAO, Legal, HR & Fire

Useful Life: 0 Pre Approval:

Department: Legal Services

Category: Major

Project Mgr: Claudia Storto

Cost Validation: Internal peer review

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: _____

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The purpose of this capital project request is to obtain funding necessary to defend Council decisions on development applications and other planning instruments and resolve outstanding site-specific appeals of the 2014 Official Plan at the Ontario Land Tribunal (OLT) as well as to defend appeals to the City's newly enacted Development Charges and Community Benefits Charges By-laws.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	350,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>350,000</u>	<u>0</u>
HST Impact:	<u>6,160</u>	<u>0</u>
Total Project Cost:	<u>356,200</u>	<u>0</u>

NOTES

The City continues to see an increase in complex development applications and is moving forward on a number of secondary plans, which are likely to lead to a corresponding increase in OLT appeals.

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget				TOTAL		
Development Fees	356,200	0	0	0	0	0	0
TOTAL FUNDING	<u>356,200</u>				<u>0</u>	<u>0</u>	<u>0</u>

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				

Human Resources



2023 PROJECT FUNDING REQUEST FORM

Number: **23116**

Project Cost: **\$175,700**

Project Name: **Digitizing of HR Employee Files**

Commission: CAO, Legal, HR & Fire

New Asset/Expansion

Department: Human Resources

Useful Life: 0 Pre Approval:

Project Mgr: Bessie Mok

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project will see the implementation of an additional module on ADP Workforce Now, which digitizes employee files, as well as the digitization of all existing HR employee data and documents that exist in hard copy files.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	157,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 10	15,700	0
Sub Total:	172,700	0
HST Impact:	3,040	0
Total Project Cost:	175,700	0

NOTES

Implement the new module (\$39,178) and begin the process of digitizing existing HR employee files (\$136,562). Digitizing of existing employee files is anticipated to take multiple years to complete. Employee files for those who have terminated will not be included in the digitization. This project is related to meeting our environmental, sustainable and employee satisfaction opportunities. Starting in 2024, there will be an incremental annual subscription costs for this module of approximately \$35,000 per year (in addition to our current ADP costs).

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	Digitization of Exting Files	Licensing & Activation				
Building Fees	10,542	8,194	2,351	0	0	10,545	0
Development Fees	14,056	10,925	3,134	0	0	14,059	0
Tax	140,560	109,250	31,342	0	0	140,592	0
Waterworks	10,542	8,194	2,351	0	0	10,545	0
TOTAL FUNDING	175,700					175,741	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$35,000	\$0	\$35,000

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Fire & Emergency Services



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$55,000

Project Name: Air Monitor Replacement

Commission: CAO, Legal, HR & Fire

Repair/Replace

Department: Fire & Emergency Services

Useful Life: 5 Pre Approval:

Project Mgr: Chris Nearing/Matt Keay

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Replacement of 15 Air Monitors and associated components last purchased in 2018.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	54,023	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	54,023	0
HST Impact:	951	0
Total Project Cost:	55,000	0

NOTES

Project cost is based on unit price of \$3667 x 15 units. Total inventory is 15 (including 1 spare). Electronic equipment has a useful life of 5 years based on technological change. Air monitors have been assessed and require replacement. Legislation OH&S 25.(2)(h) An employer shall take every precaution reasonable in the circumstances for the protection of a worker. Associated components include charges, testing equipment etc. Amount requested is consistent with the 2023 Life Cycle Reserve Study.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	55,000	0	0	0	0	0	0	
TOTAL FUNDING	55,000					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="55,000"/>
				Amount Incl HST: <input type="text" value="55,000"/>
				Year in the study: <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: **23118**

Project Cost: **\$119,600**

Project Name: **Bunker Gear Life Cycle Replacement**

Commission: CAO, Legal, HR & Fire

Repair/Replace

Department: Fire & Emergency Services

Useful Life: 7 Pre Approval:

Project Mgr: Chris Nearing/Matt Keay

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Replacement of 41 sets of bunker gear purchased in 2016. Request based on condition assessment in 2022 and legislative requirement to provide firefighters with structural firefighting protective equipment (bunker suit). Legislation: Health and Safety Act; Employer to maintain equipment and Section 21 Guidance Notes, Section 4 outlines standards for personal protective equipment. NFPA 1971 Standard on protection Ensembles for Structural Firefighting, minimum level of protection from thermal, physical, environmental and blood-borne pathogens. MFES has a contract for the supply and delivery of bunker gear 2018-2022.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	117,536	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	117,536	0
HST Impact:	2,069	0
Total Project Cost:	119,600	0

NOTES

Project cost is based on unit price of \$2,917.07 x 41 suits. Total inventory including spare bunker suits approx. 410 sets (suits ordered at 7 year mark to maintain adequate spare equipment, eliminates purchasing 2 full sets of bunker gear for each firefighter).

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	119,600	0	0	0	0	0	0	
TOTAL FUNDING	119,600					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="104,500"/>
				Amount Incl HST <input type="text" value="119,600"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
As at September 2022, vendor (Safedesign) advised that their current pricing for bunker suits is \$2,249USD/suit (\$2,856.23 CAD pre-tax at an exchange rate of 1.27). Including \$10.50/set of wrist guards, total cost per bunker set = \$2,866.73 CAD pre-tax				



2023 PROJECT FUNDING REQUEST FORM

Number: **23119**

Project Cost: **\$63,900**

Project Name: **Burn Prop-Second Floor Configuration**

Commission: CAO, Legal, HR & Fire

New Asset/Expansion

Department: Fire & Emergency Services

Useful Life: 10 Pre Approval:

Project Mgr: DFC Nearing

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Construction of interior walls for the second story of the burn facility. Included is an exterior metal staircase that will be required to access second story and an interior metal staircase is required to access a third storey unit. The second storey of the burn prop is wide open (40' x 40'). The interior walls allow the units to be configured for optimal training purposes. This allows us to replicate interior spaces that we would face in residential or commercial buildings. This presents firefighters with challenges in search and rescue and fire control and mitigation. As garages represent one of the most common points of origin, two 20' containers (\$9,150) will be used to simulate garage fires.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	62,750	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	62,750	0
HST Impact:	1,104	0
Total Project Cost:	63,900	0

NOTES

175 2' x 4' x 10' @ \$10/per unit (total \$1,750). 50 sheets of 1/2" x 4' x 8' Cement Board @ 50 per sheet (total \$2,500). \$500 for fasteners and miscellaneous materials. \$50,000 for fabrication and installation of exterior and interior staircases. \$9,150 for 2 containers.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
DCA	63,900	0	0	0	0	0	0	
TOTAL FUNDING	63,900					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
DCA: Firefighter Furniture and Equipment, which is under the Sustainability and Asset Management Department				



2023 PROJECT FUNDING REQUEST FORM

Number: **23120**

Project Cost: **\$53,400**

Project Name: **Firefighter Mental and Physical Health Program**

Commission: CAO, Legal, HR & Fire

Department: Fire & Emergency Services

Project Mgr: Chris Nearing/Matt Keay

Ward(s): CW 1 2 3 4
5 6 7 8

Repair/Replace

Useful Life: 10 Pre Approval:

Category: Minor

Cost Validation: Third party estimate

Requirement Validation: _____

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Replacement of existing fire station gym equipment with functional fitness and rehab equipment to modernize firefighter fitness and bring under our Total Health and Wellness Program. Training for on-shift fitness and wellness coaches (\$16,000) and equipment to outfit existing stations (approx \$37,000). Current gym facilities are based on building physical fitness/strength in a conventional fashion. The Fit 2 Thrive (F2T) program is a modern program (with one-time cost) based on preparing firefighters for their duties and rehabing the body after incidents. The F2T program is facilitated training led by certified trainers (firefighters on-shift) and requires different equipment that requires little, to no maintenance, resulting in some incremental savings to FS FFE.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	52,510	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	52,510	0
HST Impact:	924	0
Total Project Cost:	53,400	0

NOTES

Gyms are used by firefighters as a place to prepare for their work, and also to decompress and process traumatic events informally as a team. The F2T model is instructor led and based around teams, as opposed to individual strength training or cardio sessions. The physical and mental benefits to the firefighters will work to reduce work related injuries. Equipment includes the following for each fire station: 1 1500lb oly barbell, assorted bumper plates (15/25/45lbs), dumbbells, kettlebells, medicine balls, Half-rack etc.

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	Training	Equipment				
Tax	53,400	16,282	37,152	0	0	53,434	
TOTAL FUNDING	53,400					53,434	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: 23121

Project Cost: \$105,500

Project Name: Firefighting Tools & Equipment Replacement

Commission: CAO, Legal, HR & Fire

Department: Fire & Emergency Services

Project Mgr: Chris Nearing/Matt Keay

Ward(s): CW 1 2 3 4
5 6 7 8

Repair/Replace

Useful Life: 1 Pre Approval:

Category: Annual

Cost Validation: Other(specify in Notes)

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Annual replacement and purchase of firefighting tools & equipment. Examples include but are not limited to the following: ladders, nozzles, hand tools, water rescue equipment, ropes, fire extinguishers, hydraulic rescue tools, oxygen equipment, fire hose, air cylinders, SCBA masks & breathing valves, portable pumps, electric & gas operated saws, cribbing, hose appliances, portable radios, medical bags, fans, thermal camera & related equipment, laser temperature probes, travel restraint and lock out kits.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	103,700	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	103,700	0
HST Impact:	1,825	0
Total Project Cost:	105,500	0

NOTES

Purchases occur due to condition assessment/legislative requirements/circumstances. Because of the nature of the department activities, equipment may require purchase/replacement due to damage and condition, beyond economical repair or technological change. Amount is consistent with the 2023 Life Cycle Reserve Study update. This project funding meets the current needs of the Fire Department and keeps all tools and equipment in a good state of operational order.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	105,500	0	0	0	0	0	0	
TOTAL FUNDING	105,500					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: 105,500
				Amount Incl HST 105,500
				Year in the study 2023
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: **23122**

Project Cost: **\$144,800**

Project Name: **New Recruits Dudley**

Commission: **CAO, Legal, HR & Fire**

New Asset/Expansion

Department: **Fire & Emergency Services**

Useful Life: **7** Pre Approval:

Project Mgr: **Chris Nearing/ Adam Grant**

Category: **Minor**

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: **Recent awards**

Requirement Validation: **Legislative compliance**

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Personal Protective Equipment for new recruit firefighters to be stationed at Dudley Fire Station. Typically, a 3 month lead up is required to have a fully trained crew to be assigned to a station.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	142,296	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	142,296	0
HST Impact:	2,504	0
Total Project Cost:	144,800	0

NOTES

Equipment for 16 new recruits includes: Bunker Gear, uniforms, helmets, gloves, boots, hoods, safety shoes, SCBA, personal masks and breathing valves. The average cost of personal protective clothing, uniforms and equipment is \$9,050 per recruit based on 2022 quotes.

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget	TOTAL					
DCA	144,800	0	0	0	0	0	0
TOTAL FUNDING	144,800	0	0	0	0	0	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
FIRE SERVICES - Firefighter Equipment - New Fire Station - Thornhill (21 firefighters)	2022	142,296	166,299	Amount in Study: <input type="text"/>
TOTAL FUNDING		142,296	166,299	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Amount requested is based on 2022 personal protective equipment quote (\$9,050) x 16 new recruits.



2023 PROJECT FUNDING REQUEST FORM

Number: **23123**

Project Cost: **\$56,000**

Project Name: **Personal Firefighter Thermal Imaging Cameras**

Commission: CAO, Legal, HR & Fire

New Asset/Expansion

Department: Fire & Emergency Services

Useful Life: 5 Pre Approval:

Project Mgr: Chris Nearing/Matt Keay

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Purchase of 50 Seek Fire-ProX Thermal Imaging cameras to allow one for each firefighter on an apparatus (4 x 11 vehicles), as well as for one for each of the 4 Training Officers (ISO) and 2 spare units. The use of these cameras by a lost or trapped firefighter could offer substantial increases in firefighter safety. The addition of these TIC's would equip every firefighter with one, whereas currently only the Captain on each vehicle has one. These units are not the large, tactical units provided to the Captains; rather they are small, less expensive units with slightly less functionality.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	55,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	55,000	0
HST Impact:	968	0
Total Project Cost:	56,000	0

NOTES

Technology in the area of thermal imaging cameras has provided an additional layer of safety for firefighters and trapped persons: a relatively low cost personal TIC for each firefighter to carry. When a firefighter is trapped or disoriented they are usually isolated from the rest of their team. The current reliance on a single TIC per apparatus was a product of cost, not safety. 50 units @ \$1,120/unit, replaced every 5 years. Thermal Imaging Cameras ("TIC") are a basic piece of firefighter gear. They allow firefighters to see in zero-visibility house fires to search for trapped victims, locate hidden fires and to provide a rapid exit if conditions deteriorate.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Tax	56,000	0	0	0	0	0		
TOTAL FUNDING	56,000					0		

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$108,600

Project Name: Replacement of Equipment due to Staff Retirements

Commission: CAO, Legal, HR & Fire

Repair/Replace

Department: Fire & Emergency Services

Useful Life: 1 Pre Approval:

Project Mgr: Chris Nearing/Matt Keay

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: _____

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Purchase of personal protective clothing, uniforms and equipment for each recruit following the retirement of a firefighter. Legislation: OH&S 25.(2)(h) An employer shall take every precaution reasonable in the circumstances for the protection of a worker. Section 21 Guidance Notes, Section 4 in its entirety outlines standards for personal protective equipment and practices to protect firefighters. NFPA 1971 Standard on Protective Ensembles for Structural Firefighting, establishes minimal levels of protection from thermal, physical, environmental and blood-borne pathogens.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	106,766	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	106,766	0
HST Impact:	1,879	0
Total Project Cost:	108,600	0

NOTES

The average cost of personal protective clothing, uniforms and equipment is \$9,050 per firefighter based on 2022 quotes. Forecasted recruits for 2023 = 12 @ \$9,050 = \$108,600. Some retiree equipment is repurposed as spare.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	108,600	0	0	0	0	0	0	
TOTAL FUNDING	108,600					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="108,700"/>
				Amount Incl HST <input type="text" value="108,600"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$85,200

Project Name: Rescue Equipment Replacement

Commission: CAO, Legal, HR & Fire

Repair/Replace

Department: Fire & Emergency Services

Useful Life: 10 Pre Approval:

Project Mgr: Chris Nearing/Matt Keay

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Life Cycle replacement of the following equipment: 1 rescue cart last replaced in 2018; 6 remote area lighting system last replaced in 2018; 2 battery powered lights last replaced in 2018; 10 manual hydraulics last replaced in 2008; 1 thermal image camera (TIC) last replaced in 2013; 9 sets of ropes and rope bags last replaced in 2018 and 5 medical bags last replaced in 2018.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	83,690	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	83,690	0
HST Impact:	1,473	0
Total Project Cost:	85,200	0

NOTES

Project cost is based on unit price of \$2,180 x 1 Rescue Cart=\$2,180, \$1,156 x 6 Remote Area Lighting System=\$6,936, \$2,616 x 2 Battery Powered Lights=\$5,232, \$5,295 x 10 Manual Hydraulics=\$52,950, \$11,200 x 1 Thermal Camera = \$11,200, \$389 x 9 sets of Ropes and Rope Bags = \$3,500 and \$640 x 5 Medical Bags = \$3,200. The amounts and units are consistent with the 2023 Life Cycle Reserve Study.

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget	rescue cart, lights and area lighting system	manual hydraulics	TIC	ropes, rope bags & medical bags	TOTAL	
Operating Funded Life Cycle	85,200	14,348	52,952	11,200	6,700	85,200	
TOTAL FUNDING	85,200					85,200	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="135,100"/>
				Amount Incl HST <input type="text" value="85,200"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$950,000

Project Name: Self Contained Breathing Apparatus (SCBA) Replacement

Commission: CAO, Legal, HR & Fire

Repair/Replace

Department: Fire & Emergency Services

Useful Life: 9 Pre Approval:

Project Mgr: Chris Nearing/Matt Keay

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Replacement of 100 self contained breathing apparatus (SCBA) packs last purchased in 2014 and 272 SCBA Interspiro S-USA ambient air hatch mask w/breathing valve, quick connect and HUD Textile head harness (face piece) last purchased in 2014.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	933,607	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>933,607</u>	<u>0</u>
HST Impact:	<u>16,431</u>	<u>0</u>
Total Project Cost:	<u>950,000</u>	<u>0</u>

NOTES

100 packs @ \$5,326.44/pack and 272 face pieces @ \$1,534.54/face piece.

<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>					<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>	<u>100 SCBA packs</u>	<u>272 S9 masks</u>		<u>TOTAL</u>		
Operating Funded Life Cycle	950,000	532,644	417,395	0	0	950,039	0
TOTAL FUNDING	<u>950,000</u>					<u>950,039</u>	<u>0</u>

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="838,300"/>
				Amount Incl HST: <input type="text" value="950,000"/>
				Year in the study: <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
Unit numbers increased due to additional apparatus (Drago units) and deployment positions. 2023 replacement requires an additional 6 packs (for a total of 100 SCBA packs @ 5,326.44/pack), and an additional 52 masks (for a total of 272 face pieces @ \$1,534.54/face piece), resulting in an increase of \$111,754.72 from what was identified in the Life Cycle Study for 2023 replacements.				



2023 PROJECT FUNDING REQUEST FORM

Number: **23127**

Project Cost: **\$29,900**

Project Name: **Technical Rescue Program - Training**

Commission: CAO, Legal, HR & Fire

New Asset/Expansion

Department: Fire & Emergency Services

Useful Life: 5 Pre Approval:

Project Mgr: Chris Nearing/ Matt Keay

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

MFES currently has a squad team trained and equipped in a variety of technical rescue specialties. The next phase is to prepare them to access, treat, package and extricate persons who cannot evacuate themselves from height, whether through medical emergency or misadventure. This can include rescue from cranes, high buildings under construction and many other rescues involving complex climbing and rigging. The project also includes specialized climbing and rigging equipment.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	29,400	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	29,400	0
HST Impact:	517	0
Total Project Cost:	29,900	0

NOTES

The specialty training will be delivered by an outside agency to a total of 16 staff for \$1,532/pp (\$24,500) and will require the purchase of climbing and rigging equipment as well as additional long-length rope (\$5,400).

SOURCE(S) OF FUNDING (\$)		Components					TOTAL	Future Phases
Funding Type	Budget							
Tax	29,900	0	0	0	0	0	0	
TOTAL FUNDING	29,900					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$33,000

Project Name: Water Rescue Equip. Replac. - RDC and Technician Vests

Commission: CAO, Legal, HR & Fire

Repair/Replace

Department: Fire & Emergency Services

Useful Life: 5 Pre Approval:

Project Mgr: Chris Nearing/Matt Keay

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Replacement of 60 SAR 770 Technician Vests, last replaced in 2018. Replacement of 1 RDC (Rapid Deployment Craft) for 957 and 971, last replaced in 2015. The RDC allows for entry into open water to engage in rescue.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	32,448	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	32,448	0
HST Impact:	571	0
Total Project Cost:	33,000	0

NOTES

Replacement of equipment that has fulfilled its established useful life cycle based on condition assessment. 2 RDC @\$6,667/unit with an 8 year useful life, and 60 technician vests @\$327.76/unit with a 5 year useful life. The total inventory of RDC is 4 and the total inventory of technician vests is 60.

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	RDC	Technician Vests				
Operating Funded Life Cycle	33,000	13,334	19,666	0	0	33,000	0
TOTAL FUNDING	33,000					33,000	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="128,500"/>
				Amount Incl HST: <input type="text" value="33,000"/>
				Year in the study: <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				

IT Services



2023 PROJECT FUNDING REQUEST FORM

Number: **23129**

Project Cost: **\$507,500**

Project Name: **Contract Resource Recovery**

Commission: Corporate Services

New Asset/Expansion

Department: ITS

Useful Life: 0 Pre Approval:

Project Mgr: _____

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Other(specify in Notes)

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This is a capital request based on discussion with Finance for 2023 funding of approved contract resources for EAM and PerfectMind initiatives. The approved resources (5 total) consist of 1 GIS resource (digitization of assets), 1 QA, 1 Training resource (seconded from Recreation), and 2 testers

BUILDING MARKHAM'S FUTURE TOGETHER: Stewardship of Money & Resources

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	0
Internal Charges:	507,500	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	507,500	0
HST Impact:	0	0
Total Project Cost:	507,500	0

NOTES

Amounts determined by finance (Funding and Staffing request spreadsheet v9)

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Ramp Up	507,500	0	0	0	0	0	0	
TOTAL FUNDING	507,500					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: **23130**

Project Cost: **\$335,800**

Project Name: **ITS - AMP's (Administrative Monetary Penalty) Expansion**

Commission: Corporate Services

New Asset/Expansion

Department: ITS

Useful Life: 8 Pre Approval:

Project Mgr: Rob Cole

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Other(specify in Notes)

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The City implemented the Administrative Monetary Penalties System (AMPS) program for parking infractions in 2015. The program allows the screening and adjudication of parking violations by the City, reducing the burden on the Provincial Offences Courts, and enhancing customer service and efficiency. Based on a business case developed with Provincial Audit & Accountability funding, as part of the 2022 budget, Council approved the expansion of AMPS to include a broader range of infractions across multiple departments.

In fall 2022, the City is implementing a new software solution for parking enforcement. In order to facilitate the expansion of AMPS to other areas, this software solution will need to be enhanced, with additional modules, or a new solution procured, to accommodate the business requirements of the new AMPS program.

Scoping for the system requirements is currently underway; however, a preliminary estimate of the capital funding required is \$250,000 for software, licensing, and implementation services. In addition, there will be an ongoing operating cost of \$50,000 per year (20% of the solution cost), The first year is to be added to capital (\$250,000 + \$50,000) = \$300,000. Lastly, 10% contingency is added to account for expected costs for additional hardware needs (ie. phones, hand held devices, printers).

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	300,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 10	30,000	0
Sub Total:	330,000	0
HST Impact:	5,808	0
Total Project Cost:	335,800	0

NOTES

Cost is estimated at this time based on high level information provided by the consultant. Costing quotes will still be required. In order to support the solution, through implementation and subsequent support, administration, updates, reporting etc. - 1 new FTE will be required and is reflected in the personnel costs. Personnel operating budget impact is expected to start in 2023. Non-Personnel operating budget impact is expected to start in 2024.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	335,800	0	0	0	0	0	0	
TOTAL FUNDING	335,800					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$159,208	\$50,000	\$0	\$209,208

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: 23131

Project Cost: \$58,200

Project Name: ITS - Gimmel Upgrade to the Cloud

Commission: Corporate Services

Repair/Replace

Department: ITS

Useful Life: 5 Pre Approval:

Project Mgr: Rob Cole

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: _____

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Upgrade the software used for legislative services document management and move it to a cloud based environment. Capital expectation for software upgrade and implementation is US\$45K, which is equivalent is CDN \$57,150 at budgeted FX rate of 1.27.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	57,150	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	57,150	0
HST Impact:	1,006	0
Total Project Cost:	58,200	0

NOTES

As we are currently using Gimmel SaaS, the operating cost of Gimmel is already included the current operating budget. Hence, there is no incremental operating budget impact. The latest subscription fee is \$22,225.

SOURCE(S) OF FUNDING (\$)		Components					Future Phases
Funding Type	Budget				TOTAL	Phases	
Tax	58,200	0	0	0	0	0	
TOTAL FUNDING	58,200				0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: 23132

Project Cost: \$57,000

Project Name: MPL Digital Literacy Strategy Implementation

Commission: Corporate Services

New Asset/Expansion

Department: ITS

Useful Life: 5 Pre Approval:

Project Mgr: Catherine Biss

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Internal peer review

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

MPL's Digital Literacy Strategy supports the goals of Digital Markham by providing access to resources to support academics, lifelong learning, creative expression, entrepreneurship and skill development in the areas of fabrication, coding, digital media, robotics and AR/VR. Building on the success of MPL's current makerspaces and digital literacy programming, this project will expand access to the Thornhill Community, and provide additional services supporting local entrepreneurship, and digital skill development. This project supports the goal of digital inclusion by providing access to resources for community members who may otherwise lack the skill or means to participate in the digital economy, education and citizenship.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	56,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	56,000	0
HST Impact:	986	0
Total Project Cost:	57,000	0

NOTES

Initial investment reflects costs to implement a makerspace at Thornhill CC branch. This will provide equity for Thornhill community with introduction of fabrication technologies (3D printing, scanning, etc). It includes large scale printing & equipment for self-publishing which supports Markham authors & content creators. Equipment & technologies for teaching will allow MPL to introduce instruction in the area of game development, robotics & coding, that will be accessible across the system. Annual operating fund for licensing is required starting from year 2.

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	Hardware	Licence				
Tax	57,000	42,750	14,250	0	0	57,000	0
TOTAL FUNDING	57,000					57,000	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$14,250	\$0	\$14,250

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: 23133

Project Cost: \$458,700

Project Name: GPS/AVL Replacement

Repair/Replace

Commission: Corporate Services

Useful Life: 10 Pre Approval:

Department: ITS

Category: Minor

Project Mgr: Mustafa Rahman/Steve Dollmaier

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The Operations Department maintains fleet equipment and has lacked the data required to take a strategic evidence based approach to improve their decision making, work planning and responsiveness to employee and driver behavior. This project will involve upgrading of the GPS hardware and software and adding dashcams to fleet vehicles. Procurement, setup, testing and support will be key components of this project.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	450,748	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	450,748	0
HST Impact:	7,933	0
Total Project Cost:	458,700	0

NOTES

The current hardware is dated and does not provide the data needed to make informed decisions. Dash-cams encourage safer driving, provide an unbiased video recording which can be used as training for staff, and aid in protecting the safety of City staff. In order to become more proactive and provide a stronger legal position to legislative compliance and record keeping, better data is needed to inform decision making.
Annual operating cost quoted is \$140,682. The current operating budget for AVL is \$87,066. The incremental operating budget impact is \$53,616 and is expected to start in 2024.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
DCA	458,700	0	0	0	0	0	0	
TOTAL FUNDING	458,700					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$53,616	\$0	\$53,616

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: 23134

Project Cost: \$6,568,600

Project Name: IT Lifecycle Asset Replacement - 2

Commission: Corporate Services

Repair/Replace

Department: ITS

Useful Life: 0 Pre Approval:

Project Mgr: Sugun Rao

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Other(specify in Notes)

Requirement Validation: _____

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The request is to seek approval of IT Life Cycle hardware assets that are aging and reaching end of life. Assets have been discontinued by manufacturers and some have started to fail causing unexpected service interruptions. For details, see supporting document.

BUILDING MARKHAM'S FUTURE TOGETHER:

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	6,455,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>6,455,000</u>	<u>0</u>
HST Impact:	<u>113,608</u>	<u>0</u>
Total Project Cost:	<u>6,568,600</u>	<u>0</u>

NOTES

The request includes replacement of the following assets and professional services: 1. ITS Strategy Review; 2. ITS Cybersecurity Audit; 3. Backup Data Centre Firewall and Phase 2of 2 Network Closet Switches; 4. Storage Disk System and SAN Switch (Primary and Backup Data Centre); 5. Staff Computing Device; 6. Audio Visual Equipment; 7. Library Bibliotheca and 8. Print Room IT Assets. The \$96k Non-Personnel operating budget is for licenses, subscriptions and support for switch, firewall and cloud Infrastructure. Cost estimate is based on recent purchases and budgetry estimates from vendor.

SOURCE(S) OF FUNDING (\$)		Components						Future Phases
Funding Type	Budget					TOTAL		
Building Fees	360,536	0	0	0	0	0	0	
Development Fees	480,712	0	0	0	0	0	0	
Operating Funded Life Cycle	5,366,822	0	0	0	0	0	0	
Waterworks	360,530	0	0	0	0	0	0	
TOTAL FUNDING	<u>6,568,600</u>					<u>0</u>	<u>0</u>	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$96,000	\$0	\$96,000

DCA/LIFE CYCLE DETAILS

<u>DCA</u> Name	Year	Amount	Amount in Study	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="8,618,700"/>
				Amount Incl HST <input type="text" value="5,366,800"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Staff has validated that the proceeding 2023 capital submission has sufficient life cycle funding.

Item	Quantity	Total Costs	Life Cycle	Source of Funding			
				Water Works	Building	Engineering	Planning
2023 IT Lifecycle Asset Replacement							
1 ITS Strategy Review <i>Undertake ITS Strategy Review to support and align with new BMFT plan</i>		\$150,000	\$120,000	\$9,000	\$9,000	\$6,000	\$6,000
2 Security Audit <i>Conduct a comprehensive vulnerability assessment exercise of the City's internal network to find deficiencies as a result of new risks and vulnerabilities being introduced as part of the new IT system added to network and in the view of more intrusive cyber attacks.</i>	1	\$55,000	\$44,000	\$3,300	\$3,300	\$2,200	\$2,200
1 DR Firewall and Network Closet Switch Replacement - Phase Two <i>Replacement of aging firewall hardware at Data Centre and network switches at all citywide Network Closets. The replacement solution will include enhanced security features such as traffic segregation based on service type (such as Security Camera, SCADA, BAS/HVAC, Public, Staff Network, etc).</i>		\$1,200,000	\$960,000	\$72,000	\$72,000	\$48,000	\$48,000
2 Storage Disk replacement <i>As part of the Life Cycle replacement of Primary Storage Disk System (For File Server and Virtual Machines)</i>	1	\$800,000	\$640,000	\$48,000	\$48,000	\$32,000	\$32,000
1 Computing device replacement <i>Life Cycle replacement of citywide computing device (Laptop, Tablets, Desktop and Monitors) that are 6+ years old and Monitors 16+ Year old.</i>		\$2,100,000	\$1,680,000	\$126,000	\$126,000	\$84,000	\$84,000
2 Committee Meeting Room and City Wide Boardrooms Audio Visual Replacement <i>Replacement of 9+ years old Audio Visual equipment in Council Chamber, Canada Room, York Room, Great Hall plus citywide 55 Boardrooms.</i>	1	\$1,200,000	\$960,000	\$72,000	\$72,000	\$48,000	\$48,000
1 Library Bibliotheca Replacement <i>Replacement of 8+ year old Library bibliotheca equipment - (9 units at Angus Glen Library and 7 units at Markham Village Library)</i>		\$550,000	\$550,000				
2 Print Room IT equipment replacement <i>Replacement includes 3 Multifunction Devices and Folder Machines</i>	1	\$300,000	\$240,000	\$18,000	\$18,000	\$12,000	\$12,000
5 Internal Charges - 1 Staff for Project Resources <i>This resource is required in order to implement IT Capital Projects</i>		\$ 100,000	80,000	6,000	6,000	4,000	4,000
Total		\$6,455,000	\$5,274,000	\$354,300	\$354,300	\$236,200	\$236,200
HST Impact 1.76%		\$113,608	\$92,822	\$6,236	\$6,236	\$4,157	\$4,157
Total with HST Impact		\$6,568,608	\$5,366,822	\$360,536	\$360,536	\$240,357	\$240,357



2023 PROJECT FUNDING REQUEST FORM

Number: **23135**

Project Cost: **\$305,300**

Project Name: **ITS - Existing Portal Infrastructure Extension**

Commission: Corporate Services

Repair/Replace

Department: ITS

Useful Life: 1 Pre Approval:

Project Mgr: Rob Cole

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Our existing portal is managed on infrastructure at Compugen. The current contract for support and use of this infrastructure ends in April 2023. With the approval of a staff award from Council, the ITS team will be replacing the portal platform with a new platform (Drupal); however, that project is just kicking off (currently in contract negotiation). To accommodate the continued support for the current platform while Drupal is being implemented, we will require 300K in funding. Estimate is based on current costs (45K/quarter + 45K support = 225K) plus an anticipated uplift.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	300,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	300,000	0
HST Impact:	5,280	0
Total Project Cost:	305,300	0

NOTES

Extension of existing infrastructure for 1 year

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget	TOTAL				Future Phases	
Building Fees	18,318	0	0	0	0	0	0
Development Fees	24,424	0	0	0	0	0	0
Tax	244,240	0	0	0	0	0	0
Waterworks	18,318	0	0	0	0	0	0
TOTAL FUNDING	305,300				0	0	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: **23136**

Project Cost: **\$27,100**

Project Name: **ITS - Feature Manipulation Engine (FME)**

Commission: Corporate Services

New Asset/Expansion

Department: ITS

Useful Life: 5 Pre Approval:

Project Mgr: Matt Miller

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Purchase 1 Server and 2 additional Desktop licenses of FME. This is an Extract Load and Transform (ETL) tool that allows for integration between many different data and application platforms. The server license will allow us to create event based automation workflows and assist with real-time processing. The Desktop licenses are used for data integration, transformation, validation and conversion between different systems. This solution can be used with both spatial and non-spatial data types.

CAPEX
 Secondary Floating License cost = 2 @ \$3,900 = \$7,800
 Server cost = \$18,800
 Total = \$26,600

Operating
 Secondary Floating License maintenance = 2 @ \$780 = \$1,560
 Server maintenance = \$8,800
 Total = \$20,360

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	26,600	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	26,600	0
HST Impact:	468	0
Total Project Cost:	27,100	0

NOTES
 Operating budget impact is expected to start in 2024.

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
Funding Type	Budget					TOTAL	Phases
Tax	27,100	0	0	0	0	0	0
TOTAL FUNDING	27,100					0	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$20,600	\$0	\$20,600

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Finance



2023 PROJECT FUNDING REQUEST FORM

Number: 23137

Project Cost: \$987,800

Project Name: Internal Project Management

Studies/Pilot Programs _____

Commission: Corporate Services

Useful Life: 0 Pre Approval:

Department: Finance

Category: _____

Project Mgr: Kevin Ross/Graham Seaman

Cost Validation: _____

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: _____

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Project to allocate internal resource costs to Development Charges associated with the administration and procurement management aspects of capital growth. This project represents 90% of the total costs and the remaining 10% will be funded from the Operating Budget.

BUILDING MARKHAM'S FUTURE TOGETHER:

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	0	0
Internal Charges:	987,752	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	987,752	0
HST Impact:	0	0
Total Project Cost:	987,800	0

NOTES

Requirement validation: Internal resource costs of 10 staff associated with capital growth (development charges) projects.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>							
DCA	987,800	0	0	0	0	0	0	
TOTAL FUNDING	987,800					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: 23138

Project Cost: \$5,247,700

Project Name: Water Billing Transition Project

Commission: Corporate Services

New Asset/Expansion

Department: Finance

Useful Life: 0 Pre Approval:

Project Mgr: Shane Manson

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: _____

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

As part of the ongoing work to transition to a new Utility Billing System, the City has engaged Kaihen Inc. (Kaihen) as a consultant resource to conduct assessments of its current systems and processes, to assess possible options to replace the services currently received from Alectra. The objective of the assessment was to determine the available options and determine a recommended path forward. Based on the assessment, it was recommended the City move forward with a Hybrid Service Delivery Model, which includes a combination of in-house and outsourced components including; a Cloud/Hosted CIS & Customer Portal; Outsourced Meter Reading and Bill Print service; In-House Back Office & Call Centre support services.

BUILDING MARKHAM'S FUTURE TOGETHER: Stewardship of Money & Resources

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	3,400,000	0
Internal Charges:	322,500	0
External Consulting:	1,000,000	0
Contingency %: 10	440,000	0
Sub Total:	<u>5,162,500</u>	<u>0</u>
HST Impact:	85,184	0
Total Project Cost:	<u>5,247,700</u>	<u>0</u>

NOTES

The initial Procurement will be for the CIS, SI and AMS-IT services, with the CIS being one of the most important applications within a utility. The subsequent Procurement will be for the Outsourced Meter Reading and Bill Print service providers. Third party estimate has been provided by Kaihen consultants who were engaged in the Discovery Phase to provide information on the best method to forward with. ITS has been involved in this project and have reviewed this submission. Operating impact will begin to be phased in starting in 2023. \$1.75M contract with Alectra will be offsetting expenses commencing in 2025.

