Asset Management Plan

April 2019



EXECUTIVE SUMMARY

The Township of Greater Madawaska is a small, rural municipality located in Eastern Ontario. Approximately, fifty percent of the ratepayers are seasonal residents, which creates some unique challenges and some advantages when creating the Asset Management Plan as well as anticipating the desired levels of service. Some of the challenges that the municipality faces are:

- Large rural road network, with a low population density
- Aging fleet of vehicles and equipment, that will have costly replacements in the future

In order to protect its infrastructure investment, the Township of Greater Madawaska must find creative and cost effective financial solutions. One of the key tools and objectives of the Township of Greater Madawaska is the implementation of a realistic asset management plan to ensure that infrastructure is properly maintained and operational in order to meet the service requirements and to ensure that maintenance/repairs/rehabilitation is completed at the lowest cost and in a timely manner.

It is acknowledged that Asset Management cannot be a "one" time undertaking and that it must continue to be an on-going process. There must be continuous flow of data to ensure that the asset management plan is up to date with the current service level standards. As such, the Township of Greater Madawaska will be updating the Asset Management Plan regularly as conditions change in the field, as improvements are implemented, and as options and costs change with the economy.

Assets that are in the "Now Need" category have been placed as priority items on the plan as there is a greater risk of health and safety concerns or level of service failure.

As development of the Plan progresses, staff will be providing regular updates to Council.

INTRODUCTION

Our Municipality is located in the southeastern end of The County of Renfrew. The County of Renfrew is the largest geographic county in Ontario with a land mass twice the size of Prince Edward Island. The County of Renfrew was founded in 1861 by European settlers. Wilno, a hamlet nestled near Algonquin Park, is recognized as Canada's First Official Polish settlement.

The County of Renfrew contains over 7,000 square kilometers and Greater Madawaska is over 1,000 square kilometers of rugged and beautiful terrain including lakes, forests and a sparse, spread out population. The Crown holds approximately 160,000 acres or over 60 percent of the land mass in Greater Madawaska. This vast acreage affords visitors and residents employment, excellent fishing, hiking and hunting opportunities.



Greater Madawaska is a multi-dimensional active living community playing host to many great attractions such as, our long time four season resort, Calabogie Peaks. The ski hill has one of eastern Ontario's highest vertical drops. Calabogie Highlands is our 18-hole championship golf course stretching along, and next to the shores of Calabogie Lake. Our community includes Calabogie Lodge, a spectacular and successful time share development. We are home to Calabogie Motorsport Park, described as the newest and most challenging motor course in North America. It has brought visitors from across the United States and all across Canada. Crown Land and private holdings host, jointly and separately, a significant number of snowmobile and ski trails. Members of our community are also offering exciting whitewater experiences and paddling opportunities on the Madawaska River. There are numerous fishing holes and hunting spots on Crown and private land which are closely guarded multi-generational secrets.

Greater Madawaska is located 45 minutes from the western parts of Ottawa and 65 minutes from the seat of Canada's government. Our total population in 2016 was 2,518 people. We have had consistent growth of approximately 25 new homes a year over the last 10 years with our construction value topping \$9,000,000. It is estimated our population swells by between 10,000 and 15,000 over the summer months. The ski hill also has visitors in the range of 180,000 people during the winter.

The Township of Greater Madawaska was formed in 2001 from three former rural municipalities each bringing its own charm to the union and governed by five members of Council each. The Municipality is governed by four Councilors elected in three wards and a Mayor elected at large. Greater Madawaska has three transfer stations, two fire halls, two Public Works garages, a Medical Centre, a Pharmacy, a library and one central municipal administration building. The Municipality employs 18 full time employees and 6 part time employees and approximately 35 volunteer fire staff.

Our community's population is largely over 50 years of age and increasingly made up of recently retired active folks who have an avid interest in their community. We do not have a large commercial sector and are devoid of industrial tax base. Residential assessment is the financial engine funding the Municipality.

Asset Management

The main objectives of the AMP have been structured to promote the following:

- Enhanced decision making, accountability and transparency for Council
- Long term impacts of infrastructure management investment decisions and justification for such decisions
- Improved customer service and improved delivery of services at an approved level of service
- Reduction in life cycle costs while maintaining assets in a safe condition

The development of the AMP was premised on the following:

 Value-Based/Affordability The implementation decisions were based on balancing services levels, risks and associated costs. Risk-Based

To ensure the health and safety of the general public, protect the environment and preserve the assets.

 Innovative Continually improve how assets are managed by taking advantage or taking into consideration new technology and best practices.

Benefits and Objectives of Asset Management

A well developed and realistic AMP provides a "road map" for Council and staff in terms of identifying current and future needs for the Township. The AMP provides financially sustainable operating/capital expenditure needs over the predetermined time.

In general the AMP:

- Provides a guide for better decision making of the allocation of resources and funding
- Identifies the total investment required to maintain or improve infrastructure to meet or maintain the prescribed levels of service
- Provides a long-term capital program and financial strategy

Infrastructure Included in the AMP

Currently, the Township of Greater Madawaska's tangible capital assets included the following:

- Linear Assets (Roads)
- Land Improvements
- Buildings
- Machinery/Equipment
- Vehicles
- Road Allowances
- Environment sites

Methodology

The four elements of an AMP are presented in the below figure:



The Township's AMP has given consideration to costs associated with:

- Replacement Activities
- Disposal Activities
- Upgrading Activities
- New/Additional Assets

Township Asset Management Initiatives

The Council of the Township of Greater Madawaska has endorsed the following initiatives that have been undertaken:

- Asset inventories have been updated
- Condition assessments completed and the costs associated have been determined for various rehabilitation/replacement strategies
- Asset levels of service have been developed
- Identification of funding "gaps" and development of financial strategies to sustain the AMP.

STATE OF INFRASTRUCTURE

The condition of the Township of Greater Madawaska assets varies and in many instances they are reaching the end of their service lives.

A Road Needs Study was completed in July/August of 2017 by the Township of Greater Madawaska Public Works Department. This study assessed the current state of the roadways in the Township based on the approved condition rating (see ROADS below).

Facilities staff of the Township also visited each building to determine and assess the needs of the buildings, mechanical and electrical systems based on the approved condition rating (see BUILDINGS below)

The Township mechanic assessed the equipment and vehicles based on their current state and estimated the remaining useful life of the equipment and/or vehicle.

ROADS

A Road Needs Study was completed in July/August of 2017 by the Township of Greater Madawaska Public Works Department.

The report contains a list of municipal roads to prepare a plan for improving and maintaining the road system. The chart below displays the types and lengths of roadways that are included in the Asset Management Plan.

Road Type	Total Length in Kilometres (km)
Gravel	139.78
Low Class Bituminous (LCB)	36.83
Hot Mix Paved (HL4)	56.69

The purpose of the Road Needs Study is to inventory and assess the road network within the Municipality to address the Asset Management Plan required by the Province.

Roads that have varying conditions have been segmented to show the condition of each portion of the road. For example: Matawatchan Road may have a portion that is fair and a portion that

is ranked in good condition. This road would then show two different locations, each referring to the road condition rating that applies to that section of road.

Road Classification

Road classification is based on the Minimum Maintenance Standards set out by the Province which the Municipality adopted. **See Table 1**

Condition Ratings

Condition Ratings are calculated for each wear surface type. Newly constructed roads have a condition rating of Good and roads that require reconstruction or have a high level of risk are assigned Now Need. A condition rating of Now Need is considered to be unsatisfactory.

The tangible capital asset policy assumes that asphalt roads (HL4) have a life expectancy of 25 years and surface treated roads have a life expectancy of 15 years. Although, realistically some wear surfaces will exceed the life expectancy and some will fall short of life expectancy, this is dependent on a number of factors.

Each year there is 10, 000 tonnes of granular "M" accounted for in the operations budget that will be needed under loose top maintenance as part of the loose top maintenance program to maintain gravel roads at a 'Fair' condition rating.

Gravel roads are considered to have an ongoing life expectancy as long as the municipality keeps up with maintenance by applying granular to the road as in the past.

The Road conditions were assessed based on the factors in Chart 1 below. But we must keep in mind that some roads may experience faster deterioration than others, which may change capital projects in the future.

Road Condition Rating (Years Left)	Description
Good	Generally approaching mid-stage of expected
High Float – 10 to 15 yrs	service life, meets current required level of
HL4 – 17 to 25 yrs	service. Required maintenance costs are
	within acceptable standards but are increasing.
Fair	Signs of deterioration, some elements exhibit
High Float – 5 to 10 yrs	deficiencies. The asset is beginning to perform
HL4 – 9 to 17 yrs	at a lower level than initially intended.
	Maintenance costs are beginning to exceed
	acceptable standards and are increasing. Asset
	is in the later stage of its expected life.
Poor	Approaching the latter stage of its expected
High Float – 1 to 5 yrs	service life, conditions below standard, large
HL4 – 1 to 9 Years	portion of system exhibits significant
	deterioration. Maintenance costs exceed
	acceptable standards and are increasing.
Now Need	Now Need – beyond expected service life
High Float – 0 yrs	and/or widespread signs of advanced
HL4 – 0 yrs	deterioration. Some assets may be unusable
	and/or require immediate attention and/or
	repairs. Maintenance costs exceed acceptable
	standards.

Chart 1: Road Rating Description

Condition rating with a 'Now Need' will be considered for road improvements over the next 10 years.

Current Condition Ratings of Township Roadways

Below you will see a chart that shows the breakdown of the current road conditions for all Asphalt Pavement roadways in the Township. Note: that this would include roadways that have been segmented into various road condition ratings.



Below you will see a chart that shows the breakdown of the current road conditions for all Surface Treatment or LCB roadways in the Township. Note: that this would include roadways that have been segmented into various road condition ratings.



Below you will see a chart that shows the breakdown of the current road conditions for all Gravel roadways in the Township. Note: Gravel roads have not been segmented based on road condition ratings.



Benchmark Costs

To determine the cost of construction, benchmark costs are used and are associated with the capital improvement.

The estimated cost for improvements based on wear surface type. Charts 2, 3 and 4 provide costs in 2018 dollars. The cost for improvement or resurfacing is based on the roadway being 6.5m in surface wear width and applying 150mm granular base along with the new wear surface. Note: some Township roadways are not 6.5m in surface wear width so the estimated cost associated with that road would be to bring the roadway up to a 6.5m surface wear width road.

It must be noted that culvert replacements and drainage issues will be dealt with under the operating expense maintenance program in the Municipality.

Cul-de-sacs on High Float Surface roads should be paved with a 50mm lift of HL4 asphalt due to traffic turning in the cul-de-sac and tearing up the surface.

The average area for a cul-de-sac is 250m².

Chart 2: Unit Prices

ltem	Benchmark Costs
Granular "A"	\$16.00 per tonne
Double Surface Treatment	\$5.50 per square meter
Asphalt	\$110.00 per tonne
Pulverizing	\$1.35 per square meter

Chart 3: Double Surface Treatment

Partial Depth Reconstruction	Per Square Meter
Pulverize, 150 mm Granular "A" and	\$12.13
double surface treatment	

Chart 4: Asphalt

Partial Depth Reconstruction	Per Square Meter
Pulverize, 150 mm Granular "A" and 50	\$20.16
mm HL4	

Solid Waste

The Township maintains and operates two waste disposal sites (Black Donald and Mount St. Patrick) and three waste transfer station sites at Griffith, Mount St. Patrick and Norway Lake. Based on the 2016 Annual Reports the Black Donald Waste Disposal Site will have a remaining useful life of 10 years and the Mount St. Patrick will have a remaining useful life of 29 years.

The below chart provides detail of the estimated total closure costs as per Greenview Environment 2016 for each site:

		ESTIMATED CLOSURE COSTS				
SITE	CLOSURE	POST-CLOSURE	TOTAL			
Griffith	\$0	\$202,500	\$202,500			
Matawatchan	\$0	\$215,500	\$215,500			
Black Donald	\$137,500	\$477,500	\$615,000			
Mount St. Patrick	\$112,500	\$415,000	\$527,500			
Norway Lake	\$0	\$191,000	\$191,000			
TOTALS	\$250,000	\$1,501,500	\$1,751,500			

The assets that relate to all Solid Waste have been assessed and rated based on the following criteria:

Solid Waste Rating	Description
Good	Generally approaching mid-stage of expected service life, meets current required level of service. Required maintenance costs are within acceptable standards but are increasing.
Fair	Signs of deterioration, some elements exhibit deficiencies. The asset is beginning to perform at a lower level than initially intended. Maintenance costs are beginning to exceed acceptable standards and are increasing. Asset is in the later stage of its expected life.
Poor	Approaching the latter stage of its expected service life, conditions below standard, large portion of system exhibits significant deterioration. Maintenance costs exceed acceptable standards and are increasing.
Now Need	Now Need – beyond expected service life and/or widespread signs of advanced deterioration. Some assets may be unusable and/or require immediate attention and/or repairs. Maintenance costs exceed acceptable standards.

From the above noted criteria the below graph shows the current condition rating for the Solid Waste Assets:



Buildings/Facilities

The Township's asset management program is a tool to ensure the effective maintenance of the Township properties and buildings to meet or exceed legislative requirements. Staff currently monitors and maintains the building components and equipment to ensure that they meet their useful life expectations.

The condition ratings are defined as follows:

Building Facilities Condition Rating	Description
Good	Generally approaching mid-stage of expected service life, meets current required level of service. Required maintenance costs are within acceptable standards but are increasing.
Fair	Signs of deterioration, some elements exhibit deficiencies. The asset is beginning to perform at a lower level than initially intended. Maintenance costs are beginning to exceed acceptable standards and are increasing. Asset is in the later stage of its expected life.
Poor	Approaching the latter stage of its expected service life, conditions below standard, large portion of system exhibits significant deterioration. Maintenance costs exceed acceptable standards and are increasing.
Now Need	Now Need – beyond expected service life and/or widespread signs of advanced deterioration. Some assets may be unusable and/or require immediate attention and/or repairs. Maintenance costs exceed acceptable standards.

The below figure provides a summary of the overall condition ratings of all Township buildings/facilities.



Land Improvements

The Township currently has 27 assets under land improvements; these assets include but are not limited to parking lots, retaining walls, septic systems, wells, etc. The Land Improvements have been assessed based on the same condition rating as Solid Waste Assets. The below noted figure shows the current condition of all Land Improvement Assets on the AMP:



While staff was assessing the conditions of the Land Improvement Assets it was noted that there will be some upgrading of gravel parking lots to paved parking lots for health and safety concerns along with accessibility plans.

Fleet and Equipment

Fleet and equipment assets are an integral component in the Township's ability to respond to the needs of the community and provide the levels of service that are both expected by our ratepayers and mandated by legislation. Generally, vehicles and equipment are replaced as required based on the condition and service life expectancy. Depending on the asset class the current life expectancy of the Township's fleet assets and equipment assets range from eight (8) years to thirty (30) years.

The below figure shows the overall condition ratings for all vehicles/equipment:



ASSET MANAGEMENT STRATEGY AND RISK MANAGEMENT

The AMP has identified sustainable funding strategies over the long-term to ensure that sufficient monies are available to meet expected or targeted levels of service. The funding strategy may be influenced by future federal/provincial funding programs as they become available from time to time. Funding priority will be given to the assets that pose the highest level of service risk. Managing the consequences of failure is our highest priority, keeping in mind that not every asset would present the same risk of failure or would be equally critical to the operations of the Township. The condition and risk of failure of each asset has influenced the implementation of the priority assets.

The AMP utilizes level of service standards as a benchmark for the maintenance, rehabilitation and replacement of the Township's assets. The strategy has also brought forth the requirement to establish a regular and cost effective maintenance program to extend the life of the assets, specifically with the linear assets. These programs may be developed through industry standard, local experience and the desired levels of service.

The strategy utilized for prioritizing the assets was firstly based on the condition of the asset. All "Now Need" assets would be the first priority as they would require the most amount of maintenance and financial needs. From here the "Now Need" was prioritized based on the level of risk of service failure they would impose.

Risk Management

A risk assessment has been undertaken for each asset of the Township and the risk of service level failure has been instrumental in prioritizing the timing and type of capital work interventions required.

For the Linear Assets (Roads) there was a different approach to assessing the risk of service level failure. The below noted matrix was utilized to provide a points value:

	Probability of Service Level Failure			
	Low (0 points)	Medium (1 point)	High (2 points)	
Maintenance (50%)				
Steep Embankments (25%)				
Sight Lines (25%)				

For all the other assets the risk of failure was completed in a similar manner but the risk of failure was incorporated into the asset condition. Therefore, if an asset was in Fair condition but posed a medium level of service failure the asset would be moved to Poor for that reason.

It must be noted that risk levels can be reduced or mitigated through planned maintenance, rehabilitation and/or replacement of assets. An objective of this asset management plan is to reduce

the risk levels where they are deemed too high, as well as to ensure that assets are maintained in a manner that maintains risk at an acceptable level.

