

## 2021 Capital Project Listing - New Requests

Operations

		Contribution	Grants	Tax Supported	Reserves	DC	Donation	Miscellaneous	User Pay	Taxation Comments
	Expenditures	to Reserves		Debt		Reserves			Debt	
Project Listing										
130 Fleet										
X69 Replace Water Unit 28 - Silverado Hybrid Pickup Truck	35,000								(35,000)	
X68 Replace Fire Unit 37 - F250 Pickup Truck	88,000			(88,000)						
X67 Replace Fire Unit 38 - Escape Hybrid SUV	50,000			(50,000)						
X66 Replace Building Unit 39 - Escape Hybrid SUV	46,000			(46,000)						
X65 Replace Hydro Unit 65 - Hybrid Bucket Truck	50,000								(50,000)	
X64 Replace Cemetery Unit 87 -310 Backhoe	175,000			(175,000)						
X63 Replace Parks Unit 88 - 4720 Tractor	222,000			(222,000)						
X62 Replace Roads Unit 203 - Mower SZ60 Commercial	46,000			(46,000)						
X61 New Cemetery Unit - Mower Tractor with attachment	65,000			(65,000)						
X60 New Parks/Facilities Unit - Mini Cargo Van	40,000			(40,000)						
Total 130 Fleet	817,000			(732,000)					(85,000)	
210 Engineering										
X90 OSIM Inspection	45,000									45,000
X55 Master Transportation Study	80,000					(46,800)				33,200
X54 Kismen Bridge Upgrade Design	60,000					(6,000)				54,000
X53 Asset Managment (FCM)	120,000		(50,000)	(70,000)						FCM Grant -pending approval
Total 210 Engineering	305,000		(50,000)	(70,000)		(52,800)				132,200
220 Public Works										
X99 Asphalt Program	400,000		(400,000)							Federal Gas Tax
X96 Sidewalk Connectivity Program	200,000					(138,600)				61,400
X95 Vienna Road	961,000		(864,900)							96,100 Connecting Link
X94 Concession St W - Rolph to Charolette	1,681,000		(1,312,000)			(163,400)				<b>205,600</b> ICIP Grant
X93 Rolling Meadows Phase 2 of 2	769,600		(257,000)							512,600 Federal Gas Tax, OCIF formul
Total 220 Public Works	4,011,600		(2,833,900)			(302,000)				875,700
240 Airport										
X51 General Aviaton Access Road	195,000			(195,000)						
Total 240 Airport	195,000			(195,000)						
260 Storm Sewers										
X95 Vienna Road	961,000		(864,900)							96,100 Connecting Link

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## 2021 Capital Project Listing - New Requests

Operations

	Expenditures	Contribution to Reserves	Grants	Tax Supported Reserves Debt	DC Reserves	Donation	Miscellaneous	User Pay Debt	Taxation	Comments
X94 Concession St W - Rolph to Charolette	476,000				(328,900)				147,100	
X93 Rolling Meadows Phase 2 of 2	312,400								312,400	
Total 260 Storm Sewers	1,749,400		(864,900)		(328,900)				555,600	
Total Project Listing	\$7,078,000		(\$3,748,800)	(\$997,000)	(\$683,700)			(\$85,000)	\$1,563,500	

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## Asset Management Fleet Replacement Strategy - 2021 Capital Plan