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	Software & Portal	Project Staff	Consulting	Contingency		
Waterworks	5,247,700	3,459,856	322,500	1,017,600	447,744	5,247,700	0
TOTAL FUNDING	<u>5,247,700</u>					<u>5,247,700</u>	<u>0</u>

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$1,373,911	-\$178,778	\$0	\$1,195,133

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				

WATER TRANSITION PROJECT DETAILS			
Category	Resources	Cost / FTE	Project Component Estimates
CIS			\$296,800
SI			\$2,700,000
AMS			\$100,000
Customer Portal			\$112,000
Meter Reading			\$628,838
Bill Design / Print			\$82,500
COST SUBTOTAL:			
PROJECT RESOURCES:			
Kaihen Phase 2A/2B/3			\$1,000,000
External Consulting:			
Internal Consulting	2	\$65,000	\$130,000
IT/SE			
Internal Charges:			

Contingency @ 10% (excludes Internal Charges):

UPFRONT COSTS	
2023	2024
\$98,700	\$296,800
\$1,350,000	\$1,350,000
\$0	\$100,000
\$56,000	\$56,000
\$0	\$10,000
\$0	\$82,500
\$1,504,700	\$1,895,300
\$3,400,000	
\$500,000	\$500,000
\$1,000,000	
\$130,000	\$130,000
\$62,419	\$0
\$322,419	
\$200,470	\$239,530
\$440,000	

ONGOING COSTS		Comments
2025	2026+	
\$296,000	\$310,800	escalated by 5% / yr
\$0	\$0	
\$100,000	\$105,000	need to understand licensing model for software, iif user based cost could be higher than 100K/year. Also, assume with SaaS solution that maintenance and support will start upon contract effective date (though we will try to negotiate otherwise) escalated by 5% / yr
\$90,000	\$94,500	escalated by 5% / yr
\$628,838	\$644,559	escalated by 2.5% / yr 82K RES reads every 2 mths, 2.5K ICI reads mthly
\$455,066	\$466,442	(70% Bill, 30% ebill) then escalate by 2.5% growth
\$0		Phase 2B \$500K and Phase 3 \$500K
\$25,067		3 month post live
		6 month contract in 2023

TOTAL CAPITAL AND NON-PERSONNEL OPERATING COSTS (i) :

Offest: EXISTING OPERATING BUDGET FOR ALECTRA (ii) :
(still required for 2023/2024 during transition period)

2025+ NON-PERSONNEL SAVINGS (ii - i)

\$5,162,419	\$1,594,971	\$1,621,301
	\$1,748,681	\$1,801,141
	\$178,777	\$179,840

PERSONNEL COSTS

Future Staffing	A	B	C = A x B
	# of Staff Required	Salary (w/ benefits)	
Call Centre	8	\$87,122	\$696,973
Back Office	7	\$78,941	\$552,584
IT/SE	1	\$124,837	\$124,837

2023	2024
\$0	\$174,247
\$0	\$138,158
\$0	\$124,837

2025	2026+	Comments
\$696,973	\$710,913	
\$552,584	\$563,636	escalated by 2% / yr
\$124,837	\$127,334	125K/annum based on a fully burdened ITS Band D rate escalated by 2% / yr

TOTAL PERSONNEL COSTS (ii) :

\$437,243	\$1,374,395	\$1,401,882
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Sustainability & Asset Management



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$191,200

Project Name: 8100 Warden Facility Repair and/or Replacement Projects

Repair/Replace

Commission: Corporate Services

Useful Life: 25 Pre Approval:

Department: Sustainability and Asset Management

Category: Major

Project Mgr: Jason Ramsaran

Cost Validation: Internal peer review

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Program includes various life cycle works to maintain the 8100 Warden Facility in a state of good repair and in alignment to the Asset Management Plan/ Policy.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	187,893	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	187,893	0
HST Impact:	3,307	0
Total Project Cost:	191,200	0

NOTES

\$20,800 - Carpet for north stairwell (2007)
 \$170,400 - Electrical and mechanical repairs and replacements (1982-2021)

Amount is validated and consistent with the Life Cycle Reserve Study and based on the prior year annual condition assessment and cost estimation.

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	North Stairwell	Electrical & Mechanical				
Operating Funded Life Cycle	191,200	20,800	170,400	0	0	191,200	0
TOTAL FUNDING	191,200					191,200	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="191,200"/>
				Amount Incl HST <input type="text" value="191,200"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$239,200

Project Name: Accessibility Retrofit Program

Commission: Corporate Services

Repair/Replace

Department: Sustainability and Asset Management

Useful Life: 10 Pre Approval:

Project Mgr: Dana Honsberger

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Internal peer review

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Ongoing program to comply with legislative requirements under the Accessibility for Ontarians with Disabilities Act and with Auditor General recommendations.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	235,063	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	235,063	0
HST Impact:	4,137	0
Total Project Cost:	239,200	0

NOTES

\$239,200 - Misc. upgrades & Accessibility Program Support, compliance with the Advisory Committee on Accessibility March 2020 audit report for the Civic Centre remaining priority level 1 and 2 items, and on-demand items.

Amount is validated and consistent with the Life Cycle Reserve Study and based on the prior year annual condition assessment and cost estimation.

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget	Accessibility Support			TOTAL		
Operating Funded Life Cycle	239,200	239,200	0	0	0	239,200	0
TOTAL FUNDING	239,200					239,200	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="254,800"/>
				Amount Incl HST: <input type="text" value="239,200"/>
				Year in the study: <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: 23141

Project Cost: \$156,000

Project Name: Bird Safe Film

Commission: Corporate Services

Repair/Replace

Department: Sustainability and Asset Management

Useful Life: 8 Pre Approval:

Project Mgr: Michael Ryan

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Internal peer review

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Supply and install bird safe film at various City facilities where film is not installed, to meet Canadian Standards Association (CSA) requirements.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	153,302	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	153,302	0
HST Impact:	2,698	0
Total Project Cost:	156,000	0

NOTES

\$156,000 - Bird Film at Markham Village Library and Armadale Community Centre and any other facilities from FLAP's list as budget permits.

On completion of this project, all City facilities will be compliant with Fatal Life Awareness Program (FLAP) audit recommendations and future needs will be repaired or replaced as necessary. Amount is validated and consistent with the Life Cycle Reserve Study.

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget	Bird Film Installation				TOTAL	
Operating Funded Life Cycle	156,000	156,000	0	0	0	156,000	0
TOTAL FUNDING	156,000					156,000	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: 156,000
				Amount Incl HST: 156,000
				Year in the study: 2023
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: 23142

Project Cost: \$903,100

Project Name: Building Automation Systems Replacement Program

Commission: Corporate Services

Repair/Replace

Department: Sustainability and Asset Management

Useful Life: 25 Pre Approval:

Project Mgr: Aaron Cheung

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Multiple(specify)

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This is funding for Design and Replacement work for Building Automation Systems (BAS) in City facilities. Design work consists of engineering consultant services to audit building systems, prepare updated control replacement scope for tender packages, and contract administration and commissioning. Replacement work consists of new BAS based on tender package. The work is to migrate facilities on the old central BAS platform that is sunsetting (discontinuation of parts and software updates), to the new central BAS. City will apply for external grant funding (at least \$55k) to help reduce capital costs. Forecasted utility costs savings are \$40k starting in 2025, additional \$27k starting in 2026, and \$67k starting in 2027.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	887,480	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	887,480	0
HST Impact:	15,620	0
Total Project Cost:	903,100	0

NOTES

Project is contingent on approval of new staff to manage the project and is not contingent on grant.
\$686,400 - 8100 Warden construction
\$216,700 - Design/consulting for FS 93, FS 99, Armadale CC, Varley Art Gallery, Markham Village Library and Museum Collections Bldg. Design and tender packages in 2023 and replacement in 2024.
Estimate costs based on third party quotations obtained in 2022, replacement costs in last 5 years, as well as internal peer review.
Amount is validated and consistent with the Life Cycle Reserve Study.

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	Construction	Design/Consulting				
	0	0	0	0	0	0	0
Operating Funded Life Cycle	903,100	686,400	216,700	0	0	903,100	0
TOTAL FUNDING	903,100					903,100	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	-\$40,000	\$0	-\$40,000

DCA/LIFE CYCLE DETAILS

<u>DCA</u> Name	Year	Amount	Amount in Study	<u>Life Cycle</u>
				Amount in Study: 1,840,000
				Amount Incl HST 903,100
				Year in the study 2023

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

This is a new program. The variance (excess LC) will be corrected/updated in next reserve study update.

BAS Replacement Program Major

Lifecycle Budget Inflation 0.04

											←Non Inflated, HST Inclusive→	←Inflated, HST Included→		
											A	E=A*Inflation		
Facility	Responsible Name	Operating/Capital	Classification	Class Type	Description	Location	Attributes	Year Installed	Cycle Factor	Year Due	Replacement Value	2023	2023 Budget Entry	Notes
BAS Replacement Program		OOT	Mechanical	Controls	Building Automation System	8100 Warden	Construction	2003	20	2023	660023	660023	686,400	674528
BAS Replacement Program		OOT	Mechanical	Controls	Building Automation System	Fire Station 93	Consulting fee	2003	20	2023	36001	36001		
BAS Replacement Program		OOT	Mechanical	Controls	Building Automation System	Fire Station 99	Consulting fee	2003	20	2023	34468	34468		
BAS Replacement Program		OOT	Mechanical	Controls	Building Automation System	Armada CC	Consulting fee	2003	20	2023	34468	34468		
BAS Replacement Program		OOT	Mechanical	Controls	Building Automation System	Varley Art Gallery	Consulting fee	2003	20	2023	34468	34468		
BAS Replacement Program		OOT	Mechanical	Controls	Building Automation System	Markham Village Library	Consulting fee	2003	20	2023	34468	34468		
BAS Replacement Program		OOT	Mechanical	Controls	Building Automation System	Markham Museum Collections	Consulting fee	2003	20	2023	34468	34468	216,700	
BAS Replacement Program		OOT	Mechanical	Controls	Building Automation System	Markham Museum Collections	Internal Recovery	2003	20	2023	104204	0.0		
TOTAL =											972,568	868,364	903,100	
Cost/Quote (Inflated, HST Excluded) = SUM(C,D) / 1.0176													887,480	
Internal Chargeback													108,400	
External Consulting													-	
Contingency													-	
Subtotal													995,880	
HST Impact+													15,620	
Total													1,011,500	
1,011,500														
RFP/Tender Submission to Purchasing													15-Mar-23	
RFP/Tender Award by													15-Apr-23	
Project Completion Date														
C1													252,875	
C2													252,875	
C3													252,875	
C4													252,875	



2023 PROJECT FUNDING REQUEST FORM

Number: 23143

Project Cost: \$13,690,900

Project Name: Centennial Near Net-Zero Emissions Retrofit Pilot

Studies/Pilot Programs

Commission: Corporate Services

Useful Life: 25 Pre Approval:

Department: Sustainability and Asset Management

Category: Major

Project Mgr: Amanda Martin

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

A net-zero study was completed in 2022 for Centennial CC that identified a suite of deep retrofit solutions to significantly reduce GHG emissions and energy consumption. Infrastructure Canada (INFC)'s Green and Inclusive Community Building (GICB) program could provide a contribution of up to 80% of eligible project costs (up to \$10.2M grant) for this project to support the transition of retrofitting community buildings to net-zero by 2050. This project will leverage 26% wrt Life Cycle funds and external grants to accelerate the replacement of building components coming due for replacement with lower energy/carbon alternatives. The list of low-carbon solutions include: LED lighting retrofits, geoexchange heat pumps, water efficiency improvements, HVAC improvements, and an energy-efficient refrigeration plant replacement. The package of solutions are forecasted to save at least \$5M over the next 30 years, and reduce GHG emissions by over 75% and energy consumption by 45%. Completing this pilot project will set Centennial CC on a course to achieve net-zero energy emissions by 2050.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	12,231,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 10	1,223,100	0
Sub Total:	13,454,100	0
HST Impact:	236,792	0
Total Project Cost:	13,690,900	0

NOTES

The project and staff position will only proceed if grant funding is secured. Project is contingent on approval of new staff. Council approved Markham's Municipal Energy Plan target of achieving NZEE by the year 2050. This project supports that target and the commitments made through the Corporate Energy Management Plan (requirement per O.Reg. 507/18).

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget	Centennial Retrofit			TOTAL		
Gas Tax	3,476,365	3,476,365	0	0	0	3,476,365	0
Infrastructure Grant	10,214,535	10,214,535	0	0	0	10,214,535	0
TOTAL FUNDING	13,690,900					13,690,900	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: 23144

Project Cost: \$896,000

Project Name: Civic Centre Repair and/or Replacement Projects

Commission: Corporate Services

Repair/Replace

Department: Sustainability and Asset Management

Useful Life: 5 Pre Approval:

Project Mgr: Jason Ramsaran

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Published guidelines

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Program includes various life cycle works to maintain the Civic Centre Facility in a state of good repair and in alignment to the Asset Management Plan/Policy.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	880,503	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	880,503	0
HST Impact:	15,497	0
Total Project Cost:	896,000	0

NOTES

\$100,500 - Concrete sealing, replace & repair interior landscaping
\$36,400 - Replacement of concrete and tile to chapel - Multi burner unit (peace flame)
\$652,500 - Piping, pump, filter & automatic door opener
\$106,600 - Consultant review (1989-2013)
Amount is validated and consistent with the Life Cycle Reserve Study and based on the prior year annual condition assessment and cost estimation.

SOURCE(S) OF FUNDING (\$)

Funding Type	Budget	Components					TOTAL	Future Phases
		Concrete sealing	Site Features	Plumbing & Building Equipment	Consultant Review			
Operating Funded Life Cycle	896,000	100,500	36,400	652,500	106,600	896,000	0	
TOTAL FUNDING	896,000					896,000	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: 896,000
				Amount Incl HST 896,000
				Year in the study 2023
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				

Civic Centre Improvements		Major (Usually Minor, but changed to Major in 2023 due to project volume)													Budget Inflation		0.04			
																			<-Inflated, HST included-->	
Facility	Responsible Name	Operating/Capital	Classification	Class Type	Description	Location	Attributes	Year Installed	Cycle Factor	Year Due	Replacement Value	2023	A	2023 Budget Entry	E=A*Inflation	Notes				
Civic Centre		OOT	OOT	Architectural	Flooring	Concrete Sealing	Concrete sealing - clear finish - including shipping and receiving area	2013	10	2023	20000	20000								
Civic Centre		OOT	OOT	Architectural	Accessories	Interior Landscaping	Replace and repair	2007	16	2023	75000	75000								
Civic Centre		OOT	OOT	Architectural	Painting	Walls		2021	2	2023	1600	1600			100,500					
Civic Centre		OOT	OOT	Civil	Site Features	Decking	Replacement of concrete and tile to chapel	2006	17	2023	25000	25000								
Civic Centre		OOT	OOT	Civil	Site Features	Architectural Feature	Multi burner unit - Peace Flame	1990	33	2023	10000	10000			36,400					
Civic Centre		OOT	OOT	Mechanical	Plumbing	Piping	broken and needs repair	2010	13	2023	285890	285890								
Civic Centre		OOT	OOT	Mechanical	Pumps	Pump (Water)	Fountain for lake(South Wing)	2013	10	2023	5500	5500								
Civic Centre		OOT	OOT	Mechanical	Pumps	Pump (Water)	Fountain for lake(South Wing)	2013	10	2023	5500	5500								
Civic Centre		OOT	OOT	Mechanical	Refrigeration	Condenser Water Tank	Condensation pan	1990	33	2023	3500	3500								
Civic Centre		OOT	OOT	Mechanical	Refrigeration	Condenser Water Tank	Condensation pan	1990	33	2023	3500	3500								
Civic Centre		OOT	OOT	Mechanical	Refrigeration	Condenser Water Tank	Condensation pan	1990	33	2023	3500	3500								
Civic Centre		OOT	OOT	Mechanical	Refrigeration	Condenser Water Tank	Condensation pan	1990	33	2023	3500	3500								
Civic Centre		OOT	OOT	Mechanical	Refrigeration	Condenser Water Tank	Condensation pan	1990	33	2023	3500	3500								
Civic Centre		OOT	OOT	Mechanical	Plumbing	Filter	Filter for Pond, includes upgrade	1990	33	2023	50000	50000								
Civic Centre		OOT	OOT	Mechanical	Plumbing	Filter	Filter for Pond, includes upgrade	1990	33	2023	50000	50000								
Civic Centre		OOT	OOT	Mechanical	Plumbing	Filter	Filter for Pond, includes upgrade	1990	33	2023	50000	50000								
Civic Centre		OOT	OOT	Mechanical	Plumbing	Filter	Filter for Pond, includes upgrade	1990	33	2023	50000	50000								
Civic Centre		OOT	OOT	Mechanical	Building Equipment	Automatic Door Opener		1999	24	2023	6000	6000								
Civic Centre		OOT	OOT	Mechanical	Building Equipment	Automatic Door Opener		1999	24	2023	6000	6000								
Civic Centre		OOT	OOT	Mechanical	Pumps	Filter Pump	Pump Lake # 1	1999	24	2023	25000	25000								
Civic Centre		OOT	OOT	Mechanical	Pumps	Filter Pump	Pump Lake # 2	2005	18	2023	25000	25000								
Civic Centre		OOT	OOT	Mechanical	Building Equipment	Automatic Door Opener		1998	25	2023	4500	4500								
Civic Centre		OOT	OOT	Mechanical	Building Equipment	Automatic Door Opener		1998	25	2023	4500	4500								
Civic Centre		OOT	OOT	Mechanical	Building Equipment	Automatic Door Opener		1998	25	2023	4500	4500								
Civic Centre		OOT	OOT	Mechanical	Building Equipment	Automatic Door Opener		1998	25	2023	4500	4500								
Civic Centre		OOT	OOT	Mechanical	Building Equipment	Automatic Door Opener		1998	25	2023	4500	4500								
Civic Centre		OOT	OOT	Mechanical	Building Equipment	Automatic Door Opener		1998	25	2023	4500	4500								
Civic Centre		OOT	OOT	Mechanical	Building Equipment	Automatic Door Opener		1998	25	2023	4500	4500								
Civic Centre		OOT	OOT	Mechanical	Building Equipment	Automatic Door Opener		1998	25	2023	4500	4500								
Civic Centre		OOT	OOT	Mechanical	Building Equipment	Automatic Door Opener		1998	25	2023	4500	4500								
Civic Centre		OOT	OOT	Mechanical	Building Equipment	Automatic Door Opener		1999	24	2023	4500	4500								
Civic Centre		OOT	OOT	Mechanical	Building Equipment	Automatic Door Opener		1999	24	2023	4500	4500								
Civic Centre		OOT	OOT	Mechanical	Building Equipment	Automatic Door Opener		1999	24	2023	6000	6000			652,500					
Civic Centre		OOT	OOT	Program	Reports	Throughout - Consultant	All Washrooms Design	1923	100	2023	50000	50000								
Civic Centre		OOT	OOT	Program	Reports	Throughout - Consultant	Electrical IR Scan	2021	2	2023	2500	2500								
Civic Centre		OOT	OOT	Program	Reports	Throughout - Consultant	Rink/Fountain	1923	100	2023	25000	25000								
Civic Centre		OOT	OOT	Program	Reports	Throughout - Consultant	Garage Roof	1923	100	2023	25000	25000			106,600					

2023 Budget Request Back-up Pictures

Civic Centre – Garage Floor

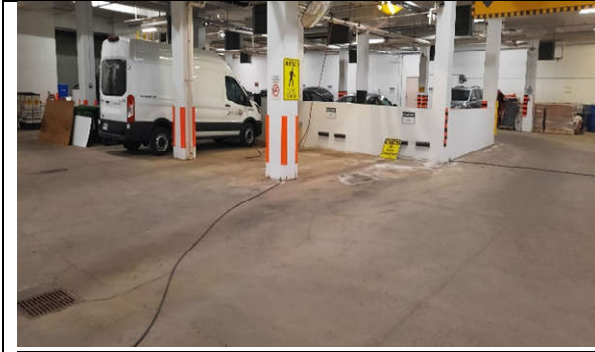


Photo 1:

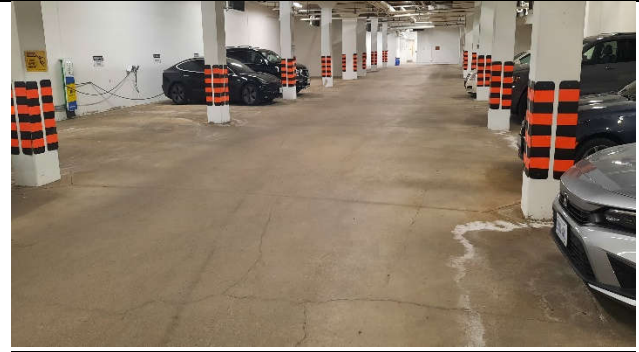


Photo 2:

Civic Centre - Interior Landscaping



Photo 1: Large Tree Replacement



Photo 2: Small Planters - Lower

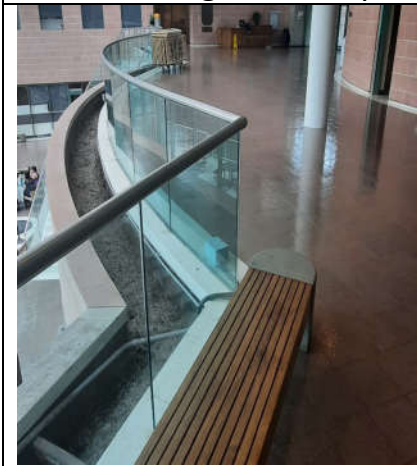


Photo 3: Small Planters - Upper

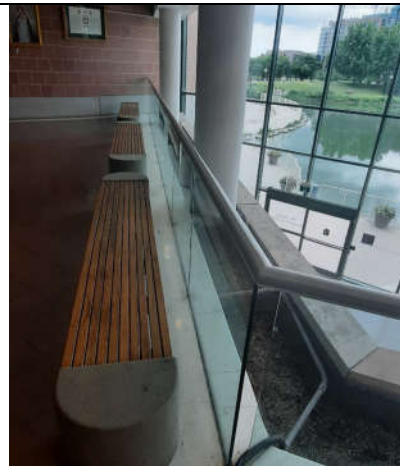


Photo 4: Small Planters - Upper

Civic Centre – Chapel Entrance Tile

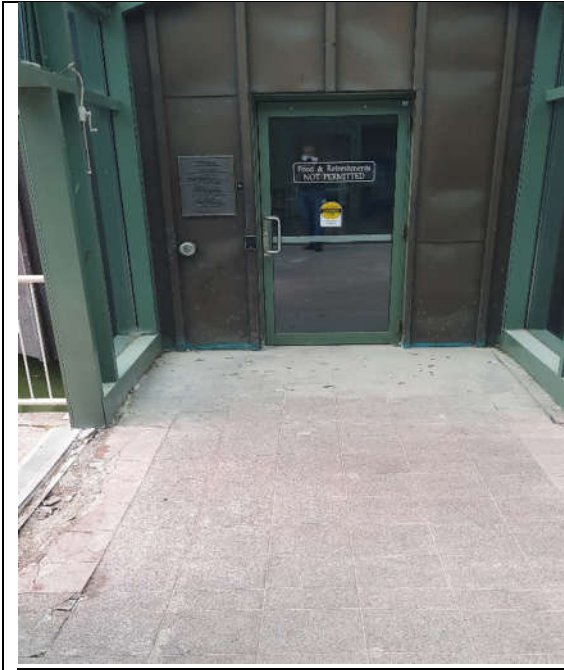


Photo 1: Tiles



Photo 2: Tiles



Photo 3: Tiles

Civic Centre – Peace Flame Multi burner unit (not functioning)



Photo 1: Flame

Civic Centre – Piping – Underground pipe replacement for fountain

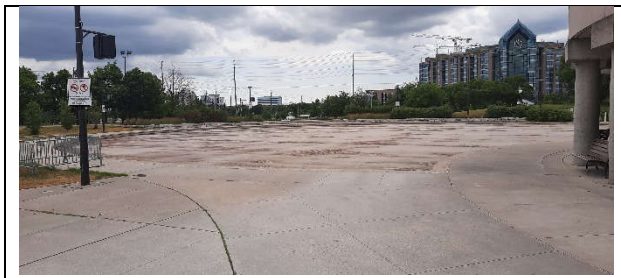


Photo 1:

Civic Centre – Condenser Pans – (quote provided)



Photo 1:

Civic Centre – Pond Filters (see combined quote, Pumps and Filters)



Photo 1:

Civic Centre – Pond Pumps (see combined quote, Pumps and Filters)



Photo 1:

Civic Centre – Automatic Door Openers



Photo 1:



Photo 2:

Civic Centre – Garage Roof (Consultant)



Photo 1:



Photo 2:



2023 PROJECT FUNDING REQUEST FORM

Number: 23145

Project Cost: \$1,544,700

Project Name: Clatworthy Near Net-Zero Emissions Retrofit Pilot

Studies/Pilot Programs

Commission: Corporate Services

Useful Life: 25 Pre Approval:

Department: Sustainability and Asset Management

Category: Major

Project Mgr: Amanda Martin

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

A net-zero study was completed in 2022 for Clatworthy Arena that identified a suite of deep retrofit solutions to significantly reduce GHG emissions and energy consumption. Infrastructure Canada (INFC)'s Green and Inclusive Community Building (GICB) program could provide a contribution of up to 80% of eligible project costs (grant of up to \$1.23M) for this project to support the transition of retrofitting community buildings to net-zero by 2050. This project will leverage 26% wrt Lifecycle funds and external grants to accelerate the replacement of building components coming due for replacement with lower energy/carbon alternatives. The list of low-carbon solutions include: LED lighting retrofits, heat pumps, heat recovery, water efficiency improvements, building envelope improvements (ex. Insulated walls and doors), and HVAC improvements. The package of solutions are forecasted to save at least \$300k over the next 30 years, reduce GHG emissions by over 70% and energy consumption by 25%. Completing this pilot project will set Clatworthy Arena on a course to achieve net-zero energy emissions by 2050.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	1,380,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 10	138,000	0
Sub Total:	<u>1,518,000</u>	<u>0</u>
HST Impact:	26,717	0
Total Project Cost:	<u>1,544,700</u>	<u>0</u>

NOTES

The project and staff position will only proceed if grant funding is secured. Project is contingent on approval of new staff. Council approved Markham's Municipal Energy Plan target of achieving NZEE by the year 2050. This project supports that target and the commitments made through the Corporate Energy Management Plan (requirement per O.Reg. 507/18).

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget	Clatworthy Retrofit			TOTAL		
Infrastructure Grant	1,235,773	1,235,773	0	0	0	1,235,773	0
Operating Funded Life Cycle	308,927	308,927	0	0	0	308,927	0
TOTAL FUNDING	<u>1,544,700</u>					<u>1,544,700</u>	<u>0</u>

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: 23146

Project Cost: \$140,900

Project Name: Corporate Asset Management

Studies/Pilot Programs

Commission: Corporate Services

Useful Life: 0 Pre Approval:

Department: Sustainability and Asset Management

Category: Major

Project Mgr: Sameem Shah

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Consulting services for development of City's Corporate Asset Management (CAM) program to maintain compliance with Auditor General recommendations and applicable regulations. The City's CAM roadmap will create a fully integrated Enterprise Asset Management system that will bring efficiency and ensure sustainable delivery of approved levels of service in a financially optimized way.

BUILDING MARKHAM'S FUTURE TOGETHER: Stewardship of Money & Resources

PROJECT COSTS (\$)	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	125,900	131,500
Contingency %: 10	12,590	13,150
Sub Total:	138,490	144,650
HST Impact:	2,437	2,546
Total Project Cost:	140,900	147,200

NOTES

Develop "Condition Assessment Framework" to standardize condition assessment data and procedures. "Lucity Integration with AM" to determine data structure, import and export procedures. CAM projects will be funded 74% from Water Rate and 26% from Life Cycle based on the total replacement cost of City owned Water, Wastewater, Stormwater assets and other assets. New permanent FT staff position is requested to satisfy the CAM Program's current need. The outcome of these projects will serve all relevant business units. Future phase will include development of LC definition and strategy, and Risk Management frameworks.

<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>	<u>Condition Assessment Framework & Lucity Integratio</u>						
Operating Funded Life Cycle	36,634	36,634	0	0	0	36,634	38,272	
Waterworks	104,266	104,266	0	0	0	104,266	108,928	
TOTAL FUNDING	140,900					140,900	147,200	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$124,837	\$0	\$0	\$124,837

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: 23147

Project Cost: \$111,900

Project Name: Corporate Energy & Net-Zero Emissions Plan

Studies/Pilot Programs _____

Commission: Corporate Services

Useful Life: 5 Pre Approval:

Department: Sustainability and Asset Management

Category: Minor

Project Mgr: Joken Chiu

Cost Validation: Internal peer review

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project requests funding for consulting services to assist the City in updating its Corporate Energy Management Plan and to develop a Net-Zero Emissions Plan by 2050 for its corporate assets. Ontario Regulation 507/18, enacted under the Electricity Act, requires municipalities and the broader public sector to develop, implement, and make available to the public energy conservation and demand management plans. O.Reg. 507/18 requires an updated plan by July 1, 2024. The plan must include two sections: 1) A summary of the public agency’s annual energy consumption and greenhouse gas emissions for its operations; and 2) A description of previous, current and proposed measures for conservation by the public agency’s operations and for managing the public agency’s demand for energy, including a forecast of the expected results of current and proposed measures.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	100,000	0
Contingency %: 10	10,000	0
Sub Total:	<u>110,000</u>	<u>0</u>
HST Impact:	1,936	0
Total Project Cost:	<u>111,900</u>	<u>0</u>

NOTES

Aligns with corporate goals to achieve the Municipal Energy Plan (Net-Zero Emissions by 2050) and the Greenprint’s objectives of net-zero, energy, water, waste and emissions by 2050. Energy conservation and efficiency decrease annual utility costs and environmental harm. Funding source: Markham Energy Conservation Office (MECO).

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget	Consulting				TOTAL	
Other Internal	111,900	111,900	0	0	0	111,900	0
TOTAL FUNDING	<u>111,900</u>					<u>111,900</u>	<u>0</u>

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: 23148

Project Cost: \$425,400

Project Name: Corporate Security Operations & System Upgrades

Commission: Corporate Services

Repair/Replace _____

Department: Sustainability and Asset Management

Useful Life: 7 Pre Approval:

Project Mgr: Eric Lizotte

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Internal peer review

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Funding required to complete various corporate security upgrades at various City Facilities, in order to meet requirements under Bill 168. This program includes security audits, access control, CCTV, gates, policy protocol and procedure development and training. Funding request two staff (security experts) to lead security initiatives.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	418,003	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	418,003	0
HST Impact:	7,357	0
Total Project Cost:	425,400	0

NOTES

\$149,760 - CCTV Upgrades FS 95 & FS 96, camera replacement at McKay House, Civic Centre systems & 8100 Warden CCTV storage & backup device
\$52,000 - Thornhill Village Library & Thornlea Pool
\$223,600 - recreation facilities upgrade, Staff ID replacement, On-Demand items, Consultant fee & Maintenance Fee (software license - approx. \$10,000/year)
Amount is validated and consistent with the Life Cycle Reserve Study and based on the prior year annual condition assessment and cost estimation.

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	8100 Warden, Fire Stations, McKay House, Citywide	Thornhill Village Library & Thornlea Pool	Recreation Facilities upgrade			
Operating Funded Life Cycle	425,400	149,760	52,000	223,600	0	425,360	0
TOTAL FUNDING	425,400					425,360	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: 706,100
				Amount Incl HST 425,400
				Year in the study 2023

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: 23149

Project Cost: \$53,000

Project Name: Designated Substances Management

Commission: Corporate Services

Repair/Replace

Department: Sustainability and Asset Management

Useful Life: 2 Pre Approval:

Project Mgr: Vicky Chan

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Internal peer review

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project includes review of identified Asbestos Containing Materials (ACMs) at 18 City owned facilities and update existing Asbestos Management Plans. This program will also include management (including testing, analysis, planning and abatement) of any other designated substances at City facilities and training for facility staff on Asbestos management. Ontario Regulation 278/05 requires all building owners to have ongoing Asbestos Management programs at facilities where Asbestos Containing Materials (ACMs) are identified. Project supports PSAB 3280 Asset Retirement Obligation reporting.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	52,083	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	52,083	0
HST Impact:	917	0
Total Project Cost:	53,000	0

NOTES

\$51,000 - Designated Substance Management to maintain a healthy and safe environment within City owned facilities.

Amount is validated and consistent with the Life Cycle Reserve Study and based on the prior year annual condition assessment and cost estimation.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget	Designated Substances Management						
Operating Funded Life Cycle	53,000	53,000	0	0	0	53,000	0	
TOTAL FUNDING	53,000					53,000	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: 58,200
				Amount Incl HST 53,000
				Year in the study 2023
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: **23150**

Project Cost: **\$251,300**

Project Name: **EV Chargers Expansion and Repairs**

Commission: Corporate Services

Repair/Replace

Department: Sustainability and Asset Management

Useful Life: 5 Pre Approval:

Project Mgr: Colby Brygidyr

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Install new EV chargers at various locations to accommodate the new corporate electric fleet vehicles. This project will also support maintaining current levels of service by replacing the 3 Schneider units in the Civic Centre garage as parts have been discontinued and includes regular maintenance of the level 3 fast charger and level 2 chargers.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	247,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	247,000	0
HST Impact:	4,347	0
Total Project Cost:	251,300	0

NOTES

Replacement fees are based on a quote provided by FLO, which supplies and manages the City's public charging network. \$5k Non-Personnel budget impact is for maintenance.

SOURCE(S) OF FUNDING (\$)		Components						Future Phases
Funding Type	Budget					TOTAL	Phases	
Other Internal	37,675	0	0	0	0	0	0	
Tax	213,625	0	0	0	0	0	0	
TOTAL FUNDING	251,300					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$5,000	\$0	\$5,000

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: 23151

Project Cost: \$399,700

Project Name: Fire Facilities Repair and/or Replacement Projects

Repair/Replace

Commission: Corporate Services

Useful Life: 15 Pre Approval:

Department: Sustainability and Asset Management

Category: Major

Project Mgr: Jason Vasilaki

Cost Validation: Published guidelines

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Program includes various life cycle works to maintain the fire facilities in a state of good repair and in alignment to the Asset Management Plan/Policy. Funding request is based on historical budgets, life cycle database and trending.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	392,757	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	392,757	0
HST Impact:	6,913	0
Total Project Cost:	399,700	0

NOTES

\$204,880 - FS 91, 93 & 94 overhead door, heat pump
\$135,930 - FS 95 & 96 generator, overhead door, refrigerator, blinds, fencing & exhaust fan
\$58,860 - FS 97, 99 & Fire Training Centre fixtures, painting, chairs, pumps, ventilation, heating & flooring (1984-2021)
Amount is validated and consistent with the Life Cycle Reserve Study and based on the prior year annual condition assessment and cost estimation.

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	FS 91, 93 & 94	FS 95 & 96	FS 97, 99 & Training Centre			
Operating Funded Life Cycle	399,700	204,880	135,930	58,860	0	399,670	0
TOTAL FUNDING	399,700					399,670	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: 884,000
				Amount Incl HST 399,700
				Year in the study 2023
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: **23152**

Project Cost: **\$683,900**

Project Name: **Fire Station 97 Near Net-Zero Emissions Retrofit Pilot**

Studies/Pilot Programs

Commission: Corporate Services

Useful Life: 25 Pre Approval:

Department: Sustainability and Asset Management

Category: Major

Project Mgr: Renee England

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

A net-zero study was completed in 2022 for Fire Station 97 that identified a suite of deep retrofit solutions to significantly reduce GHG emissions and energy consumption. This project will leverage 50% wrt Lifecycle funds and external grants to accelerate the replacement of building components coming due for replacement with lower energy/carbon alternatives. The list of low-carbon solutions include: LED lighting retrofits, heat pumps, and building envelope improvements (air curtains, air-sealing, increased insulation). The package of solutions are forecasted to reduce GHG emissions by over 65% and energy consumption by 50%, will result in utility savings of at least \$300k over a 30 year term, and should be eligible for a grant through FCM to fund up to 50% of project costs. Completing this pilot project will set Fire Station 97 on a course to achieve net-zero energy emissions by 2050.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	497,785	0
Internal Charges:	0	0
External Consulting:	113,185	0
Contingency %: 10	61,097	0
Sub Total:	672,067	0
HST Impact:	11,828	0
Total Project Cost:	683,900	0

NOTES

Project will only proceed if external grant funding is secured. Council approved Markham's Municipal Energy Plan target of achieving net-zero energy emissions by the year 2050. This project supports that target and the commitments made through the Corporate Energy Management Plan (requirement per O.Reg. 507/18).