Some of the noted benefits for an asset upgrade, replacement or rehabilitation are:

- Health and Safety
 - Accident reduction both pedestrian, cyclists and automobile
 - Safety of employees who work with, in or around the assets
 - Injury reduction associated with accident reduction
- Environmental Impact
 - Greenhouse gas emissions
 - Groundwater and surface water impacts
 - o Climate change
- Efficiencies
 - Labour new technology provides for a faster service performance, less break downs
 - Electricity energy upgrades provide for less operating costs
 - Vehicles produce less emissions, use less fuel
 - Grant application can be "shelf" ready as the capital projects are planned for 10 years in advance

Due to the fact that the Township of Greater Madawaska is a small, rural municipality with limited resources, Council and staff must accept opportunities that coordinate resources with other local municipalities or the County of Renfrew. This may include shared services, contract negotiations, joint service boards, etc.

FINANCING STRATEGY

Township staff identified the capital needs for the organization over the next twenty (20) years. These targets were arrived at after carefully considering current replacement values, asset conditions, year of expected asset replacement, the level of service expected from each asset category and the risk to the organization based on the probability of asset failure to meet service levels. The current replacement cost (2018 values) of this capital needs study totals \$38,548,080.

This 20 year plan is based upon the Township's current responsibilities and does not include any unexpected issues that may arise nor any increased program responsibilities that may arise in the future.

Please refer to Appendix B to review the Capital Schedule which demonstrates the financial strategy as well as the corresponding costs.

Assumptions

The results of the financing strategy are based on several assumptions:

(1) Capital Investment

The projection of the amount of Capital Investment is based on a continual increase in the amount of taxation that will be utilized for these investments. In 2018 the taxation amount utilized will be \$284,530 and in 2038 the amount of taxation utilized will be \$960,000. These numbers are for new capital investments and for debt payments on previous capital investments. Debentures will be utilized to finance the capital investments that are required for the 20 year plan that the taxation amount will not cover. The debenture interest rate is based on 2018 rates from the Infrastructure Ontario Lending program.



There are a large number of assets that require replacement or rehabilitation within the first five years of the AMP. Therefore, there will be a substantial amount of monies required from debentures to complete all of the proposed projects. The below graph illustrates the forecasted debt balance for the ten year period.



(2) Provincial/Federal Revenue

The Federal Gas Tax Program, Ontario Community Infrastructure Fund and the OMPF Northern and Rural Funding programs are other sources of revenue that are stable and predictable funding available to assist with capital plans. In 2018, the Federal Gas Tax was \$79,150, the OCIF was \$50,000 and the OMPF was \$213,100.

(3) Reserves and Lot Development Charges

At December 31, 2018 the reserve budget was \$1,465,049. The financial strategy plan assumes that reserve balance will not fall below \$1,000,000. The assumption is that each year any surplus or lot development charges will be utilized for the next year.

TABLE 1

Municipal Act, 2001 Loi de 2001 sur les municipalités

ONTARIO REGULATION 239/02

MINIMUM MAINTENANCE STANDARDS FOR MUNICIPAL HIGHWAYS

Consolidation Period: From January 25, 2013 to the e-Laws currency date.

Last amendment: O. Reg. 47/13.

This Regulation is made in English only.

Definitions

1. (1) In this Regulation,

"cm" means centimetres;

- "day" means a 24-hour period;
- "ice" means all kinds of ice, however formed;
- "motor vehicle" has the same meaning as in subsection 1 (1) of the *Highway Traffic Act*, except that it does not include a motor assisted bicycle;

"non-paved surface" means a surface that is not a paved surface;

"Ontario Traffic Manual" means the Ontario Traffic Manual published by the Ministry of Transportation, as amended from time to time;

"paved surface" means a surface with a wearing layer or layers of asphalt, concrete or asphalt emulsion;

"roadway" has the same meaning as in subsection 1 (1) of the *Highway Traffic Act*;

- "shoulder" means the portion of a highway that provides lateral support to the roadway and that may accommodate stopped motor vehicles and emergency use;
- "snow accumulation" means the natural accumulation of any of the following that, alone or together, covers more than half a lane width of a roadway:
 - 1. Newly-fallen snow.
 - 2. Wind-blown snow.
 - 3. Slush;

"substantial probability" means a significant likelihood considerably in excess of 51 per cent;

"surface" means the top of a roadway or shoulder;

"weather" means air temperature, wind and precipitation. O. Reg. 239/02, s. 1 (1); O. Reg. 23/10, s. 1 (1); O. Reg. 47/13, s. 1.

(2) For the purposes of this Regulation, every highway or part of a highway under the jurisdiction of a municipality in Ontario is classified in the Table to this section as a Class 1, Class 2, Class 3, Class 4, Class 5 or Class 6 highway, based on the speed limit applicable to it and the average annual daily traffic on it. O. Reg. 239/02, s. 1 (2).

(3) For the purposes of subsection (2) and the Table to this section, the average annual daily traffic on a highway or part of a highway under municipal jurisdiction shall be determined,

- (a) by counting and averaging the daily two-way traffic on the highway or part of the highway; or
- (b) by estimating the average daily two-way traffic on the highway or part of the highway. O. Reg. 239/02, s. 1 (3); O. Reg. 23/10, s. 1 (2).

(4) For the purposes of this Regulation, a municipality is deemed to be aware of a fact if, in the absence of actual knowledge of the fact, circumstances are such that the municipality ought reasonably to be aware of the fact. O. Reg. 23/10, s. 1 (3).

TABLE CLASSIFICATION OF HIGHWAYS

Average Annual Daily Traffic (number of motor vehicles)	Posted or Statutory Speed Limit (kilometres per hour)						
(infinite of motor venicles)	91 - 100	81 - 90	71 - 80	61 - 70	51 - 60	41 - 50	1 - 40
	91 - 100	61 - 90	/1-00			41 - 30	1 - 40
15,000 or more	1	1	1	2	2	2	2
12,000 - 14,999	1	1	1	2	2	3	3
10,000 - 11,999	1	1	2	2	3	3	3
8,000 - 9,999	1	1	2	3	3	3	3
6,000 - 7,999	1	2	2	3	3	3	3
5,000 - 5,999	1	2	2	3	3	3	3
4,000 - 4,999	1	2	3	3	3	3	4
3,000 - 3,999	1	2	3	3	3	4	4
2,000 - 2,999	1	2	3	3	4	4	4
1,000 - 1,999	1	3	3	3	4	4	5
500 - 999	1	3	4	4	4	4	5
200 - 499	1	3	4	4	5	5	5
50 - 199	1	3	4	5	5	5	5
0 - 49	1	3	6	6	6	6	6

O. Reg. 613/06, s. 1.

Application

2. (1) This Regulation sets out the minimum standards of repair for highways under municipal jurisdiction for the purpose of clause 44(3)(c) of the Act. O. Reg. 288/03, s. 1.

- (2) REVOKED: O. Reg. 23/10, s. 2.
- (3) This Regulation does not apply to Class 6 highways. O. Reg. 239/02, s. 2 (3).

MINIMUM STANDARDS

Patrolling

3. (1) The minimum standard for the frequency of patrolling of highways to check for conditions described in this Regulation is set out in the Table to this section. O. Reg. 23/10, s. 3(1).

(2) If it is determined by the municipality that the weather monitoring referred to in section 3.1 indicates that there is a substantial probability of snow accumulation on roadways, ice formation on roadways or icy roadways, the minimum standard for patrolling highways is, in addition to that set out in subsection (1), to patrol highways that the municipality selects as representative of its highways, at intervals deemed necessary by the municipality, to check for such conditions. O. Reg. 47/13, s. 2.

(3) Patrolling a highway consists of observing the highway, either by driving on or by electronically monitoring the highway, and may be performed by persons responsible for patrolling highways or by persons responsible for or performing highway maintenance activities. O. Reg. 23/10, s. 3 (1).

(4) This section does not apply in respect of the conditions described in section 10, subsections 11 (0.1) and 12 (1) and section 16.1. O. Reg. 23/10, s. 3 (1).

TABLE PATROLLING FREQUENCY

Class of Highway	Patrolling Frequency
1	3 times every 7 days
2	2 times every 7 days
3	once every 7 days
4	once every 14 days
5	once every 30 days

Weather monitoring

3.1 (1) From October 1 to April 30, the minimum standard is to monitor the weather, both current and forecast to occur in the next 24 hours, once every shift or three times per calendar day, whichever is more frequent, at intervals determined by the municipality. O. Reg. 47/13, s. 3.

(2) From May 1 to September 30, the minimum standard is to monitor the weather, both current and forecast to occur in the next 24 hours, once per calendar day. O. Reg. 47/13, s. 3.

Snow accumulation

4. (1) The minimum standard for addressing snow accumulation is,

- (a) after becoming aware of the fact that the snow accumulation on a roadway is greater than the depth set out in the Table to this section, to deploy resources as soon as practicable to address the snow accumulation; and
- (b) after the snow accumulation has ended, to address the snow accumulation so as to reduce the snow to a depth less than or equal to the depth set out in the Table within the time set out in the Table,
 - (i) to provide a minimum lane width of the lesser of three metres for each lane or the actual lane width, or
 - (ii) on a Class 4 or Class 5 highway with two lanes, to provide a total width of at least five metres. O. Reg. 47/13, s. 4.

(2) If the depth of snow accumulation on a roadway is less than or equal to the depth set out in the Table to this section, the roadway is deemed to be in a state of repair with respect to snow accumulation. O. Reg. 47/13, s. 4.

(3) For the purposes of this section, the depth of snow accumulation on a roadway may be determined in accordance with subsection (4) by a municipal employee, agent or contractor, whose duties or responsibilities include one or more of the following:

- 1. Patrolling highways.
- 2. Performing highway maintenance activities.
- 3. Supervising staff who perform activities described in paragraph 1 or 2. O. Reg. 47/13, s. 4.
- (4) The depth of snow accumulation on a roadway may be determined by,
- (a) performing an actual measurement;
- (b) monitoring the weather; or
- (c) performing a visual estimate. O. Reg. 47/13, s. 4.
- (5) For the purposes of this section, addressing snow accumulation on a roadway includes, but is not limited to,
- (a) plowing the roadway;
- (b) salting the roadway;
- (c) applying abrasive materials to the roadway; or
- (d) any combination of the methods described in clauses (a), (b) and (c). O. Reg. 47/13, s. 4.
- (6) This section does not apply to that portion of the roadway designated for parking. O. Reg. 47/13, s. 4.

TABLE SNOW ACCUMULATION

Class of Highway	Depth	Time
1	2.5 cm	4 hours
2	5 cm	6 hours
3	8 cm	12 hours
4	8 cm	16 hours
5	10 cm	24 hours

O. Reg. 47/13, s. 4.

Ice formation on roadways and icy roadways

5. (1) The minimum standard for the prevention of ice formation on roadways is doing the following in the 24-hour period preceding an alleged formation of ice on a roadway:

- 1. Monitor the weather in accordance with section 3.1.
- 2. Patrol in accordance with section 3.
- 3. If the municipality determines, as a result of its activities under paragraph 1 or 2, that there is a substantial probability of ice forming on a roadway, treat the roadway to prevent ice formation within the time set out in the Table to this section, starting from the time that the municipality determines is the appropriate time to deploy resources for that purpose. O. Reg. 47/13, s. 5.

(2) If the municipality meets the minimum standard set out in subsection (1) and, despite such compliance, ice forms on a roadway, the roadway is deemed to be in a state of repair until the earlier of,

- (a) the time that the municipality becomes aware of the fact that the roadway is icy; or
- (b) the applicable time set out in the Table to this section for treating the roadway to prevent ice formation expires. O. Reg. 47/13, s. 5.

(3) The minimum standard for treating icy roadways after the municipality becomes aware of the fact that a roadway is icy is to treat the icy roadway within the time set out in the Table to this section, and an icy roadway is deemed to be in a state of repair until the applicable time set out in the Table for treating the icy roadway expires. O. Reg. 47/13, s. 5.

(4) For the purposes of this section, treating a roadway means applying material to the roadway, including but not limited to, salt, sand or any combination of salt and sand. O. Reg. 47/13, s. 5.

TABLE ICE FORMATION PREVENTION AND ICY ROADWAYS

Class of Highway	Time
1	3 hours
2	4 hours
3	8 hours
4	12 hours
5	16 hours

O. Reg. 47/13, s. 5.

Potholes

6. (1) If a pothole exceeds both the surface area and depth set out in Table 1, 2 or 3 to this section, as the case may be, the minimum standard is to repair the pothole within the time set out in Table 1, 2 or 3, as appropriate, after becoming aware of the fact. O. Reg. 239/02, s. 6 (1).

(2) A pothole is deemed to be in a state of repair if its surface area or depth is less than or equal to that set out in Table 1, 2 or 3, as appropriate. O. Reg. 239/02, s. 6 (2); O. Reg. 47/13, s. 6.

TABLE 1POTHOLES ON PAVED SURFACE OF ROADWAY

Class of Highway	Surface Area	Depth	Time
1	600 cm ²	8 cm	4 days
2	800 cm ²	8 cm	4 days
3	1000 cm ²	8 cm	7 days
4	1000 cm ²	8 cm	14 days
5	1000 cm ²	8 cm	30 days

O. Reg. 239/02, s. 6, Table 1.

TABLE 2POTHOLES ON NON-PAVED SURFACE OF ROADWAY

Class of Highway	Surface Area	Depth	Time
3	1500 cm ²	8 cm	7 days
4	1500 cm ²	10 cm	14 days
5	1500 cm ²	12 cm	30 days

O. Reg. 239/02, s. 6, Table 2.

TABLE 3 POTHOLES ON PAVED OR NON-PAVED SURFACE OF SHOULDER

Class of Highway	Surface Area	Depth	Time
1	1500 cm ²	8 cm	7 days
2	1500 cm ²	8 cm	7 days
3	1500 cm ²	8 cm	14 days
4	1500 cm ²	10 cm	30 days
5	1500 cm ²	12 cm	60 days

O. Reg. 239/02, s. 6, Table 3.

Shoulder drop-offs

7. (1) If a shoulder drop-off is deeper, for a continuous distance of 20 metres or more, than the depth set out in the Table to this section, the minimum standard is to repair the shoulder drop-off within the time set out in the Table after becoming aware of the fact. O. Reg. 239/02, s. 7 (1).

(2) A shoulder drop-off is deemed to be in a state of repair if its depth is less than or equal to that set out in the Table. O. Reg. 239/02, s. 7 (2); O. Reg. 47/13, s. 7.

(3) In this section,

"shoulder drop-off" means the vertical differential, where the paved surface of the roadway is higher than the surface of the shoulder, between the paved surface of the roadway and the paved or non-paved surface of the shoulder. O. Reg. 239/02, s. 7 (3).

TABLE SHOULDER DROP-OFFS

Class of Highway	Depth	Time
1	8 cm	4 days
2	8 cm	4 days
3	8 cm	7 days
4	8 cm	14 days
5	8 cm	30 days

O. Reg. 239/02, s. 7, Table.

Cracks

8. (1) If a crack on the paved surface of a roadway is greater, for a continuous distance of three metres or more, than both the width and depth set out in the Table to this section, the minimum standard is to repair the crack within the time set out in the Table after becoming aware of the fact. O. Reg. 239/02, s. 8 (1).

(2) A crack is deemed to be in a state of repair if its width or depth is less than or equal to that set out in the Table. O. Reg. 239/02, s. 8 (2); O. Reg. 47/13, s. 8.

TABLE CRACKS

Class of Highway	Width	Depth	Time
1	5 cm	5 cm	30 days
2	5 cm	5 cm	30 days
3	5 cm	5 cm	60 days
4	5 cm	5 cm	180 days
5	5 cm	5 cm	180 days

O. Reg. 239/02, s. 8, Table.

Debris

9. (1) If there is debris on a roadway, the minimum standard is to deploy resources, as soon as practicable after becoming aware of the fact, to remove the debris. O. Reg. 239/02, s. 9 (1).

(2) In this section,

"debris" means any material (except snow, slush or ice) or object on a roadway,

- (a) that is not an integral part of the roadway or has not been intentionally placed on the roadway by a municipality, and
- (b) that is reasonably likely to cause damage to a motor vehicle or to injure a person in a motor vehicle. O. Reg. 239/02, s. 9 (2); O. Reg. 47/13, s. 9.

Luminaires

10. (0.1) The minimum standard for the frequency of inspecting all luminaires to check to see that they are functioning is once per calendar year, with each inspection taking place not more than 16 months from the previous inspection. O. Reg. 23/10, s. 6; O. Reg. 47/13, s. 10 (1).

(1) For conventional illumination, if three or more consecutive luminaires on a highway are not functioning, the minimum standard is to repair the luminaires within the time set out in the Table to this section after becoming aware of the fact. O. Reg. 239/02, s. 10 (1).

(2) For conventional illumination and high mast illumination, if 30 per cent or more of the luminaires on any kilometre of highway are not functioning, the minimum standard is to repair the luminaires within the time set out in the Table to this section after becoming aware of the fact. O. Reg. 239/02, s. 10 (2).

(3) Despite subsection (2), for high mast illumination, if all of the luminaires on consecutive poles are not functioning, the minimum standard is to deploy resources as soon as practicable after becoming aware of the fact to repair the luminaires. O. Reg. 239/02, s. 10 (3).