						Replaceme	nt Options	Probability	of Failure	Consequ	ence of Failure		
Department	Vehicle Number	Make	Туре	Description	Year	New Unit Replacement Cost Estimate	Alternative Replacement Cost Estimate	% Remaining Service Life (%RSL)	Probability of Failure Description	Type of Service Score	Consequence of Failure Description	Overall Asset Risk	Comments
Water	28	Chevrolet	Light Duty	Silverado Hybrid Pickup Truck	2010	\$35,000	\$35,000	25%	Likely	3.0	Moderate	High	High risk of battery failure. Estimated Useful Life = 8 years.
Fire	37	Ford	Medium Duty	F250 Pickup Truck	2007	\$88,000	\$88,000	19%	Highly Probable	4.0	Major	Extreme	Existing unit #37 will be transferred to Engineering as a new vehicle to their compliment only has 60,000km, Engineering will only use about 6 months per year. Estimated Useful Life = 8 years.
Fire	38	Ford	Light Duty	Escape Hybrid SUV	2011	\$50,000	\$50,000	37%	Likely	4.0	Major	High	High risk of battery failure. Estimated Useful Life = 8 years.
Building	39	Ford	Light Duty	Escape Hybrid SUV	2011	\$46,000	\$46,000	37%	Likely	2.0	Minor	Medium	High risk of battery failure. Estimated Useful Life = 8 years.
Hydro	65	International	Heavy Duty	4300 Hybrid Bucket Truck	2009	\$50,000	\$50,000	25%	Likely	1.0	Slight	High	Hybrid battery has already failed once. High risk of failure. Estimated Useful Life = 12 years.
Cemetery	87	John Deere	Off Road Equipment	310 Backhoe	2003	\$175,000	\$175,000	45%	Likely	4.0	Major	High	High risk of failure. Estimated Useful Life = 12 years.
Parks	88	John Deere	Off Road Equipment	4720 Tractor	2006	\$222,000	\$222,000	0%	Highly Probable	3.0	Moderate	Extreme	Extreme risk of failure. Parks has requested an upgrade to a larger unit to meet their current needs. Estimated Useful Life = 15 years.
Roads	203	Cub Cadet	Off Road Equipment	SZ60 Commerical	2016	\$46,000	\$46,000	10%	Highly Probable	4.0	Major	Extreme	Extreme risk of failure. Hydrostatic drive has failed once, This is the only mower available for roads. Failure would impact grass cutting service to Community. Estimated Useful Life = 5 years.
Cemetery	NEW		Attachment	Boom Flail Attachment for Tractor		\$65,000	\$65,000						Boom Flail Mower Attachment for upgraded unit #88
Parks/Facilities	NEW		Light Duty	Mini Cargo Van/ With Tool Storage		\$40,000	\$40,000						Facilities division in need of enclosed cargo van for carrying tools.

it Replacement Sub-Tota

\$817,000

\$817,00

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#### Capital Projects

Project Department

Version

	Activity of the state of the st	
X90 OSIM Inspection		
Engineering		

2021

#### Description

Consulting Services for Bridge, Culvert and Retaining Wall Inspections is required to acquire the necessary professional services to conduct bridge, culvert and retaining wall inspections within the Town. The purpose of this project is to perform visual structure inspections; a mandatory requirement of Ontario Regulation 104/97 under the *Public Transportation and Highway Improvement Act*, in accordance with the Ontario Structure Inspection Manual, determine structure conditions and outline the timeframe and cost of needs for each structure in the form of a Needs Study. The information will be utilized by staff for prioritizing the capital works program for bridge, culvert and retaining wall assets within the Towns Asset Management Plan.

## Justification

Comply with Ontario Regulation 104/97;

2 - SMT review

- Protect and prolong the useful life of structures;
- Identify maintenance, repair, load limit posting, and rehabilitation needs of structures with priority of itemized work elements, strategies and costs to replace based on life cycle analysis and budget;
- Produce a comprehensive Needs Study that identifies maintenance and rehabilitation activities, their associated costs and lifecycle time frames for each structure to incorporate into the Town's Asset Management Plan; and
- Compare the 2020 Needs Study results to the 2019 Needs Study recommendations in order to reconfirm the ongoing financial strategy requirements.

		E	Budget				
	Total	2021	2022	2023	2024	2025	2026
Expenditures							
Construction	45,000	45,000					
Expenditures Total	45,000	45,000					
Funding							
Taxation	45,000	45,000					
Funding Total	45,000	45,000					

#### **Capital Projects**

Project Department X55 Master Transportation Study

Engineering

Version

2 - SMT review Year 2021

#### Description

The Transportation Master Plan (TMP) is a strategic plan that will direct policies and infrastructure initiatives for the Town's transportation system over the next 25 years. The TMP will focus on a sustainable transportation network for vehicles, pedestrians and cyclists along with their projected needs up until the year 2036. These include how and where to invest in local road improvements, traffic controls, public transit services, and cycling and walking facilities. It also includes strategies to manage both ongoing travel demands, and the necessary accommodations required by evolving transportation technologies.

The objectives of the study are to address short, medium and long-term transportation needs of the Town of Tillsonburg.

#### Justification

Many municipalities undertake Transportation Master Plans (TMP) to define their long-term transportation objectives as a supplement to transportation needs identified through their Official Plan development process. TMPs are developed through a stakeholder consultation process that involves consultation with the public, government technical agencies, other municipalities, and First Nations in accordance with the Municipal Class EA process.

A TMP integrates existing and future land-use planning and the planning of transportation infrastructure with the principles of environmental assessment planning.

The TMP will be the Town's blueprint for planning, developing and operating its walking, cycling, transit and road networks over the next two decades. The plan will also identify a number of modifications to road and transit infrastructure priorities to account for adjustments in growth patterns, emerging issues and strategic opportunities. The actions and policies in the TMP will guide day-to-day transportation programs and provide a basis for future capital and operating budgets.