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	Consulting	Construction				
Operating Funded Life Cycle	341,950	63,350	278,600	0	0	341,950	0
Other External	341,950	63,350	278,600	0	0	341,950	0
TOTAL FUNDING	683,900					683,900	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u> Name	Year	Amount	Amount in Study	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="445,900"/>
				Amount Incl HST <input type="text" value="341,900"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$77,000

Project Name: Fire Systems Maintenance at Various City Facilities

Commission: Corporate Services

Repair/Replace

Department: Sustainability and Asset Management

Useful Life: 1 Pre Approval:

Project Mgr: Dana Honsberger

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Maintenance of Fire & Sprinkler systems at various City facilities that is outside of the annual maintenance program. This maintenance is legislated under Ontario Fire Code (OFC). Annual maintenance through operating budget includes items such as fire/smoke sensor testing, extinguisher inspection, fire pump inspection, etc. Items under this program includes non-annual tasks (tasks that are required to happen every 3 years, or 5 years or 15 years) such as dry/wet systems piping obstruction inspection, standpipe hydrostatic test, etc.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	75,629	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	75,629	0
HST Impact:	1,331	0
Total Project Cost:	77,000	0

NOTES

Amount is validated and consistent with the Life Cycle Reserve Study and based on the prior year annual condition assessment and cost estimation.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget	Fire System Maintenance						
Operating Funded Life Cycle	77,000	77,000	0	0	0	77,000	0	
TOTAL FUNDING	77,000					77,000	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="86,300"/>
				Amount Incl HST <input type="text" value="77,000"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: 23154

Project Cost: \$84,400

Project Name: Library Facilities Repair and/or Replacement Projects

Repair/Replace

Commission: Corporate Services

Useful Life: 10 Pre Approval:

Department: Sustainability and Asset Management

Category: Minor

Project Mgr: Jason Vasilaki

Cost Validation: Internal peer review

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Program includes various life cycle works to maintain the library facilities in a state of good repair and in alignment to the Asset Management Plan/Policy.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	82,980	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	82,980	0
HST Impact:	1,460	0
Total Project Cost:	84,400	0

NOTES

\$1,560 - Markham Library - millwork
 \$49,600 - Thornhill Village Library - electric and architectural
 \$33,280 - Unionville Library - ventilation & masonry (1983-2019)
 Amount is validated and consistent with the Life Cycle Reserve Study and based on the prior year annual condition assessment and cost estimation.

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	Markham Library	Thornhill Village Library	Unionville Library			
Operating Funded Life Cycle	84,400	1,560	49,600	33,280	0	84,440	0
TOTAL FUNDING	84,400					84,440	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: 100,300
				Amount Incl HST 84,400
				Year in the study 2023
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: **23155**

Project Cost: **\$223,900**

Project Name: **Low-Carbon Vehicle Policy Study and Strategy**

Studies/Pilot Programs

Commission: Corporate Services

Useful Life: 10 Pre Approval:

Department: Sustainability and Asset Management

Category: Minor

Project Mgr: Tanya Lewinberg/Amanda Martin/Jenn Wong

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4

Requirement Validation: Other(specify in Notes)

5 6 7 8

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Corporate Study and Strategy will inform cost-effective deployment of low-carbon municipal fleet vehicles and charging infrastructure to achieve significant emission reductions in alignment with Lifecycle (capital) planning. An FCM grant is anticipated to cover up to \$55,000 of study costs. Additionally, Community EV Policy and Strategy will support the expansion of the City's public charging network, advance EV uptake, and strengthen community engagement. Project aligns with the Municipal Energy Plan's net zero by 2050 objective.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	200,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 10	20,000	0
Sub Total:	220,000	0
HST Impact:	3,872	0
Total Project Cost:	223,900	0

NOTES

Project will only proceed if external grant funding is secured. This project supports the commitments made through the Corporate Energy Management Plan (requirement per O. Reg. 507/18). The MEP states that the majority of the City's transportation emissions come from personal vehicles (80%). The outcomes of this study will provide valuable planning and insight that will be incorporated in the Corporate Energy Management Plan update (due July 1, 2024) and Net-Zero by 2050 Plan.
Internal funds:
\$57,000 - MECO; \$111,900 - MEP Implementation Proj

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget	Consultant			TOTAL		
Carry Forward	111,900	111,900	0	0	0	111,900	0
Other External	55,000	55,000	0	0	0	55,000	0
Other Internal	57,000	57,000	0	0	0	57,000	0
TOTAL FUNDING	223,900					223,900	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: **23156**

Project Cost: **\$21,400**

Project Name: **Municipal Building Backflow Prevention - Annual Testing**

Commission: Corporate Services

Repair/Replace

Department: Sustainability and Asset Management

Useful Life: 1 Pre Approval:

Project Mgr: Jason Vasilaki

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Testing of all backflow devices within Markham facilities must be completed, annually as outlined in By-law 2007-142.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	21,030	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	21,030	0
HST Impact:	370	0
Total Project Cost:	21,400	0

NOTES

\$21,000 - Testing all backflow devices installed within Markham facilities
Amount is validated and consistent with the Life Cycle Reserve Study and based on the prior year annual condition assessment and cost estimation.

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	Testing					
Operating Funded Life Cycle	21,400	21,400	0	0	0	21,400	0
TOTAL FUNDING	21,400					21,400	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="21,500"/>
				Amount Incl HST: <input type="text" value="21,400"/>
				Year in the study: <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: 23157

Project Cost: \$142,500

Project Name: Municipal Energy Plan (MEP) Update

Studies/Pilot Programs _____

Commission: Corporate Services

Useful Life: 5 Pre Approval:

Department: Sustainability and Asset Management

Category: Minor

Project Mgr: Jennifer Wong

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The Intergovernmental Panel on Climate Change calls for urgent action to limit global warming to 1.5C. This project seeks to update the Municipal Energy Plan (MEP) – Getting to Zero (2018). Consultants will update projections and identify actions that support the City’s net zero emissions by 2050 objective. Data from World Council on City Data, local utilities, and third party organizations will be used to compare citywide 2020 energy and emissions data to the 2011-2014 baseline. Update will integrate regional electricity planning with York Region, Alectra, and Independent Electricity System Operator into the analysis on future infrastructure capacity and demand.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	140,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	140,000	0
HST Impact:	2,464	0
Total Project Cost:	142,500	0

NOTES

Engagement across all sectors is critical to achieving the City’s net zero emissions by 2050 goal. The buildings & transportation sectors combined account for 86% of Markham’s total emissions (MEP, 2018). This plan will also focus on strengthening engagement with key stakeholders (e.g. homeowners). Engagement plan will be supported by the City’s Green Recovery Program-Feasibility study, which will examine strategies for increasing local participation in home energy retrofits. Contingent upon external grant. External grant: \$25,000 – Ontario’s MEP Program. Internal funds: \$45,000 – MECO. Tax: \$72,500

SOURCE(S) OF FUNDING (\$)		Components						Future Phases
Funding Type	Budget					TOTAL	Phases	
Other External	25,000	0	0	0	0	0	0	
Other Internal	45,000	0	0	0	0	0	0	
Tax	72,500	0	0	0	0	0	0	
TOTAL FUNDING	142,500					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA

Name

Year Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number: **23158**

Project Cost: **\$314,900**

Project Name: **Operations Facilities Repair and/or Replacement Projects**

Commission: Corporate Services

Repair/Replace

Department: Sustainability and Asset Management

Useful Life: 15 Pre Approval:

Project Mgr: Dana Honsberger

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Internal peer review

Requirement Validation: Visual inspection

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Program includes various life cycle works to maintain the Operations Facilities in a state of good repair and in alignment to the Asset Management Plan/Policy.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	309,463	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	309,463	0
HST Impact:	5,447	0
Total Project Cost:	314,900	0

NOTES

\$16,120 - Central Parks Shop - painting & flooring
\$23,920 - Milliken Mills Park Washrooms painting, millwork, flooring, plumbing & door repairs
\$33,280 - Park Shops heating, lighting, washroom, etc.
\$241,590 - Miller Works Yard electrical, mechanical, building envelope & civil maintenance (1980-2018)
Amount is validated and consistent with the Life Cycle Reserve Study and based on the prior year annual condition assessment and cost estimation.

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget	Central Park Shop	Milliken Mills	Parks' Shops	Work Yard	TOTAL	
Operating Funded Life Cycle	314,900	16,120	23,920	33,280	241,590	314,910	0
TOTAL FUNDING	314,900					314,910	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="363,900"/>
				Amount Incl HST: <input type="text" value="314,900"/>
				Year in the study: <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: **23159**

Project Cost: **\$72,800**

Project Name: **Parking Lot Light Replacement**

Commission: Corporate Services

Repair/Replace

Department: Sustainability and Asset Management

Useful Life: 25 Pre Approval:

Project Mgr: Khwaja Waker

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Internal peer review

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This work allows for replacement of the parking lot light poles focusing on underground wiring and fixture at City owned properties. Poles for replacement are identified through another program (Parking Lot light poles/fixtures Inspection) that occurs every 5 years to meet illumination standards for safety and liability. Poles and fixtures are audited once every 5 years to identify the poles/fixtures to be replaced through this program. Replacement fixtures will be LED and dark sky compliant.

BUILDING MARKHAM'S FUTURE TOGETHER: Stewardship of Money & Resources

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	71,541	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	71,541	0
HST Impact:	1,259	0
Total Project Cost:	72,800	0

NOTES

\$72,800 - Citywide parking lot light replacement including Fire Station 95
Amount is validated and consistent with the Life Cycle Reserve Study and based on the prior year annual condition assessment and cost estimation.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget	All Locations						
Operating Funded Life Cycle	72,800	72,800	0	0	0	72,800	0	
TOTAL FUNDING	72,800					72,800	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="80,100"/>
				Amount Incl HST <input type="text" value="72,800"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$13,000

Project Name: Recycling Depots Repair and/or Replacement Projects

Commission: Corporate Services

Repair/Replace

Department: Sustainability and Asset Management

Useful Life: 7 Pre Approval:

Project Mgr: Khwaja Waker

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Other(specify in Notes)

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Program includes various life cycle works to maintain the recycling depots in a state of good repair and in alignment to the Asset Management Plan/Policy.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	12,775	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>12,775</u>	<u>0</u>
HST Impact:	<u>225</u>	<u>0</u>
Total Project Cost:	<u>13,000</u>	<u>0</u>

NOTES

\$9,350 - Unionville Recycling Depot Building Envelope, electrical, heating
\$1,010 Milliken Mills mechanical
\$2,640 Thornhill electrical

Amount is validated and consistent with the Life Cycle Reserve Study and based on the prior year annual condition assessment and cost estimation.

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	Unionville Recycling	Milliken Mills RD	Thornhill RD			
Operating Funded Life Cycle	13,000	9,350	1,010	2,640	0	13,000	0
TOTAL FUNDING	<u>13,000</u>					<u>13,000</u>	<u>0</u>

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="13,000"/>
				Amount Incl HST <input type="text" value="13,000"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$126,100

Project Name: Roofing Maintenance and Repair

Repair/Replace

Commission: Corporate Services

Useful Life: 1 Pre Approval:

Department: Sustainability and Asset Management

Category: Annual

Project Mgr: Michael Ryan

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Project scope includes annual routine maintenance and on demand roof repairs at all City of Markham facilities. Maintenance and repair helps ensure maximum utility or life of our roof systems.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	123,919	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	123,919	0
HST Impact:	2,181	0
Total Project Cost:	126,100	0

NOTES

\$126,100 - Roofing Maintenance and Repair
3 yr average is \$85k. However, 2020 spent was \$112k

Amount is validated and consistent with the Life Cycle Reserve Study and based on the prior year annual condition assessment and cost estimation.

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget	Annual Maintenance			TOTAL		
Operating Funded Life Cycle	126,100	126,100	0	0	0	126,100	0
TOTAL FUNDING	126,100					126,100	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="128,500"/>
				Amount Incl HST: <input type="text" value="126,100"/>
				Year in the study: <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: 23162

Project Cost: \$1,673,100

Project Name: Salary Recoveries for Staff

Studies/Pilot Programs

Commission: Corporate Services

Useful Life: 1 Pre Approval:

Department: Sustainability and Asset Management

Category: Major

Project Mgr: Renee England

Cost Validation: Internal peer review

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: _____

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Cost recovery for Sustainability & Asset Management staff on Capital projects. The list of projects are as follows: Accessibility, Building Condition Audit, Corporate Security operations and system upgrades, Designated Substances management, Fire facilities, Library facilities, Museum - various buildings, Operation facilities, Parking lot light replacement, Roofing replacement, FS and Community Centers - approaching Near Net-Zero Retrofit Pilot.

BUILDING MARKHAM'S FUTURE TOGETHER:

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	0
Internal Charges:	1,673,077	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	1,673,077	0
HST Impact:	0	0
Total Project Cost:	1,673,100	0

NOTES

The request is based on staff with varying percentage of time allocated to work on various projects.

Amount is validated and consistent with the 2022 Life Cycle Reserve Study update.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget	Salary Recovery						
Operating Funded Life Cycle	1,673,100	1,673,100	0	0	0	1,673,100	0	
TOTAL FUNDING	1,673,100					1,673,100	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: 5,998,800
				Amount Incl HST 1,673,000
				Year in the study 2023
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$97,800

Project Name: Satellite Community Centre Repair and/or Replacement

Commission: Corporate Services

Repair/Replace

Department: Sustainability and Asset Management

Useful Life: 15 Pre Approval:

Project Mgr: Khwaja Waker

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Other(specify in Notes)

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Program includes various life cycle works to maintain the satellite community centres in a state of good repair and in alignment to the Asset Management Plan/Policy.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	96,069	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	96,069	0
HST Impact:	1,691	0
Total Project Cost:	97,800	0

NOTES

\$97,800 - Box Grove Community Centre (structural) Cedar Grove Community Centre (mechanical) (2003-2016)
Amount is validated and consistent with the Life Cycle Reserve Study and based on the prior year annual condition assessment and cost estimation.

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget	Satellite C.C.			TOTAL		
Operating Funded Life Cycle	97,800	97,780	0	0	0	97,780	0
TOTAL FUNDING	97,800				97,780		0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="97,800"/>
				Amount Incl HST: <input type="text" value="97,800"/>
				Year in the study: <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: 23164

Project Cost: \$2,871,200

Project Name: Thornhill Near Net-Zero Emissions Retrofit Pilot

Studies/Pilot Programs

Commission: Corporate Services

Useful Life: 25 Pre Approval:

Department: Sustainability and Asset Management

Category: Major

Project Mgr: Amanda Martin

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

A net-zero study was completed in 2022 for Thornhill CC that identified a suite of deep retrofit solutions to significantly reduce GHG emissions and energy consumption. Infrastructure Canada (INFC)'s Green and Inclusive Community Building (GICB) program could provide a contribution of up to 80% of eligible project costs (up to \$2.3M grant) for this project to support the transition of retrofitting community buildings to net-zero by 2050. This project will leverage 27% wrt Lifecycle funds and external grants to accelerate the replacement of building components coming due for replacement with lower energy/carbon alternatives. The list of low-carbon solutions include: LED lighting retrofits, heat pumps, water efficiency improvements, and HVAC improvements. The package of solutions are forecasted to save at least \$2.5M over the next 30 years, and reduce GHG emissions by over 50% and energy consumption by 25%. Completing this pilot project will set Thornhill CC on a course to achieve net-zero energy emissions by 2050.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	2,565,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 10	256,500	0
Sub Total:	<u>2,821,500</u>	<u>0</u>
HST Impact:	49,658	0
Total Project Cost:	<u>2,871,200</u>	<u>0</u>

NOTES

The project and staff position will only proceed if grant funding is secured. Project is contingent on approval of new staff. Council approved Markham's Municipal Energy Plan target of achieving NZEE by the year 2050. This project supports that target and the commitments made through the Corporate Energy Management Plan (requirement per O. Reg. 507/18).

<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>					<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>	<u>Thornhill Retrofit</u>			<u>TOTAL</u>		
Infrastructure Grant	2,296,907	2,296,907	0	0	0	2,296,907	0
Operating Funded Life Cycle	574,293	574,293	0	0	0	574,293	0
TOTAL FUNDING	<u>2,871,200</u>				<u>2,871,200</u>	<u>0</u>	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA
Name

Year **Amount** **Amount in Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



Approval for Four Net Zero Ready Projects



Graham Seaman, Director, Sustainability & Asset Management
 Amanda Martin, Corporate Energy Manager, Sustainability & Asset Management
 Sustainability & Asset Management
 October 2022

1



Purpose

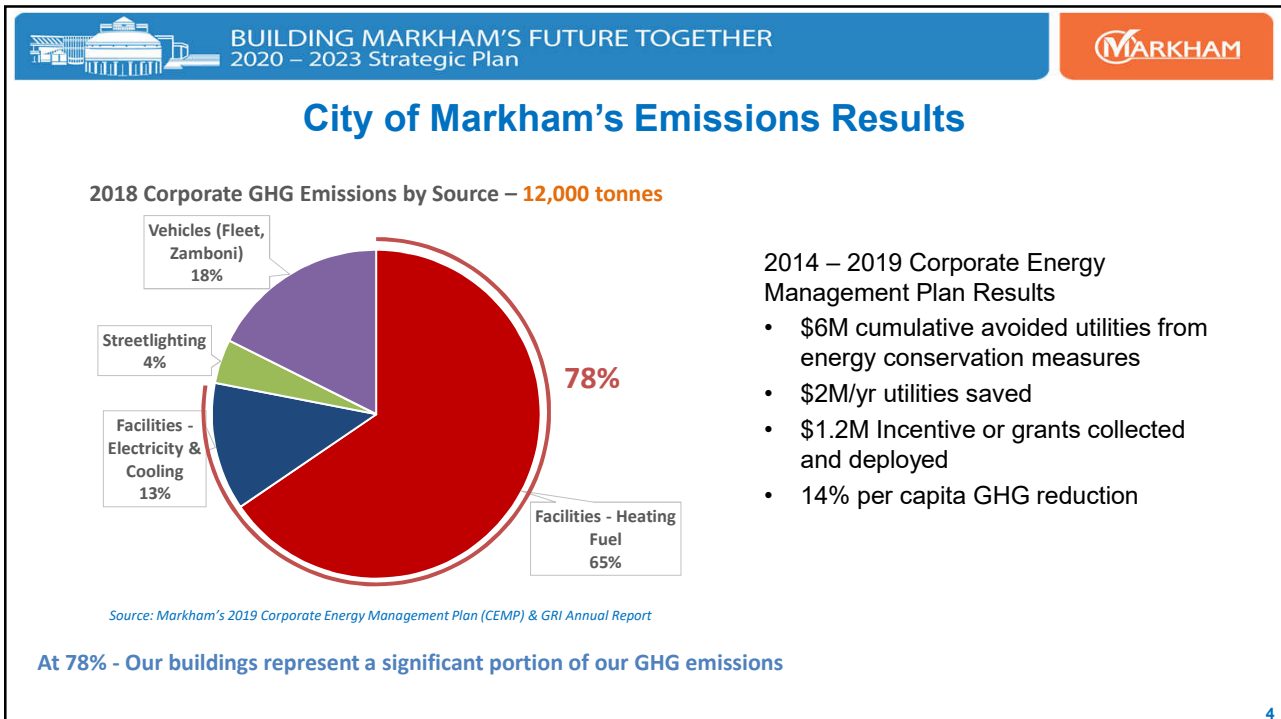
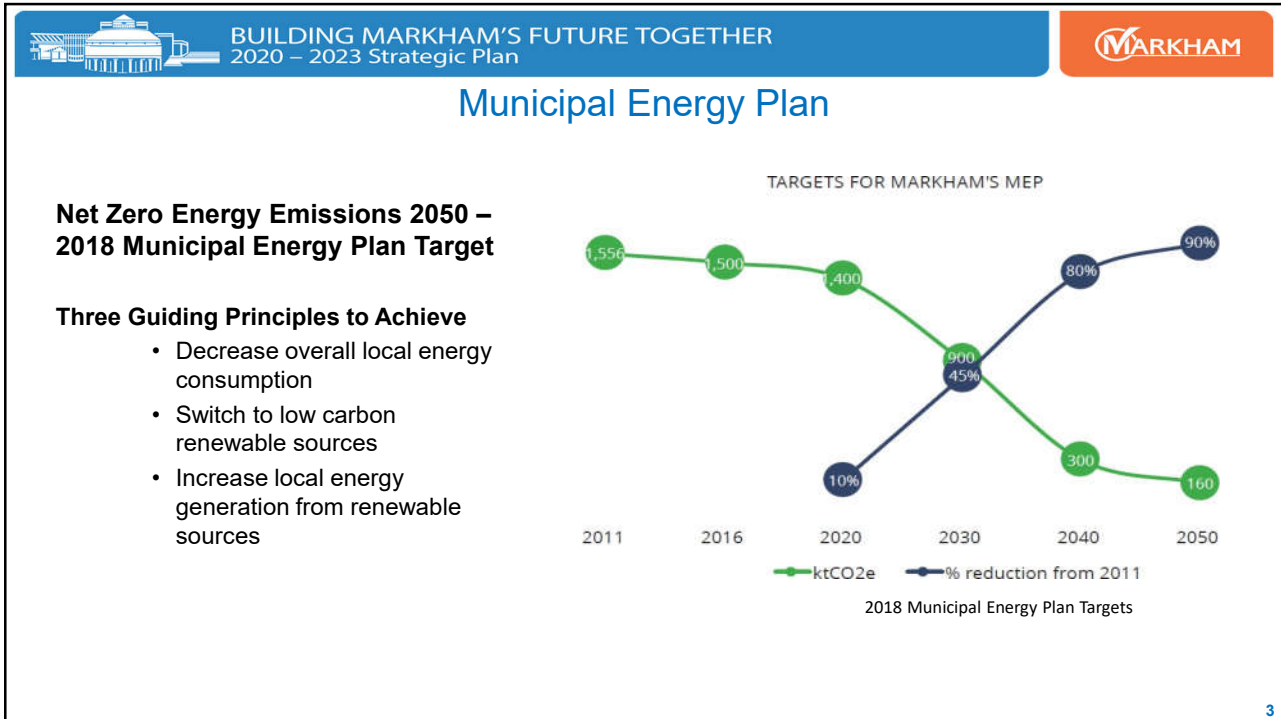
To seek approval for four “Near Net Zero Emissions” (net zero ready) capital projects, leveraging external funding, focused on mitigating utility cost increases and the City’s exposure to the annually increasing Federal Carbon Pollution Tax.

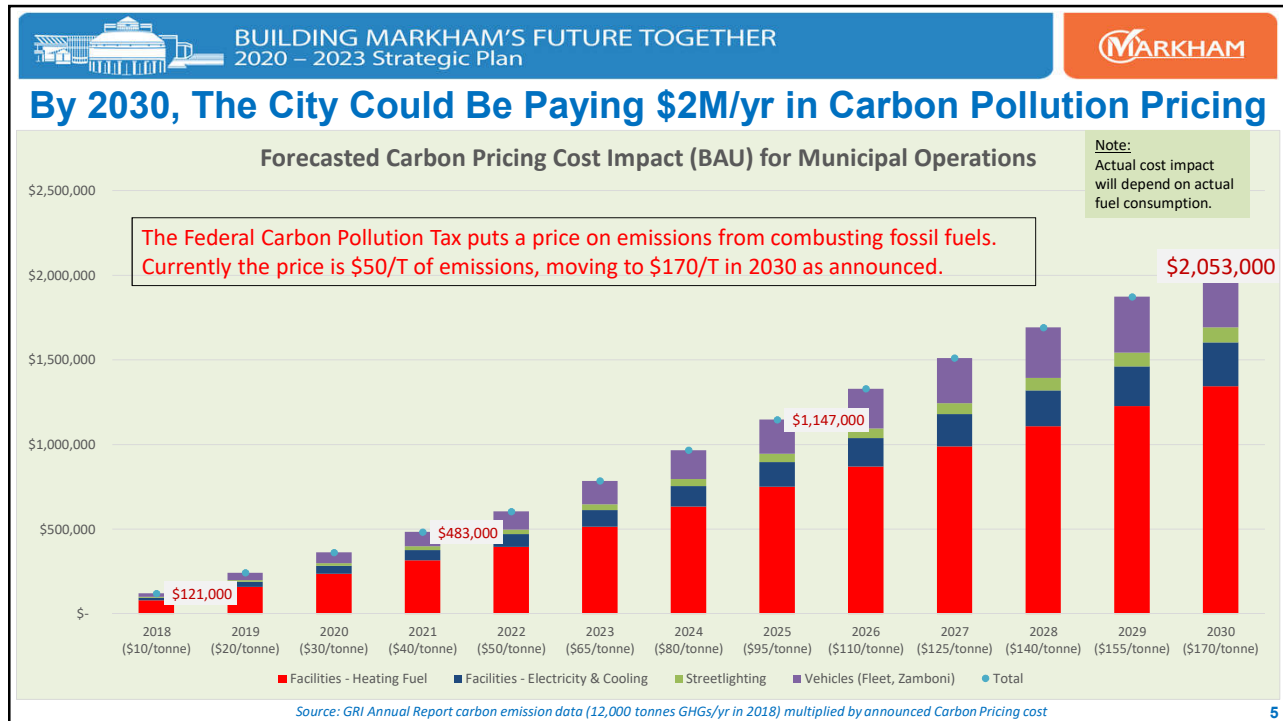
1. Centennial Community Centre to be net zero ready
2. Clatworthy Arena to be net zero ready
3. Fire Station 97 to be net zero ready
4. Thornhill Community Centre to be net zero ready

Capital Budget Requests total \$19.54M, where City share is \$5.44M and grants will cover up to \$14.1M.

City is expected to save \$8.1M over 30 years as a result of these projects, while providing net zero leadership to our community and building our capacity to further implement net zero projects.

2





BUILDING MARKHAM'S FUTURE TOGETHER
2020 – 2023 Strategic Plan

MARKHAM

Carbon Pollution Tax Options for Markham

- 1. Do nothing** - Ramp up our base budget from now to 2030 for the anticipated \$2M/yr as the carbon tax moves annually up to \$170/T emissions. Fee is expected to continue to increase to \$300/T or more beyond 2030.
- 2. Mitigate with net zero ready retrofits** – Build on our experience in reducing utility budgets through retrofits and innovative technologies to deliver an accelerated capital plan that leverages external funding to mitigate utility cost increases, Carbon Tax increases and emissions.

Staff are recommending four capital projects that accelerate net zero ready retrofits for four City facilities



Project Summaries

Four net zero ready projects are requested for approval by Budget Committee:

1. **Project # xxx** - Capital Budget request for \$14M to retrofit Centennial Community Centre to be net zero ready, contingent on up to 80% external funding, where the City share is \$3.8M and expected savings is at least \$5M over 30 years,
2. **Project # xxx** – Capital Budget request for \$1.7M to retrofit Clatworthy Arena to be net zero ready, contingent on up to 80% external funding, where the City share is \$450k and expected savings is at least \$300k over 30 years,
3. **Project # xxx** - Capital Budget request for \$740k to retrofit Fire Station 97 to be net zero ready, contingent on up to 50% external funding, where the City share is \$370k and expected savings is at least \$300k over 30 years,
4. **Project # xxx** - Capital Budget request for \$3.1M to retrofit Thornhill Community Centre to be net zero ready, contingent on up to 80% external funding, where the City share is \$815k and expected savings is at least \$2.5M over 30 years.

Capital Budget Requests total \$19.54M, where City share is \$5.44M and grants will cover up to \$14.1M.

7



Summary

- Proposed projects align directly and provide community leadership in achieving Markham and Federal objectives of Net Zero Emissions by 2050
- City expects to be exposed to more than \$2M/yr of carbon tax by 2030, and this is expected to increase significantly past 2030
- Grants available from the Green & Inclusive Community Buildings program by Federal Ministry of Infrastructure and Federation of Canadian Municipalities can reduce the City's investment substantially, 80% and 50% respectively
- City share of recommended capital investment is leveraging planned Life Cycle and some new funds
 - Total capital request of \$19.54M, external grants of \$14.1M, with City share of \$5.44M (\$318k new funds, on planned Life Cycle of \$5.1M) is forecasted to result in 30 year savings of \$8.1M

8

BUILDING MARKHAM'S FUTURE TOGETHER
2020 – 2023 Strategic Plan

Backup

9

BUILDING MARKHAM'S FUTURE TOGETHER
2020 – 2023 Strategic Plan

Centennial Near Net-Zero Emissions Retrofit Pilot

A	Project Cost (inc. inflation, contingency, tax, PM fees)	\$14M
B	Infrastructure Canada's GICB Grant	\$10.2M
C	Net Capital Cost (A-B)	\$3.8M
D	Available Funding in Life Cycle	\$3.2M
E	Incremental Project Cost to City (C-D)	\$540k

>75% GHG Emissions Savings

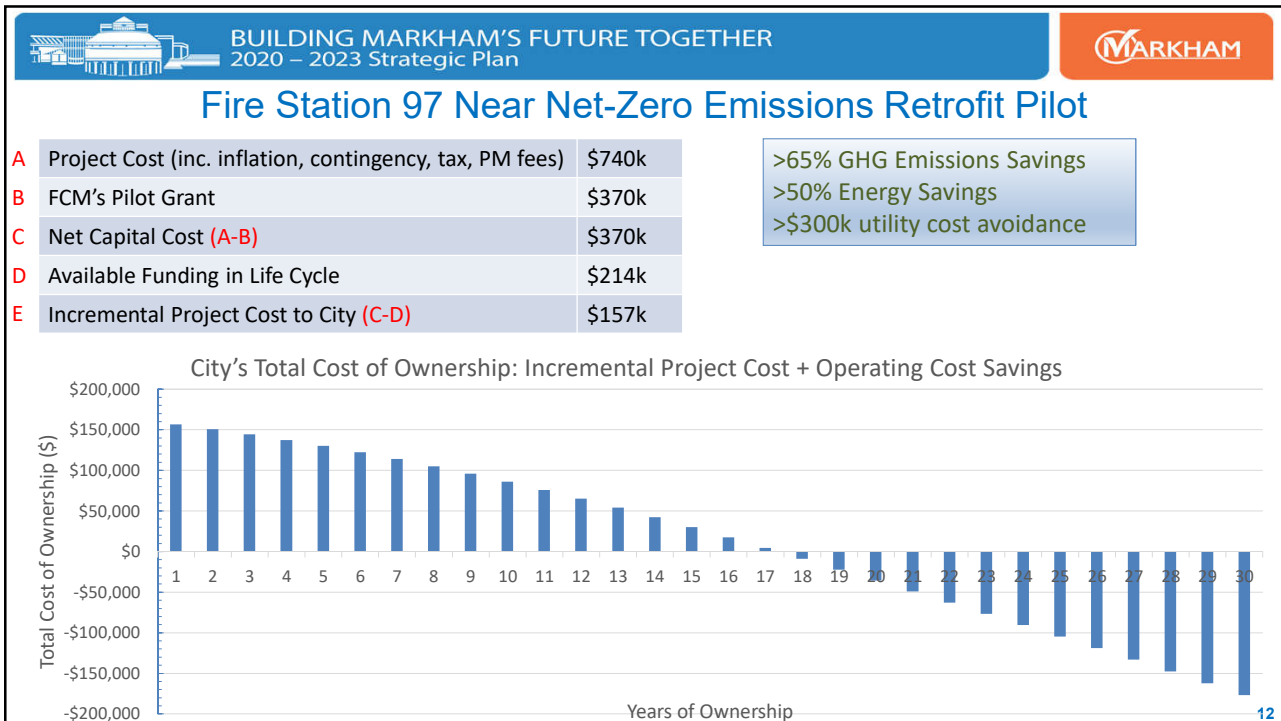
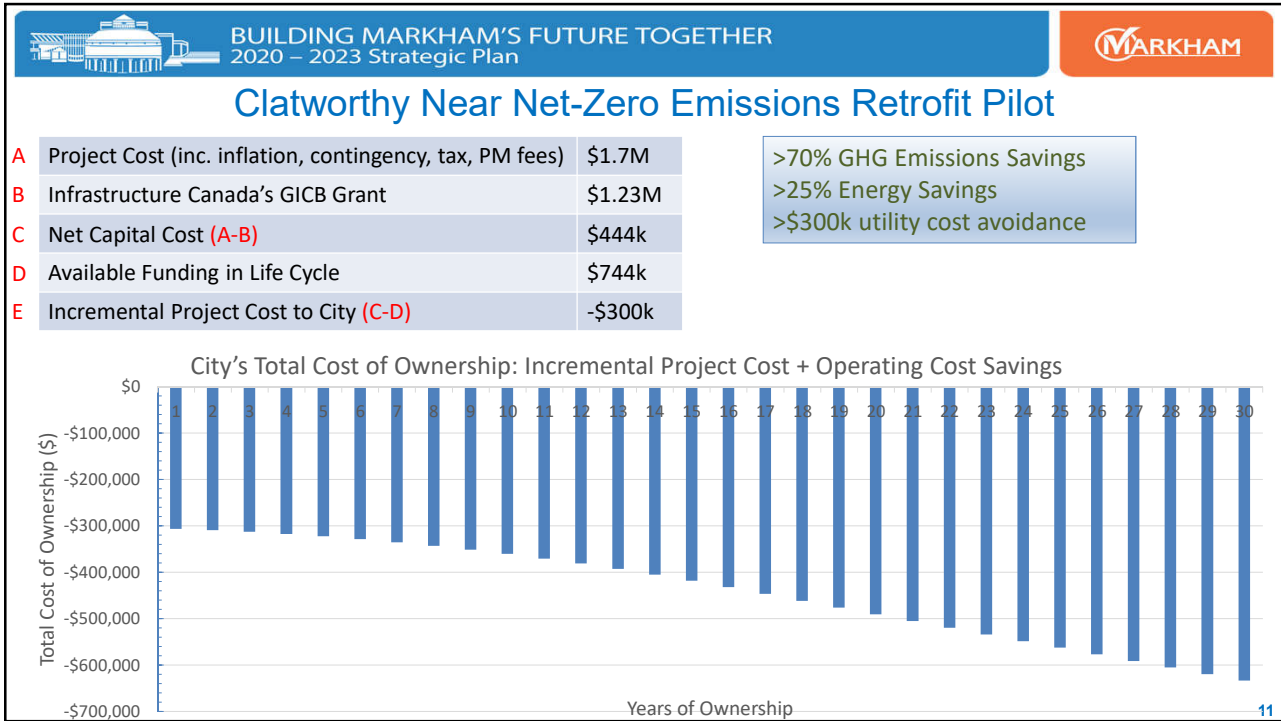
>45% Energy Savings

>\$5M utility cost avoidance

City's Total Cost of Ownership: Incremental Project Cost + Operating Cost Savings

Year	Total Cost of Ownership (\$)
1	500,000
2	400,000
3	300,000
4	200,000
5	100,000
6	0
7	-100,000
8	-200,000
9	-300,000
10	-400,000
11	-500,000
12	-600,000
13	-700,000
14	-800,000
15	-900,000
16	-1,000,000
17	-1,100,000
18	-1,200,000
19	-1,300,000
20	-1,400,000
21	-1,500,000
22	-1,600,000
23	-1,700,000
24	-1,800,000
25	-1,900,000
26	-2,000,000
27	-2,100,000
28	-2,200,000
29	-2,300,000
30	-2,400,000

10

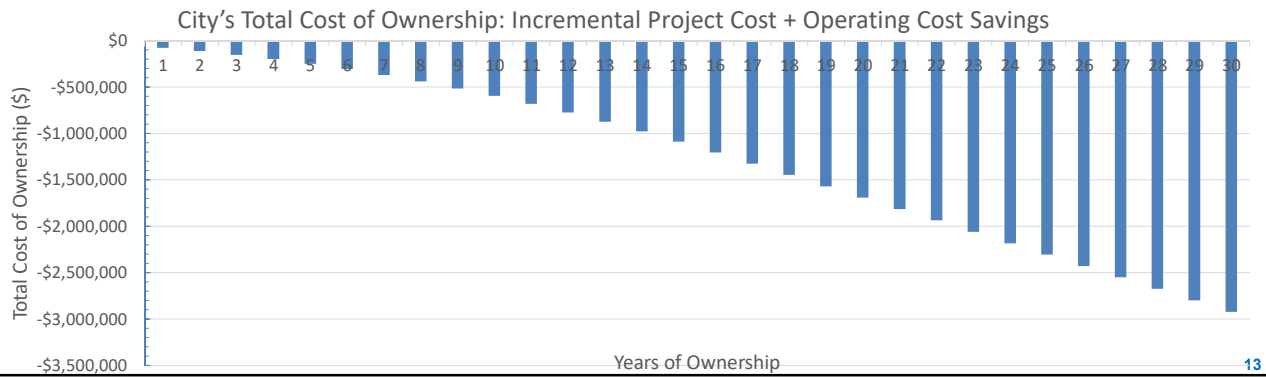




Thornhill Near Net-Zero Emissions Retrofit Pilot

A	Project Cost (inc. inflation, contingency, tax, PM fees)	\$3.1M
B	Infrastructure Canada's GICB Grant	\$2.3M
C	Net Capital Cost (A-B)	\$814k
D	Available Funding in Life Cycle	\$893k
E	Incremental Project Cost to City (C-D)	-\$79k

>50% GHG Emissions Savings
>25% Energy Savings
>\$2.5M utility cost avoidance



Recreation Services



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$45,800

Project Name: Aaniin C.C. Expansion Joint Study (Phase 1 of 2)

Studies/Pilot Programs

Commission: Community Services

Useful Life: 25 Pre Approval:

Department: Recreation Services

Category: Minor

Project Mgr: Ryan Hanna

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to retain a consultant to investigate cracking and potential movement in the foundation along the North East corner of Aaniin C.C. The consultant will conduct a structural review along the walls near the North East corner of the facility and determine if an expansion joint will be required to create a buffer for the wall to expand and contract.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	45,000	90,000
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>45,000</u>	<u>90,000</u>
HST Impact:	<u>792</u>	<u>1,584</u>
Total Project Cost:	<u>45,800</u>	<u>91,600</u>

NOTES

The walls are original to the facility and were installed and built in 2017. An initial condition assessment of the walls indicates that further investigation is required to determine a solution that will prevent future cracking of the walls. Phase 1 investigation will determine an appropriate course of action which then will advise a future phase on necessary remediation. The amount required is consistent with recent quote. Future phase is subject to change based on findings from Phase 1.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>	<u>Consultant</u>					
Operating Funded Life Cycle	45,800	45,800	0	0	0	45,800	91,600
TOTAL FUNDING	<u>45,800</u>					<u>45,800</u>	<u>91,600</u>

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="792,100"/>
				Amount Incl HST <input type="text" value="137,400"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$86,500

Project Name: Angus Glen C.C. & Pingle House Fire System Replacement

Repair/Replace

Commission: Community Services

Useful Life: 19 Pre Approval:

Department: Recreation Services

Category: Minor

Project Mgr: Scott Hill

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to replace the existing fire prevention system at Angus Glen C.C. and at the Pingle House. Replacing the fire prevention system will support legislative requirements and a safe environment for users and staff.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	85,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>85,000</u>	<u>0</u>
HST Impact:	<u>1,496</u>	<u>0</u>
Total Project Cost:	<u>86,500</u>	<u>0</u>

NOTES

Existing fire system in both Angus Glen C.C. and Pingle House are original and were installed in 2005. A condition assessment of both systems indicate replacement is warranted. Included in this replacement is the annunciator panels, pull stations, strobe lights, smoke detectors, heat detectors, supervisor switch, labour and disposal. The cost of the replacement is consistent with recent quote.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>	<u>Angus Glen C.C.</u>	<u>Pingle House</u>				
Operating Funded Life Cycle	86,500	74,100	10,900	0	0	85,000	0
TOTAL FUNDING	<u>86,500</u>					<u>85,000</u>	<u>0</u>

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="832,700"/>
				Amount Incl HST <input type="text" value="86,500"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$46,600

Project Name: Angus Glen C.C. Arena Boards Replacement

Repair/Replace

Commission: Community Services

Useful Life: 17 Pre Approval:

Department: Recreation Services

Category: Minor

Project Mgr: Scott Hill

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to replace the arena dasher boards on the West Rink Angus Glen C.C. The replacement will comprise of approximately 200 ft of arena dasher boards in the West arena. Arena boards provide a safe environment for arena users.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	45,800	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>45,800</u>	<u>0</u>
HST Impact:	<u>806</u>	<u>0</u>
Total Project Cost:	<u>46,600</u>	<u>0</u>

NOTES

Existing arena boards in the West Rink were last installed in 2016 at Angus Glen C.C. A condition assessment indicate that replacement is warranted. The amount requested is consistent with recent staff award plus inflation.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
Operating Funded Life Cycle	46,600	0	0	0	0	0	0	
TOTAL FUNDING	<u>46,600</u>					<u>0</u>	<u>0</u>	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="821,400"/>
				Amount Incl HST <input type="text" value="46,600"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$310,200

Project Name: Angus Glen C.C. Arena Rubber Flooring Replacement

Repair/Replace

Commission: Community Services

Useful Life: 10 Pre Approval:

Department: Recreation Services

Category: Minor

Project Mgr: Scott Hill

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
 5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to replace the existing rubber flooring in both the arena pads and arena dressing rooms. Approximately 18,730 sq. ft. of rubber flooring located in all arena change rooms, arena hallway, perimeter of both rinks and space within the player's benches, penalty boxes and timekeepers boxes will be replaced. Rubber flooring is specifically used in arena applications as it is durable, cut resistant and able to withstand heavy impact.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	282,300	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 8	22,584	0
Sub Total:	304,884	0
HST Impact:	5,366	0
Total Project Cost:	310,200	0

NOTES

Existing rubber flooring was installed in 2012 at Angus Glen C.C. A condition assessment of the flooring indicates replacement is warranted. The amount requested is consistent with recent award plus inflation. *** (Recent Award) Rubber Flooring costs approximately \$16.56 per sq ft including labour x 18,730 sq ft = \$310,200

SOURCE(S) OF FUNDING (\$)		Components					Future Phases
Funding Type	Budget	Rubber Flooring				TOTAL	Phases
Operating Funded Life Cycle	310,200	0	0	0	0	0	0
TOTAL FUNDING	310,200					0	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="821,400"/>
				Amount Incl HST <input type="text" value="287,300"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$210,700

Project Name: Angus Glen C.C. Exterior Wood Refurbishment

Repair/Replace

Commission: Community Services

Useful Life: 5 Pre Approval:

Department: Recreation Services

Category: Minor

Project Mgr: Scott Hill

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to clean and recoat the exterior wood features and to replace the exterior wood trellis located on the south side and the library patio at Angus Glen C.C.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	207,101	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>207,101</u>	<u>0</u>
HST Impact:	<u>3,645</u>	<u>0</u>
Total Project Cost:	<u>210,700</u>	<u>0</u>

NOTES

The existing wood features were last refinished in 2018 and the wood trellis are original to the facility and were installed in 2005. Based on condition assessment of the exterior wood, it was identified that some wood features have deteriorated and require cleaning and recoating in year 2023 and that the wood trellis will need to be replaced. Cleaning and recoating with a wood finish protects the exterior wood features from UV rays and harsh weather effects. The amount requested is consistent with recent quote.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>	<u>Wood Trellis</u>	<u>Exterior Wood</u>				
Operating Funded Life Cycle	210,700	98,830	111,870	0	0	210,700	0
TOTAL FUNDING	<u>210,700</u>					<u>210,700</u>	<u>0</u>

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="821,400"/>
				Amount Incl HST <input type="text" value="210,700"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$38,300

Project Name: Angus Glen C.C. Mirrors Replacement

Repair/Replace

Commission: Community Services

Useful Life: 15 Pre Approval:

Department: Recreation Services

Category: Minor

Project Mgr: Scott Hill

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to replace 64 mirrors located within changerooms and washrooms across Angus Glen C.C.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	37,675	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>37,675</u>	<u>0</u>
HST Impact:	663	0
Total Project Cost:	<u>38,300</u>	<u>0</u>

NOTES

The existing mirrors are original and were installed in 2005. Mirrors have been maintained for several years past their useful life. Based on condition assessment replacement is warranted. The amount requested is consistent with recent quote.

<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
Operating Funded Life Cycle	38,300	0	0	0	0	0	0	
TOTAL FUNDING	<u>38,300</u>					<u>0</u>	<u>0</u>	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="821,400"/>
				Amount Incl HST <input type="text" value="38,300"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$36,600

Project Name: Angus Glen C.C. Pool Flooring and Blinds Replacement

Repair/Replace

Commission: Community Services

Useful Life: 18 Pre Approval:

Department: Recreation Services

Category: Minor

Project Mgr: Scott Hill

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to replace the aquatic safety flooring in the aquatics staff office and the pool blinds on the pool deck at the Angus Glen C.C. Safety flooring reduces slip and fall accidents in areas with residual water. Pool blinds are used to reduce water glare, which increases lifeguard's ability to provide a safe environment to all users.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	36,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	36,000	0
HST Impact:	634	0
Total Project Cost:	36,600	0

NOTES

The existing safety flooring and pool blinds are original and were installed in 2005. A condition assessment completed on the assets indicate replacement is warranted. There is a total 2,250 sq. ft. of safety flooring to be replaced. Cost of safety flooring is \$6.71 per sq. ft. including labour x 2,250 sq. ft. = \$15,111. Additionally, there are 17 UV reflective pool blinds that needs to be replaced. Cost per blind is \$1,265 x 17 = \$21,500. The amount requested is consistent with recent quote.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>	<u>Pool Blinds</u>	<u>Pool Flooring</u>				
Operating Funded Life Cycle	36,600	21,500	15,100	0	0	36,600	0
TOTAL FUNDING	36,600					36,600	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="821,400"/>
				Amount Incl HST <input type="text" value="36,600"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$35,100

Project Name: Angus Glen C.C. Wood Ceiling Replacement

Repair/Replace

Commission: Community Services

Useful Life: 17 Pre Approval:

Department: Recreation Services

Category: Minor

Project Mgr: Scott Hill

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to replace the wooden ceiling in the arena lower lobby at Angus Glen C.C. The wooden ceiling supports lighting and acoutics in the lower lobby area.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	34,500	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>34,500</u>	<u>0</u>
HST Impact:	<u>607</u>	<u>0</u>
Total Project Cost:	<u>35,100</u>	<u>0</u>

NOTES

The wood ceiling the in lower lobby is original and were installed in 2005. A condition assessment indicates that replacement is warranted. The amount requested is consistent recent quote.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
Operating Funded Life Cycle	35,100	0	0	0	0	0	0	
TOTAL FUNDING	<u>35,100</u>					<u>0</u>	<u>0</u>	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
<u>Name</u>				Amount in Study: <input type="text" value="821,400"/>
				Amount Incl HST <input type="text" value="35,100"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$40,000

Project Name: Armadale C.C. Wooden Gym Floor Refinishing

Repair/Replace

Commission: Community Services

Useful Life: 10 Pre Approval:

Department: Recreation Services

Category: Minor

Project Mgr: Ryan Hanna

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to refinish the wooden flooring within the gymnasium at the Armadale C.C. This project supports community programming and sports leagues by providing a safe environment for participants.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	39,300	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	39,300	0
HST Impact:	692	0
Total Project Cost:	40,000	0

NOTES

The gymnasium floors were last refinished in 2013. The current condition reveals areas that are significantly worn down. The dulling of the floors can reduce the quality of play used by instructional programs and rentals that are revenue generating. The work requested consists of screening to abrade and to sand the floors and prep the wooden gym floor for finishing. New game lines will be painted and the floors will then be refinished with polyurethane. The amount requested is consistent with recent quote.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Operating Funded Life Cycle	40,000	0	0	0	0	0	0
TOTAL FUNDING	40,000					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="40,000"/>
				Amount Incl HST <input type="text" value="40,000"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: 23174

Project Cost: \$97,100

Project Name: City of Markham Environics Analytics

Commission: Community Services

Repair/Replace

Department: Recreation Services

Useful Life: 5 Pre Approval:

Project Mgr: Chris Rickett / Mary Creighton

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: External peer review

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to update the existing Environics Analytics contract to include additional datasets and expand the use of the data across all City departments. Currently the data available from Environics Analytics can only be used by Recreation and the Library. This data allows them to make fact based decisions based on community insights to develop programs, plan facilities and market to community members. The expansion of the datasets will mean new data will be added, including mobility, social values, community healthy, household expenditure and media behavior datasets. These additional datasets will further the ability of all City departments to make data-based decisions, helping shape community programming, improving the City's marketing and communications, and developing community and economic development plans.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	95,400	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>95,400</u>	<u>0</u>
HST Impact:	<u>1,679</u>	<u>0</u>
Total Project Cost:	<u>97,100</u>	<u>0</u>

NOTES

The City of Markham subscribed to Environics Analytics in 2011. Since 2011, additional features and new datasets have been developed by Environics Analytics. This project will update the existing dataset, adding more data points, and will move towards an enterprise license allowing the entire corporation access to this software. Environics Analytics continues to be a critical tool that provides useful data on neighbourhoods and insights to city staff in determining appropriate programs, services and types of marketing tools to effectively facilitate and communicate services to community members.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Operating Funded Life Cycle	97,100	0	0	0	0	0	0
TOTAL FUNDING	<u>97,100</u>					<u>0</u>	<u>0</u>

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$20,000	\$0	\$20,000

DCA/LIFE CYCLE DETAILS

DCA

Name

Year

Amount

**Amount in
Study**

Life Cycle

Amount in Study:

Amount Incl HST

Year in the study

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$45,900

Project Name: Clatworthy Arena Header Trench Cover Replacement

Repair/Replace

Commission: Community Services

Useful Life: 25 Pre Approval:

Department: Recreation Services

Category: Minor

Project Mgr: Martin Barrow

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to replace existing header trench's wooden cover with a metal cover at Clatworthy Arena. The trench cover is used to cover the refrigeration brine lines that goes from the refrigeration system to the concrete pad. The replacement consist of approximately 90 foot of material. The replacement from wood to metal is consistent with existing practice. The rationale for the conversion is that the wooden cover often rots and requires annual repairs.

BUILDING MARKHAM'S FUTURE TOGETHER: Stewardship of Money & Resources

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	36,000	0
Internal Charges:	0	0
External Consulting:	5,000	0
Contingency %: 10	4,100	0
Sub Total:	45,100	0
HST Impact:	794	0
Total Project Cost:	45,900	0

NOTES

The existing header trench cover was installed in 1985. A condition assessment of the trench cover indicates replacement is warranted. The amount required is consistent with recent quote.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	45,900	0	0	0	0	0	0	
TOTAL FUNDING	45,900					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="192,400"/>
				Amount Incl HST <input type="text" value="36,600"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$66,700

Project Name: Clatworthy Arena Marquee Replacement

Commission: Community Services

Repair/Replace

Department: Recreation Services

Useful Life: 25 Pre Approval:

Project Mgr: Martin Barrow

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to replace the marquee fixture with one (1) double sided digital marquee at the Clatworthy arena. The marquee is located outside the front of the centre and serves the public for advertising of City functions, programing, and events tied to Content Management System for emergency messaging.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	59,573	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 10	5,957	0
Sub Total:	65,530	0
HST Impact:	1,153	0
Total Project Cost:	66,700	0

NOTES

The existing marquee is a traditional system that requires letters to be replaced manually to display public information. This marquee at Clatworthy arena was installed 1985. A condition assessment of the unit indicates replacement is warranted. The marquee will be replaced with a double sided LED full colour marquee, where additional electrical work (installation of 30 amp circuit) will be required. Fibre optics cable will need to be wired to the new marquee for it to be tied to the City's Content Management System. The amount requested is consistent with the recent quote.

<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>	
Operating Funded Life Cycle	66,700	0	0	0	0	0	0	
TOTAL FUNDING	66,700					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="192,400"/>
				Amount Incl HST <input type="text" value="66,700"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$9,200

Project Name: Cornell C.C. Parking Structure Annual Maintenance

Repair/Replace

Commission: Community Services

Useful Life: 1 Pre Approval:

Department: Recreation Services

Category: Annual

Project Mgr: Mike Hasted

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This is an annual program for the maintenance and repair of the parking structure in Cornell C.C.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	9,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	9,000	0
HST Impact:	158	0
Total Project Cost:	9,200	0

NOTES

A consultant was retained in 2020 and provided a report outlining recommendations in maintaining the parking garage at Cornell C.C. The annual program is to inspect and remove any loose bricks from the precast wall panel and to make any necessary repairs. *This is an annual program and funding is requested each year.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
Operating Funded Life Cycle	9,200	0	0	0	0	0	0	
TOTAL FUNDING	9,200					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
Name				Amount in Study: <input type="text" value="42,800"/>
				Amount Incl HST <input type="text" value="9,200"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$145,500

Project Name: Cornell C.C. Pool Tunnel Investigation and Repair

Repair/Replace

Commission: Community Services

Useful Life: 30 Pre Approval:

Department: Recreation Services

Category: Major

Project Mgr: Mike Hasted / Colby Brygidyr

Cost Validation: Internal peer review

Ward(s): CW 1 2 3 4

Requirement Validation: Condition assessment

5 6 7 8

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to investigate and repair the pool tunnel area at Cornell C.C. As a result of a broken drain pipe in the pool basement, a consultant was retained to determine the cause of the damage. Preliminary reports indicate that there are structural issues in the pool tunnel, including but not limited to the break in the drain line, movement of concrete slab in various areas, pipe anchors and struts. This project will be completed in two phases. Phase 1 will require an engineer consultant to determine the scope of work from the investigation report. Phase 2 will be construction of the work designed.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	130,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 10	13,000	0
Sub Total:	143,000	0
HST Impact:	2,517	0
Total Project Cost:	145,500	0

NOTES

The existing water drain line and pool tunnel are original. The drain line and the tunnel are between basement level 1 and 2. Both elements were installed in 2012. The purpose of the water drain line is to drain existing water from the basement of the facility. Due to a recent broken water line, a consultant was retained to completed a condition assessment. Report indicates that further investigation and extensive repairs are warranted.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>							
Operating Funded Life Cycle	145,500	0	0	0	0	0	0	
TOTAL FUNDING	145,500					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
<u>Name</u>				Amount in Study: <input type="text" value="1,032,000"/>
				Amount Incl HST <input type="text" value="145,500"/>
				Year in the study <input type="text" value="2042"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$20,400

Project Name: Crosby C.C. Arena Heaters Replacement

Repair/Replace

Commission: Community Services

Useful Life: 15 Pre Approval:

Department: Recreation Services

Category: Minor

Project Mgr: Scott Hill

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to replace the existing two (2) gas fired heating units with two (2) electric radiant heaters around the arena at Crosby C.C.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	20,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	20,000	0
HST Impact:	352	0
Total Project Cost:	20,400	0

NOTES

The gas-fired heating units were last installed in 2008 at Crosby C.C. A condition assessment of the heating unit indicates that replacement is warranted. The heating units are being replaced with electric radiant heaters to support the City's Net Zero Initiative. Heaters provide a comfortable air temperature inside the arena for users. Amount required is consistent with recent quote.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
Operating Funded Life Cycle	20,400	0	0	0	0	0	0	
TOTAL FUNDING	20,400					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="42,300"/>
				Amount Incl HST <input type="text" value="20,400"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$17,500

Project Name: Crosby C.C. Facility Improvement

Commission: Community Services

Repair/Replace

Department: Recreation Services

Useful Life: 15 Pre Approval:

Project Mgr: Scott Hill

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to replace the front doors and to refurbish the hardwood spaces within the lamplight room at Crosby C.C.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	17,200	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	17,200	0
HST Impact:	303	0
Total Project Cost:	17,500	0

NOTES

The front doors were installed in 2007 at Crosby C.C. A condition assessment of the front doors indicates that replacement is warranted. A condition assessment of the hardwood spaces within the lamp light room indicates that refurbishment of the hardwood is required. The hardwood spaces were last refurbished in 2018. The door replacement will consist of replacing the bronze anodized entrance and all associated hardware. The hardwood spaces will require sanding and finishing to prevent further deterioration. Amount required is consistent with recent quote.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>	<u>Doors</u>	<u>Hardwood Spaces</u>				
Operating Funded Life Cycle	17,500	12,414	5,086	0	0	17,500	0
TOTAL FUNDING	17,500					17,500	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="42,300"/>
				Amount Incl HST <input type="text" value="17,500"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$24,500

Project Name: Heintzman House Historical Lighting Refurbishment

Repair/Replace

Commission: Community Services

Useful Life: 0 Pre Approval:

Department: Recreation Services

Category: Minor

Project Mgr: Martin Barrow

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to refurbish and restore the historical lighting fixtures at Heintzman House. The replacement program is consistent with the recommendations as outlined by a historical lighting consultant. Work will be done respecting the era of the house.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	24,120	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	24,120	0
HST Impact:	425	0
Total Project Cost:	24,500	0

NOTES

The historical lighting at Heintzman House dates back to the 1930s. A consultant was retained and completed a condition assessment of the numerous historical lighting throughout the facility. The condition assessment provides recommendations to retain and restore existing lighting dating back to the 1930s and recommendations to replace the lighting installed in the 1960s and 2000s to match the historical era of the house. The amount requested is consistent with cost estimates provided within the condition assessment report.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Operating Funded Life Cycle	24,500	0	0	0	0	0	0
TOTAL FUNDING	24,500					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="49,000"/>
				Amount Incl HST <input type="text" value="24,500"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$16,200

Project Name: Heintzman House Site Feature Refurbishment

Repair/Replace

Commission: Community Services

Useful Life: 0 Pre Approval:

Department: Recreation Services

Category: Minor

Project Mgr: Martin Barrow

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to refurbish the existing wood paneling, stair railing and doors throughout the Heintzman House. The refurbishment work will be done respecting the era of the house.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	15,912	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	15,912	0
HST Impact:	280	0
Total Project Cost:	16,200	0

NOTES

The wood trims are original and were installed in 1930 at Heintzman House. A condition assessment of the various wood trims indicates that refurbishment is warranted. The work includes localized restoration and restaining of existing wood paneling and stair railings in various rooms across both floors. Additionally, the work includes restoration and repainting of the door slabs and door frames. The amount required is consistent with recent quote.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
Operating Funded Life Cycle	16,200	0	0	0	0	0	0	
TOTAL FUNDING	16,200					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="49,000"/>
				Amount Incl HST <input type="text" value="16,200"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$20,400

Project Name: Markham Pan Am Centre Pool Equipment Replacement

Repair/Replace

Commission: Community Services

Useful Life: 1 Pre Approval:

Department: Recreation Services

Category: Annual

Project Mgr: Edward Migue

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The 2023 Markham Pan Am Centre High Performance Pool Equipment Replacement is an annual program. For 2023, replacement will include one (1) starting block, two (2) touch pads and ten (10) start push buttons. This project is to replace equipment necessary for Markham Pan Am Centre's ability to host national and international swim events.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	20,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	20,000	0
HST Impact:	352	0
Total Project Cost:	20,400	0

NOTES

There are currently 20 starting blocks, 20 touch pads and ten (10) start push buttons utilized for competitive swim events at Markham Pan Am Centre. Based on condition assessment, the following assets has been identified for replacement. Cost per one (1) starting block is \$3,220; cost per touch pads is \$7,697 (2 touchpads x \$7,697 = \$15,394); and cost per start push buttons \$178 (10 x \$178 = \$1,780). Annually, Pan Am hosts 42 swim meets and events. *This is an annual program and funding will be requested each year.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
Operating Funded Life Cycle	20,400	0	0	0	0	0	0	
TOTAL FUNDING	20,400					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="117,400"/>
				Amount Incl HST <input type="text" value="20,400"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$10,800

Project Name: Markham Village C.C. Audio System Replacement

Repair/Replace

Commission: Community Services

Useful Life: 15 Pre Approval:

Department: Recreation Services

Category: Minor

Project Mgr: Mike Hasted

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to replace existing audio system at the arena and lobby in Markham Village C.C.

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<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	10,600	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	10,600	0
HST Impact:	187	0
Total Project Cost:	10,800	0

NOTES

Existing audio equipment was installed in 1999. A condition assessment of the audio equipment indicates replacement is warranted. Four (4) speakers, two (2) amplifiers, six (6) mixers will be replaced. Amount required is consistent with recent quote.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Operating Funded Life Cycle	10,800	0	0	0	0	0	0
TOTAL FUNDING	10,800					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="57,800"/>
				Amount Incl HST <input type="text" value="10,800"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$6,100

Project Name: Milliken Mills C.C. Dance Studio Blind Replacement

Repair/Replace

Commission: Community Services

Useful Life: 15 Pre Approval:

Department: Recreation Services

Category: Minor

Project Mgr: Ryan Hanna

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to replace the existing blinds system in the Dance Studio at the Milliken Mills C.C.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	6,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	6,000	0
HST Impact:	106	0
Total Project Cost:	6,100	0

NOTES

The existing blinds were installed in 2001. The blinds have been maintained for several years past their useful life. Based on condition assessment replacement is warranted. Blinds are used in the dance studio serves two purposes. The first is to reduce glare in programs held in the facility and second is to provide additional privacy to participants in dance programs. The amount requested is consistent with recent quote.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
Operating Funded Life Cycle	6,100	0	0	0	0	0	0	
TOTAL FUNDING	6,100					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="528,900"/>
				Amount Incl HST <input type="text" value="6,100"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$143,800

Project Name: Milliken Mills C.C. Divider Wall Replacement

Repair/Replace

Commission: Community Services

Useful Life: 15 Pre Approval:

Department: Recreation Services

Category: Minor

Project Mgr: Ryan Hanna

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
 5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to replace the divider wall between the North & South Hall and Meeting Room A & B in Milliken Mills C.C. The purpose of a divider wall is to divide the room spaces in halves, so that it allows for multiple programs, camps and rentals to be conducted at the same time. Divider walls maximize and enhance usage of facility space within Milliken Mills C.C.

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<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	141,325	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	141,325	0
HST Impact:	2,487	0
Total Project Cost:	143,800	0

NOTES

The existing divider walls were installed in 2007 at Milliken C.C. Based on condition assessment replacement is warranted. Excessive use and regular wear and tear have resulted in the inability for the panels to effectively move, so that it can divide large multipurpose rooms for community use. The amount requested is consistent with recent quote.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
Operating Funded Life Cycle	143,800	0	0	0	0	0	0	
TOTAL FUNDING	143,800					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="528,900"/>
				Amount Incl HST <input type="text" value="143,800"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$228,300

Project Name: Milliken Mills C.C. Fire System Replacement (Phase 2 of 2)

Repair/Replace

Commission: Community Services

Useful Life: 25 Pre Approval:

Department: Recreation Services

Category: Minor

Project Mgr: Ryan Hanna

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to replace the existing fire safety systems throughout Milliken Mills C.C. Replacement of the fire safety system ensures that the facility meet fire code compliance and safety for staff and visitors.

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<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	192,000	0
Internal Charges:	0	0
External Consulting:	12,000	0
Contingency %: 10	20,400	0
Sub Total:	224,400	0
HST Impact:	3,949	0
Total Project Cost:	228,300	0

NOTES

The existing fire system was installed in 1989. In phase 1 of the project, a fire and life safety consultant (Innovative Fire Inc.) was retained to audit the existing fire prevention system at Milliken Mills C.C. The audit report identified fire safety components that needed to be replaced to ensure that the facility meets fire code compliance. Based on consultant's audit, the following fire safety systems were identified to be replaced: fire alarm panels, fire bells, wet sprinkler system, emergency lights and pull stations. The amount requested is consistent with recent quote.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
Operating Funded Life Cycle	228,300	0	0	0	0	0	0	
TOTAL FUNDING	228,300					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="528,900"/>
				Amount Incl HST <input type="text" value="228,300"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$24,900

Project Name: Old Unionville Library C.C. Ceiling Tile Replacement

Repair/Replace

Commission: Community Services

Useful Life: 25 Pre Approval:

Department: Recreation Services

Category: Minor

Project Mgr: Scott Hill

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to replace the existing ceiling tile with drywall. Replacement will take place within washrooms, front entrance and the storage room at Old Unionville Library C.C.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	24,500	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	24,500	0
HST Impact:	431	0
Total Project Cost:	24,900	0

NOTES

The existing ceiling tiles were installed in 1997. A condition assessment of the ceiling tiles indicates replacement is warranted. The ceiling tiles will be replaced with new drywall including vapour barrier and insulation in the wall, taped, sanded for primer and finished with paint. There are 636 sq. ft. of ceiling tiles to be replaced. Cost per sq. ft. including labour for installation and disposal is \$39.15. 636 sq ft x \$39.15 per sq. ft = \$24,900. The amount requested is consistent with recent quote.

<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>	
Operating Funded Life Cycle	24,900	0	0	0	0	0	0	
TOTAL FUNDING	24,900					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="55,000"/>
				Amount Incl HST <input type="text" value="24,900"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: 23189

Project Cost: \$24,600

Project Name: Outdoor Automated External Defibrillator (AED) Program

New Asset/Expansion

Commission: Community Services

Useful Life: 5 Pre Approval:

Department: Recreation Services

Category: Minor

Project Mgr: Jason Tsien

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to request funding for the installation of four (4) outdoor automated external defibrillator (AED) machines, four (4) outdoor AED cabinets with remote monitoring and four (4) rescue station towers. This is a pilot project to supply local community parks with outdoor AED machines.

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<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	22,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 10	2,200	0
Sub Total:	24,200	0
HST Impact:	426	0
Total Project Cost:	24,600	0

NOTES

There are currently 54 indoor AED units in the City of Markham. AED units have been used at indoor facilities 6 times since 2008. Cost per outdoor AED unit machine is \$1,643 x 4 = \$6,496; cost per outdoor AED case \$2,175 x 4 = \$8,700; cost per AED tower stand is \$1,329 x 4 = \$5,316; installation and labour is \$1,488. The amount requested is consistent with recent quote.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
Tax	24,600	0	0	0	0	0	0	
TOTAL FUNDING	24,600					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$12,300

Project Name: Pickleball Court Lining Project

Commission: Community Services

New Asset/Expansion

Department: Recreation Services

Useful Life: 7 Pre Approval:

Project Mgr: Jason Tsien / David Plant

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Internal peer review

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is an annual program intended to add pickleball lines to existing tennis courts in community and neighbourhood parks across Markham. The 2023 project will add six (6) sets of pickleball lines to three (3) existing outdoor tennis court facilities. Pickleball is the fastest growing sport in North America with the number of places to play nearly doubling between 2010 to 2016. With increasing levels of participation and demand for additional public outdoor courts, this program aims to meet community needs for additional outdoor pickleball opportunities. Since 2020, the City of Markham have added 12 outdoor pickleball courts.

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<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	11,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 10	1,100	0
Sub Total:	12,100	0
HST Impact:	213	0
Total Project Cost:	12,300	0

NOTES

The 2023 capital program will add pickleball lines to public tennis facilities located at Grandview Park, Morgan Park and Blodwen Davies Park. New pickleball lines painted on existing community public tennis courts will increase and maximize the use of each outdoor tennis facility. This project is a 5 year program, which will allow the City to systematically add pickleball lines to existing public tennis facilities at 13 other park locations. *Funding will be requested each year of the 5 year program.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>							
Tax	12,300	0	0	0	0	0	0	
TOTAL FUNDING	12,300					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
<u>Name</u>				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$5,100

Project Name: Recreation AED Program Replacement

Repair/Replace

Commission: Community Services

Useful Life: 5 Pre Approval:

Department: Recreation Services

Category: Annual

Project Mgr: Eric Ho

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The 2023 AED annual program will include the replacement of 8 AED trainer kits and 8 AED trainer pads. This project is a city wide annual program.

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<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	5,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	5,000	0
HST Impact:	88	0
Total Project Cost:	5,100	0

NOTES

There are currently 54 AED units in the City of Markham. The AED units have been used 6 times since 2018. 2008 and 2016 in Centennial C.C., 2010 and 2019 at the Milliken Mills C.C., 2016 and 2018 at Angus Glen C.C. Cost per trainer pads are \$283 per unit (\$283 x 18 = \$5,100). Price is consistent with recent staff award plus inflation. The Life Cycle Reserve Study will be adjusted accordingly in the next update. *This is an annual program and funding will be requested each year.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Operating Funded Life Cycle	5,100	0	0	0	0	0	0
TOTAL FUNDING	5,100					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="7,300"/>
				Amount Incl HST <input type="text" value="5,100"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$87,600

Project Name: Recreation Aquatics Equipment Replacement

Repair/Replace

Commission: Community Services

Useful Life: 5 Pre Approval:

Department: Recreation Services

Category: Annual

Project Mgr: Alex Chu

Cost Validation: Internal peer review

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This annual replacement program for aquatics equipment is for eight (8) aquatics facilities (indoor and outdoor).

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	86,050	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	86,050	0
HST Impact:	1,514	0
Total Project Cost:	87,600	0

NOTES

The 3 year average spend is \$86,050. Aquatics equipment is used to support programs that are revenue generating. The Life Cycle Reserve Study will be adjusted accordingly in the next update.
*This is an annual program and funding will be requested each year.
*Equipment will be purchased based on pool opening needs

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Operating Funded Life Cycle	87,600	0	0	0	0	0	0
TOTAL FUNDING	87,600					0	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="89,100"/>
				Amount Incl HST <input type="text" value="87,600"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: **23193**

Project Cost: **\$133,600**

Project Name: **Recreation Arena Refrigeration Study**

Studies/Pilot Programs

Commission: Community Services

Useful Life: 0 Pre Approval:

Department: Recreation Services

Category: Major

Project Mgr: Jason Tsien

Cost Validation: Internal peer review

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Recreation Services is requesting funding for a consultant to conduct a study that will determine the type of refrigeration systems to utilize in community centre arenas. Refrigeration systems have advanced utilizing different types of refrigerants (IE: ammonia, opteon, CO2, etc.) Each refrigeration has its advantages and disadvantages. The intent of the study is to provide recommendations on the type of refrigeration system that should be utilized to help the city achieve its Net Zero targets while maintaining the utmost safety for residents residing near community arenas.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	125,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 5	6,250	0
Sub Total:	131,250	0
HST Impact:	2,310	0
Total Project Cost:	133,600	0

NOTES

The objective for this study is to make recommendations towards the type of refrigeration system the City of Markham should utilize in arenas moving forward. Factors to be included are: 1) working to support reduction of greenhouse gas (GHG) emissions to align with the City's Net Zero targets. 2) Total cost of ownership (Capital & Operating Costs) 3) provision of a safe operating plant.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>							
Tax	133,600	0	0	0	0	0	0	
TOTAL FUNDING	133,600					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$88,800

Project Name: Recreation Facility Equipment Replacement

Commission: Community Services

Repair/Replace

Department: Recreation Services

Useful Life: 8 Pre Approval:

Project Mgr: Edward Migue/ Ryan Hanna / Scott Hill/ Mik

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to replace the facility equipment at four (4) community centres. Facility equipment to be replaced at Crosby C.C. includes one (1) 20" swing cleaning machine; replacement at the Markham Pan Am Centre and Milliken Mills C.C. with one (1) T-7 ride-on floor scrubbing machine per facility; and replacement at Markham Village C.C. with one (1) aerial platform unit. The cleaning machines are used to clean different surfaces in hallways, program rooms and gymnasium floors. The aerial platform is used for completing high work task and are designed to reach elevated assets in the workplace.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	87,300	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>87,300</u>	<u>0</u>
HST Impact:	<u>1,536</u>	<u>0</u>
Total Project Cost:	<u>88,800</u>	<u>0</u>

NOTES

The existing swing cleaning machine was purchased in 2000 for Crosby C.C., the T-7 machines in 2015 for Milliken Mills C.C., 2014 in Markham Pan Am Centre and the aerial platform in 1999 at Markham Village C.C. A condition assessment of the facility equipment indicate replacement is warranted. The amount requested is consistent with recent quote.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
	<u>Budget</u>	<u>Pan Am T7</u>	<u>Milliken Mills T7</u>	<u>Crosby Swing Machine</u>	<u>Markham Village Sky Jack</u>	<u>TOTAL</u>	
Operating Funded Life Cycle	88,800	30,450	30,450	4,600	23,400	88,900	0
TOTAL FUNDING	<u>88,800</u>					<u>88,900</u>	<u>0</u>

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="746,500"/>
				Amount Incl HST: <input type="text" value="88,800"/>
				Year in the study: <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$6,600

Project Name: Recreation Fitness Equipment Replacement

Repair/Replace

Commission: Community Services

Useful Life: 5 Pre Approval:

Department: Recreation Services

Category: Annual

Project Mgr: Eric Ho

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Annual replacement program for the fitness equipment at City owned facilities. The items being replaced are strength, cardio, and flooring equipment.

BUILDING MARKHAM'S FUTURE TOGETHER: Engaged, Diverse & Thriving City

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	6,450	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	6,450	0
HST Impact:	114	0
Total Project Cost:	6,600	0

NOTES

The formula for replacement of equipment is based on an industry standard that states 8% of gross revenue will represent the replacement value of equipment to service membership. Fitness Revenue in 2021 was \$80,623 when multiplied by the industry standard of 8%, it equates to \$6,450. The formula used is consistent with previous years' budgets.
*This is an annual program and funding will be requested each year.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
Operating Funded Life Cycle	6,600	0	0	0	0	0	0	
TOTAL FUNDING	6,600					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="210,500"/>
				Amount Incl HST <input type="text" value="6,600"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$98,600

Project Name: Recreation Painting Projects

Commission: Community Services

Repair/Replace

Department: Recreation Services

Useful Life: 8 Pre Approval:

Project Mgr: Scott Hill / Martin Barrow / Mike Hastad

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to repaint the interior spaces within the tennis courts at Angus Glen Tennis Centre, the exterior walls and doors at Markham Village C.C., the interior within the library at Thornhill C.C. and the exterior walls, soffits and fencing at the Unionville Train Station

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<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	96,919	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	96,919	0
HST Impact:	1,706	0
Total Project Cost:	98,600	0

NOTES

Based on condition assessment of the spaces, the paint has deteriorated and requires repainting in year 2023. Cost per sq. ft. of paint including labour is \$1.99 and there are a total of 49,517 sq. ft. of space that has been identified to be repainted. Cost is consistent with recent staff award plus inflation. Cost of paint plus labour per sq. ft. is \$1.99 x 49,517 sq. ft. = \$98,600

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
	<u>Budget</u>	<u>AG Tennis Centre</u>	<u>Markham Village CC</u>	<u>Thornhill CC</u>	<u>Unionville Train Station</u>	<u>TOTAL</u>	
Operating Funded Life Cycle	98,600	45,720	14,500	18,180	20,200	98,600	0
TOTAL FUNDING	98,600					98,600	0

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="1,000,300"/>
				Amount Incl HST <input type="text" value="98,600"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$72,800

Project Name: Recreation Pool Grouting Replacement

Commission: Community Services

Repair/Replace

Department: Recreation Services

Useful Life: 5 Pre Approval:

Project Mgr: Eric Ho

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Annual program for the repair of pool grout during pool shut down process.