(4) Despite subsections (1), (2) and (3), for conventional illumination and high mast illumination, if more than 50 per cent of the luminaires on any kilometre of a Class 1 highway with a speed limit of 90 kilometres per hour or more are not functioning, the minimum standard is to deploy resources as soon as practicable after becoming aware of the fact to repair the luminaires. O. Reg. 239/02, s. 10 (4).

- (5) Luminaires are deemed to be in a state of repair,
- (a) for the purpose of subsection (1), if the number of non-functioning consecutive luminaires does not exceed two;
- (b) for the purpose of subsection (2), if more than 70 per cent of luminaires on any kilometre of highway are functioning;
- (c) for the purpose of subsection (3), if one or more of the luminaires on consecutive poles are functioning;
- (d) for the purpose of subsection (4), if more than 50 per cent of luminaires on any kilometre of highway are functioning. O. Reg. 239/02, s. 10 (5); O. Reg. 47/13, s. 10 (2).
- (6) Subsections (1), (2) and (3) only apply to,
- (a) Class 1 and Class 2 highways; and

- (b) Class 3, Class 4 and Class 5 highways with a posted speed of 80 kilometres per hour or more. O. Reg. 239/02, s. 10 (6).
- (7) In this section,

"conventional illumination" means lighting, other than high mast illumination, where there are one or more luminaires per pole;

"high mast illumination" means lighting where there are three or more luminaires per pole and the height of the pole exceeds 20 metres;

"luminaire" means a complete lighting unit consisting of,

- (a) a lamp, and
- (b) parts designed to distribute the light, to position or protect the lamp and to connect the lamp to the power supply. O. Reg. 239/02, s. 10 (7).

TABLE LUMINAIRES

Class of Highway	Time
1	7 days
2	7 days
3	14 days
4	14 days
5	14 days

O. Reg. 239/02, s. 10, Table.

Signs

11. (0.1) The minimum standard for the frequency of inspecting signs of a type listed in subsection (2) to check to see that they meet the retro-reflectivity requirements of the Ontario Traffic Manual is once per calendar year, with each inspection taking place not more than 16 months from the previous inspection. O. Reg. 23/10, s. 7 (1); O. Reg. 47/13, s. 11 (1).

(0.2) A sign that has been inspected in accordance with subsection (0.1) is deemed to be in a state of repair with respect to the retro-reflectivity requirements of the Ontario Traffic Manual until the next inspection in accordance with that subsection, provided that the municipality does not acquire actual knowledge that the sign has ceased to meet these requirements. O. Reg. 47/13, s. 11 (2).

(1) If any sign of a type listed in subsection (2) is illegible, improperly oriented, obscured or missing, the minimum standard is to deploy resources as soon as practicable after becoming aware of the fact to repair or replace the sign. O. Reg. 239/02, s. 11 (1); O. Reg. 23/10, s. 7 (2).

- (2) This section applies to the following types of signs:
- 1. Checkerboard.
- 2. Curve sign with advisory speed tab.
- 3. Do not enter.
- 3.1 Load Restricted Bridge.
- 3.2 Low Bridge.
- 3.3 Low Bridge Ahead.
- 4. One Way.
- 5. School Zone Speed Limit.
- 6. Stop.
- 7. Stop Ahead.
- 8. Stop Ahead, New.
- 9. Traffic Signal Ahead, New.

- 10. Two-Way Traffic Ahead.
- 11. Wrong Way.
- 12. Yield.
- 13. Yield Ahead.
- 14. Yield Ahead, New. O. Reg. 239/02, s. 11 (2); O. Reg. 23/10, s. 7 (3).

Regulatory or warning signs

12. (1) The minimum standard for the frequency of inspecting regulatory signs or warning signs to check to see that they meet the retro-reflectivity requirements of the Ontario Traffic Manual is once per calendar year, with each inspection taking place not more than 16 months from the previous inspection. O. Reg. 23/10, s. 8; O. Reg. 47/13, s. 12 (1).

(1.1) A regulatory sign or warning sign that has been inspected in accordance with subsection (1) is deemed to be in a state of repair with respect to the retro-reflectivity requirements of the Ontario Traffic Manual until the next inspection in accordance with that subsection, provided that the municipality does not acquire actual knowledge that the sign has ceased to meet these requirements. O. Reg. 47/13, s. 12 (2).

(2) If a regulatory sign or warning sign is illegible, improperly oriented, obscured or missing, the minimum standard is to repair or replace the sign within the time set out in the Table to this section after becoming aware of the fact. O. Reg. 23/10, s. 8.

(3) In this section,

"regulatory sign" and "warning sign" have the same meanings as in the Ontario Traffic Manual, except that they do not include a sign listed in subsection 11 (2) of this Regulation. O. Reg. 23/10, s. 8.

TABLE REGULATORY AND WARNING SIGNS

Class of Highway	Time
1	7 days
2	14 days
3	21 days
4	30 days
5	30 days

O. Reg. 239/02, s. 12, Table.

Traffic control signal systems

13. (1) If a traffic control signal system is defective in any way described in subsection (2), the minimum standard is to deploy resources as soon as practicable after becoming aware of the defect to repair the defect or replace the defective component of the traffic control signal system. O. Reg. 239/02, s. 13 (1).

- (2) This section applies if a traffic control signal system is defective in any of the following ways:
- 1. One or more displays show conflicting signal indications.
- 2. The angle of a traffic control signal or pedestrian control indication has been changed in such a way that the traffic or pedestrian facing it does not have clear visibility of the information conveyed or that it conveys confusing information to traffic or pedestrians facing other directions.
- 3. A phase required to allow a pedestrian or vehicle to safely travel through an intersection fails to occur.
- 4. There are phase or cycle timing errors interfering with the ability of a pedestrian or vehicle to safely travel through an intersection.
- 5. There is a power failure in the traffic control signal system.
- 6. The traffic control signal system cabinet has been displaced from its proper position.
- 7. There is a failure of any of the traffic control signal support structures.
- 8. A signal lamp or a pedestrian control indication is not functioning.
- 9. Signals are flashing when flashing mode is not a part of the normal signal operation. O. Reg. 239/02, s. 13 (2).

(3) Despite subsection (1) and paragraph 8 of subsection (2), if the posted speed of all approaches to the intersection or location of the non-functioning signal lamp or pedestrian control indication is less than 80 kilometres per hour and the signal that is not functioning is a green or a pedestrian "walk" signal, the minimum standard is to repair or replace the defective component by the end of the next business day. O. Reg. 239/02, s. 13 (3).

(4) In this section and section 14,

"cycle" means a complete sequence of traffic control indications at a location;

"display" means the illuminated and non-illuminated signals facing the traffic;

"indication" has the same meaning as in the *Highway Traffic Act*;

"phase" means a part of a cycle from the time where one or more traffic directions receive a green indication to the time where one or more different traffic directions receive a green indication;

"power failure" means a reduction in power or a loss in power preventing the traffic control signal system from operating as intended;

"traffic control signal" has the same meaning as in the Highway Traffic Act;

"traffic control signal system" has the same meaning as in the Highway Traffic Act. O. Reg. 239/02, s. 13 (4).

Traffic control signal system sub-systems

14. (1) The minimum standard is to inspect, test and maintain the following traffic control signal system subsystems once per calendar year, with each inspection taking place not more than 16 months from the previous inspection:

- 1. The display sub-system, consisting of traffic signal and pedestrian crossing heads, physical support structures and support cables.
- 2. The traffic control sub-system, including the traffic control signal cabinet and internal devices such as timer, detection devices and associated hardware, but excluding conflict monitors.
- 3. The external detection sub-system, consisting of detection sensors for all vehicles, including emergency and railway vehicles and pedestrian push- buttons. O. Reg. 239/02, s. 14 (1); O. Reg. 47/13, s. 13 (1).

(1.1) A traffic control signal system sub-system that has been inspected, tested and maintained in accordance with subsection (1) is deemed to be in a state of repair until the next inspection in accordance with that subsection, provided that the municipality does not acquire actual knowledge that the traffic control signal system sub-system has ceased to be in a state of repair. O. Reg. 47/13, s. 13 (2).

(2) The minimum standard is to inspect, test and maintain conflict monitors every five to seven months and at least twice per calendar year. O. Reg. 239/02, s. 14 (2); O. Reg. 47/13, s. 13 (3).

(2.1) A conflict monitor that has been inspected, tested and maintained in accordance with subsection (2) is deemed to be in a state of repair until the next inspection in accordance with that subsection, provided that the municipality does not acquire actual knowledge that the conflict monitor has ceased to be in a state of repair. O. Reg. 47/13, s. 13 (4).

(3) In this section,

"conflict monitor" means a device that continually checks for conflicting signal indications and responds to a conflict by emitting a signal. O. Reg. 239/02, s. 14 (3).

Bridge deck spalls

15. (1) If a bridge deck spall exceeds both the surface area and depth set out in the Table to this section, the minimum standard is to repair the bridge deck spall within the time set out in the Table after becoming aware of the fact. O. Reg. 239/02, s. 15 (1).

(2) A bridge deck spall is deemed to be in a state of repair if its surface area or depth is less than or equal to that set out in the Table. O. Reg. 239/02, s. 15 (2); O. Reg. 47/13, s. 14.

(3) In this section,

"bridge deck spall" means a cavity left by one or more fragments detaching from the paved surface of the roadway or shoulder of a bridge. O. Reg. 239/02, s. 15 (3).

TABLE BRIDGE DECK SPALLS

Class of Highway	Surface Area	Depth	Time
1	600 cm ²	8 cm	4 days
2	800 cm ²	8 cm	4 days
3	1,000 cm ²	8 cm	7 days
4	1,000 cm ²	8 cm	7 days
5	1,000 cm ²	8 cm	7 days

O. Reg. 239/02, s. 15, Table.

Roadway surface discontinuities

16. (1) If a surface discontinuity on a roadway, other than a surface discontinuity on a bridge deck, exceeds the height set out in the Table to this section, the minimum standard is to repair the surface discontinuity within the time set out in the Table after becoming aware of the fact. O. Reg. 23/10, s. 9.

(1.1) A surface discontinuity on a roadway, other than a surface discontinuity on a bridge deck, is deemed to be in a state of repair if its height is less than or equal to the height set out in the Table to this section. O. Reg. 47/13, s. 15.

(2) If a surface discontinuity on a bridge deck exceeds five centimetres, the minimum standard is to deploy resources as soon as practicable after becoming aware of the fact to repair the surface discontinuity on the bridge deck. O. Reg. 23/10, s. 9.

(2.1) A surface discontinuity on a bridge deck is deemed to be in a state of repair if its height is less than or equal to five centimetres. O. Reg. 47/13, s. 15.

(3) In this section,

"surface discontinuity" means a vertical discontinuity creating a step formation at joints or cracks in the paved surface of the roadway, including bridge deck joints, expansion joints and approach slabs to a bridge. O. Reg. 23/10, s. 9.

TABLE SURFACE DISCONTINUITIES

Class of Highway	Height	Time
1	5 cm	2 days
2	5 cm	2 days
3	5 cm	7 days
4	5 cm	21 days
5	5 cm	21 days

O. Reg. 239/02, s. 16, Table.

Sidewalk surface discontinuities

16.1 (1) The minimum standard for the frequency of inspecting sidewalks to check for surface discontinuity is once per calendar year, with each inspection taking place not more than 16 months from the previous inspection. O. Reg. 23/10, s. 10; O. Reg. 47/13, s. 16 (1).

(1.1) A sidewalk that has been inspected in accordance with subsection (1) is deemed to be in a state of repair with respect to any surface discontinuity until the next inspection in accordance with that subsection, provided that the municipality does not acquire actual knowledge of the presence of a surface discontinuity in excess of two centimetres. O. Reg. 47/13, s. 16 (2).

(2) If a surface discontinuity on a sidewalk exceeds two centimetres, the minimum standard is to treat the surface discontinuity within 14 days after acquiring actual knowledge of the fact. O. Reg. 23/10, s. 10; O. Reg. 47/13, s. 16 (3).

(2.1) A surface discontinuity on a sidewalk is deemed to be in a state of repair if it is less than or equal to two centimetres. O. Reg. 47/13, s. 16 (4).

(3) For the purpose of subsection (2), treating a surface discontinuity on a sidewalk means taking reasonable measures to protect users of the sidewalk from the discontinuity, including making permanent or temporary repairs, alerting users' attention to the discontinuity or preventing access to the area of discontinuity. O. Reg. 23/10, s. 10.

(4) In this section,

"surface discontinuity" means a vertical discontinuity creating a step formation at joints or cracks in the surface of the sidewalk. O. Reg. 23/10, s. 10.

REVIEW OF REGULATION

Review

17. (1) The Minister of Transportation shall conduct a review of this Regulation and Ontario Regulation 612/06 (Minimum Maintenance Standards for Highways in the City of Toronto) made under the *City of Toronto Act, 2006* every five years. O. Reg. 613/06, s. 2.

(2) Despite subsection (1), the first review after the completion of the review started before the end of 2007 shall be started five years after the day Ontario Regulation 23/10 is filed. O. Reg. 23/10, s. 11.

18. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS REGULATION). O. Reg. 239/02, s. 18.

Asset Management Plan Overview

	Approved 2018	Projection 2019	Projection 2020	Projection 2021	Projection 2022	Projection 2023	Projection 2024	Projection 2025	Projection 2026	Projection 2027	Projection 2028	Projection 2029	Projection 2030	Projection 2031	Projection 2032	Projection 2033	Projection 2034	Projection 2035	Projection 2036	Projection 2037	Projection 2038
Total Municipal Taxation	2,991,380	3,157,430	3,330,484	2 405 700	3,667,462	3,854,420	4,023,771	4,212,650	4,409,329	4,610,542	4.824.235	5,043,213	5,270,638	5,484,795	F 70F 227	5,923,615	6,132,781	6,344,778	6,564,721	6 702 912	7,030,596
Total Municipal Taxation Grants Applied For	2,991,380	3,157,430 1,156,870	3,330,484	3,495,799	3,007,402	3,854,420	4,023,771	4,212,650	4,409,329	4,610,542	4,824,235	5,043,213	5,270,638	5,484,795	5,705,327	5,923,615	6,132,781	6,344,778	6,564,721	6,792,813	7,030,596
Other Revenues	2,349,033	2,371,201	1,855,771	2,157,165	2,036,610	2,012,084	2,016,014	2,018,280	2,048,755	2,026,523	2,032,988	2,038,051	2,071,603	2,039,043	2,039,056	2,046,925	2,098,695	2,069,337	2,068,165	2,059,413	2,077,468
Debt	1,106,613	310,000	355,000	-	1,310,000	925,000	450,000	685,000	375,000	350,000	1,215,000	-	-	-	-	-	-	-	-	-	-
Unfinanced	149,017	342,400	-	108,000	-	-	-	-	-	88,000	-	300,000	190,000	160,000	55,000	-	-	-	-	-	-
	7,882,633	7,337,901	5,541,255	5,760,964	7,014,072	6,791,504	6,489,785	6,915,930	6,833,084	7,075,065	8,072,223	7,381,264	7,532,241	7,683,838	7,799,383	7,970,540	8,231,476	8,414,115	8,632,886	8,852,226	9,108,064
Operating	4,273,180	4,372,990	4,504,180	4,639,305	4,808,484	4,921,839	5,069,494	5,221,579	5,408,226	5,539,573	5,705,760	5,876,933	6,083,241	6,234,838	6,421,883	6,614,540	6,842,976	7,017,365	7,227,886	7,444,723	7,668,064
Capital	3,609,453	2,964,911	1,037,075	1,121,659	2,205,588	1,869,666	1,420,292	1,694,351	1,424,858	1,535,492	2,366,463	1,504,331	1,449,000	1,449,000	1,377,500	1,356,000	1,388,500	1,396,750	1,405,000	1,407,503	1,440,000
Total Expenses	7,882,633	7,337,901	5,541,255	5,760,964	7,014,072	6,791,504	6,489,785	6,915,930	6,833,084	7,075,065	8,072,223	7,381,264	7,532,241	7,683,838	7,799,383	7,970,540	8,231,476	8,414,115	8,632,886	8,852,226	9,108,064
-																					
Overall Taxation increase	5.6%	5.6%	5.5%	5.0%	4.9%	5.1%	4.4%	4.7%	4.7%	4.6%	4.6%	4.5%	4.5%	4.1%	4.0%	3.8%	3.5%	3.5%	3.5%	3.5%	3.5%
Touchion increase Due to Operating	4.5%	4.3%	4.5%	4.0%	4.0%	3.8%	3.7%	3.7%	2 70/	3.5%	3.5%	3.4%	3.4%	3.5%	2 40/	3.2%	3.0%	3.3%	3.3%	3.4%	3.0%
Taxation increase Due to Operating	4.5%	4.3%	4.5%	4.0%	4.0%	3.8%	3.7%	3.7%	3.7%	3.3%	3.3%	3.4%	3.4%	3.3%	3.4%	3.2%	3.0%	3.3%	3.3%	3.4%	3.0%
Taxation increase Due to Capital	1.0%	2.2%	0.1%	0.9%	0.9%	1.3%	0.7%	1.0%	1.0%	1.1%	1.2%	1.1%	1.1%	0.6%	0.6%	0.6%	0.5%	0.1%	0.1%	0.0%	0.5%
Debt Balance	2,013,541	2,026,340	1,931,309	1,495,263	2,372,901	2,667,040	2,396,179	2,401,068	2,117,406	1,825,745	2,458,584	1,974,253	1,545,253	1,116,253	758,753	497,753	284,253	127,503	42,503	0	0
		262.640	262.640	464 640	161 610	464 640	464 640	454 540	464 640	540,640	540.640	040 640	4 000 640	4 400 640	4 35 4 6 4 9	4 4 70 6 40	4 00 4 6 40	004 640	504 640	450.640	(200.252)
Unfinanced balance	94,948	363,648	363,648	461,648	461,648	461,648	461,648	461,648	461,648	549,648	549,648	849,648	1,039,648	1,199,648	1,254,648	1,179,648	1,024,648	804,648	504,648	159,648	(260,352)
Total Debt/Unfinanced	2,108,489	2,389,988	2,294,957	1,956,911	2,834,549	3,128,688	2,857,827	2,862,716	2,579,054	2,375,393	3,008,232	2,823,901	2,584,901	2,315,901	2,013,401	1,677,401	1,308,901	932,151	547,151	159,648	(260,352)
2017 Asset Management Plan Summary																					
Overall Taxation increase	5.6%	5.6%	5.5%	5.0%	5.0%	4.8%	4.8%	4.7%	4.7%	4.5%	4.4%	4.4%	4.3%	4.0%	4.0%	3.8%	3.5%	3.5%	3.5%	3.5%	
Touction increase Due to Onersting	4 50/	4 50/	4 50/	4.00/	4.0%	2.90/	2 70/	2 70/	2 70/	3.5%	2 50/	3.5%	3.4%	2 50/	2 40/	2.20/	2.00/	3.4%	2.49/	2 50/	
Taxation increase Due to Operating	4.5%	4.5%	4.5%	4.0%	4.0%	3.8%	3.7%	3.7%	3.7%	3.3%	3.5%	3.5%	3.4%	3.5%	3.4%	3.3%	3.0%	5.4%	3.4%	3.5%	
Taxation increase Due to Capital	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	0.9%	0.9%	0.8%	0.5%	0.5%	0.5%	0.5%	0.1%	0.1%	0.0%	
Debt Balance	2,176,128	2,057,158	1,850,888	1,454,303	2,159,503	2,180,553	1,776,353	1,802,453	1,875,053	1,679,653	1,888,053	1,526,753	1,178,953	831,153	559,753	385,003	230,503	97,503	32,503	3	
Unfinanced balance	298,882	488,882	488,882	528,882	528,882	528,882	605,882	588,382	588,382	630,382	630,382	825,382	965,382	1,080,382	1,090,382	975,382	810,382	615,382	345,382	42,882	
Total Debt/Unfinanced	2,475,010	2.546.040	2,339,770	1.983.185	2.688.385	2,709,435	2.382.235	2.390.835	2.463.435	2.310.035	2.518.435	2.352.135	2,144,335	1,911,535	1,650,135	1.360.385	1.040.885	712.885	377,885	42,885	
Total Debty Oninianceu	2,475,010	2,340,040	2,339,110	1,905,105	2,000,365	2,703,433	2,302,233	2,390,833	2,403,433	2,310,033	2,310,433	2,352,135	2,144,555	1,911,000	1,050,155	1,300,365	1,040,005	/12,005	377,083	42,005	