		E	Budget				
	Total	2021	2022	2023	2024	2025	2026
Expenditures							
Construction	80,000	80,000					
Expenditures Total	80,000	80,000					
Funding							
Cont from DC Reserves	46,800	46,800					
Taxation	33,200	33,200					
Funding Total	80,000	80,000					

#### **Capital Projects**

Project	
Department	

Version

X54 Kismen Bridge Upgrade Design

ent Engineering

2 - SMT review Year 2021

#### Description

The Kinsman Pedestrian Bridge is located on Veterans Memorial Walkway, 170m west of Rolph St. The structure is an old railway girder bridge converted to a pedestrian bridge, with 9 spans and a total length of 107.5m. The structure is in poor condition and requires rehabilitation. This will be Phase 2 of 2 with rehabilitation of the structural columns supporting the bridge decking.

## Justification

The 2019 OSIM Inspection report recommended rehabilitation of the entire bridge is completed to ensure structural adequacy.

		В	ludget				
	Total	2021	2022	2023	2024	2025	2026
Expenditures							
Construction	60,000	60,000					
Expenditures Total	60,000	60,000					
unding							
Cont from DC Reserves	6,000	6,000					
axation	54,000	54,000					
Funding Total	60,000	60,000					

#### Capital Projects

Project Department X53 Asset Managment (FCM)

Engineering

Version 2 - SMT review

Year 2021

#### Description

To complete a number of Facilities assessments, data collection and integration, develop asset management plan for facilities in its proposed project submitted to the Federation of Canadian Municipalities' Municipal Asset management Program to advance our asset management.

## Justification

The Federation of Canadian Municipalities has extended a funding opportunity to assist municipal organizations to improve and implement asset management plans. The maximum grant available is \$50,000 and project is to be completed in 12 months. If successful with the FCM grant application the project will fund conducting facilities condition assessments including structural condition and provide lifecycle costs and replacement plan.

		E	Budget				
	Total	2021	2022	2023	2024	2025	2026
Expenditures							
Construction	120,000	120,000					
Expenditures Total	120,000	120,000					
Funding							
Grants	50,000	50,000					
Debt	70,000	70,000					
Funding Total	120,000	120,000					

#### Capital Projects

Project	
Department	

X99 Asphalt Program Public Works

Version

2 - SMT review Year 2021

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Partial depth resurfacing (top layer) or Full-depth rehabilitation (top & bottom layers) with spot curb and gutter repairs would becompleted on various streets within Town.

## Justification

During a road's lifecycle, there are opportunities for work activity to extend the life of the roadway which generally coincides with its condition. Utilizing the two most economical pavement management strategies outlined in the Towns Asset Management Plan it has been determined that in order to maintain the current road network condition that rehabilitation investment varies between 800,000 to 1,100,000 over the next ten years (excluding road renewal through reconstruction activities). Using these strategies, and depending on individual road conditions, the most economical annual road resurfacing program is developed within the allocated budget

		E	Budget				
1	Total	2021	2022	2023	2024	2025	2026
Expenditures							
Construction	400,000	400,000					
Expenditures Total	400,000	400,000					
Funding							
Grants	400,000	400,000					
Funding Total	400,000	400,000					

#### Capital Projects

Project Department X96 Sidewalk Connectivity Program

Public Works

Version 2 - SMT review

Year

#### Description

2021

Installation of concrete sidewalk will be completed on various streets within Town.

## Justification

Sidewalks perform a different function in the total transportation network than roadways and their overall priority should reflect routes most commonly used by pedestrian traffic.

The Sidewalk Connectivity Plan looks to:

- provide a continuous sidewalk network that is both safe and convenient to all pedestrian user types,
- · Connect locations where sidewalks are not effectively connected to one another, and
- Remove sections of sidewalk that serve no logical purpose

The location of future sidewalks as part of the Sidewalk Connectivity Plan implementation would be completed on individual basis, following general guidelines:

- Pedestrian safety and surrounding environment
- Continuation of an existing sidewalk within the block
- Connectivity to the existing sidewalk network
- Provides logical linkage within and for future expansion of the sidewalk network
- Location of existing Community Mail Boxes
- Preference to the north or west side of a roadway to maximize solar heating value
- Preference to boulevard sidewalk to provide adequate snow and Pedestrian separation

Budget								
u —	Total	2021	2022	2023	2024	2025	2026	
Expenditures								
Construction	200,000	200,000						
Expenditures Total	200,000	200,000						
Funding								
Cont from DC Reserves	138,600	138,600						
Taxation	61,400	61,400						
Funding Total	200,000	200,000						

## Capital Projects

Project Department X96 Sidewalk Connectivity Program

Public Works

Version

2 - SMT review Year 2021

Gallery

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# Sidewalk Connectivity Plan



#### **Capital Projects**

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X95 Vienna Road			
Public Works			
2 - SMT review	Year	2021	

#### Description

The proposed location of road rehabilitation work is along Vienna Road (a two lane roadway) from Simcoe Street to the Highway 3, a distance of 1,225 meters.