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<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	71,500	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	71,500	0
HST Impact:	1,258	0
Total Project Cost:	72,800	0

NOTES

The 3 year average spend from the annual pool grouting project is \$72,800. Staff will regROUT what is necessary to get community pools re-opened for community use. The amount of work required is determined during pool shutdown when water is drained from the pool. These funds will support the cost of repairing and replacing grout. *This is an annual program and funding will be requested each year.

<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>	
Operating Funded Life Cycle	72,800	0	0	0	0	0	0	
TOTAL FUNDING	72,800					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="72,800"/>
				Amount Incl HST <input type="text" value="72,800"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$100,100

Project Name: Recreation Program Equipment Replacement

Repair/Replace

Commission: Community Services

Useful Life: 5 Pre Approval:

Department: Recreation Services

Category: Annual

Project Mgr: Alex Chu

Cost Validation: Internal peer review

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Annual program to replace City wide program/camp equipment. Items to be replaced under this program include: preschool equipment, mats, badminton and volleyball nets, learn to skate equipment, storage carts for equipment.

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<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	98,400	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	98,400	0
HST Impact:	1,732	0
Total Project Cost:	100,100	0

NOTES

The 3 year average spend from the Annual Programs Equipment is \$100,100. Programs equipment will be purchased based on requirements to reopen community centres post COVID-19. The equipment being replaced supports programs that are revenue generating.
*This is an annual program and funding is requested each year.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
Operating Funded Life Cycle	100,100	0	0	0	0	0	0	
TOTAL FUNDING	100,100					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="100,100"/>
				Amount Incl HST <input type="text" value="100,100"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$55,500

Project Name: Recreation Tables and Chairs Replacement

Commission: Community Services

Repair/Replace

Department: Recreation Services

Useful Life: 5 Pre Approval:

Project Mgr: Alex Chu

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Internal peer review

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Annual program to replace tables and chairs at all city wide recreation facilities.

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<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	54,516	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	54,516	0
HST Impact:	959	0
Total Project Cost:	55,500	0

NOTES

The 3 year average spent on this replacement program is \$54,516. Tables and chairs are equipment used to support revenue generating programs and rentals.
*This is an annual program and funding will be requested each year.

<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
Operating Funded Life Cycle	55,500	0	0	0	0	0	0	
TOTAL FUNDING	55,500					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="56,700"/>
				Amount Incl HST <input type="text" value="55,500"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$15,300

Project Name: St. Roberts Soccer Clubhouse LED Lighting Upgrade

Repair/Replace

Commission: Community Services

Useful Life: 12 Pre Approval:

Department: Recreation Services

Category: Minor

Project Mgr: Martin Barrow

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to replace the existing flourescent strip lighting fixtures and upgrade with LED fixtures in the St. Roberts Soccer Clubhouse. LED fixtures have a longer life cycle than existing flourescent fixtures.

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<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	15,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	15,000	0
HST Impact:	264	0
Total Project Cost:	15,300	0

NOTES

A condition assessment of the 36 flourescent strip lighting around the clubhouse at St. Roberts soccer dome indicates that replacement is warranted. The existing lights are original to the facility and were installed in 2012. The project will upgrade the consist 36 flourescent strip lighting with 36 x 4 foot LED strip lighting (38W) throughout the clubhouse. The amount requested is consistent with recent quote. LED fixtures have a longer useful life compared to flourescent lighting.

<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>	
Operating Funded Life Cycle	15,300	0	0	0	0	0	0	
TOTAL FUNDING	15,300					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	-\$590	\$0	-\$590

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="15,600"/>
				Amount Incl HST <input type="text" value="15,300"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$179,100

Project Name: Thornhill C.C. Rubber Floor Replacement

Repair/Replace

Commission: Community Services

Useful Life: 10 Pre Approval:

Department: Recreation Services

Category: Minor

Project Mgr: Martin Barrow

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is to replace existing rubber flooring in the East arena and arena dressing rooms at Thornhill C.C. The replacement consists of approximately 10,800 sqft of rubber flooring located at the East arena and dressing rooms. Rubber flooring is specifically used in arena applications, as it is cut resistant able to withstand heavy impact and is durable.

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<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	160,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 10	16,000	0
Sub Total:	176,000	0
HST Impact:	3,098	0
Total Project Cost:	179,100	0

NOTES

Existing rubber flooring was installed in 2009 at Thornhill C.C. A condition assessment of the flooring indicates replacement is warranted. The amount requested is consistent with recent quote. In 2021, Thornhill C.C. replaced the rubber flooring in the West arena and the arena dressing rooms. This 2023 capital request will be to replace the rubber flooring for the East arena. *** (Recent Award) Rubber Flooring costs approximately \$16.56 per sq ft including labour x 10,800 sq ft = \$178,848

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
Operating Funded Life Cycle	179,100	0	0	0	0	0	0	
TOTAL FUNDING	179,100					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="857,400"/>
				Amount Incl HST <input type="text" value="179,100"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				

Markham Public Library



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$2,958,700

Project Name: Library Collections

Commission: Community Services

Repair/Replace

Department: Markham Public Library

Useful Life: 7 Pre Approval:

Project Mgr: Catherine Biss

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Collections are the Library's main product and are used heavily by the public, which expects currency. This requires ongoing acquisition of new materials, including those in print and non-print formats and non-English language materials, which are in high demand in Markham. In a 2020 survey of 2,521 residents, 94% indicated that it was important that MPL provides books and valued borrowing materials as the #1 Library service. A constant stream of new material is required to keep up with customer interest and demand.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	2,907,500	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	2,907,500	0
HST Impact:	51,172	0
Total Project Cost:	2,958,700	0

NOTES

Preliminary allocations (incl. processing): Books & Subscriptions \$998K/ Audio-visual \$327K/ French \$26K/ Multilingual \$311.1K/ Microfilms \$3.6K/ Periodicals \$100K/ Digital Materials \$1,013K/ Processing Supplies \$180K. Figures subject to revision based on material availability, customer needs & final Library review. 25% funding (excl. processing costs) devoted to non-English materials (Multilingual/ French). Cost for replacement of existing E-Resources (when invoiced in USD) based on exchange rate of 1.27 (\$537K USD).

SOURCE(S) OF FUNDING (\$)		Components					Future Phases
Funding Type	Budget	Collections			TOTAL		
Operating Funded Life Cycle	2,958,700	2,958,700	0	0	0	2,958,700	0
TOTAL FUNDING	2,958,700					2,958,700	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="2,958,700"/>
				Amount Incl HST <input type="text" value="2,958,700"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				

2023 LIBRARY COLLECTIONS BUDGET SUPPORTING INFORMATION

The Library's Business Model for Material Selection:

MPL's business model for material selection is designed to achieve the following outcomes:

- Strong ROI on funding dollars, respecting the tax-payer's investment in library services;
- Strong library collections as a fundamental element in library service;
- Anticipating and meeting customer needs as determined by analysis of data regarding usage, trends and consumption of content, and broader trends in the publishing, retail, and public sectors;
- Alignment with the diversity of Markham's socio-demographic structure including age cohorts, language needs and preferences, and learning and leisure pursuits;
- Sector leading performance in Key Performance Indicators, including circulation per capita, collection turnover, materials as percentage of total expenditures, and visits per capita;
- Efficient use of funding dollars through a system wide approach to selection, eliminating overlap and duplication amongst the branches;
- Leveraging of alternative sources of content (i.e. online content and interlibrary loan) to satisfy long tail (non-mainstream) needs;
- High levels of use through aggressive targets for percentage of materials checked out at any given time. We want library materials to be in the hands of customers, enriching lives and supporting education.

Depth and Breadth of Library Materials:

Like all public library systems in Canada, MPL's collection policy defines the library mandate to meet the diverse information and knowledge needs of Markham residents through a collection that provides an appropriate balance of depth and breadth; meeting anticipated and expressed individual and community needs.

- **Bestsellers vs. Backlist:** Like bookstores, library "stock" includes both current bestsellers and backlist (older books still in print) items that are in demand by library customers
 - Backlist would include materials such as classics of children's literature
 - Classic board books and picture books for babies and pre-schoolers (*Goodnight Moon, Brown Bear, Brown Bear, What Do You See?*)
 - Series fiction for school aged children (*Diary of a Wimpy Kid, Dork Diaries, Geronimo Stilton, etc.*)
 - Classic children's fiction for school aged children (*Harry Potter, Anne of Green Gables, Treasure Island*)
 - Curriculum related materials (children's non-fiction books on Lands & People, Science, Technology and Math, Social Studies, etc.)
 - Backlist materials for teens such as popular teen fiction series and classics
 - Popular teen fiction (*Twilight, Divergent, The Hunger Games, The Giver, etc.*)
 - Curriculum related non-fiction (materials to support Independent Study Units)
 - Classic literature (Margaret Atwood, William Shakespeare, Harper Lee, William Golding, F. Scott Fitzgerald, etc.)
 - Backlist materials for adults such as classic literature, series fiction and non-fiction
 - Backlist of popular authors (James Patterson, Sue Grafton, Stephen King)
 - Backlist non-fiction (Health & Wellness, Travel, Food & Drink, Business and Financial Investments, Computers, Home & Garden, etc.)

- Genre fiction (Romance, Mysteries, Horror, Fantasy, etc.)
 - Backlist materials for senior adults
 - Large print (popular fiction and non-fiction titles)
 - Audiobooks
- **Linguistic Diversity:** An additional challenge for Markham, in the context of the City’s high level of linguistic diversity, is to allocate adequate funding to the demand for multilingual materials in each service area.
- **Customer Purchase Suggestions:** Appropriate response to purchase suggestions by Markham residents where they meet the Library’s selection criteria including ensuring that the item would be of interest of other Markham residents.
- **Fiscal Responsibility:** Our collection policy excludes purchasing niche or scholarly materials, ensuring that MPL’s collection appeals to the general public and not for niche interests (we try to meet these needs through Interlibrary Loans or online databases).

Estimated budget breakdown for 2023: \$2,958,700

Books & Subscriptions	\$998,000
Audiovisual	\$327,000
French Books	\$ 26,000
Multilingual	\$311,100
Microfilms	\$ 3,600
Periodicals	\$100,000
eResources	\$1,013,000
Processing & Supplies	\$180,000

Circulation in 2019 VS 2018:

Circulation	2019	2018	%+/-
Physical Circulation	4,845,118	4,905,024	(1.2)
Digital Circulation (eCirc)	731,177	555,728	31.6
Total Circ (incl. eCirc)	5,576,295	5,460,752	2.1

Electronic circulation over the past 5 years:

Years	2017	2018	2019	2020	2021
eCirculation	370,779	555,728	731,177	1,136,547	1,164,094
%Increase over prior year	19.53%	49.88%	31.57%	35.67%	2.37%

As of July 2022, the Library has seen an **increase of over 40% in digital circulation** over the same period in 2019, a huge increase due in part to COVID 19.

CUSTOMER SATISFACTION WITH COLLECTIONS:

The number one reason for Markham residents using the library is for its collection as they continuously state in all surveys. As you can see from the chart below, our customer expectations of the content MPL provides exceeds their actual satisfaction with the collection.

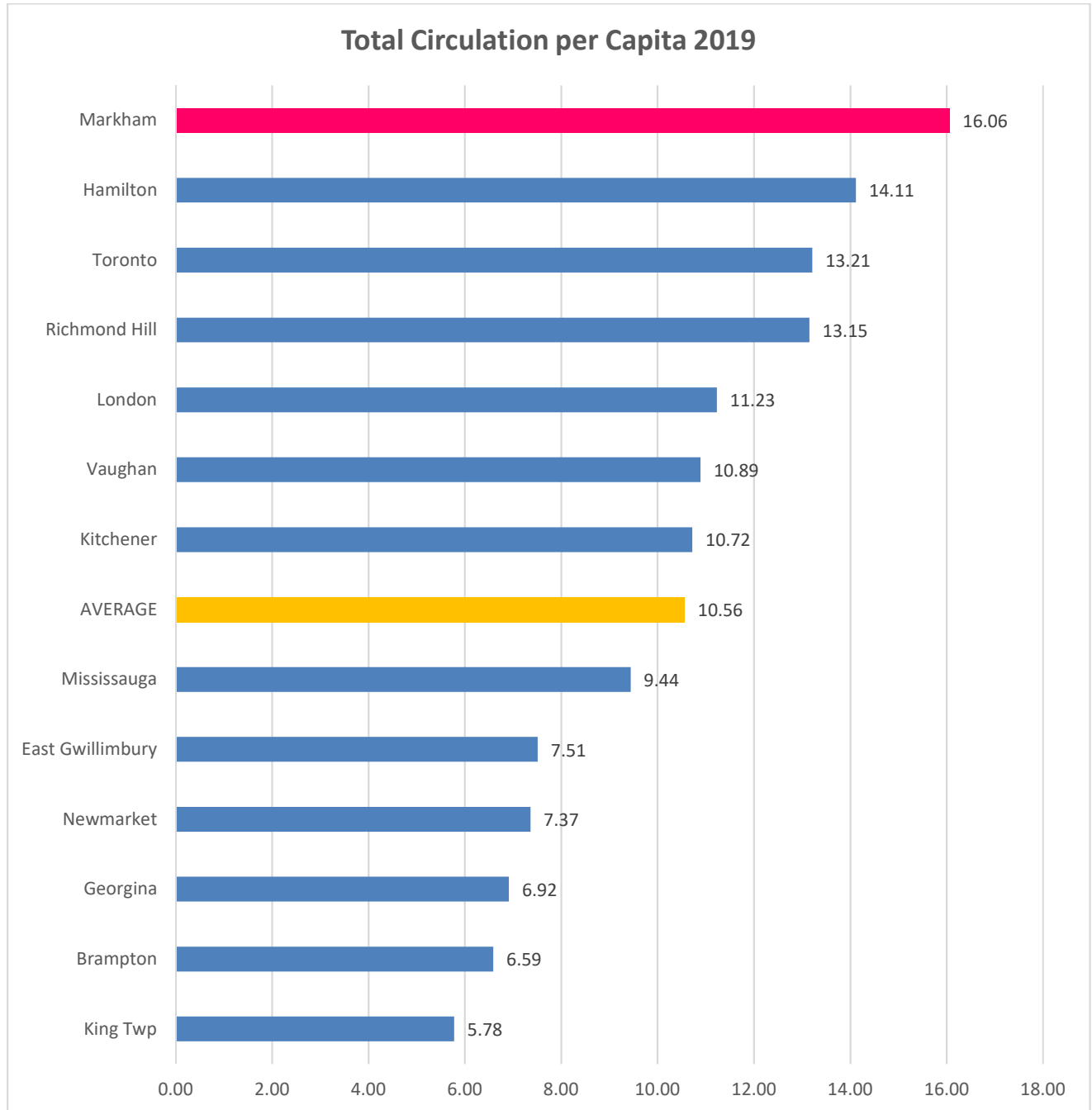
	2019
Importance	9.20/10
Satisfaction	8.03/10
Gap	1.17

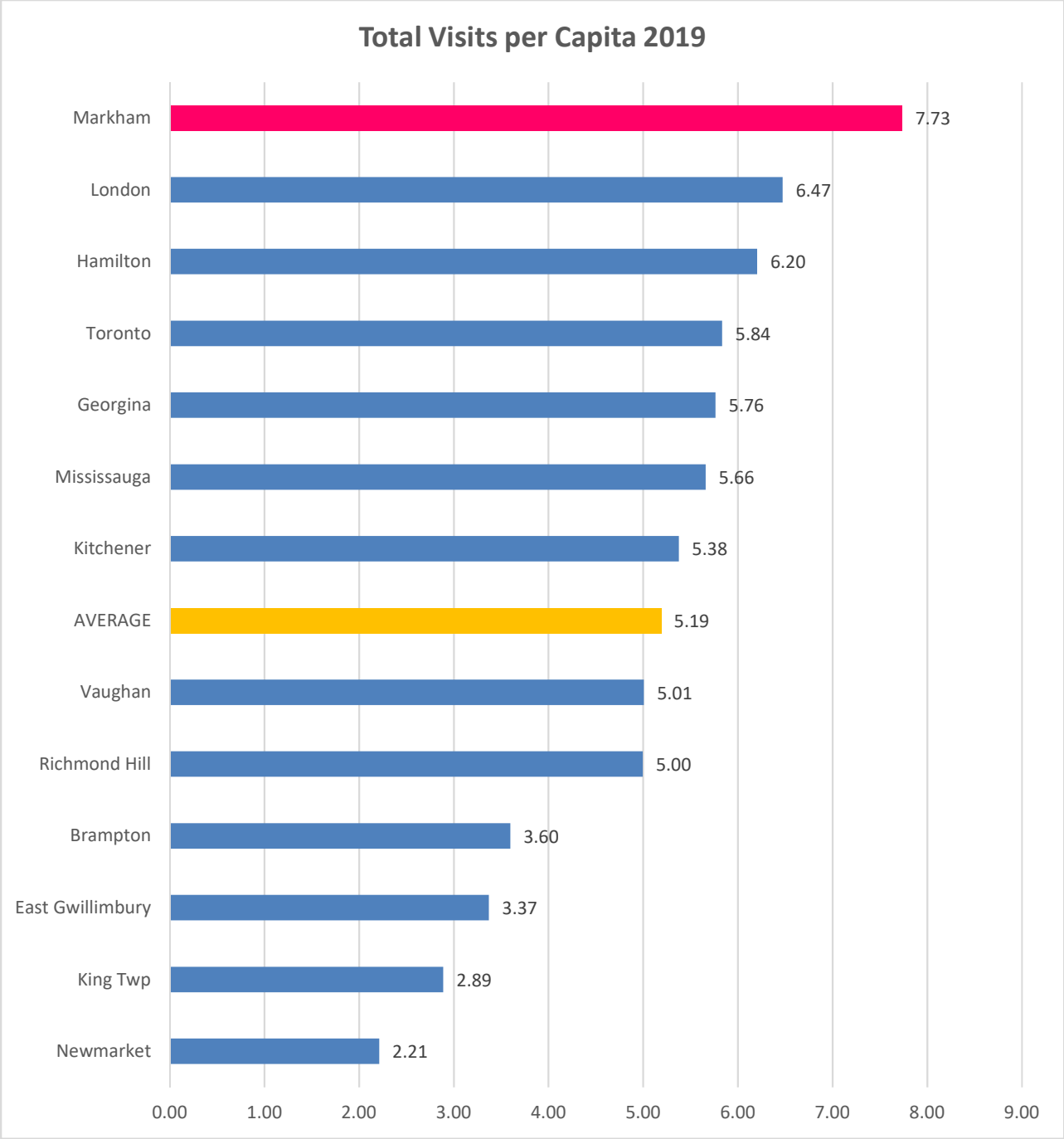
LANGUAGES COLLECTED:

- English, French, Arabic, German, Greek, Gujarati, Hebrew, Hindi, Italian, Korean, Persian, Panjabi, Russian, Spanish, Tagalog, Tamil, Urdu, and Chinese.

KEY PERFORMANCE INDICATORS

(Based on the latest 2019 statistics submitted to Ontario Ministry by Public Libraries)







2023 PROJECT FUNDING REQUEST FORM

Number: **23204**

Project Cost: **\$187,300**

Project Name: **Library Furniture, Equipment & Shelving Replacement**

Commission: Community Services

Repair/Replace

Department: Markham Public Library

Useful Life: 10 Pre Approval:

Project Mgr: Catherine Biss

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

To replace furniture/shelving that is broken and/or in poor condition due to heavy usage in MPL branches. Required to maintain library facilities and operations. The public library is a high use municipal service that is valued by the community and helps make Markham a highly attractive place in which to live, work and study. Replacement of Milliken Mills Library shelving (Phase 2 of 3), which is original to this 1990 building. At 31 years of age, this is the oldest shelving in use at MPL branches and is now significantly past its expected lifespan (20 years). Phase 3 will be completed in 2024-2025.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	184,100	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	184,100	0
HST Impact:	3,240	0
Total Project Cost:	187,300	0

NOTES

This is an annual program. 2023 project will be used for replacement of Milliken Mills Library Shelving (Phase 2 of 3). The estimated cost is \$144K/year. Other replacement will include public-facing loose furniture/shelving for various locations (\$43.3K). The replacement is high priority due to structural damages/safety/public liability risks. 3 years average spend is \$156.9k. This amount is consistent with the 2022 Life Cycle Reserve Study update.

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	Furniture	Shelving				
Operating Funded Life Cycle	187,300	43,300	144,000	0	0	187,300	0
TOTAL FUNDING	187,300					187,300	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="187,300"/>
				Amount Incl HST <input type="text" value="187,300"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				

Operations - Roads



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$82,100

Project Name: 14th Ave Railway Crossing

Commission: Community Services

Repair/Replace

Department: Operations - Roads

Useful Life: 20 Pre Approval:

Project Mgr: Zoyeb Vahora

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This project is for the relocation of the existing safety gates at 14th Avenue. CN Rail will be undertaking this work along with signals upgrade for legislated compliance.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	80,654	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	80,654	0
HST Impact:	1,420	0
Total Project Cost:	82,100	0

NOTES

CN Rail initiated the work and in accordance to the executed board order, the City is responsible for 50% of the on-going operating and maintenance cost at this location. The City portion is estimated at \$80,653.31 pre-tax.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	82,100	0	0	0	0	0	0	
TOTAL FUNDING	82,100					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

The 2022 Life Cycle does not include any provision for this work. It will be added to the 2023 LC update.



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$274,400

Project Name: City Owned Entrance Feature Rehabilitation/Replacement

Repair/Replace

Commission: Community Services

Useful Life: 20 Pre Approval:

Department: Operations - Roads

Category: Annual

Project Mgr: Zoyeb Vahora

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Maintenance and repair of entrance features based on condition assessment.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	269,657	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	269,657	0
HST Impact:	4,746	0
Total Project Cost:	274,400	0

NOTES

Locations for 2023 are Main Street Unionville & The Bridal Trail (2 replacements), and Heritage Corners Lane & 16th Ave. The City owns 144 features, there are 170 known to be located on private property with the remaining 17 of uncertain ownership for a total inventory of 331.

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	Main Street & Bridal Trail (2)	Heritage Corners & 16th Ave				
Operating Funded Life Cycle	274,400	143,700	130,700	0	0	274,400	0
TOTAL FUNDING	274,400					274,400	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="166,000"/>
				Amount Incl HST <input type="text" value="274,400"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
1 location was deferred to 2024 (Kennedy Road and Bur Oak - 22K) and one location was accerlated to 2023 (Heritage corners & 16th Lane - 128K)				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$71,200

Project Name: City Owned Fence Replacement Program

Commission: Community Services

Repair/Replace

Department: Operations - Roads

Useful Life: 25 Pre Approval:

Project Mgr: Taylor Thomson

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Internal peer review

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

To remove and replace failing fence locations throughout the City on City owned property.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	70,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	70,000	0
HST Impact:	1,232	0
Total Project Cost:	71,200	0

NOTES

2023 locations include: John St & Rockingham (wrought iron), Fresno Court (Wood), 16 Water St.(Green P) (Wood), Stargell Cr. (chain link). This is an annual program. There is no backlog in this program and the fences are in a state of good repair.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	71,200	0	0	0	0	0	0	
TOTAL FUNDING	71,200					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="139,400"/>
				Amount Incl HST <input type="text" value="139,400"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$149,800

Project Name: Citywide Ditching Program

Commission: Community Services

Repair/Replace

Department: Operations - Roads

Useful Life: 25 Pre Approval:

Project Mgr: Anthony Leocata/Dennis King

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Internal peer review

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Annual ditch restoration program per Council resolution. Program is to maintain roadside ditches & culverts which are a critical component of the broader storm drainage system. The program will protect the City's investments in road maintenance and avoid early erosion of Markham's infrastructure. The scope of the project has been increased to now include the testing and disposal of the material. Contractors were previously hauling the material to 555 Miller Ave where Operations had to test, haul and dispose of the material. The onus is now put onto the Contractor to test and dispose of the material (removing the need to double handle the material).

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	147,200	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	147,200	0
HST Impact:	2,591	0
Total Project Cost:	149,800	0

NOTES

The ditching program will be able to maintain up to 4 linear km's per year. Ditch restoration work will be undertaken as part of the annual capital road improvements program and done prior to undertaking road rehab work on roads with rural profiles.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
Operating Funded Life Cycle	149,800	0	0	0	0	0	0	
TOTAL FUNDING	149,800					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
<u>Name</u>				Amount in Study: <input type="text" value="149,800"/>
				Amount Incl HST <input type="text" value="149,800"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
<input type="text" value="Updated unit price as per latest tender will be reflected in the 2022 Life Cycle Study."/>				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$21,500

Project Name: Don Mills Storm Channel

Commission: Community Services

Repair/Replace

Department: Operations - Roads

Useful Life: 1 Pre Approval:

Project Mgr: Dennis King

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Storm channel is located east of Woodbine between Steeles and John Street. This program is to remove overgrowth, vegetation and debris from storm channel to ensure proper storm water conveyance. Program will include periodic clean-up of debris, garbage and excess vegetation found in the channel. It will also include channel maintenance after large storm events, and in response to dumping.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	21,100	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	21,100	0
HST Impact:	371	0
Total Project Cost:	21,500	0

NOTES

To support ongoing annual maintenance. 3 yr average is \$8K. This is an annual program. 2 site visits per year in July/Oct. Operations is responsible for minor above ground maintenance on the Don Mills storm channel such as debris and vegetation removal while Environmental Services is responsible for its flood reduction strategies and implementation. Higher funding requested this year for more frequent work which will improve water flow and volume capacity and minimize flooding and breaching of banks.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	21,500	0	0	0	0	0	0	
TOTAL FUNDING	21,500					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
<input type="text" value="Lif Cycle resides in Environmental Services."/>				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$79,900

Project Name: Guiderail- Install/Upgrade

Commission: Community Services

Repair/Replace

Department: Operations - Roads

Useful Life: 15 Pre Approval:

Project Mgr: Taylor Thomson

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Install new or upgrade existing guiderail to meet new Provincial Standards and minimize maintenance. Program ensures that the City maintains safe roadways for users.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	78,506	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	78,506	0
HST Impact:	1,382	0
Total Project Cost:	79,900	0

NOTES

153 locations identified in inventory. Guiderails are upgraded to meet standards only when they are due for replacement. To date, 69 locations have been upgraded to the Provincial Standard. There is no substantial backlog in this program. This is year 6 of 10 year program during which time the remaining locations will be upgraded. Locations identified for 2023 Church Street & Bramble Way (2), Water Street (2), Chimenti Court.

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	16 Water St	Church & Bramble	Chimenti			
Operating Funded Life Cycle	79,900	28,340	45,600	5,960	0	79,900	0
TOTAL FUNDING	79,900					79,900	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="114,400"/>
				Amount Incl HST <input type="text" value="79,900"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
3 locations were identified that are not currently in life cycle, Water Street (2) Chimenti Court. They will be added during the next life cycle update. 1 locations was deferred (Carlton & Fqawnbrook Circel) due to condition assessment.				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$477,400

Project Name: Incremental Growth Related Winter Maintenance Vehicles

Commission: Community Services

New Asset/Expansion

Department: Operations - Roads

Useful Life: 0 Pre Approval:

Project Mgr: Alice Lam

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Development Charge (DC) funding for additional growth-related winter maintenance vehicles purchased by contractors. If winter maintenance was done in-house, these vehicles would need to be purchased by the City, so this request is to obtain DC funding to offset a portion of the capital cost included in the winter maintenance paid through Operating accounts.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	477,360	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	477,360	0
HST Impact:	0	0
Total Project Cost:	477,400	0

NOTES

Amount requested is as per the 2017 DC Study plus 2% inflationary increase.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
DCA	477,400	0	0	0	0	0	0	
TOTAL FUNDING	477,400					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

DCA funding source should be Public Works - Fleet - unavailable to select correct funding source on project form



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$78,700

Project Name: Retaining Wall Repair Program

Commission: Community Services

Repair/Replace

Department: Operations - Roads

Useful Life: 20 Pre Approval:

Project Mgr: Taylor Thomson

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Repairs to failing retaining walls and other right of way structural assets on city owned property.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	77,300	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	77,300	0
HST Impact:	1,360	0
Total Project Cost:	78,700	0

NOTES

Location for 2023 is Burwell Cr, 24 Delancy, Robinson & Water St (2) and 32 Doncaster Ave. There is no backlog in this program. The retaining walls are in a state of good repair. Amount requested is consistent with the 2023 Life Cycle Reserve Study update.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	78,700	0	0	0	0	0	0	
TOTAL FUNDING	78,700					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="78,700"/>
				Amount Incl HST <input type="text" value="78,700"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$56,200

Project Name: Storm Water Retention Pond Maintenance Program

Commission: Community Services

Repair/Replace

Department: Operations - Roads

Useful Life: 15 Pre Approval:

Project Mgr: Taylor Thomson

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Internal peer review

Requirement Validation: Visual inspection

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Ongoing minor maintenance activities to all storm water management ponds throughout the City. The work includes repairing/replacing grates, headwalls and fences. This maintenance program will include localized repairs of identified deficiencies as reported by 2021 site inspection. Repair defective items identified from the 115 storm water management (SWM) ponds inspected in the fall of 2021.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	55,200	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	55,200	0
HST Impact:	972	0
Total Project Cost:	56,200	0

NOTES

Items include repairs to baffle blocks, inlets, backflow preventer, outlets, pipes and retaining walls. This is an annual program. There is no backlog in this program. Roads provide maintenance above the water line while Environmental Services provide rehabilitation below the water line.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	56,200	0	0	0	0	0	0	
TOTAL FUNDING	56,200					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
<input type="text" value="Life cycle resides in Environmental Services."/>				

Operations - Parks



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$224,600

Project Name: 2022 Wind Storm Tree Replacement - Phase 1

Commission: Community Services

Repair/Replace

Department: Operations - Parks

Useful Life: 50 Pre Approval:

Project Mgr: Josh Van Kemp

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The May 2022 windstorm damaged hundreds of trees Citywide with particular emphasis on Markham Village, Unionville, and Thornhill. As a result of the storm 312 trees were damaged severely and require complete removal and stump grinding to prepare the sites for new tree planting. The trees being removed are larger than average and will require a longer timeframe to remove and prepare for planting. Planting will take place in 2024 once this work has been completed.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	220,703	135,408
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>220,703</u>	<u>135,408</u>
HST Impact:	<u>3,884</u>	<u>2,383</u>
Total Project Cost:	<u>224,600</u>	<u>137,800</u>

NOTES

Based on previous removal contracts the average cost for the removal of 312 trees will be \$634 and the average cost for stump grinding will be \$350. Forecasted costs for future planting are \$434 per tree. These costs are to be tracked separately along with all other storm related costs for potential cost recovery. This is a recovery project and is separate from the regular capital tree replacement project.

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget					TOTAL	
Operating Funded Life Cycle	224,600	0	0	0	0	0	137,800
TOTAL FUNDING	<u>224,600</u>					<u>0</u>	<u>137,800</u>

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Not included as part of the 2022 Life Cycle update as event occurred after completion of the study update. Will be reflected in the 2023 Life Cycle update.



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$17,300

Project Name: Cemetery Fence Repair/Replacement

Repair/Replace

Commission: Community Services

Useful Life: 25 Pre Approval:

Department: Operations - Parks

Category: Minor

Project Mgr: Dean McDermid

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Fence repairs Cemeteries (City owned cemeteries = 14) based on condition assessment to maintain a formal border between private adjacent lands and burial grounds.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	16,958	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	16,958	0
HST Impact:	298	0
Total Project Cost:	17,300	0

NOTES

This is an asset based program and is subject to condition assessment. Locations for 2023: Buttonville Cemetery - Wire Post, Ramer Cemetery - Wood Post, Ramer Cemetery Wooden Picket . There is no backlog in this program.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	17,300	0	0	0	0	0	0	
TOTAL FUNDING	17,300					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="54,200"/>
				Amount Incl HST <input type="text" value="17,300"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
<input type="text" value="St Johns was accelerated to 2022 and Thornhill Cemetery was completed in 2021."/>				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$185,600

Project Name: City Park Furniture / Amenities

Commission: Community Services

Repair/Replace

Department: Operations - Parks

Useful Life: 10 Pre Approval:

Project Mgr: Matthew Busato

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This is an annual replacement program to provide for the refurbishment or replacement of City furniture in parks and Civic property such as benches, games tables, picnic tables and umbrellas, waste receptacles, bike racks, banner arms, self-watering planters and hanging baskets. Project also includes refurbishment or replacement of existing Moloks, seasonal waste containers, tree grates and bollards/p gates. Moloks at large community parks are replaced if damaged as they are effective at these locations. Other Moloks damaged are being replaced with regular receptacles.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	182,400	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>182,400</u>	<u>0</u>
HST Impact:	3,210	0
Total Project Cost:	<u>185,600</u>	<u>0</u>

NOTES

This is an annual program and funds will be requested each year. There is no substantial backlog and assets are in a state of good repair. Amount requested is consistent with the 2023 Life Cycle Reserve Study. Replacements are based on annual condition assessments at all City parks, trails, greenspace and facilities. Includes benches, waste receptacles/recycling and concrete pads for both, bike racks, planters and hanging baskets, P Gates, picnic table frames and wood/hardware, banner arms, parks information signs and plaques, seasonal decoration (LED trees), Muskoka chairs.

<u>SOURCE(S) OF FUNDING (\$)</u>		<u>Components</u>					<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
Operating Funded Life Cycle	185,600	0	0	0	0	0	0	
TOTAL FUNDING	<u>185,600</u>					<u>0</u>	<u>0</u>	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
<u>Name</u>				Amount in Study: <input type="text" value="185,600"/>
				Amount Incl HST <input type="text" value="185,600"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: 23217

Project Cost: \$331,000

Project Name: Fence (Backstop and Outfield) Replacement

Commission: Community Services

Repair/Replace

Department: Operations - Parks

Useful Life: 35 Pre Approval: []

Project Mgr: James Bingham

Category: Minor

Ward(s): CW [] 1 [] 2 [] 3 [x] 4 [x] 5 [] 6 [] 7 [] 8 []

Cost Validation: Recent awards

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted? []

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Backstop fence and outfield fence replacement for 4 locations.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

Table with 3 columns: PROJECT COSTS (\$), 2023, Future Phases. Rows include Cost/Quote, Internal Charges, External Consulting, Contingency %, Sub Total, HST Impact, and Total Project Cost.

NOTES

2023 locations: Featherstone Park Major #1, Milliken Mills Major #2, 3 & 4, Doreen Quirk Minor #1 This is the first time these assets are being replaced since original construction.

Table with 4 columns: SOURCE(S) OF FUNDING (\$), Components, TOTAL, Future Phases. Row includes Operating Funded Life Cycle and TOTAL FUNDING.

Table with 4 columns: OPERATING BUDGET IMPACT, Personnel, Non Personnel, Revenues, Expenditures/(Revenues). Values are \$0.

DCA/LIFE CYCLE DETAILS

Table with 4 columns: DCA Name, Year, Amount, Amount in Study, Life Cycle. Includes fields for Amount in Study, Amount Incl HST, and Year in the study.