Asset Management Plan Capital

<u>Capital</u>	Approved 2018 <u>Budget</u>	2019 <u>Projection</u>	2020 <u>Projection</u>	2021 <u>Projection</u>	2022 <u>Projection</u>	2023 <u>Projection</u>	2024 <u>Projection</u>	2025 <u>Projection</u>	2026 <u>Projection</u>	2027 <u>Projection</u>	2028 <u>Projection</u>	2029 <u>Projection</u>	2030 <u>Projection</u>	2031 <u>Projection</u>	2032 <u>Projection</u>	2033 <u>Projection</u>	2034 <u>Projection</u>	2035 <u>Projection</u>	2036 Projection	2037 <u>Projection</u>	2038 <u>Projection</u>
TAXATION FOR CAPITAL & Debt	284,530	350,379	352,075	383,659	415,588	464,666	490,292	529,351	569,858	617,492	671,463	724,331	779,000	809,000	842,500	876,000	908,500	916,750	925,000	927,503	960,000
GRANTS - CAPITAL	333,100	486,770	330,000	330,000	330,000	330,000	330,000	330,000	330,000	330,000	330,000	330,000	330,000	330,000	330,000	330,000	330,000	330,000	330,000	330,000	330,000
RESERVES AND DEV'P CHGS	449,603	318,492		300,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000
TOTAL CAPITAL INCOME	1,067,233	1,155,641	682,075	1,013,659	895,588	944,666	970,292	1,009,351	1,049,858	1,097,492	1,151,463	1,204,331	1,259,000	1,289,000	1,322,500	1,356,000	1,388,500	1,396,750	1,405,000	1,407,503	1,440,000
GRANTS - CAPITAL Applied For	1,286,590	1,156,870																			
TOTAL EXTRAORDINARY INCOME	1,286,590	1,156,870	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Debenture/Grant - Roads	475,117	-			180,000	500,000	450,000	350,000	375,000		850,000	-	-	-	-	-	-	-	-	-	-
Debenture - Equipment	631,496	310,000	355,000	-	1,130,000	425,000		335,000		350,000	365,000					-	-	-	-	-	
CAPITAL UNFINANCED/MISC	149,017	342,400	-	108,000						88,000		300,000	190,000	160,000	55,000						
TOTAL DEBT/UNFINANCE	1,255,630	652,400	355,000	108,000	1,310,000	925,000	450,000	685,000	375,000	438,000	1,215,000	300,000	190,000	160,000	55,000	0	0	0	0	0	0
TOTAL DEBT/UNFINANCE	1,255,630	652,400	355,000	108,000	1,310,000	925,000	450,000	685,000	375,000	438,000	1,215,000	300,000	190,000	160,000	55,000	0	0	0	0	0	0
TOTAL CAPITAL REVENUE	3,609,453	2,964,911	1,037,075	1,121,659	2,205,588	1,869,666	1,420,292	1,694,351	1,424,858	1,535,492	2,366,463	1,504,331	1,449,000	1,449,000	1,377,500	1,356,000	1,388,500	1,396,750	1,405,000	1,407,503	1,440,000
Roads	2,147,953	1,970,300	44,044	535,613	583,226	663,804	571,430	556,239	661,196	508,831	1,364,302	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000
Solid Waste	-	-	50,000	20,000	-	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Facilities	237,310	111,000	142,000	-	60,000	165,000	25,000	155,000	50,000	35,000	35,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Land Improvements	-	92,710	-	-	-	-	65,000	40,000	-	-	-	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
Vehicle and Equipment	824,000	420,000	351,000	120,000	1,130,000	400,000	38,000	263,000	55,000	350,000	385,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000
Total	3,209,263	2,594,010	587,044	675,613	1,773,226	1,238,804	699,430	1,014,239	766,196	893,831	1,784,302	1,020,000	1,020,000	1,020,000	1,020,000	1,020,000	1,020,000	1,020,000	1,020,000	1,020,000	1,020,000
Debt Payments	241,870	297,201	450,031	436,046	432,361	630,861	720,861	680,111	658,661	641,661	582,161	484,331	429,000	429,000	357,500	261,000	213,500	156,750	85,000	42,503	-
Unfinance Payment	158,320	73,700	-,	10,000	. ,	-,	- /	- /	-,	,	,	,	-,	.,	,	75,000	155,000	220,000	300,000	345,000	420,000
Total Capital Expenditures	3,609,453	2,964,911	1,037,075	1,121,659	2,205,588	1,869,666	1,420,292	1,694,351	1,424,858	1,535,492	2,366,463	1,504,331	1,449,000	1,449,000	1,377,500	1,356,000	1,388,500	1,396,750	1,405,000	1,407,503	1,440,000

Road	ds
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Roads				Total	11,573,907	1,970,300	44,044	535,613	583,226	663,804	571,430	556,239	661,196	508,831	1,364,302
		Detailed Asset			Replacement										
		Description	Projected	Construction Loweth	and/or										
	Asset Name 1, 2	(Gravel/LCB/HL4) 1, 2	Replacement or Upgrade Year	Construction Length (km) 1	Maintenance Cost 3	2010	2020	2024	2022	2022	2024	2025	2026	2027	2020
	Asset Name 1, 2	1, 2 0	2019	0.00	10,000	2019 10,000	2020	2021	2022	2023	2024	2025	2026	2027	2028
	Right of Way Brydges Rd	Gravel	2019	1.50	20,000	20,000	-	-	-	-	-	-	-	-	-
	Mary Joanne Dr Cul De Sac	HL4	2019	0.04	6,000	6,000	-	-	-	-	-	-	-	-	-
	Airds Lake Rd	HL4	2019	0.20	26,208		_	_	-	_	-	-	_	-	-
	Mary Joanne Dr	HL4	2019	0.40	87,610	- ,	-	_	-	_	-	-	_	-	_
	Barrett Chute Rd	HL4	2019	3.40	1,467,600	1,239,570	-	-	-	-	-	-	-	-	-
	Ferguson Lake Rd	HL4	2019	1.10	134,916		-	-	-	-	-	-	-	-	-
RD01459a	-	HL4	2019	1.40	162,015		-	-	-	-	-	-	-	-	-
	Flying Club Rd	LCB	2019	0.90	72,131		-	-	-	-	-	-	-	-	-
	Airds Lake Rd	LCB	2019	0.15	12,022	12,022	-	-	-	-	-	-	-	-	-
RD00217	Airds Lake Rd	LCB	2019	0.85	68,123		-	-	-	-	-	-	-	-	-
RD01430a	Mt. St. Patrick Rd	LCB	2019	0.90	72,131	72,520	-	-	-	-	-	-	-	-	-
RD01324	Pine Street	LCB	2019	0.30	24,044	25,280	-	-	-	-	-	-	-	-	-
RD01430b	Mt. St. Patrick Rd	LCB	2019	0.10	8,015	11,000	-	-	-	-	-	-	-	-	-
RD00271	Brydges Rd	Gravel	2020	1.50	20,000	-	20,000	-	-	-	-	-	-	-	-
RD00598	Ginza Rd	LCB	2020	0.30	24,044	-	24,044	-	-	-	-	-	-	-	-
RD00233	Ashdad Rd	Gravel	2021	0.40	16,000	-	-	16,000	-	-	-	-	-	-	-
RD01271	Windle Lane	Gravel	2021	1.45	4,000	-	-	4,000	-	-	-	-	-	-	-
RD00442a	Ferguson Lake Rd	HL4	2021	0.90	117,936	-	-	117,936	-	-	-	-	-	-	-
	Parnell St	HL4	2021	0.12	15,725		-	15,725	-	-	-	-	-	-	-
R0036		HL4	2021	1.10	144,144		-	144,144	-	-	-	-	-	-	-
	O'Neill Point Rd (Squaw Point Rd)	HL4	2021	0.12	15,725	-	-	15,725	-	-	-	-	-	-	-
RD01459c		HL4	2021	0.60	78,624	-	-	78,624	-	-	-	-	-	-	-
	Pheasant Run	LCB	2021	1.55	124,225		-	124,225	-	-	-	-	-	-	-
	Main Street (Griffith)	LCB	2021	0.20	16,029		-	16,029	-	-	-	-	-	-	-
	Pheasant Cul de Sac	LCB	2021	0.04	3,206	-	-	3,206	-	-	-	-	-	-	-
	Windle Lane	Gravel	2022	1.45	20,000	-	-	-	20,000	-	-	-	-	-	-
	Ferguson Lake Rd	HL4 HL4	2022 2022	0.65	85,176		-	-	85,176	-	-	-	-	-	-
	Ferguson Lake Rd	LCB	2022	1.85 0.20	242,424 16,029		-	-	242,424	-	-	-	-	-	-
	St. Joseph Blvd Spindle Drift Court Cul de Sac	LCB	2022	0.20	3,206	-	-	-	16,029 3,206	-	-	-	-	-	-
	Church St	LCB	2022	1.30	104,189		-	-	3,206	-	-	-	-	-	-
	Partridge Dr.	LCB	2022	0.40	32,058		-	-	32,058	-	-	-	-	-	-
	Fleming Lane/Drive	LCB	2022	1.00	80,145		-	-	80,145	-	-	-	-	-	
	Windle Lane	Gravel	2023	1.45	20,000		-	-	- 00,145	20,000	-	-	_	-	_
	Matawatchan Rd	HL4	2023	3.80	497,952		-		-	497,952	-	-	-	-	-
	Mowat St	HL4	2023	0.11	14,414		-	-	-	14,414	-	-	-	-	-
	Roseburgh Rd cul de Sac	LCB	2023	0.04	3,206		-	-	-	3,206	-	-	-	-	-
	Hutson Lake Rd	LCB	2023	1.60	128,232		-	-	-	128,232	-	-	-	-	-
	Windle Lane	Gravel	2024	1.45	20,000		-	-	-	-	20,000	-	-	-	-
	Matawatchan Rd	HL4	2024	0.35	45,864		-	-	-	-	45,864	-	-	-	-
	Pucker St	HL4	2024	1.35	176,904	-	-	-	-	-	176,904	-	-	-	-
	Blake Street	HL4	2024	0.10	13,104	-	-	-	-	-	13,104	-	-	-	-
RD00511b	Fleming Lane Cul De Sac	LCB	2024	0.04	7,000	-	-	-	-	-	7,000	-	-	-	-
RD00860d	Matawatchan Rd	LCB	2024	2.30	184,334	-	-	-	-	-	184,334	-	-	-	-
		Detailed Asset			Replacement										
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		Description	Projected		and/or										1 1
		(Gravel/LCB/HL4)	Replacement or	Construction Length	Maintenance										1 1
Asset ID 1	Asset Name 1, 2	1, 2	Upgrade Year	(km) 1	Cost 3	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
RD00847		LCB	2024	0.10	8,015	-	-	-	-	-	8,015	-	-	-	- 1
RD00414	Cooper Hill Rd	LCB	2024	0.20	16,029	-	-	-	-	-	16,029	-	-	-	
RD01119a	Roseburgh Rd	LCB	2024	0.75	60,109	-	-	-	-	-	60,109	-	-	-	
R0134	Spindle Drift Court	LCB	2024	0.50	40,073	-	-	-	-	-	40,073	-	-	-	
RD00602	Gladstone St	HL4	2025	0.08	10,483	-	-	-	-	-	-	10,483	-	-	
RD00479	Flat Rd	HL4	2025	1.50	196,560	-	-	-	-	-	-	196,560	-	-	
RD00532	Francis St.	HL4	2025	0.55	72,072		-	-	-	-	-	72,072	-	-	<u> </u>
RD00819	Madawaska St	HL4	2025	0.45	64,740	-	-	-	-	-	-	64,740	-	-	<u> </u>
RD00378	Centennial Dr	LCB	2025	1.05	84,152	-	-	-	-	-	-	84,152	-	-	
RD00427	Eastern Ave	LCB	2025	0.40	32,058	-	-	-	-	-	-	32,058	-	-	-
RD00340a	Bluff Point Rd	LCB	2025	1.00	80,145	-	-	-	-	-	-	80,145	-	-	-
	Tatty Hill Rd.	LCB	2025	0.20	16,029	-	-	-	-	-	-	16,029	-	-	-
RD00545	Fraser Rd	LCB	2026	3.80	304,551	-	-	-	-	-	-	-	304,551	-	-
RD00752	Kennedy Rd	LCB	2026	1.85	148,268	-	-	-	-	-	-	-	148,268	-	-
RD00860c	Matawatchan Rd	LCB	2026	2.20	176,319	-	-	-	-	-	-	-	176,319	-	-
RD01286a	Wolfe Rapids Rd	LCB	2026	0.40	32,058	-	-	-	-	-	-	-	32,058	-	
RD00695	Hyland Creek Rd	HL4	2027	0.90	117,936		-	-	-	-	-	-	-	117,936	
RD00644	Graphite Bay Rd	LCB	2027	3.45	276,500		-	-	-	-	-	-	-	276,500	-
	Winsum Court Rd	LCB	2027	0.15	12,022	-	-	-	-	-	-	-	-	12,022	-
	Winsum Court Rd Cul-de-Sac	LCB	2027	0.04	7,000	-	-	-	-	-	-	-	-	7,000	-
	Pine Hill Rd	LCB	2027	0.15	12,022	-	-	-	-	-	-	-	-	12,022	-
	Jim Wallace Road Cul de Sac	LCB	2027	0.04	3,206	-	-	-	-	-	-	-	-	3,206	-
	Tatty Hill Rd.	LCB	2027	1.00	80,145	-	-	-	-	-	-	-	-	80,145	-
	Kennelly Mountain Rd	HL4	2028	0.50	65,520	-	-	-	-	-	-	-	-	-	65,520
	Mt. St. Patrick Rd	HL4	2028	0.25	32,760	-	-	-	-	-	-	-	-	-	32,760
	Hydro Dam Rd	HL4	2028	5.70	746,928	-	-	-	-	-	-	-	-	-	746,928
	Algoma Dr	HL4	2028	0.30	39,312	-	-	-	-	-	-	-	-	-	39,312
	Algoma Dr Cul-de-sac	HL4	2028	0.04	5,242	-	-	-	-	-	-	-	-	-	5,242
	Ferguson Lake Rd	HL4	2028	0.60	78,624	-	-	-	-	-	-	-	-	-	78,624
	Pine Hill Road Cul de Sac	LCB	2028	0.04	3,206		-	-	-	-	-	-	-	-	3,206
	Matawatchan Rd	LCB	2028	3.00	240,435		-	-	-	-	-	-	-	-	240,435
	Jim Wallace Rd	LCB	2028	0.55	44,080		-	-	-	-	-	-	-	-	44,080
	Mt. St. Patrick Rd	LCB	2028	0.65	52,094		-	-	-	-	-	-	-	-	52,094
	Matawatchan Rd	LCB	2028	0.70 E.60	56,102		-	-	-	-	-	-	-	-	56,102
RD01518		HL4	2029	5.60	733,824		-	-	-	-	-	-	-	-	┢────┤
	Ferguson Lake Rd	HL4	2030	0.25	32,760		-	-	-	-	-	-	-	-	· · · · ·
	Old Darling Rd	HL4	2030 2030	0.25 1.40	32,760		-	-	-	-	-	-	-	-	<u> </u>
RD00927		HL4 HL4	2030	3.00	183,456 393,120		-	-	-	-	-	-	-	-	<u> </u>
	Ferguson Lake Rd	HL4 HL4	2030	0.04	5,242		-	-	-	-	-	-	-	-	<u> </u>
	Old Darling Rd Cul de Sac	HL4 HL4	2030	0.04	52,416		-	-	-	-	-	-	-	-	· · · · · · · · · · · · · · · · · · ·
	Spring Town Bridge Rd	LCB	2030	0.40	9,617		-	-	-	-	-	-	-	-	· · · · · · · · · · · · · · · · · · ·
	Thirteenth Fairway	LCB	2030	0.05	4,007		-	-	-	-	-	-	-	-	· · · · ·
	Vada Court	LCB	2030	0.04	3,206		-	-	-	-	-	-	-	-	· · · · · · · · · · · · · · · · · · ·
	Vada Court Cul de Sac Campground Sideroad	LCB	2030	0.50	40,073		-	-	-	-	-	-	-	-	· · · ·
	Campground Sideroad Pucker St	HL4	2030	0.60	78,624		-	-	-	-	-	-	-	-	┢━━━━━┫
	Wilson Farm Rd	HL4	2031	2.30	301,392		-	-	-	-	-	-	-	-	· · · · · · · · · · · · · · · · · · ·
KDOT5019		1164	2031	2.30	301,392	-	-	-	-	-	-	-	-	-	