This section of Connecting Link services local transit and over 7,800 AADT with approximately 10% being heavy truck traffic, providing a key link to the Towns major Forest Hill Industrial area.

The scope of engineering design work includes geotechnical investigation to confirm pavement design, development of a traffic management control plan to minimize traffic impacts considering the adjacent Forest Hill Industrial area, and engineered drawings to produce a tender ready package.

The project construction works consisting of full-depth road surface rehabilitation with curb replacement and catch basin and manhole cover adjustments/replacement that would be completed over the 2021 construction season. The construction tender would be issued in early 2021 to leverage early season construction pricing.

#### Justification

The Ministry of Transportation is providing 90% of the funds required to complete this project.

		Е					
	Total	2021	2022	2023	2024	2025	2026
Expenditures							
Construction	1,922,000	1,922,000					
Expenditures Total	1,922,000	1,922,000					
Funding							
Grants	1,729,800	1,729,800					
Taxation	192,200	192,200					
Funding Total	1,922,000	1,922,000					

#### Capital Projects

Project Department X94 Concession St W - Rolph to Charolette

Public Works

Version

2 - SMT review Year 2021

#### Description

The urbanization of Concession St. W. from Rolph to Charlotte involves the installation of new water and stormwater underground infrastructure complete with curb and gutter, boulevard sidewalks, full pavement rehabilitation and the provision of bicycle lanes.

## Justification

The replacement and renewal of core infrastructure for this project would alleviate the ongoing road maintenance to ensure compliance with MMS due to the failing road surface. This project was award ICIP Green Steam funding along with being apart of the 2021 County Capital budget for watermain replacement.

	Budget							
	Total	2021	2022	2023	2024	2025	2026	
Expenditures								
Construction	2,807,000	2,807,000						
Expenditures Total	2,807,000	2,807,000						
Funding								
Grants	1,962,000	1,962,000						
Cont from DC Reserves	492,300	492,300						
Taxation	352,700	352,700						
Funding Total	2,807,000	2,807,000						

## **Capital Projects**

Project Department X94 Concession St W - Rolph to Charolette Public Works

Version

2 - SMT review

Year

2021

#### Capital Projects

Project Department

Version

X93 Rolling Meadows Phase 2 of 2

Public Works 2 - SMT review

w .	Year
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2021

#### Description

The reconstruction of Rolling Meadows Reconstruction Phase 2 of 2 (Owl and Woodcock) project limits are Owl from Tanager to Woodcock and Woodcock from North Street to Pheasant Court

The project involves the complete reconstruction of the pavement structure including new barrier curb and gutter, sidewalks, the installation of new storm sewers and catch basins and repairs to the sanitary sewer and watermain.

## Justification

The replacement and renewal of core infrastructure for this project would alleviate the ongoing road maintenance issues to ensure compliance with MMS due to the series of watermain breaks in the area, provide an opportunity to upgrade the area to current municipal design standards as well as an opportunity to partner with the County and leverage funding efficiencies of completing road reconstruction.

Budget							
	Total	2021	2022	2023	2024	2025	2026
Expenditures							
Construction	1,722,000	1,722,000					
Expenditures Total	1,722,000	1,722,000					
Funding							
Grants	897,000	897,000					
Taxation	825,000	825,000					
Funding Total	1,722,000	1,722,000					

#### Capital Projects

Project Department X51 General Aviaton Access Road

Airport

Version 2 - SMT review

Year 2021

#### Description

Installation of asphalt road to provide vehicular traffic access to the General Aviation area and rehabilitation of Taxiway G1 to address taxiway deficiencies.

## Justification

An airport is a complex interface between the air and the ground environments, where access must be controlled and separation between aircraft and vehicular traffic must be maintained and optimised to ensure efficient and safe airport ground operations.

Designated vehicular traffic access is recommended to prevent collisions and reduce the deterioration of the taxiway. In the past, many collisions involving vehicular traffic and aircrafts have been the results of vehicular traffic using an incorrect taxiway, failing to stop at a taxiway holding point and failing to obtain a clearance before entering an area subject to control.

In all cases, these actions have the potential to put the vehicle in conflict with an aircraft which, in turn could lead to a collision.

To prevent and mitigate taxiway incidents, Staff is recommending the installation of a designated vehicular access to the General Aviation area and the rehabilitation of the Taxiway G1.

		Е	Budget			-	
	Total	2021	2022	2023	2024	2025	2026
Expenditures							
Construction	195,000	195,000					
Expenditures Total	195,000	195,000					
Funding							
Debt	195,000	195,000					
Funding Total	195,000	195,000					