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$50,900

Project Name: Fence Replacement (Wood Privacy and Decorative)

Repair/Replace

Commission: Community Services

Useful Life: 20 Pre Approval:

Department: Operations - Parks

Category: Minor

Project Mgr: James Bingham

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Replace aging pathway fence and picket fence at German Mills Community Center.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	50,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	50,000	0
HST Impact:	880	0
Total Project Cost:	50,900	0

NOTES

Replace city owned fence on path way beside 23 and 25 Josiah Crt (\$35k). The fence is for privacy and is being replaced to same design and function. German Mills CC picket fence (\$15k) is deteriorating and requires replacment as repairs are not sustainable for the function and intended purpose.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	50,900	0	0	0	0	0	0	
TOTAL FUNDING	50,900					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
<input type="text" value="Will be added to LC in 2024."/>				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$155,900

Project Name: Irrigation Refurbishment

Commission: Community Services

Repair/Replace

Department: Operations - Parks

Useful Life: 40 Pre Approval:

Project Mgr: James Bingham

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Irrigation systems requiring replacement and or repairs to maintain athletic fields while committing to water conservation.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	153,200	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	153,200	0
HST Impact:	2,696	0
Total Project Cost:	155,900	0

NOTES

Aging irrigation systems require replacement of components, heads, nozzels, timers, valves, solinoids, flow valves that over time begin to fail and not deliver the intended operation to city facilites. Aging systems also void any water conservation by operating inadequately. 2023 Locations include Bishop's Cross soccer and baseball, Milliken Mills soccer, Centennial Park soccer and the Bowling Green.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	155,900	0	0	0	0	0	0	
TOTAL FUNDING	155,900					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="155,900"/>
				Amount Incl HST <input type="text" value="155,900"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$80,600

Project Name: Mt Joy Artificial Turf Replacement

Commission: Community Services

Repair/Replace

Department: Operations - Parks

Useful Life: 15 Pre Approval:

Project Mgr: James Bingham

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Other(specify in Notes)

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The replacement of the artificial turf at Mt. Joy Community Center is scheduled to take place in 2024 and requires a comprehensive consultation to prepare specifications, cost estimates and tender documents complete with project oversight.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	79,226	0
Contingency %: 0	0	0
Sub Total:	79,226	0
HST Impact:	1,394	0
Total Project Cost:	80,600	0

NOTES

The current artificial turf at Mt. Joy is heavily worn in the area where the winter air support structure is erected every year. The field is constructed using a dated method of artificial turf construction and will be rebuilt using the FIFA standards used at Crothers Artificial Turf fields which requires a comprehensive scope of work to be developed. Using a third party for condition assessment the field condition suggests that replacement of the turf occur in 2023 or 2024. The consulting will occur in 2023 and then replacement will be recommended for 2024. Lifecycle funding will be accelerated to allow for the consulting.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	80,600	0	0	0	0	0	0	
TOTAL FUNDING	80,600					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$11,100

Project Name: Park Lighting Replacement

Commission: Community Services

Repair/Replace

Department: Operations - Parks

Useful Life: 40 Pre Approval:

Project Mgr: James Bingham

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Replacement of park lighting which luminates park areas and pathways for residents and pedestrian travel.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	10,920	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	10,920	0
HST Impact:	192	0
Total Project Cost:	11,100	0

NOTES

Grandview Park Pathway requires replacement of pole and light fixture, aging system does not provide adequate lumination for park users.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	11,100	0	0	0	0	0	0	
TOTAL FUNDING	11,100					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="11,100"/>
				Amount Incl HST <input type="text" value="11,100"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$52,900

Project Name: **Parks Retaining Wall Replacement**

Commission: Community Services

Repair/Replace

Department: Operations - Parks

Useful Life: 20 Pre Approval:

Project Mgr: JamesBingham

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Replace Retaining walls at Aldergrove park and Armadale park.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	52,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	52,000	0
HST Impact:	915	0
Total Project Cost:	52,900	0

NOTES

Condition Assesment complete. Aging and rotting retaining wall requires replacement to retain properties to neighbouring homes and maintain overland water run off at Aldergrove park(38k).
Condition assessment to replace retaining wall in support of safety surface at playground at Armadale Park (14k)

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget	TOTAL					
Operating Funded Life Cycle	52,900	0	0	0	0	0	0
TOTAL FUNDING	52,900	0	0	0	0	0	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
<input type="text" value="Lc to be updated in 2024."/>				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$27,500

Project Name: Relamping & Fixtures Refurbishment

Commission: Community Services

Repair/Replace

Department: Operations - Parks

Useful Life: 10 Pre Approval:

Project Mgr: James Bingham

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

An independent audit of electrical services in municipal parks and sportsfields identifies locations for repair/maintenance of electrical components based on condition assessment. Untimely outages may pose potential hazards.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	21,000	0
Internal Charges:	0	0
External Consulting:	6,000	0
Contingency %: 0	0	0
Sub Total:	27,000	0
HST Impact:	475	0
Total Project Cost:	27,500	0

NOTES

This is an annual program and funds will be requested each year. Locations to be determined. Project scope includes bulb, defective ballast, cables, broken lens replacements. Work to completed is based on condition assessment by the lighting consultant and is location specific. This is an annual program and funding will be requested each year. 3 year average- \$23K The assets are in a state of good repair.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	27,500	0	0	0	0	0	0	
TOTAL FUNDING	27,500					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="42,500"/>
				Amount Incl HST <input type="text" value="42,500"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
Amount requested has been lowered to reflect actual average yearly spend and will be monitored for 2023 to ensure this trend continues .				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$17,900

Project Name: Replace Recycling Containers

Commission: Community Services

Repair/Replace

Department: Operations - Parks

Useful Life: 10 Pre Approval:

Project Mgr: Matt Busato

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Replacement of aging recycle containers.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	17,600	72,290
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>17,600</u>	<u>72,290</u>
HST Impact:	<u>310</u>	<u>1,272</u>
Total Project Cost:	<u>17,900</u>	<u>73,600</u>

NOTES

This is year 6 of 10. There are approximately 500 seasonal recycling bins in parks. Project will replace aging recycling containers. This is a multi year project and will be requested each year until completed. Amount requested is consistent with the 2023 Life Cycle Reserve Study update.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Operating Funded Life Cycle	17,900	0	0	0	0	0	91,500
TOTAL FUNDING	<u>17,900</u>					<u>0</u>	<u>91,500</u>

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="17,900"/>
				Amount Incl HST <input type="text" value="17,900"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
<div style="border: 1px solid black; height: 60px;"></div>				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$253,100

Project Name: Shade Structure Rehabilitation and/or Replacement

Repair/Replace

Commission: Community Services

Useful Life: 35 Pre Approval:

Department: Operations - Parks

Category: Minor

Project Mgr: Deam McDermid

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Rehabilitation and/or replacement of shade structures (gazebo minor, major and trellis) based on condition assessment. There are 6 locations in 2023.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	248,726	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	248,726	0
HST Impact:	4,378	0
Total Project Cost:	253,100	0

NOTES

This is an asset based program and is subject to condition assessment. 2023 locations are: Millenium Bandstand (waterproofing, concrete sealing & exterior), John Payne, Leitchcroft, Upper Cornell Park, Greensborough Town Centre and Williamstown Park. There is currently no backlog and the assets are in a state of good repair.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	253,100	0	0	0	0	0	0	
TOTAL FUNDING	253,100					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="367,900"/>
				Amount Incl HST <input type="text" value="253,100"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
Locations/Component scheduled for 2023 rehabilitation and/or replacement in Lifecycle that will be deferred based on condition assessment. Millenium - Bandstand - Interlocking Brick Millenium - Bandstand - Benches, Millenium - Bandstand - Structural Reports, Millenium - Bandstand - Main Disconnect, Coltys Corners, Monarch Park, Victoria Square, Innis MacDonald Park, Peace Park, South Unionville Park				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$34,700

Project Name: Talc Metal Cabinet Replacment

Commission: Community Services

Repair/Replace

Department: Operations - Parks

Useful Life: 0 Pre Approval:

Project Mgr: James Bingham

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Replace aging talc boxes.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	34,083	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	34,083	0
HST Impact:	600	0
Total Project Cost:	34,700	0

NOTES

Replace aging talc cabinets with more ergonomic storage units for user safety. 2023 locations are John Button, Milliken Mills 1-5 and Reesor Park. These units are required to keep equipment and Talc material safe and dry for Baseball permit users.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	34,700	0	0	0	0	0	0	
TOTAL FUNDING	34,700					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="38,600"/>
				Amount Incl HST <input type="text" value="34,700"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
<input type="text" value="Coledale & John Button deferred."/>				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$152,600

Project Name: Urban Forestry Management Plan

Commission: Community Services

Studies/Pilot Programs

Department: Operations - Parks

Useful Life: 0 Pre Approval:

Project Mgr: Josh Van Kemp

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Guiding principals and Implementation Plan for all aspects of the City's urban forest evaluating current state of the urban forest, management practices and risk profile along with strategic goals to meet long range objectives.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	150,000	0
Contingency %: 0	0	0
Sub Total:	150,000	0
HST Impact:	2,640	0
Total Project Cost:	152,600	0

NOTES

The purpose of Urban Forestry Management Plan is to set the vision and strategic direction, including required actions, for managing Markham's urban forest. From the study an Implementation Plan will be developed and will provide the framework and strategy for the long term health of the urban forest complete with identified goals and the resources required to reach them.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Tax	152,600	0	0	0	0	0	0	
TOTAL FUNDING	152,600					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Operations - Fleet



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$10,200

Project Name: Corporate Fleet Growth

Commission: Community Services

New Asset/Expansion

Department: Operations - Fleet

Useful Life: 7 Pre Approval:

Project Mgr: Tony Greco/Steve Dollmaier

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Internal peer review

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

To purchase growth related Non- Fleet equipment such as push mowers, portable generators, cord trimmers, leaf blowers and other small tools.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	10,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	10,000	0
HST Impact:	176	0
Total Project Cost:	10,200	0

NOTES

Additional equipment for additional seasonal staff based on growth. The 2 year average is \$9.6K.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
DCA	10,200	0	0	0	0	0	0	
TOTAL FUNDING	10,200					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA	Amount in			Life Cycle
Name	Year	Amount	Study	
PUBLIC WORKS - Fleet	2023	10,200	570,649	Amount in Study: <input type="text"/>
TOTAL FUNDING		10,200	570,649	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$39,700

Project Name: Corporate Fleet Refurbishing

Commission: Community Services

Repair/Replace

Department: Operations - Fleet

Useful Life: 3 Pre Approval:

Project Mgr: Tony Greco/Steve Dollmaier

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Internal peer review

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Equipment and vehicles require periodic refurbishing, rust proofing and corrosion protection to meet the Ministry of Transportation safety requirements and to ensure life cycle requirements are met. Program helps to mitigate maintenance costs and keeps the equipment in a state of good repair.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	39,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	39,000	0
HST Impact:	686	0
Total Project Cost:	39,700	0

NOTES

Project includes rust protection, body work and painting. Requirement Validation - condition assessment and legislative compliance. This is an annual program. 3 year average is \$46K. Amount requested is consistent with Life Cycle Reserve Study update.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	39,700	0	0	0	0	0	0	
TOTAL FUNDING	39,700					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="39,700"/>
				Amount Incl HST <input type="text" value="39,700"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$3,042,900

Project Name: Corporate Fleet Replacement - Fire

Commission: Community Services

Repair/Replace

Department: Operations - Fleet

Useful Life: 5 Pre Approval:

Project Mgr: Chris Nearing/Steve Dollmaier

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

2023 Annual Fleet Replacement Program based on the Council adopted Corporate Fleet Policy Guidelines. Life cycle costing targets optimal replacement intervals (ORI) which identifies the most cost effective time period for replacement. All vehicles and equipment contained in this program have reached or surpassed the ORI. User Departments were consulted with respect to the units in this program. Total units for replacement - 4 units (2 Vehicles, 2 Apparatus).

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PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	2,990,309	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>2,990,309</u>	<u>0</u>
HST Impact:	52,629	0
Total Project Cost:	<u>3,042,900</u>	<u>0</u>

NOTES

Useful life varies from 5 to 10 years based on units types. Requirement validation - Condition assessment, vehicle reliability & down time, & operating costs. Units specified in this replacement program will be purchased with the most recent technology available at time of purchase providing maximized fuel economy with minimal emissions. Project completion estimated at Q2/Q3 2024 for apparatus units due to time required to build the vehicles (built in USA). USD foreign exchange used was \$1.27 USD to CDN - USD \$1,274,642. As at 12/16/21 - USD purchased at rate of 1.2837, Fire apparatus budget updated.

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	Fire	Fire Apparatus				
Operating Funded Life Cycle	3,042,900	74,200	2,968,700	0	0	3,042,900	0
TOTAL FUNDING	<u>3,042,900</u>					<u>3,042,900</u>	<u>0</u>

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="3,318,700"/>
				Amount Incl HST <input type="text" value="3,042,900"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
<input type="text" value="18 licenced vehicles deferred to 2024"/>				

Project	Corporate Fleet Replacement – Non Fire
2023 Capital Request	\$3,042,900
Funding Source	Life Cycle Reserve
Description of Program	2023 Annual Fleet Replacement Program based on the Council adopted Corporate Fleet Policy Guidelines. Life cycle costing targets optimal replacement intervals (ORI) which identifies the most cost effective time period for replacement. All vehicles and equipment contained in this program have reached or surpassed the ORI. User Departments are consulted with respect to the units in this program. Total units - 4 units
Project Rationale	2023 Annual Fleet Replacement Program based on the Council adopted Corporate Fleet Policy Guidelines. To maintain current service levels for all users department
Legislative Requirement	n/a
History	
Future Phases	This funding is requested each year.
Total Project Cost	n/a
Related Projects	
Related Maps	n/a
Alignment to the Strategic Plan	Providing reliable fleet units allowing effective municipal services to local residents and businesses. Promoting the continued use of new technology along with alternate energy solutions that reduce fuel consumption and improved fleet efficiencies with reductions in overall fleet emissions.

2023 Corporate Fleet Replacement - Fire

Asset ID	Inventory Description	Mileage (Km)	Usage (Hours)	Category	Model Year	2023 Inflated Cost	Adjustment	2023 Updated Cost	Comments
9091	DEPUTY CHIEF SUV - 4 x 4			FIRE-1- Fire	2014	45,255	(45,255)	0	Deferred from 2020 to 2024
9092	FIRE CHIEF SUV - 4 x 4			FIRE-1- Fire	2014	45,255	(45,255)	0	Deferred from 2020 to 2024
9093	DEPUTY CHIEF SUV - 4 x 4			FIRE-1- Fire	2013	45,255	(45,255)	0	Deferred from 2020 to 2024
9400	FIRE EXTINGUISHER TRAILER			FIRE-1- Fire	2008	8,690		8,690	Deferred from 2020 to 2023 For scope change
9401	FIRE SAFETY HOUSE TRAILER			FIRE-1- Fire	2008	64,195		64,195	Deferred from 2020 to 2023 For scope change
9410	COMPACT CAR			FIRE-1- Fire	2014	24,402	(24,402)	0	Deferred from 2022 to 2024
9411	COMPACT CAR			FIRE-1- Fire	2014	24,402	(24,402)	0	Deferred from 2022 to 2024
9412	COMPACT CAR			FIRE-1- Fire	2014	24,402	(24,402)	0	Deferred from 2022 to 2024
9414	COMPACT CAR			FIRE-1- Fire	2014	24,402	(24,402)	0	Deferred from 2022 to 2024
9803	FIRE MECHANICAL SERVICE FULL SIZE CARGO VAN			FIRE-1- Fire	2014	37,654	(37,654)	0	Deferred from 2022 to 2024
9916	105' SMEAL AERIAL SPARTAN GLADIATOR			FIRE-1- Fire Apparatus	2013	1,952,491		1,952,491	US\$1,444,500 (from Safetek)
9981	PUMPER RESCUE SG09 POWER			FIRE-1- Fire Apparatus	2015	964,933		964,933	\$689,736 USD (Safetek)
					Total Pre-Tax	3,261,336	(271,027)	2,990,309	
					HST impact	57,400		52,629	
					Total Project Cost	3,318,735		3,042,937	
					Rounded Off Project Cost	3,318,700		3,042,900	

ORIGINAL PROJECT COST

No. of Units	Category	Pre-Tax	HST Impact	Project Cost
10	Fire - Licensed	343,912	6,053	349,965
2	Fire Apparatus	2,917,424	51,347	2,968,771
				-
		3,261,336	57,400	3,318,736
			Rounded Off - Project Cost	3,318,700
12				

UPDATED PROJECT COST

No. of Units	Category	Pre-Tax	HST Impact	Project Cost
2	Fire - Licensed	72,885	1,283	74,168
2	Fire Apparatus	2,917,424	51,347	2,968,771
				-
		2,990,309	52,629	3,042,938
			Rounded Off - Project Cost	3,042,900
4				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$163,800

Project Name: Corporate Fleet Replacement - Ice Resurfacing Machine

Commission: Community Services

Repair/Replace

Department: Operations - Fleet

Useful Life: 10 Pre Approval:

Project Mgr: Tony Greco/Steve Dollmaier

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Part of the 2023 Annual Fleet Replacement Program based on the Council adopted Corporate Fleet Policy Guidelines and condition assessment. Life cycle costing targets Optimal Replacement Intervals (ORI) which identifies the most cost effective time period for replacement. All equipment contained in this program have reached or surpassed the ORI. User Departments were consulted with respect to the units in this program. Unit for replacement - 1 ice resurfacing machine at Milliken Mills Community Centre,

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PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	160,945	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	160,945	0
HST Impact:	2,833	0
Total Project Cost:	163,800	0

NOTES

Cost Validation- most recent purchase of similar unit type. Requirement validation - vehicle reliability and down time, and operating costs. Pending condition assessment. Replacement model and make may change depending on availability. This program and funding will be requested each year. Unit specified in this replacement program will be purchased with the most recent technology available at time of purchase providing maximized fuel economy with minimal emissions. Amount requested is higher than Life Cycle Reserve Study update due to higher cost of EV replacement.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	163,800	0	0	0	0	0	0	
TOTAL FUNDING	163,800					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="109,300"/>
				Amount Incl HST <input type="text" value="163,800"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
<input type="text" value="Increase price due to replacment being an EV."/>				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$1,962,200

Project Name: Corporate Fleet Replacement - Non-Fire

Commission: Community Services

Repair/Replace

Department: Operations - Fleet

Useful Life: 5 Pre Approval:

Project Mgr: Steve Dollmaier/Tony Greco

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Multiple(specify)

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

2023 Annual Fleet Replacement Program based on the Council adopted Corporate Fleet Policy Guidelines. Life cycle costing targets optimal replacement intervals (ORI) which identifies the most cost effective time period for replacement. All vehicles and equipment contained in this program have reached or surpassed the ORI. User Departments were consulted with respect to the units in this program. Total units - 32 units

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PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	1,928,263	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>1,928,263</u>	<u>0</u>
HST Impact:	33,937	0
Total Project Cost:	<u>1,962,200</u>	<u>0</u>

NOTES

Useful life varies - 4 to 12 years based on units types. Operations-Non Fleet (\$56k) includes cord trimmers, chainsaws, blowers, etc. Cost Validation- Most recent purchase of similar unit type; Requirement validation - Condition assessment, vehicle reliability & down time, & operating costs. Units specified in this program will be purchased with the most recent technology available at time of purchase providing maximized fuel economy with minimal emissions. Pre Approval required for 20 units \$2,407,000.

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	Licensed (5)	Non Licensed (27)	Non Fleet			
Operating Funded Life Cycle	1,962,200	536,700	1,368,800	56,700	0	1,962,200	0
TOTAL FUNDING	<u>1,962,200</u>					<u>1,962,200</u>	<u>0</u>

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="3,343,300"/>
				Amount Incl HST <input type="text" value="1,962,200"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
<input type="text" value="32 units out of 52 units. 20 units were submitted for pre approval as part of a separate Capital Project request. Budget request increased by an additional \$450,300 based on analysis of actual pricing from 2022 tenders."/>				

Project	Corporate Fleet Replacement – Non Fire
2023 Capital Request	\$1,962,200
Funding Source	Life Cycle Reserve
Description of Program	2023 Annual Fleet Replacement Program based on the Council adopted Corporate Fleet Policy Guidelines. Life cycle costing targets optimal replacement intervals (ORI) which identifies the most cost effective time period for replacement. All vehicles and equipment contained in this program have reached or surpassed the ORI. User Departments are consulted with respect to the units in this program. Total units - 20 units
Project Rationale	2023 Annual Fleet Replacement Program based on the Council adopted Corporate Fleet Policy Guidelines. To maintain current service levels for all users department
Legislative Requirement	n/a
History	
Future Phases	This funding is requested each year.
Total Project Cost	n/a
Related Projects	
Related Maps	n/a
Alignment to the Strategic Plan	Providing reliable fleet units allowing effective municipal services to local residents and businesses. Promoting the continued use of new technology along with alternate energy solutions that reduce fuel consumption and improved fleet efficiencies with reductions in overall fleet emissions.

2023 Corporate Fleet Replacement - Non-Fire

Asset ID	Inventory Description	Mileage (Km)	Usage (Hours)	Facility	Category	Model Year	2023 Inflated Cost	Adjustment	2023 Updated Cost	Comments
1268	COMPACT VAN FWD	81,918		OPERATIONS-Licensed	Licensed	2014	43,501		43,501	Deferred from 2022 to 2023 Based on 238-Q-20 second lowest bid; Vehicle will be renumbered
1269	COMPACT VAN FWD	85,360		OPERATIONS-Licensed	Licensed	2014	43,501		43,501	Deferred from 2022 to 2023; conversion to Compact SUV PHEV. Based 244-Q-20
1432	COMPACT TRACTOR 4X4		3,837	SIDEWALK-Non Licensed	Non Licensed	2015	57,101		57,101	
1433	COMPACT TRACTOR 4X4		3,195	SIDEWALK-Non Licensed	Non Licensed	2015	57,101		57,101	
1436	LOADER BACKHOE		3,665	OPERATIONS-Non Licensed	Non Licensed	2016		147,417	147,417	Accelerate from 2024 to 2023
1929	HOT MIX TRASPORTER		n/a	OPERATIONS-Licensed	Licensed	2015		30,274	30,274	Accelerate from 2025 to 2023
1969	20 TON TANDEM TRAILER		n/a	OPERATIONS-Licensed	Licensed	2003		27,073	27,073	Deferred from 2020 to 2023
1970	PORTABLE AIR COMPRESSOR 185CFM		173	OPERATIONS-Non Licensed	Non Licensed	2003		33,842	33,842	Deferred from 2020 to 2023
1971	TANDEM TRAILER C/W REAR RAMPS		n/a	OPERATIONS-Licensed	Licensed	2008		9,321	9,321	Accelerate from 2025 to 2023
3434	TRACTOR 4X4 74 PTO HP C/W CAB		558	OPERATIONS-Non Licensed	Non Licensed	2011		60,805	60,805	2017 add Snow Pusher implement
3466	TRACTOR 4X4 81 HP C/W LOADER		2,856	OPERATIONS-Non Licensed	Non Licensed	2008		60,789	60,789	Deferred from 2020 to 2023
3469	ROTARY MOWER 16' CUT 4WD		2,189	OPERATIONS / PARKS-Non Licensed	Non Licensed	2013		122,570	122,570	
3470	ROTARY MOWER 16' CUT 4WD		4,800	OPERATIONS / PARKS-Non Licensed	Non Licensed	2013		77,943	77,943	
3491	ROTARY MOWER 16' CUT 4WD		4,411	OPERATIONS / PARKS-Non Licensed	Non Licensed	2013		122,570	122,570	
3492	ROTARY MOWER 16' CUT 4WD		1204 -Meter Not working	OPERATIONS / PARKS-Non Licensed	Non Licensed	2014		122,570	122,570	Accelerate from 2024 to 2023
3913	BRUSH CHIPPER 18"		1,713	OPERATIONS-Non Licensed	Non Licensed	2013		59,070	59,070	Accelerate from 2025 to 2023
4028	TOP DRESSER HYDAULIC DRIVE		n/a	OPERATIONS-Non Licensed	Non Licensed	2008		31,252	31,252	
4121	WALKBEHIND MOWER 48" HYDROSTATIC ELEC START		n/a	OPERATIONS / PARKS-Non Licensed	Non Licensed	2009		9,960	9,960	Deferred from 2019 to 2023
4126	WALKBEHIND MOWER 48" HYDROSTATIC ELEC START		n/a	OPERATIONS / PARKS-Non Licensed	Non Licensed	2009		9,960	9,960	Deferred from 2019 to 2023
4128	WALKBEHIND MOWER 48" HYDROSTATIC ELEC START			OPERATIONS / PARKS-Non Licensed	Non Licensed	2007		9,960	9,960	Deferred from 2018 to 2023
4194	DIAMOND GROOMER			OPERATIONS / PARKS-Non Licensed	Non Licensed	2013		8,500	8,500	Previously classified as Non Fleet < 55k; Cost updated - new classification is non-licensed
4195	ROTARY MOWER 11' CUT 4WD		n/a	OPERATIONS-Non Licensed	Non Licensed	2017		77,943	77,943	Accelerate from 2025 to 2023
4216	WALKBEHIND MOWER 48" HYDROSTATIC ELEC START		n/a	OPERATIONS / PARKS-Non Licensed	Non Licensed	2009		9,960	9,960	Deferred from 2019 to 2023
4249	DIAMOND MASTER			OPERATIONS / PARKS-Non Licensed	Non Licensed	2010		8,500	8,500	Previously classified as Non Fleet < 55k; Cost updated - new classification is non-licensed
4302	OVER SEEDER 3 PT HITCH		n/a	OPERATIONS / PARKS-Non Licensed	Non Licensed	2003		22,112	22,112	
4310	DIAMOND GROOMER			OPERATIONS / PARKS-Non Licensed	Non Licensed	2007		8,500	8,500	Previously classified as Non Fleet < 55k; Cost updated - new classification is non-licensed
4325	ROTARY MOWER 11' CUT 4WD		2,092	OPERATIONS / PARKS-Non Licensed	Non Licensed	2015		77,943	77,943	
4381	WALKBEHIND MOWER 48" HYDROSTATIC ELEC START		n/a	OPERATIONS / PARKS-Non Licensed	Non Licensed	2009		9,960	9,960	Deferred from 2019 to 2023
4387	TURF TILLER			OPERATIONS / PARKS-Non Licensed	Non Licensed	2000		35,429	35,429	Deferred from 2020 to 2023; previously approved Project 20223 - resubmit in 2022, based on 2020 cost
4424	DIAMOND GROOMER			OPERATIONS / PARKS-Non Licensed	Non Licensed	2007		8,500	8,500	Previously classified as Non Fleet < 55k; Cost updated - new classification is non-licensed
4491	ZERO TURN 60" SIDE DISCHARGE DIESEL		837	OPERATIONS-Non Licensed	Non Licensed	2016		20,156	20,156	Accelerate from 2024 to 2023
	ARTIFICIAL TURF GROOMER			OPERATIONS / PARKS-Non Licensed	Non Licensed	2012		6,000	6,000	Asset ID to be assigned; Unit came from the construction artificial turf at St. Roberts
All	Operation Non Fleet < \$5,000 or Misc			OPERATIONS- Operation Non Fleet < \$5,000 or Misc	Operation Non Fleet < \$5,000 or Misc			55,713	55,713	

ORIGINAL PROJECT COST

No. of Units	Category	Pre-Tax	HST Impact	Project Cost
28	Licensed	2,365,722	41,637	2,407,359
23	Non Licensed	1,089,615	19,177	1,108,792
	Operations Non-Fleet <\$5,000 or Misc	55,713	981	56,694
		3,511,050	61,794	3,572,844
51			Rounded Off - Project Cost	3,572,800

UPDATED PROJECT COST

No. of Units	Category	Pre-Tax	HST Impact	Project Cost
5	Licensed	153,670	2,705	156,375
27	Non Licensed	1,276,413	22,465	1,298,878
	Operations Non-Fleet <\$5,000 or Misc	55,713	981	56,694
		1,485,796	26,150	1,511,946
32			Rounded Off - Project Cost	1,511,900

ADDITIONAL BUDGET BASED ON 2022 ACTUAL PRICING	450,300
TOTAL PROJECT REQUEST \$	1,962,200



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$199,400

Project Name: New Fleet - Community Parks

Commission: Community Services

New Asset/Expansion

Department: Operations - Fleet

Useful Life: 8 Pre Approval:

Project Mgr: Steve Dollmaier/Tony Greco

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Other(specify in Notes)

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Purchase and acquisition of two(2) Kubota 72" Diesel Zero Turn mowers in substitution for one wide area mower, two(2) 60" Diesel Kubota Zero Turn mowers, one(1) pwer sandtrap rake (new specification), one(1) field marking unit (current specification), one(1) RTV with Trailer (current specifications), one(1) gasoline power washer (current specifications).

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PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	195,924	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	195,924	0
HST Impact:	3,448	0
Total Project Cost:	199,400	0

NOTES

72" Zero Turns Mowers (2) \$75,300 60" Zero Turn Mowers (2) \$59,000, Sand Trap Rake (1) \$20,400, Gasoline Power Washer (1) \$1,900, Field Line Painting Unit (1) \$8,700, RTV and Trailer (1) \$34,100 Boxgrove and Cornell in Ward 7 and 5. Cornell Community Park has a maintenance building and will have dedicated staff on site requiring dedicated equipment to maintain this park and several surrounding parks. The 72" Zero Turn mowers are in substitution for one wide area mower to increase flexibility and address longterm supply chain issues.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
DCA	199,400	0	0	0	0	0	0	
TOTAL FUNDING	199,400					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$26,339	\$0	\$26,339

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$226,900

Project Name: New Fleet - Parks

Commission: Community Services

New Asset/Expansion

Department: Operations - Fleet

Useful Life: 8 Pre Approval:

Project Mgr: Tanya Lewinberg/David Plant

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Supply & delivery of (1) One Ton Truck with Dump Body, (2) Tandem Dump Trailers and (1) Chipper.

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PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	222,994	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	222,994	0
HST Impact:	3,925	0
Total Project Cost:	226,900	0

NOTES

One Ton - Truck with Dump Body – Due to growth. This is \$60k less than a dedicated garbage truck and more versatile for year round use. Tandem Axle Dump Trailer (2) – For mulch delivery in parks, clean-ups, streetscape maintenance, additional garbage collection at peak times. Chipper - Additional chipper as back-up for existing, extra unit for storm response and use by parks staff for trail maintenance, parks pruning. Rental options are limited.

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	One Ton Truck	2 Trailers	Chipper			
DCA	226,900	127,200	23,400	76,300	0	226,900	0
TOTAL FUNDING	226,900					226,900	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$42,459	\$0	\$42,459

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
PUBLIC WORKS - Fleet	2023	226,900	570,649	Amount in Study: <input type="text"/>
TOTAL FUNDING		226,900	570,649	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$130,700

Project Name: New Fleet - Recreation

Commission: Community Services

New Asset/Expansion

Department: Operations - Fleet

Useful Life: 8 Pre Approval:

Project Mgr: Jason Tsien/Tony Greco

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Based on operational requirements, Recreation Services is making the following requests:
1. One 1/2 ton pickup to support daily operational requirements.
2. One 3/4 ton pickup to support daily operational requirements including transporting Community Services enclosed trailer.

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PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	128,440	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	128,440	0
HST Impact:	2,261	0
Total Project Cost:	130,700	0

NOTES

Recreation Services currently has two (2) pickup trucks that support daily operational requirements for 22 facilities across the City. The pickups are used to safely move fuel for facility equipment (IE: Ice Edgers, Kabotas, Emergency Generators, etc.), to move tools and materials needed to make facility repairs, and used by staff to travel between facilities to conduct health & safety checks. The existing two vehicles do not meet operational requirements. This request seeks two additional vehicles, so that each of the 4 geographical areas can have dedicated pickup to support operational requirements.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
DCA	130,700	0	0	0	0	0	0	
TOTAL FUNDING	130,700					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$33,579	\$0	\$33,579

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
PUBLIC WORKS - Fleet	2023	130,700	570,649	Amount in Study: <input type="text"/>
TOTAL FUNDING		130,700	570,649	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Additional budget request of \$20,800 based on analysis of actual pricing received for same models from 2022 tenders.



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$101,400

Project Name: New Fleet - Utility Locates (Bill 93 AMPs)

Commission: Community Services

New Asset/Expansion

Department: Operations - Fleet

Useful Life: 8 Pre Approval:

Project Mgr: Steven Dollamier

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

To purchase growth related Fleet vehicles - two new small pickup trucks to support in-house locate team in anticipation of Bill 93 amendment. And to support growth arising from the introduction of Bill 23, resulting in a higher volume of utility locate requests due to increased development across the City.

BUILDING MARKHAM'S FUTURE TOGETHER: Exceptional Services by Exceptional People

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	99,600	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	99,600	0
HST Impact:	1,753	0
Total Project Cost:	101,400	0

NOTES

Requirement for 2 new small pickups and 2 new locate detectors for new staff as the current utility locate model is changing in 2023 due to amended legislation (Bill 93) and streetlight and traffic locates will now be done in-house. The cost of the vehicles includes amount for laptop (\$2,000 per vehicle - pre-tax) and Markhamizing costs (\$1,800 per vehicle).

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	Vehicles	Locate Detectors				
DCA	101,400	89,233	12,167	0	0	101,400	0
TOTAL FUNDING	101,400					101,400	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$18,800	\$0	\$18,800

DCA/LIFE CYCLE DETAILS

DCA	Amount in			Life Cycle
Name	Year	Amount	Study	
PUBLIC WORKS - Fleet	2023	101,400	570,649	Amount in Study: <input type="text"/>
TOTAL FUNDING		<u>101,400</u>	<u>570,649</u>	Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Operations - Utility Inspection



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$274,700

Project Name: German Mills Meadow Environmental Monitoring Program

Studies/Pilot Programs

Commission: Community Services

Useful Life: 0 Pre Approval:

Department: Operations - Utility Inspection & Survey

Category: Major

Project Mgr: Negar Mahmoudi

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Hire a consultant for the management of the German Mills Meadow and Natural Habitat. Work includes condition assessment, monitoring systems to ensure that appropriate protection is provided to abutting properties and German Mills Creek. This request is to hire a consultant to monitor for 2 years (2024-2026) to ensure methane gas concentrations are below MOE (Ministry of Environment) compliance levels and German Mills Creek is not adversely affected by the leachate.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	269,995	0
Contingency %: 0	0	0
Sub Total:	269,995	0
HST Impact:	4,752	0
Total Project Cost:	274,700	0

NOTES

This project is required every 3 years. The request amount is only for 2 years. Year 1 was submitted on a separate form.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	274,700	0	0	0	0	0	0	
TOTAL FUNDING	274,700					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="357,600"/>
				Amount Incl HST <input type="text" value="274,700"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$56,100

Project Name: Survey Monument Replacement

Commission: Community Services

Repair/Replace

Department: Operations - Utility Inspection & Survey

Useful Life: 60 Pre Approval:

Project Mgr: Ben Kihara

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Program to replace damaged survey monuments to maintain integrity of City's survey control network and maintain the assets in a state of good repair. A well developed survey control network will help to achieve an efficient engineering design and construction program and also reduce layout time.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	55,118	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	55,118	0
HST Impact:	970	0
Total Project Cost:	56,100	0

NOTES

The survey monument replacement is an annual program to maintain the assets in state of good repair. Total approx. survey monuments in the City is 2,645. Addition through subdivision assumption process approx. 35/year. Replacement plan-Approx. 28 horizontal monument (avg. \$1787/unit) and 2 Benchmarks (avg. \$3000/unit). Unit costs are consistent with recent award plus inflation.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	56,100	0	0	0	0	0	0	
TOTAL FUNDING	56,100					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="41,600"/>
				Amount Incl HST <input type="text" value="56,100"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
<input type="text" value="Increased cost based on current Staff Award 110-R-22. 2023 LC will be updated to reflect new pricing."/>				

Environmental Services - Infrastructure



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$21,400

Project Name: MNRF Monitoring for Capital Projects at Water Crossings

Studies/Pilot Programs

Commission: Community Services

Useful Life: 0 Pre Approval:

Department: ES - Infrastructure

Category: Minor

Project Mgr: Hossein Sharif

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Hire a Consultant to prepare reports to the Ministry of Natural Resources and Forestry (MNRF). Program commenced in 2016 as required under Section 17, item 5e of the Endangered Species Act, 2007. Total of 7 site reports are required for 2023.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	21,000	0
Contingency %: 0	0	0
Sub Total:	21,000	0
HST Impact:	370	0
Total Project Cost:	21,400	0

NOTES

This is an annual program. It is a requirement to submit the following to MNRF:
(a) Monitoring Reports every year for 5 years after the completion of capital works at water crossings; and
(b) Mitigation Plan Reports for some structures as determined by MNRF.
3 year average is not applicable as requirement varies each year. Unit cost is consistent with recent award plus inflation. Amount requested is consistent with 2022 Life Cycle Reserve Study Update.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	21,400	0	0	0	0	0	0	
TOTAL FUNDING	21,400					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="16,900"/>
				Amount Incl HST <input type="text" value="16,900"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
<input type="text" value="Cost has been increased based on current market rates."/>				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$2,773,400

Project Name: Storm Culvert Rehabilitation (2 Structures) - Construction

Commission: Community Services

Repair/Replace

Department: ES - Infrastructure

Useful Life: 0 Pre Approval:

Project Mgr: Hossein Sharif

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Construction and CA for rehabilitation of two storm sewer culverts. SC04 (3.4m x 1.9m x 99m): Clark Ave culvert east of Yonge St.; SC05 (2.6m x 1.9m x 20.5m): Henderson Ave culvert south of Clark Ave. See attached map for locations.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	2,675,400	0
Internal Charges:	0	0
External Consulting:	50,000	0
Contingency %: 0	0	0
Sub Total:	2,725,400	0
HST Impact:	47,967	0
Total Project Cost:	2,773,400	0

NOTES

This project includes rehabilitation of two storm sewer culverts (SC04 and SC05). Amount requested is consistent with 2022 Life Cycle Reserve Study update. This request is for rehabilitation only. Design budget was requested in 2022.