		Detailed Asset			Replacement										
		Description	Projected		and/or										
		(Gravel/LCB/HL4)	Replacement or	Construction Length	Maintenance										
Asset ID 1	Asset Name 1, 2	1, 2	Upgrade Year	(km) 1	Cost 3	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	Wilson Farm Rd Cul de Sac	HL4	2031	0.04	5,242	-	-					-		-	
	Matawatchan Rd	HL4	2031	0.70	91,728	-	-	-	-	-	-	-	-	-	-
	Frontenac Rd	LCB	2032	1.00	80,145	-	-	-	-	-	-	-	-	-	-
	Norway Lake Rd	HL4	2034	2.95	386,568	-	-	-	-	-	-	-	-	-	
RD01459d	·	HL4	2035	5.90	773,136	-	-	-	-	-	-	-	-	-	1
	Matawatchan Rd	LCB	2041	0.65	52,094	-	-	-	-	-	-	-	-	-	-
RD00316	Barryvale Rd	HL4	2043	4.80	650,000	-	-	-	-	-	-	-	-	-	-
	Wolfe Rapids Rd Cul-de-Sac	LCB	2043	0.04	5,000	-	-	-	-	-	-	-	-	-	-
	Grassy Bay Rd	Gravel	-	0.60	-	-	-	-	-	-	-	-	-	-	-
	MacNabb Rd	Gravel	-	0.15	-	-	-	-	-	-	-	-	-	-	-
RD00813b	MacNabb Rd Cul de Sac	Gravel	-	0.04	-	-	-	-	-	-	-	-	-	-	-
RD01210	Thirteenth Fairway Cul de Sac	Gravel	-	0.04	-	-	-	-	-	-	-	-	-	-	
RD01214	Tower Hill	Gravel	-	0.10	-	-	-	-	-	-	-	-	-	-	
	Upper Spruce Hedge Rd	Gravel	-	4.10	-	-	-	-	-	-	-	-	-	-	-
	Airds Lake Rd	Gravel	-	2.20	-	-	-	-	-	-	-	-	-	-	
RD00233	Ashdad Rd	Gravel	-	1.20	-	-	-	-	-	-	-	-	-	-	- 1
RD00233	Ashdad Rd	Gravel	-	1.80	-	-	-	-	-	-	-	-	-	-	-
RD00248	Aspen Rd	Gravel	-	0.10	-	-	-	-	-	-	-	-	-	-	-
RD00372	Carnegie Cres.	Gravel	-	0.50	-	-	-	-	-	-	-	-	-	-	
RD00349	Black Donald Rd	Gravel	-	2.50	-	-	-	-	-	-	-	-	-	-	
RD00397	Clark Rd	Gravel	-	0.70	-	-	-	-	-	-	-	-	-	-	
RD00271	Brydges Rd	Gravel	-	6.60	-	-	-	-	-	-	-	-	-	-	-
RD00357		Gravel	-	2.10	-	-	-	-	-	-	-	-	-	-	-
RD01245	Vaile Rd	Gravel	-	0.75	-	-	-	-	-	-	-	-	-	-	-
RD00365	Campground Sideroad	Gravel	-	0.60	-	-	-	-	-	-	-	-	-	-	-
RD00423	Dunns Lake Rd	Gravel	-	0.50	-	-	-	-	-	-	-	-	-	-	-
RD00383	Church Farm Rd	Gravel	-	1.60	-	-	-	-	-	-	-	-	-	-	-
RD00403	Clyde Lake Rd	Gravel	-	1.40	-	-	-	-	-	-	-	-	-	-	-
RD00410	Colterman Rd	Gravel	-	1.00	-	-	-	-	-	-	-	-	-	-	-
RD00417	Dunavans Rd	Gravel	-	0.40	-	-	-	-	-	-	-	-	-	-	-
RD00430	Elm Rd	Gravel	-	0.18	-	-	-	-	-	-	-	-	-	-	-
RD00433	Emon Lane	Gravel	-	0.30	-	-	-	-	-	-	-	-	-	-	-
RD00475	Finns Rd	Gravel	-	0.70	-	-	-	-	-	-	-	-	-	-	-
RD00510	Flying Club Rd	Gravel	-	3.45	-	-	-	-	-	-	-	-	-	-	-
RD01253	Wabalac Rd	Gravel	-	1.90	-	-	-	-	-	-	-	-	-	-	-
RD00543	Fraser Rd	Gravel	-	3.80	-	-	-	-	-	-	-	-	-	-	-
RD00574	Frontenac Rd	Gravel	-	3.10	-	-	-	-	-	-	-	-	-	-	-
RD00605	Glen Field Rd	Gravel	-	4.60	-	-	-	-	-	-	-	-	-	-	
RD00622	Grant Rd	Gravel	-	5.70	-	-	-	-	-	-	-	-	-	-	
RD00660	Halliday Creek Rd	Gravel	-	0.50	-	-	-	-	-	-	-	-	-	-	-
RD	K&P Trail	Gravel	-	3.25	-	-	-	-	-	-	-	-	-	-	-
RD00666	Holy Well Rd	Gravel	-	0.85	-	-	-	-	-	-	-	-	-	-	-
RD00693	Hyland Creek Rd	Gravel	-	4.90	-	-	-	-	-	-	-	-	-	-	-
RD00715	Inglis Rd	Gravel	-	1.20	-	-	-	-	-	-	-	-	-	-	-
	Kennelly Mountain Rd	Gravel	-	3.00	-	-	-	-	-	-	-	-	-	-	-
RD00730		Gravel	-	1.20	-	-	-	-	-	-	-	-	-	-	-
RD00740	Kathleen Rd	Gravel	-	0.80	-	-	-	-	-	-	-	-	-	-	-

-		Detailed Asset			Replacement										
		Description	Projected		and/or										
		(Gravel/LCB/HL4)	Replacement or	Construction Length	Maintenance										
Asset ID 1	Asset Name 1, 2	1, 2	Upgrade Year	(km) 1	Cost 3	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
RD00747		Gravel	-	0.20	-	-	-	-	-	-	-	-	-	-	
	Kennelly Mountain Rd	Gravel	-	3.40	-	-	-	-	-	-	-	-	-	-	
	Barryvale Rd	Gravel	-	1.20	-	-	-	-	-	-	-	-	-	-	-
	Barryvale Rd Cul de Sac	Gravel	-	0.04	-	-	-	-	-	-	-	-	-	-	-
	Maloney Mountain Rd	Gravel	-	5.80	-	-	-	-	-	-	-	-	-	-	-
	Kennelly Mountain Rd	Gravel	-	1.50	-	-	-	-	-	-	-	-	-	-	
	McHugh Rd	Gravel	-	8.20	-	-	-	-	-	-	-	-	-	-	-
	Kubiseskie Rd	Gravel	-	0.15	-	-	-	-	-	-	-	-	-	-	-
	Lambert Rd.	Gravel	-	0.60	-	-	-	-	-	-	-	-	-	-	-
	Lower Spruce Hedge Rd	Gravel	-	5.00	-	-	-	-	-	-	-	-	-	-	-
	Marchand/Lacourse	Gravel	-	1.90	-	-	-	-	-	-	-	-	-	-	-
	Merchand Rd	Gravel	-	0.20	-	-	-	-	-	-	-	-	-	-	-
	Milty Lake Rd	Gravel	-	1.90	-	-	-	-	-	-	-	-	-	-	-
RD00968	Mulvhill Farm Rd	Gravel	-	0.60	-	-	-	-	-	-	-	-	-	-	-
	Murphy Rd	Gravel	-	7.80	-	-	-	-	-	-	-	-	-	-	-
	Newfoundout Rd	Gravel	-	1.30	-	-	-	-	-	-	-	-	-	-	-
0	Old Fire Tower Rd	Gravel	-	1.10	-	-	-	-	-	-	-	-	-	-	-
RD01044	Old Matawatchan Rd	Gravel	-	0.20	-	-	-	-	-	-	-	-	-	-	-
RD01059	Pennock Lane	Gravel	-	0.20	-	-	-	-	-	-	-	-	-	-	-
RD01074	Popkie Rd	Gravel	-	0.70	-	-	-	-	-	-	-	-	-	-	-
RD01078a	Poplar Way	Gravel	-	0.75	-	-	-	-	-	-	-	-	-	-	-
RD01078b	Poplar Way Cul de Sac	Gravel	-	0.04	-	-	-	-	-	-	-	-	-	-	-
RD01168	Stoughton SDRD	Gravel	-	0.80	-	-	-	-	-	-	-	-	-	-	-
RD01114	Riopelle Rd.	Gravel	-	0.85	-	-	-	-	-	-	-	-	-	-	-
RD01125	South Side Way	Gravel	-	1.40	-	-	-	-	-	-	-	-	-	-	-
RD01141	Spring Town Bridge Rd	Gravel	-	0.20	-	-	-	-	-	-	-	-	-	-	-
RD01153	Stones Lake Rd	Gravel	-	4.70	-	-	-	-	-	-	-	-	-	-	-
RD00657b	Cul de sac Grassy Bay Rd	Gravel	-	0.04	-	-	-	-	-	-	-	-	-	-	-
RD01173	Sweets Lane	Gravel	-	0.40	-	-	-	-	-	-	-	-	-	-	-
RD0117	Tatty Hill Rd.	Gravel	-	3.45	-	-	-	-	-	-	-	-	-	-	-
	Tatty Hill Rd.	Gravel	-	0.40	-	-	-	-	-	-	-	-	-	-	-
	Teeple Haley Rd	Gravel	-	5.70	-	-	-	-	-	-	-	-	-	-	-
RD01271	Windle Lane	Gravel	-	1.45	-	-	-	-	-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-
						-	-	-	-	-	-	-	-	-	-
			Total		11,573,907	1,970,300	44,044	535,613	583,226	663,804	571,430	556 ,23 9	661,196	508,831	1,364,302



Asset ID ¹	Asset Name ^{1, 2}	Note	Location ¹	Detailed Asset Description (Gravel/LCB/HL4) ^{1,2}	Construction Length (km) ¹	Year in Service	Asset Life Expectancy (years) 2	Remaining Useful Life (from 2018) ²	Projected Replacement or Upgrade Year	/alue (2018 g Cost) 2	2018 Accumulated Amortization 2	2018 Netbook Value 2	Replacement and/or Maintenance Cost ³	Road Condition Rating ^{1, 5}	Reconstruction Required (explain in comments)	Road Width (M)	Speed Limit (km)	Level of Service (Class of Road) 6
RD00271	Brydges Rd		0+000-1+500	Gravel	1.50	2012	7	1	2019	\$ -	\$-	\$ -	\$ 20,000	Fair		5.2	80	5
	Right of Way							-	2019				\$ 10,000	Fair				
RD00217	Airds Lake Rd	*	0+000-0+850 <i>(Matawatcl</i>	LCB	0.85	2002	17	1	2019	\$ 72,822	\$ 72,822	\$ -	\$ 68,123	Now Need		5.8	40	5
RD00217	Airds Lake Rd	*	1+050-1+200 (Matawatcl	LCB	0.15	2002	17	1	2019	\$ 12,851	\$ 12,851	\$-	\$ 12,022	Now Need		5.8	40	5
RD00519	Flying Club Rd		0+000-0+900	LCB	0.90	2000	19	1	2019	\$ 57,815	\$ 56,117	\$ 1,698	\$ 72,131	Now Need		4.0	40	5
RD01430a	Mt. St. Patrick Rd		0+900-1+800	LCB	0.90	2008	11	1	2019	\$ 25,084	\$ 16,723	\$ 8,361	\$ 72,131	Now Need		6.0	80	5
RD01430b	Mt. St. Patrick Rd		1+800-1+900	LCB	0.10	2008	11	1	2019		\$-		\$ 8,015	Now Need		6.0	80	5
RD01324	Pine Street		0+000-0+300	LCB	0.30	1997	22	1	2019	\$ 18,476	\$ 18,476	\$-	\$ 24,044	Now Need		5.5	50	5
RD00217	Airds Lake Rd	*	0+850-1+050 <i>(Matawatcl</i>	HL4	0.20	2002	17	1	2019	\$ 17,135	\$ 17,135	\$ -	\$ 26,208	Now Need		5.8	40	5
RD00253	Barrett Chute Rd		0+000-3+400 (Calabogie	HL4	3.40	2002	17	1	2019	\$ 406,011	\$ 299,854	\$ 106,157	\$ 1,467,600	Now Need	YES	5.8	60	5
RD00441b	Ferguson Lake Rd		4+800-5+900	HL4	1.10	1997	22	1	2019		\$-		\$ 134,916	Now Need		5.8	80	5
RD01459a	Pucker St		0+000-1+400 (Norton Rd	HL4	1.40	1998	21	1	2019	\$ 424,775	\$ 226,547	\$ 198,228	\$ 162,015	Now Need		6.0	80	5
RD00851a	Mary Joanne Dr		0+000-0+400 (Barrett Ch	HL4	0.40	1997	22	1	2019	\$ 111,750	\$ 24,140	\$ 87,610	\$ 87,610	Poor		6.0	80	5
RD00851b	Mary Joanne Dr Cul De Sac			HL4	0.04	1997	22	1	2019				\$ 6,000	Poor		6.0	80	5
RD00271	Brydges Rd		0+000-1+500	Gravel	1.50	2012	8	2	2020	\$ -	\$-	\$-	\$ 20,000	Fair		5.2	80	5
RD00598	Ginza Rd		0+000-0+300	LCB	0.30	1997	23	2	2020	\$ 7,765	\$ 7,765	\$-	\$ 24,044	Poor		5.8	50	5
RD00233	Ashdad Rd		1+200-1+600	Gravel	0.40	2012	9	3	2021	\$ -	\$-	\$-	\$ 16,000	Fair		5.8	80	5
RD00823	Main Street (Griffith)		0+000-0+200	LCB	0.20	1997	24	3	2021	\$ 8,575	\$ 8,575	\$-	\$ 16,029	Poor		5.5	50	5
RD01063c	Pheasant Cul de Sac			LCB	0.04	1997	24	3	2021				\$ 3,206	Poor		6.0	80	5
RD01063	Pheasant Run		0+000-1+550 <i>(Barryvale</i>	LCB	1.55	1997	24	3	2021	\$ 124,418	\$ 124,418	\$-	\$ 124,225	Poor		6.0	80	5
RD01146	O'Neill Point Rd (Squaw Point Rd)		0+000-0+120 (Mill St)	HL4	0.12	1987	34	3	2021	\$ 10,317	\$ 9,137.91	\$ 1,179	\$ 15,725	Now Need		3.7	50	5
RD01459c	Pucker St		2+000-2+600	HL4	0.60	1998	23	3	2021				\$ 78,624	Now Need		6.0	80	5
R0036	Flat Rd		5+600-6+700	HL4	1.10	2006	15	3	2021	\$ 65,000		\$ 65,000	\$ 144,144	Poor		6.7	80	5
RD00442a	Ferguson Lake Rd		0+000-0+900 (Calabogie	HL4	0.90	1997	24	3	2021	\$ 279,623	\$ 279,623	\$-	\$ 117,936	Poor		5.5	60	5
RD01049	Parnell St		0+000-0+120 (Lanark Ro	HL4	0.12	1997	24	3	2021	\$ 10,650	\$ 8,946	\$ 1,704	\$ 15,725	Poor		6.0	50	5
RD01271	Windle Lane		0+00-1+450	Gravel	1.45	2012	9	3	2021	\$ -	\$-	\$-	\$ 4,000	Poor		4.6	80	5
RD00511a	Fleming Lane/Drive		0+000-1+000 <i>(Calabogie</i>	LCB	1.00	1997	25	4	2022	\$ 91,501	\$ 91,501	\$-	\$ 80,145	Fair		6.0	80	5
RD01150	St. Joseph Blvd		0+000-0+200	LCB	0.20	1997	25	4	2022	\$ 5,752	\$ 5,752	\$ -	\$ 16,029	Now Need		5.5	50	5
RD00392	Church St		0+000-1+300	LCB	1.30	2002	20	4	2022	\$ 155,985	\$ 99,830	\$ 56,155	\$ 104,189	Poor		5.5	40	5