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	Construction	CA				
Gas Tax	2,773,400	2,722,520	50,880	0	0	2,773,400	0
TOTAL FUNDING	2,773,400					2,773,400	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="2,773,400"/>
				Amount Incl HST <input type="text" value="2,773,400"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$101,900

Project Name: Streetlights - Miscellaneous Requests

Commission: Community Services

New Asset/Expansion

Department: ES - Infrastructure

Useful Life: 60 Pre Approval:

Project Mgr: Michael Manserra

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Based on photometric analysis and evaluation against lighting level standards IES -RP8-14 (Illuminating Engineering Society) by Staff, the City will install new streetlights at the locations, where lighting is deficient. Note that the lighting levels requirement varies depending on road type and pedestrian activity.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	100,100	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	100,100	0
HST Impact:	1,762	0
Total Project Cost:	101,900	0

NOTES

This is an annual program. Streetlights requests from the residents are reviewed for justification and are implemented to improve lighting levels in older areas. 3 year average: \$102K
Locations will be prioritized based on photometric analysis and this budget request is to install approx. 15-18 new poles with LED fixtures.
Unit cost is consistent with recent award plus inflation.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Tax	101,900	0	0	0	0	0	0	
TOTAL FUNDING	101,900					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$132,200

Project Name: Streetlights - Pole Condition Inspection

Studies/Pilot Programs

Commission: Community Services

Useful Life: 60 Pre Approval:

Department: ES - Infrastructure

Category: Minor

Project Mgr: Michael Manserra

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Inspection program to verify the condition of approx 10,500 streetlight poles out of 25,647 city owned poles.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	129,900	0
Contingency %: 0	0	0
Sub Total:	129,900	0
HST Impact:	2,286	0
Total Project Cost:	132,200	0

NOTES

Service life of streetlight poles is estimated to be approx. 60 years. Based on the condition inspection, streetlight poles are identified for replacement/rehabilitation. Unit cost is consistent with recent award plus inflation. Inspection frequency: Every 3 years. Amount requested is consistent with 2022 Life Cycle Reserve Study Update.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	132,200	0	0	0	0	0	0	
TOTAL FUNDING	132,200					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="132,200"/>
				Amount Incl HST <input type="text" value="132,200"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$134,300

Project Name: Streetlights - Poles Replacement

Commission: Community Services

Repair/Replace

Department: ES - Infrastructure

Useful Life: 60 Pre Approval:

Project Mgr: Michael Manserra

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Program to replace/repair deteriorated streetlight poles identified through 2020 streetlight poles condition inspection and internal inspection.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	132,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	132,000	0
HST Impact:	2,323	0
Total Project Cost:	134,300	0

NOTES

This is an annual program. City's current inventory is 25,647 poles. Based on the age of streetlight poles, staff estimates the following as part of this request:
• 25-30 pole replacements
• 0-20 minor pole rehabilitation work
The above quantity will be updated depending on the results of the streetlight pole condition inspection project in 2023. Unit cost is consistent with previous award plus inflation. Amount requested is consistent with 2022 Life Cycle Reserve Study Update.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	134,300	0	0	0	0	0	0	
TOTAL FUNDING	134,300					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="134,300"/>
				Amount Incl HST: <input type="text" value="134,300"/>
				Year in the study: <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$273,500

Project Name: Structures Rehabilitation (6 Structures) - Design & Const.

Commission: Community Services

Repair/Replace

Department: ES - Infrastructure

Useful Life: 15 Pre Approval:

Project Mgr: Hossein Sharif

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Design and rehabilitation of 6 structures (5 pedestrian bridges and 1 culvert). See attached map for locations.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe and Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	213,800	0
Internal Charges:	0	0
External Consulting:	55,000	0
Contingency %: 0	0	0
Sub Total:	268,800	0
HST Impact:	4,731	0
Total Project Cost:	273,500	0

NOTES

This project includes rehabilitation of 6 structures (P016, P017, P027, P029, P034, C089). Amount requested is consistent with 2022 Life Cycle Reserve Study update.

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	Design + CA	Construction				
Gas Tax	273,500	55,900	217,600	0	0	273,500	0
TOTAL FUNDING	273,500					273,500	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="273,500"/>
				Amount Incl HST: <input type="text" value="273,500"/>
				Year in the study: <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$1,239,900

Project Name: Toogood Pond Dam - Rehabilitation

Studies/Pilot Programs

Commission: Community Services

Useful Life: 50 Pre Approval:

Department: ES - Infrastructure

Category: Major

Project Mgr: Hossein Sharif

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This program is to carry out design and rehabilitation of Toogood Pond Dam to comply with Ontario Ministry of Natural Resources (OMNR) Guideline entitled "Public Safety Around Dams, Best Management Practices" as per 2018 Consultant's Report (Toogood Dam Safety Review). For location, refer to attached map.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	1,143,500	0
Internal Charges:	0	0
External Consulting:	75,000	0
Contingency %: 0	0	0
Sub Total:	1,218,500	0
HST Impact:	21,446	0
Total Project Cost:	1,239,900	0

NOTES

2021 visual condition inspection identified that the dam requires rehabilitation.
Toogood Dam was constructed in 1960. The City owns the Dam although it provides very little flood control benefit.

Amount requested is consistent with 2022 Life Cycle Reserve Study Update.

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	CA	Construction				
Operating Funded Life Cycle	1,239,900	76,320	1,163,580	0	0	1,239,900	0
TOTAL FUNDING	1,239,900					1,239,900	0

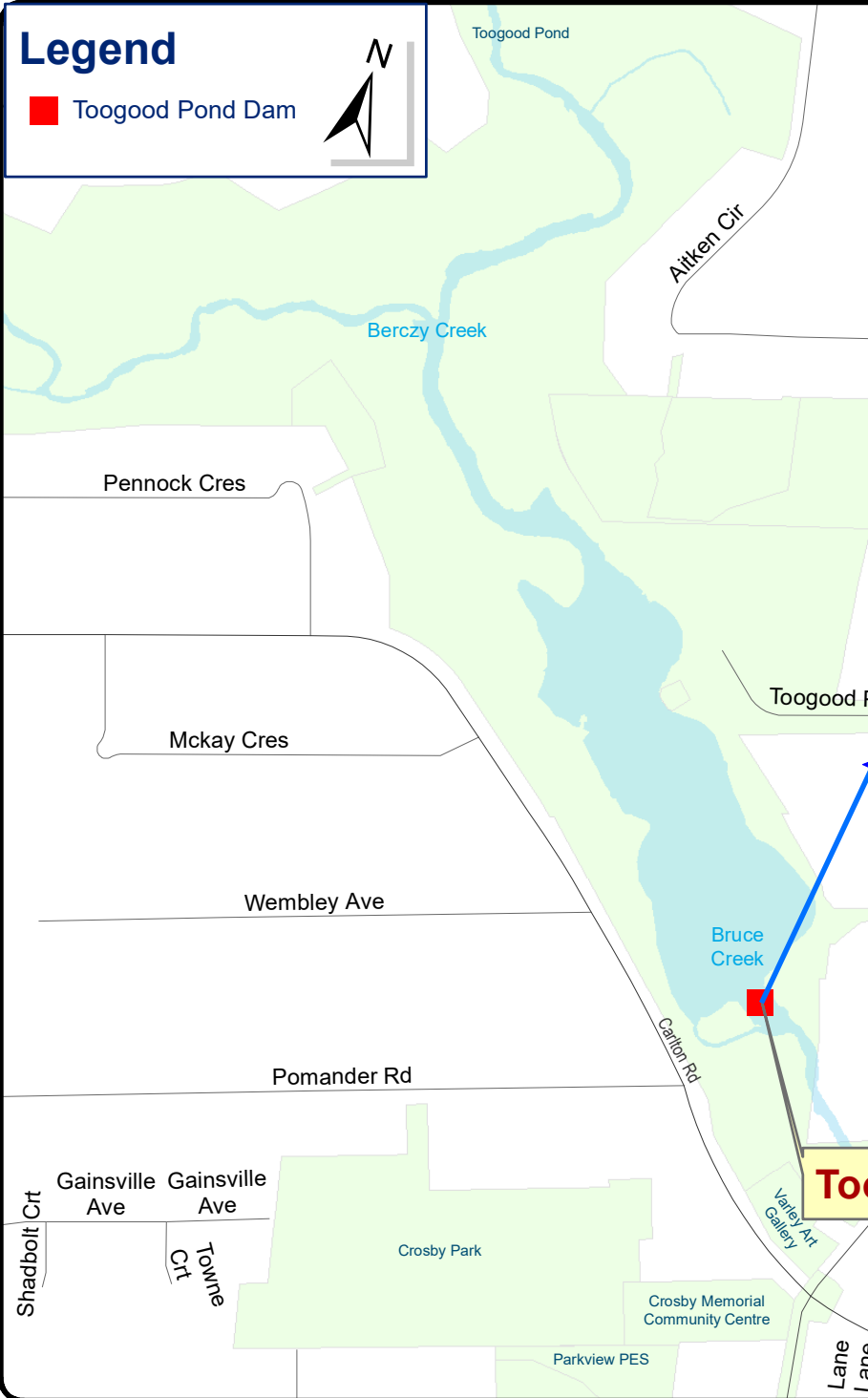
OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="1,239,900"/>
				Amount Incl HST <input type="text" value="1,239,900"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				

Legend

 Toogood Pond Dam



Toogood Pond Dam

Environmental Services - Stormwater Management



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$151,700

Project Name: City-wide Erosion Master Study - Update

Studies/Pilot Programs

Commission: Community Services

Useful Life: 5 Pre Approval:

Department: ES - Stormwater

Category: Major

Project Mgr: Rob Muir

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Erosion study needs to be updated every 5 years to identify the erosion sites and prioritize for implementation.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	149,100	0
Contingency %: 0	0	0
Sub Total:	149,100	0
HST Impact:	2,624	0
Total Project Cost:	151,700	0

NOTES

As part of Environmental Assessment (EA) Act and Municipal Class EA requirements, erosion sites need to be reviewed on a 5 year cycle (2024 - 2029).

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	151,700	0	0	0	0	0	0	
TOTAL FUNDING	151,700					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="151,700"/>
				Amount Incl HST <input type="text" value="151,700"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$1,025,700

Project Name: Don Mills Flood Control Program - Culverts #1 & #2- Design

Studies/Pilot Programs

Commission: Community Services

Useful Life: 0 Pre Approval:

Department: ES - Stormwater

Category: Major

Project Mgr: Rob Muir

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

To hire a Consultant for design for culverts #1 and #2 as part of the Don Mills Channel Flood Control Program.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	68,484,080
Internal Charges:	0	0
External Consulting:	1,008,000	0
Contingency %: 0	0	0
Sub Total:	<u>1,008,000</u>	<u>68,484,080</u>
HST Impact:	<u>17,741</u>	<u>1,205,320</u>
Total Project Cost:	<u>1,025,700</u>	<u>69,689,400</u>

NOTES

Don Mills Channel Flood Control Pond was approved by Council in June 2018.
Total program cost: \$72M
Funding Source: Stormwater Fee. 40% of the project cost (\$410k) will be reimbursed through the Disaster Mitigation and Adaptation Fund (DMAF) grant. Net cost to the City will be 60% (\$615k).

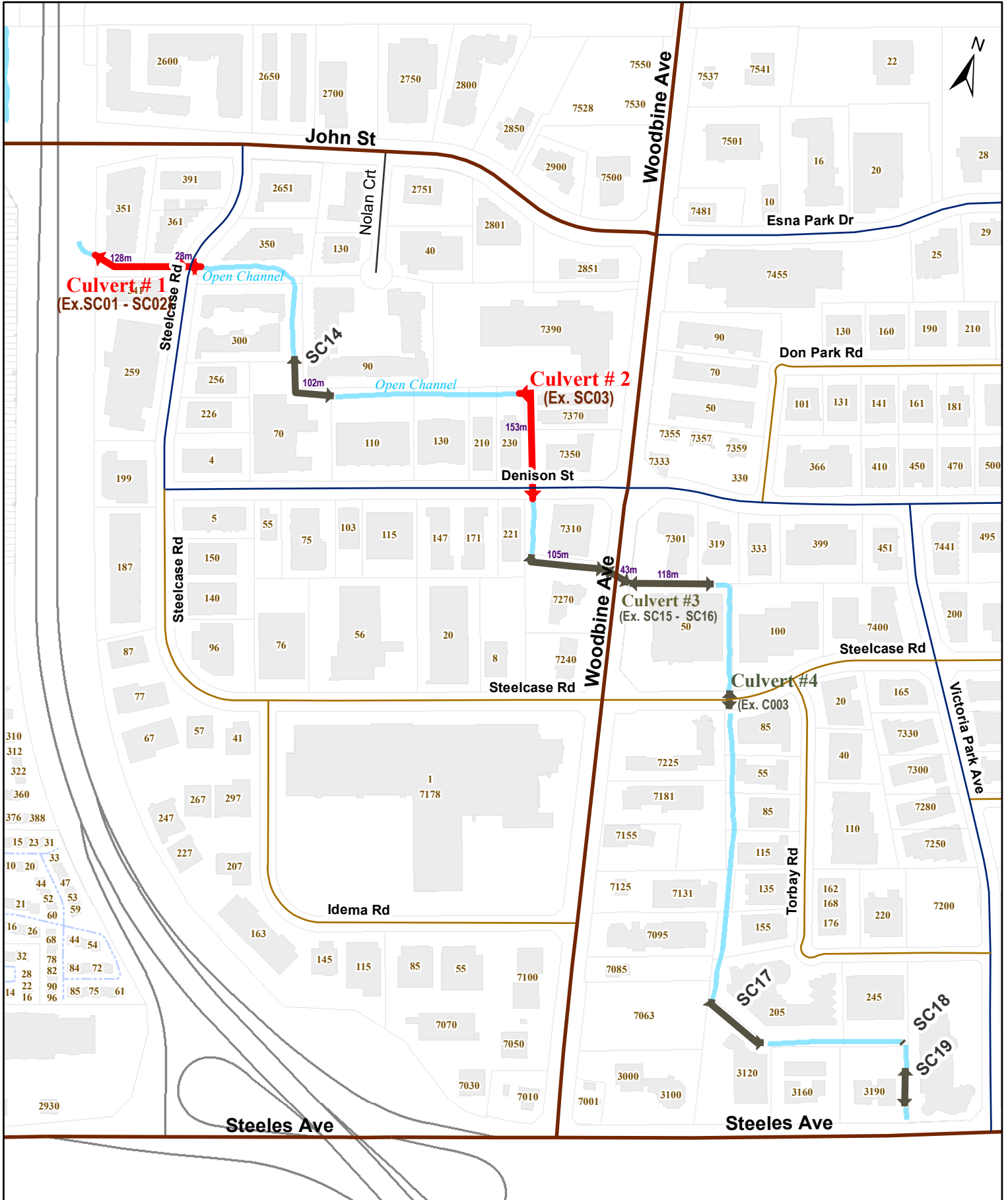
SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Infrastructure Grant	410,280	0	0	0	0	0	0	
Reserve Fund	615,420	0	0	0	0	0	69,689,400	
TOTAL FUNDING	<u>1,025,700</u>					<u>0</u>	<u>69,689,400</u>	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
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MARKHAM Don Mills Channel Flood Control Program - Culverts #1 & #2 Design





2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$953,400

Project Name: Erosion Restoration Program

Commission: Community Services

Repair/Replace

Department: ES - Stormwater

Useful Life: 0 Pre Approval:

Project Mgr: Timothy Ng

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Erosion restoration at unplanned sites to protect the lands and/or infrastructure from failure.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	836,870	0
Internal Charges:	0	0
External Consulting:	100,000	0
Contingency %: 0	0	0
Sub Total:	936,870	0
HST Impact:	16,489	0
Total Project Cost:	953,400	0

NOTES

Budget request every other year to set aside funding to restore 6-8 unplanned erosion sites. Total cost includes design, construction, contract administration and approval agency costs.
Funding source: 35% Lifecycle; 65% DC

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	Design + CA	Construction				
DCA	619,700	66,144	553,556	0	0	619,700	0
Operating Funded Life Cycle	333,700	35,616	298,084	0	0	333,700	0
TOTAL FUNDING	953,400					953,400	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="333,700"/>
				Amount Incl HST <input type="text" value="333,700"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
Total Cost: \$953,400 \$619,700 (65%) is funded through Developmental Charges \$333,700 (35%) is funded through Lifecycle				

Program Name: Erosion Restoration Program

Department: Environmental Services

Year	Project #	Past	2023	Future	Total
2017	#17194	\$829,100			\$829,100
2019	#19232	\$863,900			\$863,900
2021	#21157	\$898,800			\$898,800
2023	#23XXX (This Request)		\$953,400		\$953,400
2025 Onwards				varies	varies
Total		\$2,591,800	\$953,400	\$0	

Description of Program

Erosion restoration at unplanned sites to protect the lands and/or infrastructure from failure
65% from DC (\$619,700) and 35% from LC (\$333,700)

What was completed in the past

See above table

Current ask

Erosion Restoration Program (#23xxx): \$953,400

Future Phases

Varies

Related 2023 Project(s)

N/A

Map

N/A



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$152,600

Project Name: Feasibility Study of Stormwater diversions at Swan Lake

Studies/Pilot Programs

Commission: Community Services

Useful Life: 0 Pre Approval:

Department: ES - Stormwater

Category: Major

Project Mgr: Rob Muir

Cost Validation: Internal peer review

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

To hire a consultant to carry out a study to determine the feasibility and cost of stormwater diversions, pond inlet modifications, and potential impacts on Swan Lake and downstream storm sewer systems. See attached map for location.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	150,000	0
Contingency %: 0	0	0
Sub Total:	150,000	0
HST Impact:	2,640	0
Total Project Cost:	152,600	0

NOTES

On September 13, 2022, Council approved the following Resolution #5:
That Council approve budget request for technical analysis of Swan Lake to assess the feasibility and cost of proposed diversions and pond inlet modifications to determine if the infrastructure within and downstream of Swan Lake can support proposed changes.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	152,600	0	0	0	0	0	0	
TOTAL FUNDING	152,600					0	0	

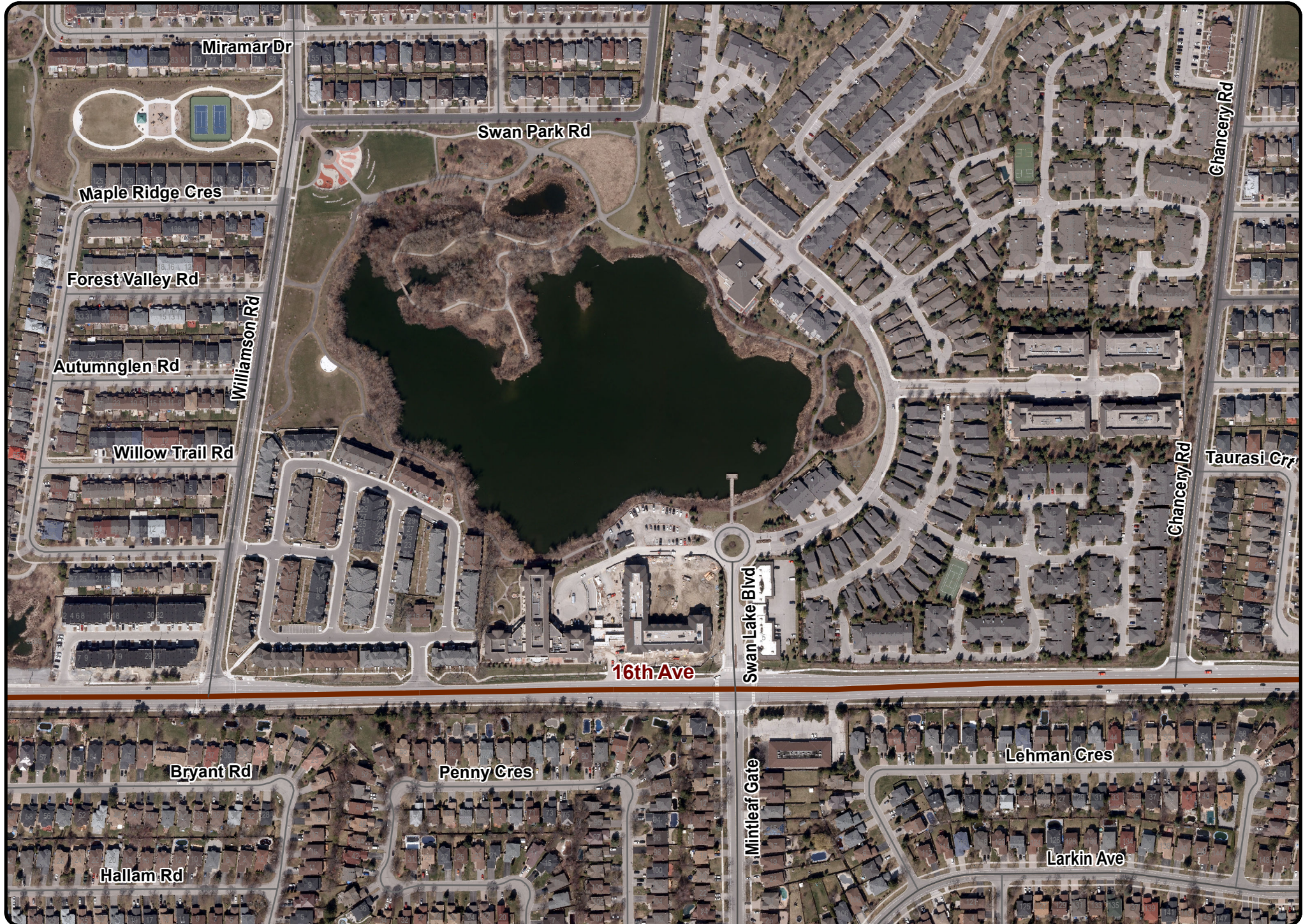
OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

2023 Lifecycle will be updated to reflect the changes.





2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$133,300

Project Name: Oil Grit Separators (OGS) - Inspection and Cleaning

Studies/Pilot Programs

Commission: Community Services

Useful Life: 0 Pre Approval:

Department: ES - Stormwater

Category: Minor

Project Mgr: Rob Muir

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

OGS are structures consisting of one or more chambers that remove sediment, screen debris, and separate oil from stormwater run-off prior to stormwater being discharged downstream. The accumulated pollutants need to be removed as part of a regular maintenance program. The inspection program will identify the OGS that require cleaning to monitor and establish future frequency.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	109,200	0
Internal Charges:	0	0
External Consulting:	21,800	0
Contingency %: 0	0	0
Sub Total:	131,000	0
HST Impact:	2,306	0
Total Project Cost:	133,300	0

NOTES

This is an annual program.
Inventory: 42. Inspection frequency is twice a year (spring & winter). 20 OGS requires cleaning based on historical inspection analysis. Environmental Services is responsible for inspection and sediment cleaning.
Requirement Validation: Condition assessment & legislative compliance (Section 53 of Ontario Water Resources Act)

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	Inspection	Cleaning				
Operating Funded Life Cycle	133,300	22,200	111,100	0	0	133,300	0
TOTAL FUNDING	133,300					133,300	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="133,300"/>
				Amount Incl HST: <input type="text" value="133,300"/>
				Year in the study: <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$1,628,200

Project Name: South Unionville Underground Stormwater Tank Rehab

Studies/Pilot Programs

Commission: Community Services

Useful Life: 50 Pre Approval:

Department: ES - Stormwater

Category: Major

Project Mgr: Rob Muir

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

To carry out major structural rehabilitation works on the South Unionville Underground Stormwater Storage Tank in Ray Street Park. See attached map for location.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	1,500,000	0
Internal Charges:	0	0
External Consulting:	100,000	0
Contingency %: 0	0	0
Sub Total:	1,600,000	0
HST Impact:	28,160	0
Total Project Cost:	1,628,200	0

NOTES

The South Unionville Underground Stormwater Storage Tank was constructed by the Developer in 2009 by placing individual cells of pre-cast concrete cells against each other. The tank was assumed by the City in May 2019. 2022 structural condition inspection revealed, major structural defects. The consultant recommended to close the open area above the underground tank until the rehabilitation works are completed. Part of park was closed as of Sept 14, 2022. This request is for rehabilitation and construction administration services.

SOURCE(S) OF FUNDING (\$)	Components					TOTAL	Future Phases
	Budget	CA	Construction				
Gas Tax	1,628,200	101,760	1,526,440	0	0	1,628,200	0
TOTAL FUNDING	1,628,200					1,628,200	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
<input type="text" value="2023 Lifecycle will be updated to reflect the changes."/>				





2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$105,800

Project Name: Storm Pumping Stations - Equipment Inspection

Commission: Community Services

Repair/Replace

Department: ES - Stormwater

Useful Life: 0 Pre Approval:

Project Mgr: Peter Michaud

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Waterworks intends to complete two condition assessments and minor upgrades to the storm stations:
• Hagerman Diamond PS
• Enterprise SPS
The upgrades are to replace instrumentation on the Enterprise pumping station.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	104,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	104,000	0
HST Impact:	1,830	0
Total Project Cost:	105,800	0

NOTES

The scope of work for these two SPS Condition Assessment will mirror the scope of work used for the Calvert and Milliken SPS Condition Assessment Phase I with an expanded scope to cover forcemain and detailed pump testing. The equipment may involve some repairs.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	105,800	0	0	0	0	0	0	
TOTAL FUNDING	105,800					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="105,800"/>
				Amount Incl HST: <input type="text" value="105,800"/>
				Year in the study: <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number: 23253

Project Cost: \$58,500

Project Name: Stormwater Pipes Emergency Repairs

Commission: Community Services

Repair/Replace

Department: ES - Stormwater

Useful Life: 0 Pre Approval: []

Project Mgr: Peter Michaud

Category: Major

Ward(s): CW [x] 1 [] 2 [] 3 [] 4 [] 5 [] 6 [] 7 [] 8 []

Cost Validation: Other(specify in Notes)

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted? []

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Various sites to be determined as per inspections

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

Table with columns: PROJECT COSTS (\$), 2023, Future Phases. Rows include Cost/Quote, Internal Charges, External Consulting, Contingency %, Sub Total, HST Impact, Total Project Cost.

NOTES

The cost is estimated based on Life Cycle high level analysis

Table with columns: SOURCE(S) OF FUNDING (\$), Components, TOTAL, Future Phases. Row includes Operating Funded Life Cycle and TOTAL FUNDING.

Table with columns: OPERATING BUDGET IMPACT, Personnel, Non Personnel, Revenues, Expenditures/(Revenues). Values are \$0.

DCA/LIFE CYCLE DETAILS

DCA Name, Year, Amount, Amount in Study, Life Cycle. Includes input fields for Amount in Study (59,500), Amount Incl HST (58,500), and Year in the study (2023). Includes a text box for DCA and/or Life Cycle explanation.



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$46,900

Project Name: Stormwater Underground Tank - Condition Inspection

Commission: Community Services

Repair/Replace

Department: ES - Stormwater

Useful Life: 20 Pre Approval:

Project Mgr: Rob Muir

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Condition Inspection of three (3) stormwater Underground Storage Tanks. Refer to attached location map.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	46,100	0
Contingency %: 0	0	0
Sub Total:	46,100	0
HST Impact:	811	0
Total Project Cost:	46,900	0

NOTES

Total inventory: 5
Condition inspection of stormwater underground tanks will determine the sediment level and required rehabilitation.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	46,900	0	0	0	0	0	0	
TOTAL FUNDING	46,900					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text"/>
				Amount Incl HST <input type="text"/>
				Year in the study <input type="text" value="2027"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
Condition Inspection for these underground stormwater tanks were originally scheduled for 2027 per ES 2022 Lifecycle. Inspections have been brought forward to 2023. 2023 Lifecycle will be adjusted to reflect the change.				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Name: **Wet SWM Pond Cleaning ID#44 & #96 - Construction**

Project Cost: **\$1,419,800**

Commission: Community Services

Repair/Replace

Department: ES - Stormwater

Useful Life: 20 Pre Approval:

Project Mgr: Rob Muir

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Sediment cleaning and maintenance of 2 stormwater management (SWM) ponds: Pond #44: Austin Drive Pond (Ward 3) with current sediment level: 60% and Pond #96: Box Grove Pond (Ward 7) with current sediment level of 52%. Refer to attached location map. SWM Ponds require maintenance to function efficiently. Sediment levels need to be monitored and when the percentage of accumulated sediment is above regulatory limits (varies depending on the pond design), ponds need to be cleaned to ensure that the approved quality control function of the pond is maintained.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	1,395,200	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	1,395,200	0
HST Impact:	24,556	0
Total Project Cost:	1,419,800	0

NOTES

Total inventory: 70 wet ponds
Requirement Validation: Condition assessment & Legislative compliance (Section 53, Ontario Water Resources Act).
Operations is responsible for minor above ground maintenance on ponds while ES is responsible for inspection, sediment cleaning, rehabilitation and flood control strategies. Unit cost is consistent with recent award plus inflation. This request is for Construction. Design budget was requested in 2022.

SOURCE(S) OF FUNDING (\$)		Components						Future Phases	
Funding Type	Budget							TOTAL	
Operating Funded Life Cycle	1,419,800	0	0	0	0	0	0	0	
TOTAL FUNDING	1,419,800							0	0

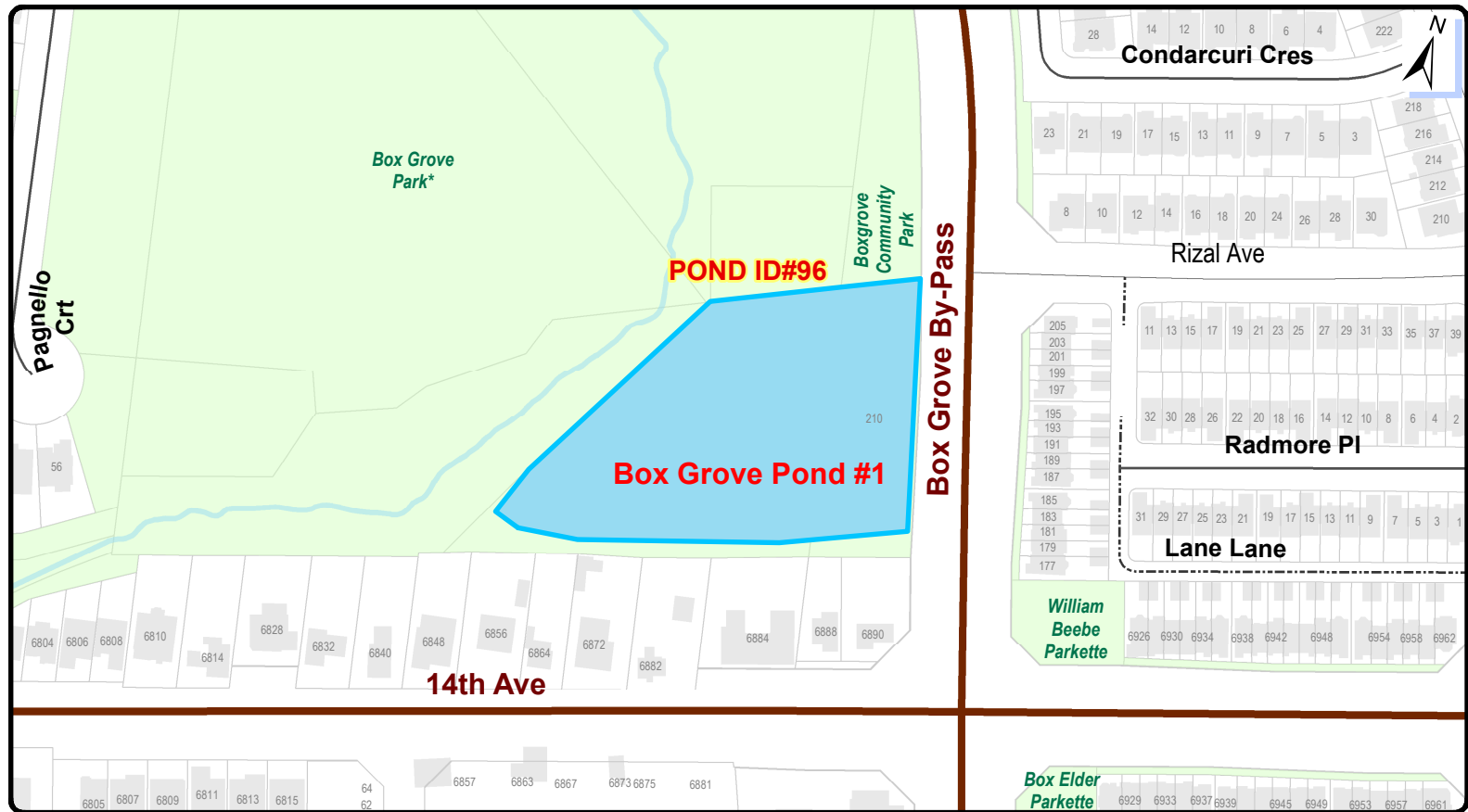
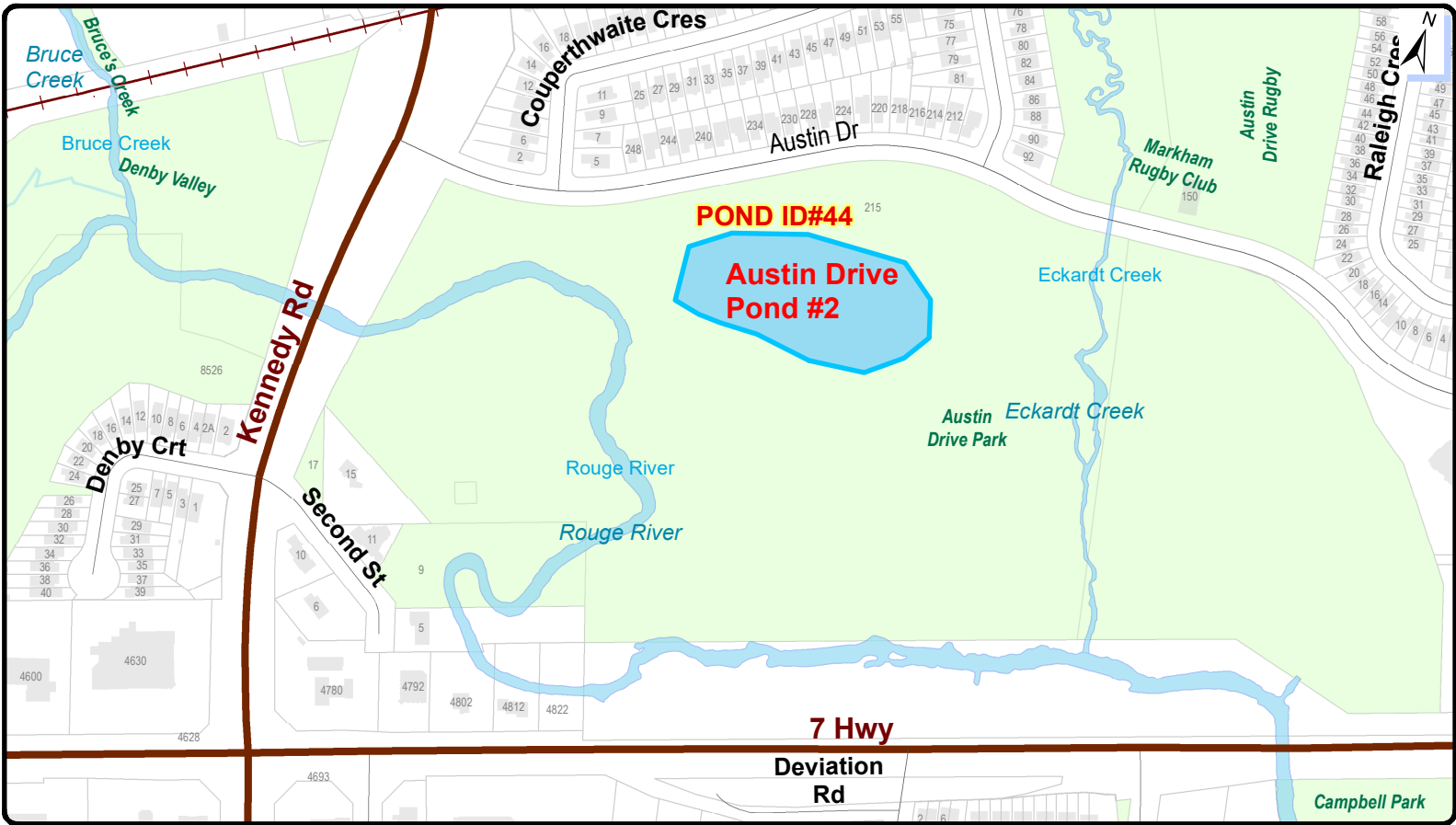
OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="1,414,200"/>
				Amount Incl HST <input type="text" value="1,419,800"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
Total cost: \$1,657,900 (Original amount in 2022 Lifecycle is \$1,414,200) \$1,419,800 is for Wet SWM Pond - Sediment Cleaning #44 & #96 Construction (Cost has been increased from original amount of \$1,176,100 based on recent market rates) - This Request \$238,100 is for Wet SWM Pond - Sediment Cleaning #75, #56 and #50 – Design (Cost same as 2022 Lifecycle)				



Wet SWM Pond Sediment Cleaning #44, #96 - Construction





2023 PROJECT FUNDING REQUEST FORM

Number:

Project Name: Wet SWM Pond Cleaning ID#50, #56 & #75 - Design

Project Cost: \$238,100

Commission: Community Services

Repair/Replace

Department: ES - Stormwater

Useful Life: 20 Pre Approval:

Project Mgr: Tim Ng

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Design and contract administration (CA) of Sediment cleaning and maintenance of 3 stormwater management (SWM) ponds: Pond #50: Ascot Village Pond (Ward 6) with current sediment level: 54% ; Pond #56: Rouge Valley Pond (Ward 4) with current sediment level of 90% and Pond #75: Berczy Pond (Ward 1) with current sediment level of 52%. Refer to attached location map. SWM Ponds require maintenance to function efficiently. Sediment levels need to be monitored and when the percentage of accumulated sediment is above regulatory limits (varies depending on the pond design), ponds need to be cleaned to ensure that the approved quality control function of the pond is maintained.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	234,000	1,657,000
Contingency %: 0	0	0
Sub Total:	<u>234,000</u>	<u>1,657,000</u>
HST Impact:	<u>4,118</u>	<u>29,163</u>
Total Project Cost:	<u>238,100</u>	<u>1,686,200</u>

NOTES

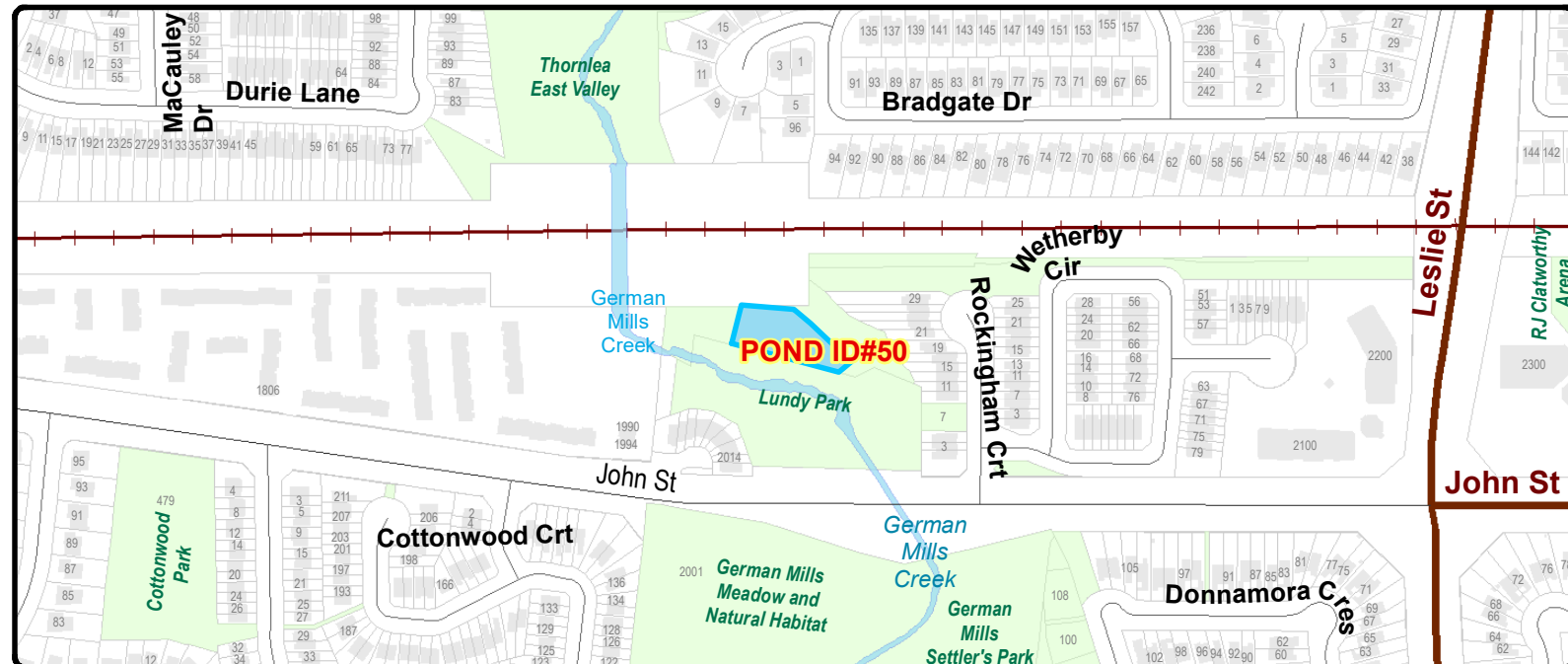
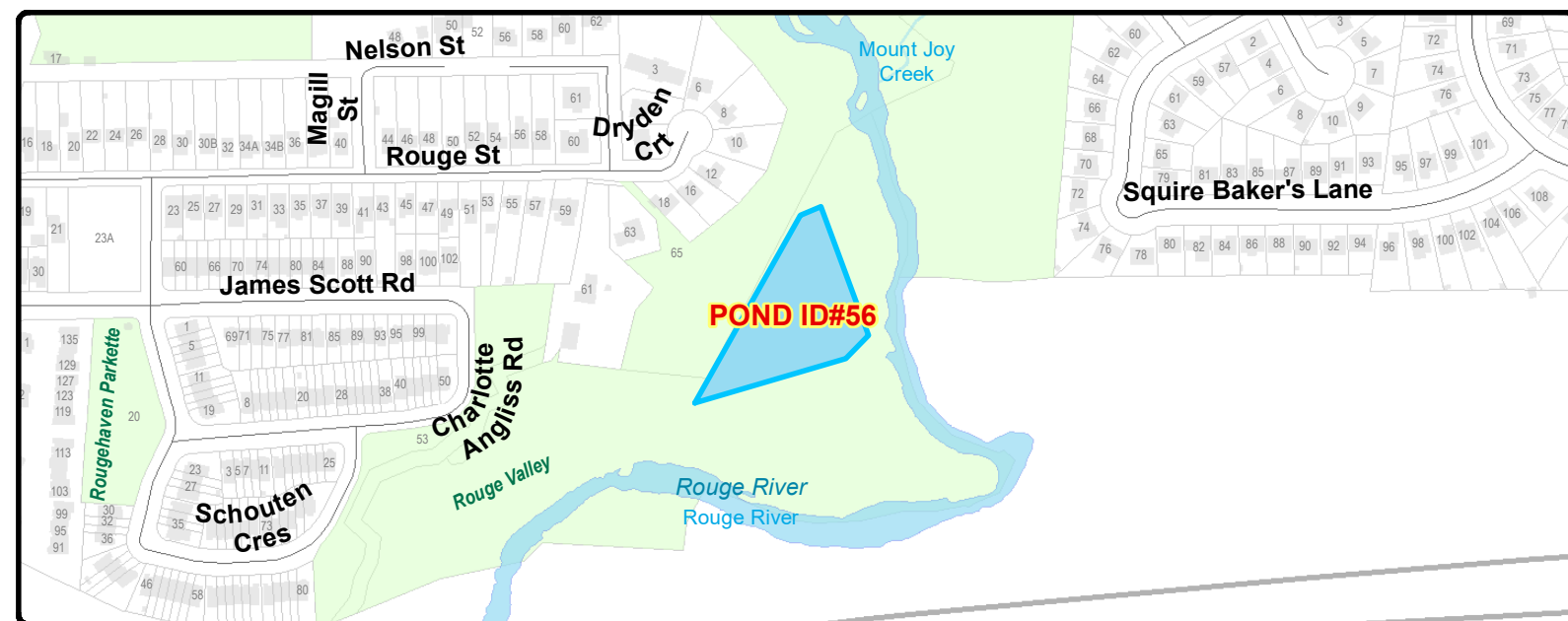
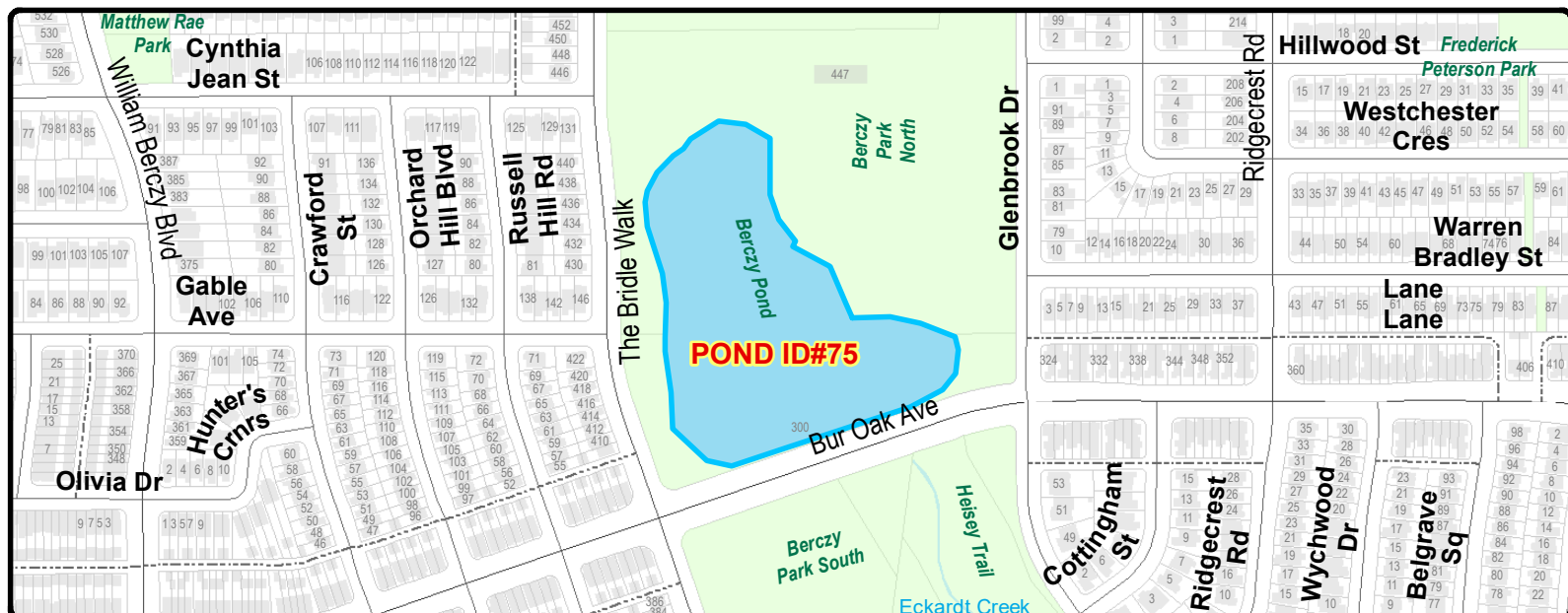
Total inventory: 70 wet ponds
Requirement Validation: Condition assessment & Legislative compliance (Section 53, Ontario Water Resources Act).
Operations is responsible for minor above ground maintenance on ponds while ES is responsible for inspection, sediment cleaning, rehabilitation and flood control strategies. Unit cost is consistent with recent award plus inflation. This request is for design.
Construction and CA budget will be requested in 2024. Future cost may change based on design outcome.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Operating Funded Life Cycle	238,100	0	0	0	0	0	1,686,200
TOTAL FUNDING	<u>238,100</u>					<u>0</u>	<u>1,686,200</u>

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="1,414,200"/>
				Amount Incl HST <input type="text" value="238,100"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				
Total cost: \$1,657,900 (Original amount in 2022 Lifecycle is \$1,414,200) \$1,419,800 is for Wet SWM Pond - Sediment Cleaning #44 & #96 Construction (Cost has been increased from original amount of \$1,176,100 based on recent market rates) \$238,100 is for Wet SWM Pond - Sediment Cleaning #75, #56 and #50 – Design (Cost same as 2022 Lifecycle) - This Request				



Environmental Services - Waste & Environmental Management



2023 PROJECT FUNDING REQUEST FORM

Number: 23257

Project Cost: \$106,100

Project Name: Incremental Growth Related Waste Management Vehicles

Commission: Community Services

New Asset/Expansion

Department: ES - Waste

Useful Life: 0 Pre Approval:

Project Mgr: Claudia Marsales

Category: _____

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: _____

Requirement Validation: _____

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Development Charge (DC) funding for additional growth-related waste management vehicles purchased by contractor. If waste management was done in-house, these vehicles would need to be purchased by the City, so this request is to obtain DC Funding to offset a portion of the capital cost included in the waste management contract paid through Operating Budget

BUILDING MARKHAM'S FUTURE TOGETHER:

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	106,080	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	106,080	0
HST Impact:	0	0
Total Project Cost:	106,100	0

NOTES

Amount requested as per 2017 Development Charges background Study plus 2% annual inflation.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
DCA	106,100	0	0	0	0	0	0	
TOTAL FUNDING	106,100					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
WASTE MANAGEMENT - Furniture & Equipment - New Depot - Cornell	2026	0	205,485	Amount in Study: <input type="text"/>
TOTAL FUNDING		0	205,485	Amount Incl HST <input type="text"/> Year in the study <input type="text"/>

DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:

Environmental Services - Waterworks



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$748,000

Project Name: Curb Box Inspection and Replacement Program

Commission: Community Services

Repair/Replace

Department: ES - Waterworks

Useful Life: 20 Pre Approval:

Project Mgr: Richard Kit

Category: Minor

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Program to conduct inspection of curb boxes and repair /replace defective curb boxes which are normally located at the property line. Curb box/ stop valve is the main control appurtenance for the City to turn on/off water supply to the private property. Over time, curb boxes/ stop valves deteriorate and become inoperable. Proactive inspection and repairs are required to ensure continuous water supply and reduce service interruptions.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	735,100	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	<u>735,100</u>	<u>0</u>
HST Impact:	<u>12,938</u>	<u>0</u>
Total Project Cost:	<u>748,000</u>	<u>0</u>

NOTES

This is an annual program.
Total inventory: 84,350. This request is to inspect approx. 4,056 curb boxes and replacement of approx. 25% curb boxes and damaged sidewalk bays as required (Refer to attached map).
There is no substantial backlog and curb boxes are in a state of good repair. Unit cost is consistent with recent award plus inflation.

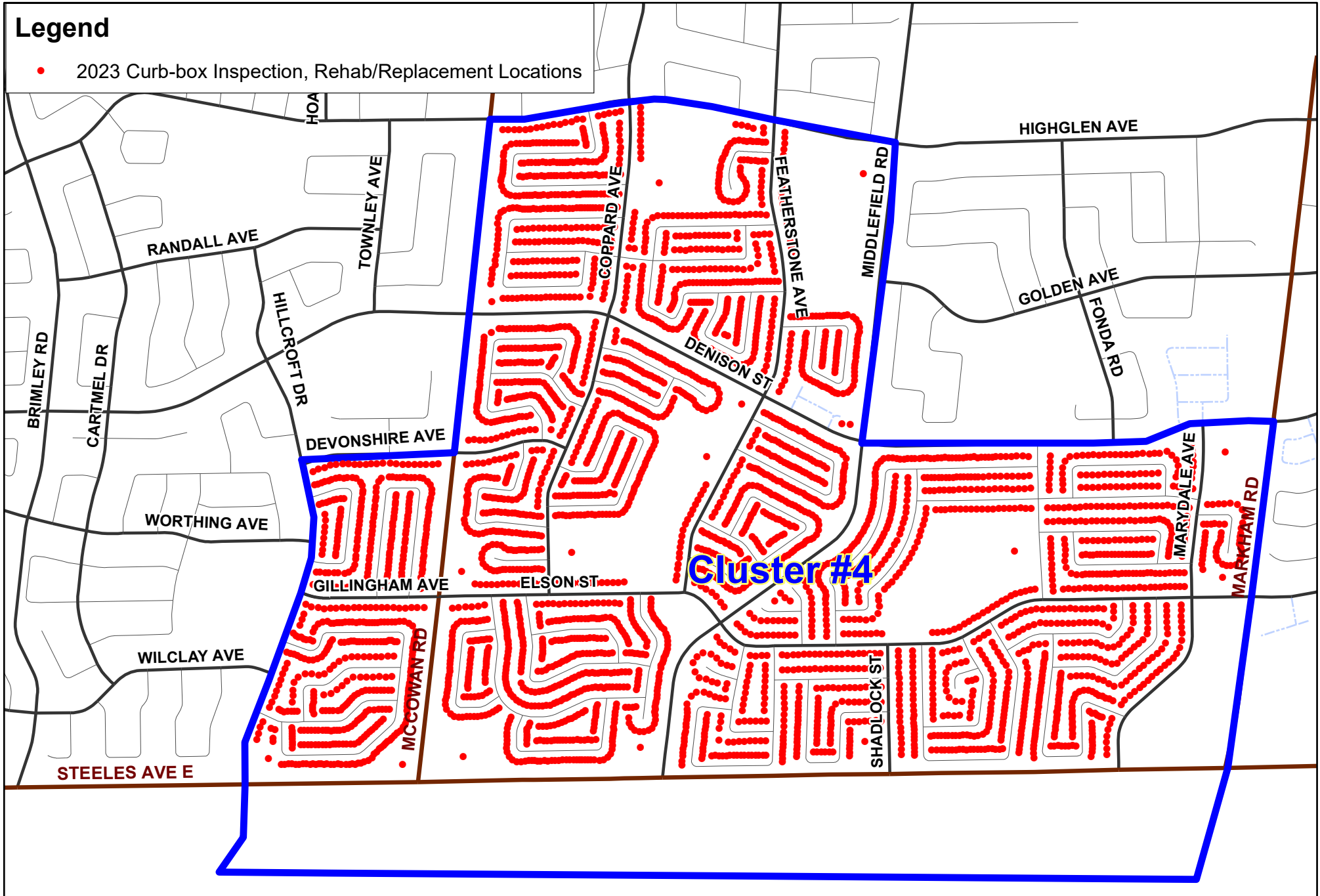
<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
	<u>Budget</u>							
Waterworks	748,000	0	0	0	0	0	0	
TOTAL FUNDING	<u>748,000</u>					<u>0</u>	<u>0</u>	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="748,000"/>
				Amount Incl HST <input type="text" value="748,000"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				

MARKHAM Curb Box Inspection and Replacement



Program Name: Curb Box Inspection and Replacement Program**Department: Environmental Services**

Year	Project #	Past	2023	Future	Total
2019	#19246	\$392,200			\$392,200
2020	#20259	\$614,100			\$614,100
2021	#21171	\$714,900			\$714,900
2022	#22205	\$639,700			\$639,700
2023	#23xxx		\$748,000		\$748,000
2024 Onwards				varies	varies
Total		\$2,360,900	\$748,000		

Description of Program

Program to conduct inspection of curb boxes and repair /replace defective curb boxes which are normally located at the property line. This is an annual program.

What was completed in the past

See above table

Current ask

\$748,100

Future Phases

Varies

Related 2023 Project(s)

N/A

Map

N/A



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$95,100

Project Name: Mobile District Metering Area Program

Commission: Community Services

Studies/Pilot Programs

Department: ES - Waterworks

Useful Life: 0 Pre Approval:

Project Mgr: Celia Fan

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Establish one mobile District Metering Area (DMA) to better manage the citywide water distribution system and reduce non-revenue water (NRW). This will involve the deployment of a mobile testing unit to accurately and reliably measure minimum night flow (MNF) and the impact of pressure reduction on flow (and leakage) reduction, monitor the total water consumption and evaluate the system performance of the DMA.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	93,455	0
Contingency %: 0	0	0
Sub Total:	<u>93,455</u>	<u>0</u>
HST Impact:	1,645	0
Total Project Cost:	<u>95,100</u>	<u>0</u>

NOTES

DMA analyze water system real losses such as leakage. Reducing water losses also reduces needless energy consumption associated with water pumping. Over the past two years, the City has conducted three temporary DMA studies and the beneficial impacts are: a) water savings of 139,000 m3/year, b) financial savings of \$426,000/year, c) energy savings of 102,000 kWh/year, d) mitigated environmental impacts of 4.1 tonnes of CO2/year (@ 40 g CO2/kWh).

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget				TOTAL		
Waterworks	95,100	0	0	0	0	0	0
TOTAL FUNDING	<u>95,100</u>				<u>0</u>		<u>0</u>

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="186,400"/>
				Amount Incl HST <input type="text" value="95,000"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$79,400

Project Name: Review and Development Design Standard Drawings/Criteria

Studies/Pilot Programs

Commission: Community Services

Useful Life: 0 Pre Approval:

Department: ES - Waterworks

Category: Major

Project Mgr: Jack Zi

Cost Validation: Internal peer review

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The City developed a sewage pumping station standard in 2022. Standard drawings are still needed to be developed. City is experiencing more deep trunk sewers and water transmission lines, and this project will develop guidelines, and standard/criteria for reviewing/designing trunk sewers and water transmission line.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	78,027	0
Contingency %: 0	0	0
Sub Total:	78,027	0
HST Impact:	1,373	0
Total Project Cost:	79,400	0

NOTES

The cost was estimated based on developing approximately 5 sewage pumping station design drawings, reviewing and updating deep trunk sewer design criteria/standard, reviewing and updating minimum separation between waterworks infrastructure and other utilities, and developing a city standard for water transmission line

SOURCE(S) OF FUNDING (\$)	Components						Future Phases
	Budget					TOTAL	
Waterworks	79,400	0	0	0	0	0	0
TOTAL FUNDING	79,400					0	0

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="79,400"/>
				Amount Incl HST <input type="text" value="79,400"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$72,500

Project Name: Sampling and Flushing Stations Replacement

Commission: Community Services

Repair/Replace

Department: ES - Waterworks

Useful Life: 0 Pre Approval:

Project Mgr: Peter Solymos

Category: Annual

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Other(specify in Notes)

Requirement Validation: Visual inspection

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Replacement of deteriorated sampling and flushing stations that have completed its life cycle.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	71,200	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	71,200	0
HST Impact:	1,253	0
Total Project Cost:	72,500	0

NOTES

Sampling stations: ID#807, B13, C07 & I12; Flushing stations ID#F5001 (\$6, 783). Specific sampling and flushing stations to be confirmed prior to construction. Cost estimate based on Life Cycle analysis. Maps as attached.

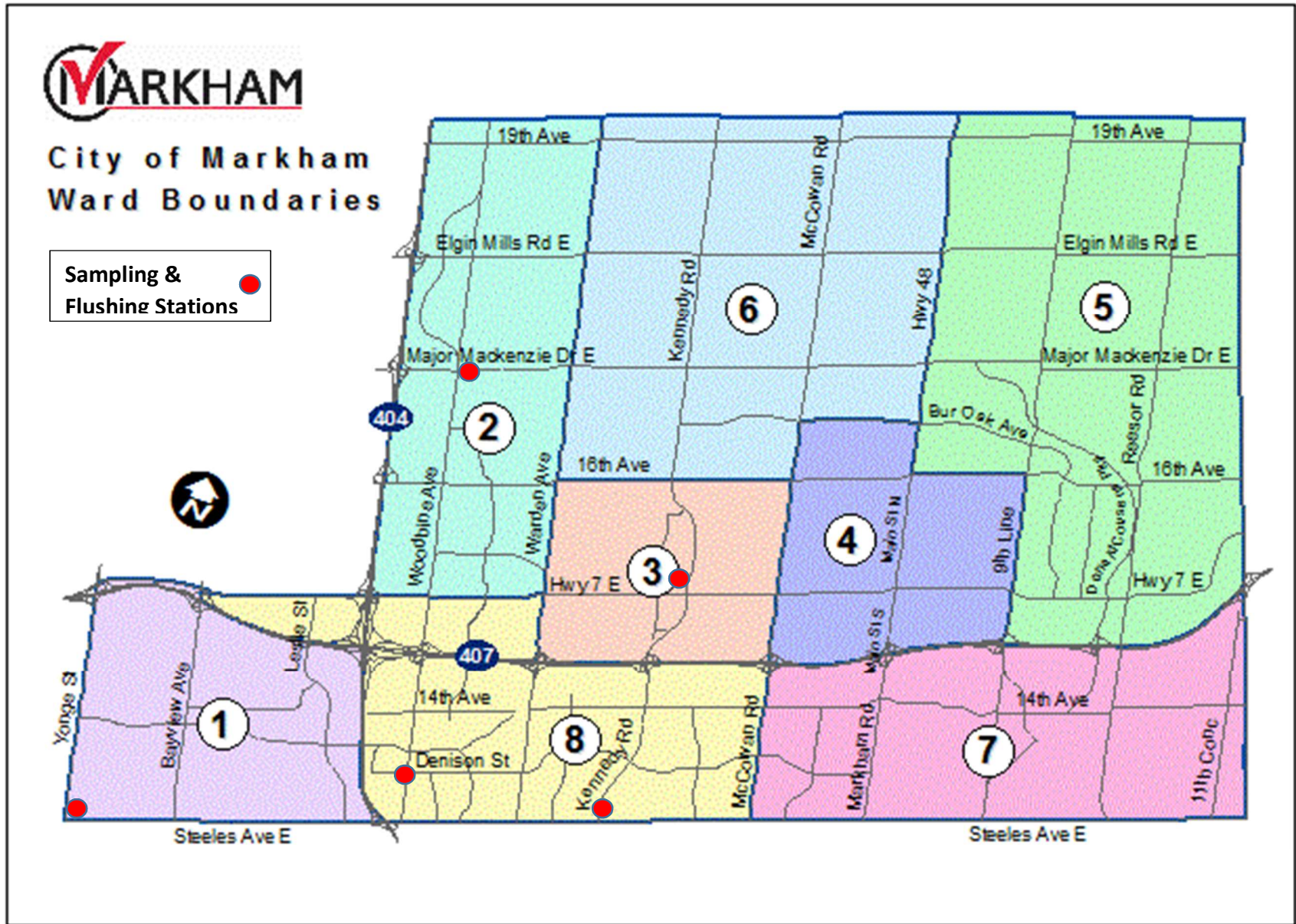
SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	72,500	0	0	0	0	0	0	
TOTAL FUNDING	72,500					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="72,500"/>
				Amount Incl HST <input type="text" value="72,500"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				

2023 LifeCycle Capital Project – Sampling and Flushing Stations Replacements





2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$391,600

Project Name: Sanitary Pumping Stations - Component Replacement

Commission: Community Services

Repair/Replace

Department: ES - Waterworks

Useful Life: 0 Pre Approval:

Project Mgr: Pete Michaud

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Waterworks has conducted a condition assessment for two sanitary pumping stations:
• Milliken SPS
• Calvert SPS
The scope involves replacement of pumps, H&S and compliance priority aspects, and mechanical and electrical component replacement.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	384,800	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	384,800	0
HST Impact:	6,772	0
Total Project Cost:	391,600	0

NOTES

Two consultants reports outline the specific component replacements. For Milliken SPS the priority is the pump replacement; and for Calvert SPS is replacement of mechanical (valves/piping) to meet Fire Code requirements, and HVAC issues with cross ventilation with the emergency generator. There were structural concerns raised as well, and a further condition assessment will focus on structural / civil aspects (for S&AM information for 2024-2025 LC budgets). Cost estimates were prepared by consultants.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Operating Funded Life Cycle	391,600	0	0	0	0	0	0	
TOTAL FUNDING	391,600					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="391,600"/>
				Amount Incl HST <input type="text" value="391,600"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$211,700

Project Name: Sanitary Pumping Stations-Condition Assessment/Upgrades

Commission: Community Services

Repair/Replace

Department: ES - Waterworks

Useful Life: 0 Pre Approval:

Project Mgr: Peter Michaud

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Third party estimate

Requirement Validation: Legislative compliance

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

The condition assessment of Carlton and Kennedy SPS is considered . Also, additional condition assessment for structural and civil works will be conducted for Calvert SPS. The upgrades include priority works as a result of the condition assessment to Calvert.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	208,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	208,000	0
HST Impact:	3,661	0
Total Project Cost:	211,700	0

NOTES

Cost estimates are based on consultant report and recent experience conducting two condition assessments.

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>TOTAL</u>	<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>							
Operating Funded Life Cycle	211,700	0	0	0	0	0	0	
TOTAL FUNDING	211,700					0	0	

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
<u>Name</u>				Amount in Study: <input type="text" value="211,700"/>
				Amount Incl HST <input type="text" value="211,700"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$846,600

Project Name: Sanitary Sewers - Rehabilitation

Commission: Community Services

Repair/Replace

Department: ES - Waterworks

Useful Life: 50 Pre Approval:

Project Mgr: Philip Zhang

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Program to rehabilitate the main sanitary sewer, service laterals using structural liner including repairs to manholes.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	832,000	0
Internal Charges:	0	0
External Consulting:	0	0
Contingency %: 0	0	0
Sub Total:	832,000	0
HST Impact:	14,643	0
Total Project Cost:	846,600	0

NOTES

This is an annual program.
Program is to rehabilitate the main sanitary sewer, service laterals using structural liner and repairs to manholes identified through CCTV inspection.
Sanitary sewers are in a state of good repair.

SOURCE(S) OF FUNDING (\$)		Components					TOTAL	Future Phases
Funding Type	Budget							
Waterworks	846,600	0	0	0	0	0	0	
TOTAL FUNDING	846,600					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="846,600"/>
				Amount Incl HST: <input type="text" value="846,600"/>
				Year in the study: <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				

Program Name: Sanitary Sewer Rehabilitation Program**Department: Environmental Services**

Year	Project #	Past	2023	Future	Total
2019	#19249	\$1,130,600			\$1,130,600
2020	#20261	\$910,600			\$910,600
2021	#21173	\$1,405,000			\$1,405,000
2022	#22210	\$981,900			\$981,900
2023	#23xxx		\$846,600		\$846,600
2024 Onwards				varies	varies
Total		\$4,428,100	\$846,600		

Description of Program

Program to rehabilitate the main sewer, service laterals using structural liner including repairs to manholes identified through CCTV inspection

What was completed in the past

See above table

Current ask

\$846,600

Future Phases

Varies

Related 2023Project(s)

N/A

Map

N/A



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$32,400

Project Name: Suspended Watermain Insulation - Condition Inspection

Repair/Replace

Commission: Community Services

Useful Life: 20 Pre Approval:

Department: ES - Waterworks

Category: Minor

Project Mgr: Richard Kit

Cost Validation: Third party estimate

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

Condition Inspection of insulation and pipe supports on Four (4) suspended watermain locations. Refer to attached map for location.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	31,800	0
Contingency %: 0	0	0
Sub Total:	31,800	0
HST Impact:	560	0
Total Project Cost:	32,400	0

NOTES

City has Suspended Watermain at 13 locations. 9 locations were inspected in 2020. This request is to inspect the remaining 4 locations.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Waterworks	32,400	0	0	0	0	0	0	
TOTAL FUNDING	32,400					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="32,400"/>
				Amount Incl HST <input type="text" value="32,400"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$63,200

Project Name: Wastewater Flow Monitoring

Studies/Pilot Programs

Commission: Community Services

Useful Life: 0 Pre Approval:

Department: ES - Waterworks

Category: Major

Project Mgr: Rob Muir

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This program is to hire a Consultant to record the sanitary system flows to help quantify areas that require further investigation and remedial works to reduce the wastewater system flood risk during large storm events from inflow and infiltration (I/I). Approx. 6 locations will be monitored in 2023 (refer to attached map) to establish the level of extraneous flow into the wastewater collection system from rainfall events.

BUILDING MARKHAM'S FUTURE TOGETHER:

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	62,100	0
Contingency %: 0	0	0
Sub Total:	62,100	0
HST Impact:	1,093	0
Total Project Cost:	63,200	0

NOTES

This is an annual program. Monitoring is for 12 months, followed by another 12 months of analysis and report generation. The results will be used to determine the degree of improvement needed to minimize wastewater system flooding. Project cost is based on current contract (expires in 2023).

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Waterworks	63,200	0	0	0	0	0	0	
TOTAL FUNDING	63,200					0	0	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="63,200"/>
				Amount Incl HST: <input type="text" value="63,200"/>
				Year in the study: <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$143,200

Project Name: Water System Model Calibration

Commission: Community Services

Studies/Pilot Programs

Department: ES - Waterworks

Useful Life: 0 Pre Approval:

Project Mgr: Celia Fan

Category: Major

Ward(s): CW 1 2 3 4
5 6 7 8

Cost Validation: Recent awards

Requirement Validation: Other(specify in Notes)

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

ES updates and calibrates the City wide water distribution system hydraulic operational model every five years to reflect the existing condition of the water supply. This calibrated hydraulic model will become a base to evaluate future development scenarios.. The last update was done in 2018.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

<u>PROJECT COSTS (\$)</u>	<u>2023</u>	<u>Future Phases</u>
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	140,723	0
Contingency %: 0	0	0
Sub Total:	<u>140,723</u>	<u>0</u>
HST Impact:	<u>2,477</u>	<u>0</u>
Total Project Cost:	<u>143,200</u>	<u>0</u>

NOTES

This is a consultant assignment. The scope includes data/report collect and review to update the model, plan & onduct field test, analyze field test results, collect SCADA data from ROY and analyze the data, and calibrate the model based on the SCADA data and field data. The field test includes fire flow tests, and pressure monitoring at various locations

<u>SOURCE(S) OF FUNDING (\$)</u>	<u>Components</u>						<u>Future Phases</u>
<u>Funding Type</u>	<u>Budget</u>					<u>TOTAL</u>	<u>Phases</u>
Waterworks	143,200	0	0	0	0	0	0
TOTAL FUNDING	<u>143,200</u>					<u>0</u>	<u>0</u>

<u>OPERATING BUDGET IMPACT</u>	<u>Personnel</u>	<u>Non Personnel</u>	<u>Revenues</u>	<u>Expenditures/(Revenues)</u>
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

<u>DCA Name</u>	<u>Year</u>	<u>Amount</u>	<u>Amount in Study</u>	<u>Life Cycle</u>
				Amount in Study: <input type="text" value="143,200"/>
				Amount Incl HST <input type="text" value="143,200"/>
				Year in the study <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				



2023 PROJECT FUNDING REQUEST FORM

Number:

Project Cost: \$35,600

Project Name: Watermain Leak Detection Program

Studies/Pilot Programs

Commission: Community Services

Useful Life: 0 Pre Approval:

Department: ES - Waterworks

Category: Annual

Project Mgr: Celia Fan

Cost Validation: Recent awards

Ward(s): CW 1 2 3 4
5 6 7 8

Requirement Validation: Condition assessment

ITS Involved Project: Is ITS Consulted?

DETAILED DESCRIPTION (SCOPE OF PROJECT):

This is an annual program. In 2023 we completed the leak survey on 50% of metallic watermain within the City. 2024 is to complete leak survey on the other 50% metallic watermain. The total inventory of metallic watermain is 280 km. In addition to the leak survey, leak correlation is to be completed to pin-point leaks on those potential leak locations identified from the previous year leak survey. The results of investigation from leak correlation will identify the confirmed leak location to be repaired.

BUILDING MARKHAM'S FUTURE TOGETHER: Safe & Sustainable Community

PROJECT COSTS (\$)	2023	Future Phases
Cost/Quote:	0	0
Internal Charges:	0	0
External Consulting:	34,984	0
Contingency %: 0	0	0
Sub Total:	<u>34,984</u>	<u>0</u>
HST Impact:	<u>616</u>	<u>0</u>
Total Project Cost:	<u>35,600</u>	<u>0</u>

NOTES

Amount requested is consistent with 2022 Waterworks Reserve Study Update.

SOURCE(S) OF FUNDING (\$)	Components						TOTAL	Future Phases
	Budget							
Waterworks	35,600	0	0	0	0	0	0	
TOTAL FUNDING	<u>35,600</u>					<u>0</u>	<u>0</u>	

OPERATING BUDGET IMPACT	Personnel	Non Personnel	Revenues	Expenditures/(Revenues)
	\$0	\$0	\$0	\$0

DCA/LIFE CYCLE DETAILS

DCA Name	Year	Amount	Amount in Study	Life Cycle
				Amount in Study: <input type="text" value="9,192,300"/>
				Amount Incl HST: <input type="text" value="35,600"/>
				Year in the study: <input type="text" value="2023"/>
DCA and/or Life Cycle: Explain if there is a change in the year and/or cost:				