Asset ID ¹	Asset Name ^{1, 2}	Note Location ¹	Detailed Asset Description (Gravel/LCB/HL4) ^{1,2}	Construction Length (km) ¹	Year in Service	Asset Life Expectancy (years) 2	Remaining Useful Life (from 2018) ²	Projected Replacement or Upgrade Year	Current Value (2018 Closing Cost) 2	2018 Accumulated Amortization 2	2018 Netbook Value 2	Replacement and/or Maintenance Cost ³	Road Condition Rating ^{1, 5}	Reconstruction Required (explain in comments)	Road Width (M)	Speed Limit (km)	Level of Service (Class of Road) ⁶
RD01055	Partridge Dr.	0+000-0+400	LCB	0.40	2006	16	4	2022	\$ 43,092	\$ 34,474	\$ 8,618	\$ 32,058	Poor		6.0	50	5
R0135	Spindle Drift Court Cul de Sac		LCB	0.04	1997	25	4	2022				\$ 3,206	Poor		6.0	80	5
RD00441a	Ferguson Lake Rd	1+150-1+800	HL4	0.65	2001	21	4	2022	\$ 136,033	\$ 136,033	\$-	\$ 85,176	Poor		6.7	80	5
RD00441d	Ferguson Lake Rd	6+500-8+350	HL4	1.85	1997	25	4	2022				\$ 242,424	Poor		5.8	80	5
RD01271	Windle Lane	0+00-1+450	Gravel	1.45	2012	10	4	2022	\$-	\$-	\$-	\$ 20,000	Poor		4.6	80	5
RD00671	Hutson Lake Rd	0+000-1+600 (Matawatch	LCB	1.60	2004	19	5	2023	\$ 143,519	\$ 133,951	\$ 9,568	\$ 128,232	Poor		5.2	80	5
RD01119b	Roseburgh Rd cul de Sac		LCB	0.04	1997	26	5	2023				\$ 3,206	Poor		5.2	80	5
RD00859a	Matawatchan Rd	0+000-3+800 (Centennia	HL4	3.80	2006	17	5	2023	\$ 448,790	\$ 359,032	\$ 89,758	\$ 497,952	Poor		5.8	80	5
RD00928	Mowat St	0+000-0+110 <i>(Madawasł</i>	HL4	0.11	1997	26	5	2023	\$ 10,847	\$ 9,111	\$ 1,736	\$ 14,414	Poor		6.0	50	5
RD01271	Windle Lane	0+00-1+450	Gravel	1.45	2012	11	5	2023	\$-	\$-	\$-	\$ 20,000	Poor		4.6	80	5
RD00346	Blake Street	0+000-0+100(Madawaska	HL4	0.10	1997	27	6	2024	\$ 86,776	\$ 72,892	\$ 13,884	\$ 13,104	Fair		4.9	50	5
RD00414	Cooper Hill Rd	0+000-0+200 (Centennia	LCB	0.20	2000	24	6	2024	\$ 15,918	\$ 15,918	\$-	\$ 16,029	Fair		5.2	80	5
RD00859c	Matawatchan Rd	4+500-4+850	HL4	0.35	2006	18	6	2024				\$ 45,864	Fair		5.8	80	5
RD00511b	Fleming Lane Cul De Sac	*	LCB	0.04	1997	27	6	2024				\$ 7,000	Poor		6.0	80	5
RD00847	Maple St	0+000-0+100 (Calabogie	LCB	0.10	2006	18	6	2024	\$ 10,773	\$ 9,049.32	\$ 1,724	\$ 8,015	Poor		6.0	50	5
RD00860d	Matawatchan Rd	11+600-13+900	LCB	2.30	1999	25	6	2024				\$ 184,334	Poor		5.8	80	5
RD01459e	Pucker St	8+550-9+850	HL4	1.35	2008	16	6	2024				\$ 176,904	Poor		6.0	80	5
RD01119a	Roseburgh Rd	0+000-0+750 (Fraser Rd)	LCB	0.75	1997	27	6	2024	\$ 44,858	\$ 44,858	\$-	\$ 60,109	Poor		5.2	80	5
R0134	Spindle Drift Court	0+000-0+500	LCB	0.50	1997	27	6	2024	\$ 35,818	\$ 35,818	\$-	\$ 40,073	Poor		6.0	80	5
RD01271	Windle Lane	0+00-1+450	Gravel	1.45	2012	12	6	2024	\$-	\$-	\$-	\$ 20,000	Poor		4.6	80	5
RD00479	Flat Rd	6+700-8+200	HL4	1.50	2006	19	7	2025	\$ 719,827	\$ 719,827	\$-	\$ 196,560	Fair		6.7	80	5
RD00340a	Bluff Point Rd	0+000-1+000 (Lanark Rd	LCB	1.00	1997	28	7	2025	\$ 59,839	\$ 59,839	\$-	\$ 80,145	Fair		6.4	80	5
RD00532	Francis St.	0+000+0+600 (Madawas	HL4	0.55	1992	33	7	2025	\$ 69,271	\$ 69,271	\$-	\$ 72,072	Fair		6.4	50	5
RD00602	Gladstone St	0+000-0+075 (Madawask	HL4	0.08	1997	28	7	2025	\$ 6,508	\$ 5,727.04	\$ 781	\$ 10,483	Fair		4.9	50	5
RD00378	Centennial Dr	0+000-1+050 (Centennia	LCB	1.05	1997	28	7	2025	\$ 26,644	\$ 26,644	\$-	\$ 84,152	Fair		4.9	80	5
RD00427	Eastern Ave	0+000-0+400	LCB	0.40	1997	28	7	2025	\$ 11,503	\$ 11,503	\$-	\$ 32,058	Fair		5.5	80	5
RD01179b	Tatty Hill Rd.	1+500-1+700	LCB	0.20	1998	27	7	2025	\$-	\$-	\$-	\$ 16,029	Fair		5.2	80	5
RD00819	Madawaska St	0+000-0+450 (Lanark Ro	HL4	0.45	1992	33	7	2025	\$ 64,740	\$ 64,740	\$-	\$ 64,740	Fair		6.7	40	5
RD00545	Fraser Rd	3+800-5+200 5+200-7+300	LCB	3.80	1997	29	8	2026	\$ 332,790	\$ 332,790	\$ -	\$ 304,551	Fair		5.5	50	5



Asset ID ¹	Asset Name ^{1, 2}	Note	Location ¹	Detailed Asset Description (Gravel/LCB/HL4) ^{1, 2}	Construction Length (km) ¹	Year in Service	Asset Life Expectancy (years) 2	Remaining Useful Life (from 2018) ²	Projected Replacement or Upgrade Year	nt Value (2018 sing Cost) 2	2018 Accumulated Amortization 2	2018 Netbook Value 2	Replacement and/or Maintenance Cost ³	Road Condition Rating ^{1, 5}	Reconstruction Required (explain in comments)	Road Width (M)	Speed Limit (km)	Level of Service (Class of Road) ⁶
RD00752	Kennedy Rd		0+000-1+850 <i>(Calabogie</i>	LCB	1.85	1999	27	8	2026	\$ 131,151	\$ 131,7	51 \$ -	\$ 148,268	Fair		5.5	40	5
RD00860c	Matawatchan Rd		9+200-11+600	LCB	2.20	1999	27	8	2026				\$ 176,319	Fair		5.8	80	5
RD01286a	Wolfe Rapids Rd		0+000-0+400 <i>(Centennia</i>	LCB	0.40	1997	29	8	2026	\$ 24,635	\$ 24,6	35 \$ -	\$ 32,058	Fair		5.8	80	5
RD00695	Hyland Creek Rd		0+000-0+900 <i>(Highway 4</i>	HL4	0.90	1997	30	9	2027	\$ 88,137	\$ 74,7	35 \$ 14,002	\$ 117,936	Fair		4.9	80	5
RD00644	Graphite Bay Rd		0+000-3+450 <i>(Hydro Dar</i>	LCB	3.45	1999	28	9	2027	\$ 278,565	\$ 278,5	65 \$ -	\$ 276,500	Fair		5.8	50	5
RD01179a	Tatty Hill Rd.		0+000-1+000 <i>(Barryvale</i>	LCB	1.00	1998	29	9	2027	\$ 111,588	\$ 111,5	38 \$ -	\$ 80,145	Fair		5.2	80	5
RD01282a	Winsum Court Rd		0+000-0+150 (Barrett Ch	LCB	0.15	2004	23	9	2027	\$ 15,097	\$ 14,0	91 \$ 1,006	\$ 12,022	Fair		6.0	80	5
RD01282b	Winsum Court Rd Cul-de-Sac			LCB	0.04	2004	23	9	2027				\$ 7,000	Fair		6.0	80	5
RD00724b	Jim Wallace Road Cul de Sac			LCB	0.04	1997	30	9	2027				\$ 3,206	Good		6.4	40	5
RD01068a	Pine Hill Rd		0+000-0+150	LCB	0.15	1997	30	9	2027	\$ 10,795	\$ 10,7	95 \$ -	\$ 12,022	Good		4.9	80	5
RD00680	Hydro Dam Rd		0+000-5+700 <i>(Calabogie</i>	HL4	5.70	1997	31	10	2028	\$ 792,828	\$ 665,9	76 \$ 126,852	\$ 746,928	Fair		6.7	80	5
R0003a	Algoma Dr		0+000-0+300 (Bluff Point	HL4	0.30	2012	16	10	2028	\$ -	\$	- \$ -	\$ 39,312	Good		6.0	80	5
R0003b	Algoma Dr Cul-de-sac			HL4	0.04	2012	16	10	2028	\$ -	\$	- \$ -	\$ 5,242	Good		6.0	80	5
RD00441c	Ferguson Lake Rd		5+900-6+500	HL4	0.60	1997	31	10	2028				\$ 78,624	Good		5.8	80	5
RD00766	Kennelly Mountain Rd		0+000-0+500 <i>(Mt. St. Pa</i> i	HL4	0.50	2012	16	10	2028	\$ 213,669	\$ 213,6	59 \$	\$ 65,520	Good		6.0	80	5
RD00860a	Matawatchan Rd		5+500-8+500	LCB	3.00	1997	31	10	2028	\$ 658,900	\$ 658,9	00 \$ -	\$ 240,435	Fair		6.4	80	5
RD00961	Mt. St. Patrick Rd		0+000-0+250	HL4	0.25	2012	16	10	2028	\$ 42,312	\$ 42,3	12 \$ -	\$ 32,760	Good		6.0	80	5
RD00724a	Jim Wallace Rd		0+000-0+550 (Kennedy F	LCB	0.55	1997	31	10	2028	\$ 37,645	\$ 37,6	45 \$ -	\$ 44,080	Good		6.4	40	5
RD00961	Mt. St. Patrick Rd		0+250-0+900	LCB	0.65	2012	16	10	2028	\$ 110,011	\$ 110,0	11 \$ -	\$ 52,094	Good		6.0	80	5
RD01068b	Pine Hill Road Cul de Sac			LCB	0.04	1997	31	10	2028				\$ 3,206	Good		4.9	80	5
RD00860b	Matawatchan Rd		8+500-9+200	LCB	0.70	2017	11	10	2028	\$ -	\$	- \$ -	\$ 56,102	Now Need		6.0	80	5
RD01518	Flat Rd		0+000-5+600 Mt. St. Pati	HL4	5.60	2014	15	11	2029	\$ 399,897	\$ 35,5	46 \$ 364,351	\$ 733,824	Good		6.7	80	5
RD00442b	Ferguson Lake Rd		0+900-1+150	HL4	0.25	2015	15	12	2030				\$ 32,760	Good		6.7	80	5
RD01536	Ferguson Lake Rd		1+800-4+800	HL4	3.00	2015	15	12	2030	\$ 737,152	\$ 194,6	94	\$ 393,120	Good		5.8	80	5
RD00927	Mill St		0+000-1+400 <i>(Calabogie</i>	HL4	1.40	2010	20	12	2030	\$ 163,008	\$ 163,0	08 \$ (0) \$ 183,456	Good		8.0	40	5
RD00340b	Campground Sideroad		0+000-0+500 (Ferguson I	LCB	0.50	2015	15	12	2030	\$ 19,558		\$ 19,558	\$ 40,073	Good		6.0	80	5
RD01211	Thirteenth Fairway		0+000-0+120 (Pheasant	LCB	0.12	2002	28	12	2030	\$ 8,314	\$ 8,3	14 \$ -	\$ 9,617	Good		4.9	80	5
RD01242a	Vada Court		0+000-0+050 <i>(Jim Walla</i> d	LCB	0.05	1997	33	12	2030	\$ 4,921	\$ 4,9	21 \$ -	\$ 4,007	Good		6.4	80	5
RD01242b	Vada Court Cul de Sac			LCB	0.04	1997	33	12	2030				\$ 3,206	Good		6.4	80	5



Asset ID ¹	Asset Name ^{1, 2}	Note	Location ¹	Detailed Asset Description (Gravel/LCB/HL4) ^{1,2}	Construction Length (km) ¹	Year in Service	Asset Life Expectancy (years) 2	Remaining Useful Life (from 2018) ²	Projected Replacement or Upgrade Year	ent Value (2018 losing Cost) 2	3 Accumulated nortization 2	2018 Netbook Value 2	Replacement and/or Maintenance Cost ³	Road Condition Rating ^{1, 5}	Reconstruction Required (explain in comments)	Road Width (M)	Speed Limit (km)	Level of Service (Class of Road) ⁶
RD01036a	Old Darling Rd		0+000-0+250 (Lanark Ro	HL4	0.25	2002	28	12	2030	\$ 27,188	\$ 17,400	\$ 9,788	\$ 32,760	Good		4.9	80	5
RD01036b	Old Darling Rd Cul de Sac			HL4	0.04	2002	28	12	2030			:	\$ 5,242	Good		4.9	80	5
RD01142	Spring Town Bridge Rd		0+000-0+400 <i>(Calabogie</i>	HL4	0.40	2005	25	12	2030	\$ 42,263	\$ 37,432.94	\$ 4,830	\$ 52,416	Good		6.0	30	5
RD00859b	Matawatchan Rd		3+800-4+500	HL4	0.70	2006	25	13	2031			:	\$ 91,728	Good		5.8	80	5
RD01459b	Pucker St		1+400-2+000	HL4	0.60	2015	16	13	2031			:	\$ 78,624	Good		6.0	80	5
RD01261a	Wilson Farm Rd		0+000-2+300 (Lanark Ro	HL4	2.30	2006	25	13	2031	\$ 390,382	\$ 187,383	\$ 202,999	\$ 301,392	Good		6.4	50	5
RD01261b	Wilson Farm Rd Cul de Sac			HL4	0.04	2006	25	13	2031			:	\$ 5,242	Good		6.4	50	5
RD00576	Frontenac Rd		3+000-4+100 <i>(Matawatcl</i>	LCB	1.00	2017	15	14	2032	\$ 57,254	\$ 57,254	\$-	\$ 80,145	Good		6.7	80	5
RD01440	Norway Lake Rd		0+000-2+950 (Calabogie	HL4	2.95	2009	25	16	2034	\$ 406,104	\$ 146,198	\$ 259,907	\$ 386,568	Good		6.4	50	5
RD01459d	Pucker St		2+600-8+550	HL4	5.90	2008	27	17	2035	\$ -	\$ -	\$ - !	\$ 773,136	Good		6.0	80	5
RD00859d	Matawatchan Rd		4+850-5+500	LCB	0.65	2016	25	23	2041			:	\$ 52,094	Good		6.4	80	5
RD00316	Barryvale Rd		0+000-4+800 (Lanark Ro	HL4	4.80	2018	25	25	2043	\$ 1,169,048	\$ 526,401	\$ 642,647	\$ 650,000	Good		6.5	60	5
RD01286b	Wolfe Rapids Rd Cul-de-Sac			LCB	0.04	2018	25	25	2043	\$ 4,783	\$ -	\$ 4,783	\$ 5,000	Fair		5.8	80	5
RD00215	Airds Lake Rd		1+200-3+400	Gravel	2.20	2012	-		-	\$ -	\$ -	\$-	\$-	Fair		5.2	80	5
RD00233	Ashdad Rd		0+000-1+200 (Pucker St,	Gravel	1.20	2012	-		-	\$ -	\$ -	\$ - 5	₿ -	Fair		5.8	80	5
RD00233	Ashdad Rd		1+600-3+400	Gravel	1.80	2012	-		-	\$ -	\$ -	\$ - 5	\$ -	Fair		5.8	80	5
RD00248	Aspen Rd		0+000-0+100 <i>(Uppper</i> Sp	Gravel	0.10	2012	-		-	\$ -	\$ -	\$ - 5	₿ –	Fair		4.3	80	5
RD00349	Black Donald Rd		0+000-2+250 (Centennia	Gravel	2.50	2012	-	-	-	\$ -	\$ -	\$ - 5	₿ -	Fair		6.7	80	5
RD00271	Brydges Rd		1+500-8+100 (Calabogie	Gravel	6.60	2012	-	-	-	\$ -	\$ -	\$- 5	β –	Fair		5.2	80	5
RD00357	Byers Rd		0+000-2-100	Gravel	2.10	2012	-	-	-	\$ -	\$ -	\$ - 5	₿ -	Fair		4.9	80	5
RD00365	Campground Sideroad		0+500-1+100	Gravel	0.60	2012			-					Fair		5.5	80	5
RD00383	Church Farm Rd		0+000-1+600 (Tatty Hill F	Gravel	1.60	2012	-	-	-	\$ -	\$ -	\$ - 5	₿ –	Fair		5.8	40	5
RD00403	Clyde Lake Rd		0+000-1+400	Gravel	1.40	2012	-	-	-	\$ -	\$ -	\$ - 5	₿ –	Fair		4.0	80	5
RD00410	Colterman Rd		0+000-1+000 <i>(Flat Rd)</i>	Gravel	1.00	2012	-	-	-	\$ -	\$ -	\$ - 5	-	Fair		3.7	80	5
RD00417	Dunavans Rd		0+000-0+400 <i>(Highway 4</i>	Gravel	0.40	2012	-	-	-	\$ -	\$ -	\$ - 5	-	Fair		3.4	80	5
RD00430	Elm Rd		0+000-0+180 (Kennedy F	Gravel	0.18	2012	-	-	-	\$ -	\$ -	\$ - 5	-	Fair		5.8	40	5
RD00433	Emon Lane		0+000-0+300 (Lanark Ro	Gravel	0.30	2012	-	-	-	\$ -	\$ -	\$ - 5	-	Fair		4.6	80	5
RD00475	Finns Rd		0+000-0+700 <i>(Highway 4</i>	Gravel	0.70	2012	-	-	-	\$ -	\$ -	\$- \$	6 -	Fair		4.9	80	5
RD00510	Flying Club Rd		0+900-4+350	Gravel	3.45	2012	-	-	-	\$ -	\$ -	\$ - 5	β -	Fair		5.8	40	5



Asset ID ¹	Asset Name ^{1, 2}	Note	Location ¹	Detailed Asset Description (Gravel/LCB/HL4) ^{1,2}	Construction Length (km) ¹	Year in Service	Asset Life Expectancy (years) 2	Remaining Useful Life (from 2018) ²	Projected Replacement or Upgrade Year	Current Value (2018 Closing Cost) 2	2018 Accumulated Amortization 2	2018 Netbook Value 2	Replacement and/or Maintenance Cost ³	Road Condition Rating ^{1, 5}	Reconstruction Required (explain in comments)	Road Width (M)	Speed Limit (km)	Level of Service (Class of Road) ⁶
RD00543	Fraser Rd		0+000+3+800 (Calabogie	Gravel	3.80	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		5.8	50	5
RD00574	Frontenac Rd		0+000-3+100 <i>(Matawatcl</i>	Gravel	3.10	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		5.8	80	5
RD00605	Glen Field Rd		0+000-4+600 (Matawatcl	Gravel	4.60	2012	-	-	-	\$	\$-	\$-	\$-	Fair		4.6	80	5
RD00622	Grant Rd		0+000-5+700 (Inglis Rd)	Gravel	5.70	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		4.6	80	5
RD00660	Halliday Creek Rd		0+000-0+500 (Brydges R	Gravel	0.50	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		4.3	80	5
RD00666	Holy Well Rd		0+000-0+850 (Mt. St. Pa	Gravel	0.85	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		3.7	80	5
RD00693	Hyland Creek Rd		0+900-5+800	Gravel	4.90	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		4.9	80	5
RD00715	Inglis Rd		0+000-1+200 (Pucker St,	Gravel	1.20	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		6.0	40	5
RD00730	Juniper		0+000-1+200 (Matawatch	Gravel	1.20	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		4.0	80	5
RD00740	Kathleen Rd		0+000-0+800 (Black Don	Gravel	0.80	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		5.8	80	5
RD00747	Kellys Rd		0+000-0+200 (Ferguson	Gravel	0.20	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		4.3	80	5
RD00765a	Kennelly Mountain Rd		0+500-3+900	Gravel	3.40	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		5.5	80	5
RD00765c	Kennelly Mountain Rd		6+900-8+400	Gravel	1.50	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		4.9	80	5
RD00791	Kubiseskie Rd		0+000-0+150 <i>(Calabogie</i>	Gravel	0.15	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		4.0	80	5
RD00796	Lambert Rd.		0+000-0+600	Gravel	0.60	2012	-	-	-	\$-	\$-	\$-	\$-	Fair			80	5
RD00799	Lower Spruce Hedge Rd		0+000-5+000	Gravel	5.00	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		5.2	40	5
RD00918	Marchand/Lacourse		0+000-1+900	Gravel	1.90	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		4.6	80	5
RD00913	Merchand Rd		0+000-0+200 <i>(Highway 1</i>	Gravel	0.20	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		4.0	80	5
RD00951	Milty Lake Rd		0+000-1+900	Gravel	1.90	2012	-	-	-	\$-	\$-	\$-	\$-	Fair			80	5
RD00968	Mulvhill Farm Rd		0+000-0+600 (Mt. St. Pai	Gravel	0.60	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		4.3	80	5
RD00972	Murphy Rd		0+000-7+800 <i>(Calabogie</i>	Gravel	7.80	2012	-	-	-	\$-	\$-	\$-	\$-	Fair			80	5
RD01015	Newfoundout Rd		0+000-1+300	Gravel	1.30	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		3.7	80	5
	Old Fire Tower Rd		0+000-1+100	Gravel	1.10	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		3.7	80	5
RD01044	Old Matawatchan Rd		0+000-0+200 <i>(Calabogie</i>	Gravel	0.20	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		4.6	25	5
RD01059	Pennock Lane		0+000+0+200 (Matawatc	Gravel	0.20	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		4.3	80	5
RD01074	Popkie Rd		0+000-0+650 <i>(Centennia</i>	Gravel	0.70	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		5.5	80	5
RD01078a	Poplar Way		0+000-0+750 (Elm St.)	Gravel	0.75	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		6.7	80	5
RD01078b	Poplar Way Cul de Sac			Gravel	0.04	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		6.7	80	5
RD01114	Riopelle Rd.		0+000-0+850 <i>(Calabogie</i>	Gravel	0.85	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		4.6	80	5



Asset ID ¹	Asset Name ^{1, 2}	Note	Location ¹	Detailed Asset Description (Gravel/LCB/HL4) ^{1,2}	Construction Length (km) ¹	Year in Service	Asset Life Expectancy (years) 2	Remaining Useful Life (from 2018) ²	Projected Replacement or Upgrade Year	Current Value (2018 Closing Cost) 2	2018 Accumulated Amortization 2	2018 Netbook Value 2	Replacement and/or Maintenance Cost ³	Road Condition Rating ^{1, 5}	Reconstruction Required (explain in comments)	Road Width (M)	Speed Limit (km)	Level of Service (Class of Road) ⁶
RD01125	South Side Way		0+000-1+400 <i>(Norway La</i>	Gravel	1.40	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		5.2	40	5
RD01141	Spring Town Bridge Rd		0+400-0+600	Gravel	0.20	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		6.0	30	5
RD01153	Stones Lake Rd		0+000-4+700 (Lanark Rd	Gravel	4.70	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		5.5	80	5
RD01173	Sweets Lane		0+000-0+300 (Centennia	Gravel	0.40	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		4.0	80	6
RD0117	Tatty Hill Rd.		1+700-5+150	Gravel	3.45	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		5.2	80	5
RD01178	Tatty Hill Rd.		1+100-1+500	Gravel	0.40	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		5.2	80	5
RD01195	Teeple Haley Rd		0+000-5+700	Gravel	5.70	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		4.6	80	5
RD01214	Tower Hill		0+000-0+100 (Frontenac	Gravel	0.10	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		4.3	80	5
RD01218	Upper Spruce Hedge Rd		0+000-4+100	Gravel	4.10	2012	-	-	-	\$	\$-	\$-	\$-	Fair		4.9	80	5
RD01245	Vaile Rd		0+000-0+750 (Pucker St.	Gravel	0.75	2012	-	-	-	\$-	\$-	\$-	\$-	Fair		4.6	80	5
RD01253	Wabalac Rd		0+000-1+900	Gravel	1.90	2012	-	-	-	\$-	\$-	\$-	\$-	Fair			80	5
RD00314	Barryvale Rd		4+800-6+000	Gravel	1.20	2012	-	-	-	\$-	\$-	\$-	\$-	Good		5.8	60	5
RD00315	Barryvale Rd Cul de Sac			Gravel	0.04	2012			-					Good		5.8	60	5
RD00657b	Cul de sac Grassy Bay Rd			Gravel	0.04	2012			-					Good		4.6	80	5
RD00657a	Grassy Bay Rd		0+000-0+600 (Lanark Ro	Gravel	0.60	2012	-	-	-	\$-	\$-	\$-	\$-	Good		4.6	80	5
RD00813a	MacNabb Rd		0+000-0+150 <i>(Barryvale</i>	Gravel	0.15	2012	-	-	-	\$-	\$-	\$-	\$-	Good		4.9	50	5
RD00813b	MacNabb Rd Cul de Sac			Gravel	0.04	2012	-	-	-	\$-	\$-	\$-	\$-	Good		4.9	50	5
RD01210	Thirteenth Fairway Cul de Sac			Gravel	0.04	2012	-	-	-	\$-	\$-	\$-	\$-	Good			80	5
RD00372	Carnegie Cres.		0+000-0+ 500 (Calabogie	Gravel	0.50	2012	-	-	-	\$-	\$-	\$-	\$-	Poor			80	5
RD00397	Clark Rd		0+000-0+700 (Maloney N	Gravel	0.70	2012	-	-	-	\$-	\$-	\$-	\$-	Poor		3.0	80	5
RD00423	Dunns Lake Rd		0+000-0+500 (Frontenac	Gravel	0.50	2012	-	-	-	\$-	\$-	\$-	\$-	Poor		3.0	80	5
RD	K&P Trail		0+000-3+250 <i>(Barryval</i> e	Gravel	3.25	2012	-	-	-	\$-	\$-	\$-	\$-	Poor		4.9	30	5
RD00765b	Kennelly Mountain Rd		3+900-6+900	Gravel	3.00	2012	-	-	-	\$-	\$-	\$-	\$-	Poor		4.0	80	5
RD00826	Maloney Mountain Rd		0+000-5+800 (Mt. St. Pai	Gravel	5.80	2012	-	-	-	\$-	\$-	\$-	\$-	Poor		4.3	80	5
RD00894	McHugh Rd		0+000-8+200 (Lower Spr	Gravel	8.20	2012	-	-	-	\$-	\$-	\$-	\$-	Poor		4.0	80	5
RD01168	Stoughton SDRD		0+000-0+800 (Tatty Hill F	Gravel	0.80	2012	-	-	-	\$-	\$-	\$-	\$-	Poor		3.0	80	5
RD01271	Windle Lane		0+000-1+450 (Ashdad Re	Gravel	1.45	2012	-	-	-	\$-	\$-	\$-	\$-	Poor		4.6	80	5



Asset ID ¹	Asset Name ^{1, 2}	Note	Location ¹	Detailed Asset Description (Gravel/LCB/HL4) ^{1,2}	Construction Length (km) ¹		Remaining Useful Life (from 2018) ²	Projected Replacement or Upgrade Year	Current Value (2018 Closing Cost) 2	2018 Accumulated Amortization 2	2018 Netbook Value 2	Replacement and/or Maintenance Cost ³	Road Condition Rating ^{1, 5}	Reconstruction Required (explain in comments)		Level of Service Class of Road) ⁶
Road Type			Total Lengt	h in Kilometres (km)	Percentag	ge of Total Road Network (%)										
Gravel				139.78		59.91%										
Low Class E	ituminous (LCB)			36.83		15.79%										
Hot Mix Pav	ed (HL4)			56.69		24.30%										
TOTAL				233.30		100.00%										

Notes:

1. Township of Greater Madawaska Roads Needs Study (Public Works Department, 2017).

2. Data from Township of Greater Madawaska, Tangible Capital Asset Detail (2017).

3. Replacement Cost Calculated by cost per kilometre multiplied by the length of the road.

4. Based on information supplied by Township of Greater Madawaska.

5. Road Condition Rating are evaluated by 10 to 8 = Good structural condition, minimal maintenance required. 7 to 5 = Fair structural condition, with some maintenance required. Less then 5 = poor structural condition. Ratings under 3 need reconstruction.

6. Road Conditions of 3 or less require reconstruction and an explanation of requirements to be completed.

7.. Level of Service = Township of Greater Madawaska Road Classification.

				Total	5,532,500	420,000	351,000	120,000	1,130,000	400,000	38,000	263,000	55,000	350,000	385,000
					Replacement										
				Projected	and/or										(
				Replacement or	Maintenance										(
Asset ID 1	Asset Name 1	Operating Department 1	Location 1	Upgrade Year	Cost 3	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
PR01348	PLAY STRUCTURE (Barnet Park)	Parks and Recreation	5179 Calabogie Rd	2019	30,000	30,000	-	-	-	-	-	-	-	-	-
PW00026	V #9 2007 International (Plow Truck)	Public Works	12470B Lanark Rd.	2019	280,000	310,000	-	-	-	-	-	-	-	-	-
PW01498	2008 Chevrolet 4x4 1/2 ton (Facilities)	Public Works	12470B Lanark Rd.	2019	35,000	35,000	-	-	-	-	-	-	-	-	-
0	Refectivity of Signs	Public Works	12470B Lanark Rd.	2019	15,000	15,000	-	-	-	-	-	-	-	-	-
PR00125	0	0	15 Ginza St.	2019	30,000	30,000	-	-	-	-	-	-	-	-	-
PR01298	KOHLER GENERATOR	Parks and Recreation	574 Mill St	2020	15,000	-	15,000	-	-	-	-	-	-	-	-
FR00004	97-24 Volvo Tanker	Fire	12470A Lanark Rd.	2020	300,000	-	300,000	-	-	-	-	-	-	-	-
PR00150	Skidoo	Parks and Recreation	-	2020	15,000	-	15,000	-	-	-	-	-	-	-	-
PW01300	PORTABLE STEAMER	Public Works	12470B Lanark Rd.	2020	15,000	-	15,000	-	-	-	-	-	-	-	-
PW01304	KARCHER PRESSURE WASHER	Public Works	12470B Lanark Rd.	2020	6,000	-	6,000	-	-	-	-	-	-	-	
PW01554	Backhoe #3 (2006 Volvo)	Public Works	25991 Hwy 41 Griffith	2021	120,000	-	-	120,000	-	-	-	-	-	-	-
PW01437	V #8 2010 International 7600SFA (Plow Truck)	Public Works	25991 Hwy 41 Griffith	2022	280,000	-	-	-	280,000	-	-	-	-	-	- !
EN01476	2010 International Tractor Trailer	Environment	12470B Lanark Rd.	2022	265,000	-	-	-	265,000	-	-	-	-	-	
GG01489	Computer System	General Government	19 Parnell St	2022	40,000	-	-	-	40,000	-	-	-	-	-	
GG01495	Computer	General Government	19 Parnell St	2022	5,000	-	-	-	5,000	-	-	-	-	-	
PW00016	Grader #1 (1986) - (Champion)	Public Works	12470B Lanark Rd.	2022	140,000	-	-	-	140,000	-	-	-	-	-	
PW00029	SWEEPER	Public Works	25991 Hwy 41 Griffith	2022	15,000	-	-	-	15,000	-	-	-	-	-	
PW01500	2010 Tandem Plow Truck	Public Works	12470B Lanark Rd.	2022	280,000	-	-	-	280,000	-	-	-	-	-	
PW01539	V #4 2015 Chevy 1 Tonne	Public Works	25992 Hwy 41 Griffith	2022	50,000	-	-	-	50,000	-	-	-	-	-	
PW01538	V #4 2015 Chevy 1 Tonne	Public Works	25992 Hwy 41 Griffith	2022	55,000	-	-	-	55,000	-	-	-	-	-	
PW00017	Grader #2 (1987) - (Champion)	Public Works	25991 Hwy 41 Griffith	2023	140,000	-	-	-	-	140,000	-	-	-	-	
PW00146	BRUSH CHIPPER	Public Works	Madawaska Salt Shed	2023	35,000	-	-	-	-	35,000	-	-	-	-	
FR01548	Used McNab Volvo Tanker Dec 2018 (expensed 75434)	Fire	12470A Lanark Rd.	2023	225,000	-	-	-	-	225,000	-	-	-	-	
FR01469	1/2 Ton Truck Station #1	Fire	12470A Lanark Rd.	2024	38,000	-	-	-	-	-	38,000	-	-	-	
FR00003	98-26 2001 Rescue Van	Fire	25991C Hwy 41 Griffith	2025	175,000	-	-	-	-	-	-	175,000	-	-	/
FR00033	Tower and Base	Fire	12470A Lanark Rd	2025	20,000	-	-	-	-	-	-	20,000	-	-	
FR00034	Tower and Base	Fire	25991C Hwy 41 Griffith	2025	20,000	-	-	-	-	-	-	20,000	-	-	
FR01470	1/2 Ton Truck Station #2	Fire	25991C Hwy 41 Griffith	2025	38,000	-	-	-	-	-	-	38,000	-	-	
PR00106	BLEACHERS - CHARBONNEAU BALL DIAMOND	Parks and Recreation	574 Mill St	2025	10,000	-	-	-	-	-	-	10,000	-	-	
PW01557	2019 One Ton Truck with plow	Public Works	12470B Lanark Rd	2026	55,000	-	-	-	-	-	-	-	55,000	-	
FR01434	Pumper 96-62 Triton LDM 1000 Front Line	Fire	25991C Hwy 41 Griffith	2027	350,000	-	-	-	-	-	-	-	-	350,000	
PW01561	GPS Units	Public Works	, 12470B Lanark Rd.	2028	28,000	-	-	-	-	-	-	-	-	-	28,000
FR01350		Fire	12470A Lanark Rd.	2028	350,000	-	-	-	-	-	-	-	-	-	350,000
FR00032	PUMP 18 HP	Fire	25991C Hwy 41 Griffith	2028	7,000	-	-	-	-	-	-	-	-	-	7,000
PW01563	Excavator John Deere 180 2014	Public Works	12470B Lanark Rd	2029	205,000	-	-	-	-	-	-	-	-	-	-
FR00011	EXTRICATION SPREADER/CUTTER	Fire	25991C Hwy 41 Griffith	2029	25,000	-	-	-	-	-	-	-	-	-	
FR00012	EXTRICATION SPREADER/CUTTER	Fire	12470A Lanark Rd.	2029	25,000	-	-	-	-	-	-	-	-		
FR00031	PUMP 18 HP	Fire	12470A Lanark Rd.	2029	7,000	-	-	-	-	-	-	-	-	-	
FR01433	TOWN & BASE STATION #2	Fire	19 Parnell St	2029	10,000	-	-	-	-	-	-	-	-	-	
PW01519	Backhoe #1 - (JCB 3CX Super 2014)	Public Works	12470B Lanark Rd.	2029	90,000	-	-	-	-	-	-	-	-		-
PW01550	2014 New Holland 4x4 Tractor with side mount mower	Public Works	12470B Lanark Rd.	2029	120,000	-	-	-	-	- 1	-	-	-		· · · ·
PW01562	Tandem Plow Truck	Public Works	12470B Lanark Rd	2030	280,000	-	-	-	-		-	-	-		· · · ·
PR01541	PLAYSTRUCTURE (Calabogie Community Centre)	Parks and Recreation	574 Mill St	2030	30,000	-	-	-	-		-	-	-		· · · ·
PW01458	Chipper Head 2010	Public Works	12470B Lanark Rd.	2030	60,000	-	-	-	-	-	-	-	-		ļ/
PW01551	2015 John Deere Grader	Public Works	12470B Lanark Rd.	2031	160,000	-	-	-	-	-	-	-	-		· · · · ·
PW01555	2017 Trailers Plus Float	Public Works	12470B Lanark Rd.	2032	36,000	-	-	-	-	-	-	-	-		· · · · ·
PW01558	Used 4X4 1/2 Ton Truck 2014	Public Works	12470B Lanark Rd.	2032	25,000	-	-	-	-	-	-	-	-	-	
PW01564	Backhoe 2018 John Deere	Public Works	12470B Lanark Rd	2033	115,000	-	-	-	-	-	-	-	-	-	
FR01496	Griffith Tanker #97-33	Fire	25991C Hwy 41 Griffith	2033	250,000	-	-	-	-	-	-	_	-	-	
FR01505	Generator	Fire	Old Fire Tower Road	2033	6,000	-	-	-	-	-	-	-	-	-	
GG01511	Phone/Data System	General Government	19 Parnell St	2033	17,000	_	-	-	_	_	_	-	-	-	
FR01531	2014 International Spartan tanker/pumper	Fire	12740A Lanark Rd.	2035	350,000		-	-		_	_		-		 /

Asset ID 1	Asset Name 1	Operating Department 1	Location 1	Projected Replacement or Upgrade Year	Replacement and/or Maintenance Cost 3	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
PW01299	Hoist (Calabogie Garbage)	Public Works	12470B Lanark Rd.	2036	7,500	-	-	-	-	-	-	-	-	-	-
FR01547	Rescue Van 2019 model	Fire	12470A Lanark Rd.	2038	122,000	-	-	-	-	-	-	-	-	-	-
FR01504	Fire Radio Tower	Fire	Old Fire Tower Road	2038	65,000	-	-	-	-	-	-	-	-	-	-
PR01565	Generator - Griffith Hall	Parks and Recreation	25991B Hwy 41 Griffith	2038	20,000	-	-	-	-	-	-	-	-	_	-
FR01526	MAC-27000 Concrete Water Storage Cistern	Fire	25991C Hwy 41 Griffith	2040	25,000	-	-	-	-	-	-	-	-	-	-

Total

5,532,500 420,000 351,000 120,000 1,130,000 400,000

00	38,000	263,000	55,000	350,000	385,000



Detailed Summary of Municipal Assets - Vehicles and Equipment Asset Management Plan (2018)

Asset ID ¹	Asset Name ¹	Note	Detailed Asset Description (Equipment/ Vehicle) ¹	Operating Department ¹	Location ¹	Year in Service ¹	Asset Life Expectancy (years) ^{1, 2}	Remaining Useful Life (from 2018) 1	Projected Replacement or Upgrade Year	Current Value (2018 Closing Cost Balance) 1	2018 Accumulated Amortization 1	2018 Net Book Value 1	Replacement and/or Upgrade Cost ³	Condition (good / fair / poor) 3	Level of Service (1 to 5) ⁴
PR00125	PLAY STRUCTURE - GRIFFTH RINK/HALL		Equipment	Parks and Recreation	15 Ginza St.	1997	22	1	2019	\$ 5,952	\$ 5,952	\$ - \$	30,000	poor	2
PR01348	PLAY STRUCTURE (Barnet Park)		Equipment	Parks and Recreation	5179 Calabogie Rd	2010	9	1	2019	\$ 5,053	\$ 5,053	\$ - \$	30,000	poor	2
PW00026	V #9 2007 International (Plow Truck)		Vehicle	Public Works	12470B Lanark Rd.	2007	12	1	2019	\$ 183,004	\$ 134,203	\$ 48,801 \$	280,000	fair	5
PW01498	2008 Chevrolet 4x4 1/2 ton (Facilities)		Vehicle	Public Works	12470B Lanark Rd.	2008	12	2	2019	\$ 13,596	\$ 11,654	\$ 1,942 \$	35,000	poor	5
	Refectivity of Signs		Equipment	Public Works	12470B Lanark Rd.				2019			\$	15,000		
PR01298	KOHLER GENERATOR		Equipment	Parks and Recreation	574 Mill St	1997	23	2	2020	\$ 10,000	\$ 10,000	\$ - \$	15,000	good	5
FR00004	97-24 Volvo Tanker		Vehicle	Fire	12470A Lanark Rd.	2006	14	2	2020	\$ 47,983	\$ 47,983	\$ - \$	300,000	good	5
PR00150	Skidoo		Vehicle	Parks and Recreation	-	2005	15	2	2020	\$ 12,892	\$ 11,173	\$ 1,719 \$	15,000	fair	1
PW01300	PORTABLE STEAMER		Equipment	Public Works	12470B Lanark Rd.	1997	23	2	2020	\$ 6,075	\$ 6,075	\$ - \$	15,000	fair	1
PW01304	KARCHER PRESSURE WASHER		Equipment	Public Works	12470B Lanark Rd.	2005	15	2	2020	\$ 5,412	\$ 5,412	\$-\$	6,000	fair	3
PW01554	Backhoe #3 (2006 Volvo)		Vehicle	Public Works	25991 Hwy 41 Griffith	2006	15	3	2021	\$ 79,958	\$ 78,625	\$ 1,333 \$	120,000	fair	4
PW01437	V #8 2010 International 7600SFA (Plow Truck)		Vehicle	Public Works	25991 Hwy 41 Griffith	2009	13	4	2022	\$ 182,494	\$ 182,494	\$ - \$	280,000	fair	5
EN01476	2010 International Tractor Trailer		Vehicle	Environment	12470B Lanark Rd.	2010	12	4	2022	\$ 296,117	\$ 157,929	\$ 138,188 \$	265,000	fair	4
GG01489	Computer System		Equipment	General Government	19 Parnell St	2012	10	4	2022	\$ 42,366	\$ 42,366	\$ - \$	40,000	good	4
GG01495	Computer		Equipment	General Government	19 Parnell St	2012	10	4	2022	\$ 5,632	\$ 5,632	\$ - \$	5,000	good	4
PW00016	Grader #1 (1986) - (Champion)		Vehicle	Public Works	12470B Lanark Rd.	1997	25	4	2022	\$ 106,763	\$ 106,763	\$ - \$	140,000	poor	4
PW00029	SWEEPER		Equipment	Public Works	25991 Hwy 41 Griffith	2007	15	4	2022	\$ 14,314	\$ 10,497	\$ 3,817 \$	15,000	fair	2
PW01500	2010 Tandem Plow Truck		Vehicle	Public Works	12470B Lanark Rd.	2010	12	4	2022	\$ 207,877	\$ 103,939	\$ 103,939 \$	280,000	good	5
PW01539	V #4 2015 Chevy 1 Tonne		Vehicle	Public Works	25992 Hwy 41 Griffith	2015	7	4	2022	\$ 43,492	\$ 18,639.45	\$ 24,853 \$	50,000	good	5
PW01538	V #4 2015 Chevy 1 Tonne		Vehicle	Public Works	25992 Hwy 41 Griffith	2015	7	4	2022	\$ 42,831	\$ 18,356	\$ 24,475 \$	55,000	fair	5
PW00017	Grader #2 (1987) - (Champion)		Vehicle	Public Works	25991 Hwy 41 Griffith	1997	26	5	2023	\$ 89,675	\$ 89,675	\$ - \$	140,000	poor	4
PW00146	BRUSH CHIPPER		Equipment	Public Works	Madawaska Salt Shed	1998	25	5	2023	\$ 31,358	\$ 31,358	\$ (0) \$	35,000	good	2
FR01548	Used McNab Volvo Tanker Dec 2018 (expensed 75434)		Vehicle	Fire	12470A Lanark Rd.	2018	5	5	2023	\$ 5,088	\$ 5,088	\$ - \$	225,000	good	5



Detailed Summary of Municipal Assets - Vehicles and Equipment Asset Management Plan (2018)

Asset ID ¹	Asset Name ¹	Note	Detailed Asset Description (Equipment/ Vehicle) ¹	Operating Department ¹	Location ¹	Year in Service ¹	Asset Life Expectancy (years) ^{1, 2}	Remaining Useful Life (from 2018) 1	Projected Replacement or Upgrade Year	Current Value (2018 Closing Cost Balance) 1	2018 Accumulated Amortization 1	2018 Net Book Value 1 Rep	lacement and/or Upgrade Cost ³	Condition (good / fair / poor) 3	Level of Service (1 to 5) ⁴
FR01469	1/2 Ton Truck Station #1		Vehicle	Fire	12470A Lanark Rd.	2010	14	6	2024	\$ 22,440	\$ 22,440	\$-\$	38,000	good	5
FR00003	98-26 2001 Rescue Van		Vehicle	Fire	25991C Hwy 41 Griffith	2005	20	7	2025	\$ 33,888	\$ 33,888	\$ (0) \$	175,000	fair	5
FR00033	Tower and Base		Equipment	Fire	12470A Lanark Rd	2000	25	7	2025	\$ 16,817	\$ 15,135	\$ 1,682 \$	20,000	good	5
FR00034	Tower and Base		Equipment	Fire	25991C Hwy 41 Griffith	2003	22	7	2025	\$ 16,332	\$ 12,249	\$ 4,083 \$	20,000	good	5
FR01470	1/2 Ton Truck Station #2		Vehicle	Fire	25991C Hwy 41 Griffith	2010	15	7	2025	\$ 22,440	\$ 22,440	\$ - \$	38,000	good	5
PR00106	BLEACHERS - CHARBONNEAU BALL DIAMOND		Equipment	Parks and Recreation	574 Mill St	1995	30	7	2025	\$ 8,341	\$ 8,341	\$ - \$	10,000	poor	2
PW01557	2019 One Ton Truck with plow		Vehicle	Public Works	12470B Lanark Rd	2018	8	8	2026	\$ 54,942	\$-	\$ 54,942 \$	55,000	good	5
FR01434	Pumper 96-62 Triton LDM 1000 Front Line		Vehicle	Fire	25991C Hwy 41 Griffith	2009	18	9	2027	\$ 250,755	\$ 150,453	\$ 100,302 \$	350,000	good	5
PW01561	GPS Units		Equipment	Public Works	12470B Lanark Rd.	2018	10	10	2028	\$ 19,489	\$-	\$ 19,489 \$	28,000	good	2
FR01350	Pumper 96-42 Front Line		Vehicle	Fire	12470A Lanark Rd.	2008	20	10	2028	\$ 235,100	\$ 156,733	\$ 78,367 \$	350,000	good	5
FR00032	PUMP 18 HP		Equipment	Fire	25991C Hwy 41 Griffith	2016	12	10	2028	\$ 5,362	\$ 5,362	\$ - \$	7,000	good	5
PW01563	Excavator John Deere 180 2014		Vehicle	Public Works	12470B Lanark Rd	2018	11	11	2029	\$ 202,375	\$-	\$ 202,375 \$	205,000	good	4
FR00011	EXTRICATION SPREADER/CUTTER		Equipment	Fire	25991C Hwy 41 Griffith	2004	25	11	2029	\$ 20,975	\$ 19,576	\$ 1,398 \$	25,000	good	4
FR00012	EXTRICATION SPREADER/CUTTER		Equipment	Fire	12470A Lanark Rd.	2004	25	11	2029	\$ 20,975	\$ 19,576	\$ 1,398 \$	25,000	good	5
FR00031	PUMP 18 HP		Equipment	Fire	12470A Lanark Rd.	2015	14	11	2029	\$ 5,176	\$ 5,176	\$ (0) \$	7,000	good	5
FR01433	TOWN & BASE STATION #2		Equipment	Fire	19 Parnell St	2009	20	11	2029	\$ 9,548	\$ 7,812	\$ 1,736 \$	10,000	good	5
PW01519	Backhoe #1 - (JCB 3CX Super 2014)		Vehicle	Public Works	12470B Lanark Rd.	2014	15	11	2029	\$ 85,458	\$ 28,486	\$ 56,972 \$	90,000	good	4
PW01550	2014 New Holland 4x4 Tractor with side mount mower		Equipment	Public Works	12470B Lanark Rd.	2016	13	11	2029	\$ 116,497	\$ 13,773	\$ 102,724 \$	120,000	good	2
PW01562	Tandem Plow Truck		Vehicle	Public Works	12470B Lanark Rd	2018	12	12	2030	\$ 243,097	\$-	\$ 243,097 \$	280,000	good	5
PR01541	PLAYSTRUCTURE (Calabogie Community Centre)		Equipment	Parks and Recreation	574 Mill St	2015	15	12	2030	\$ 16,789	\$ 1,119.33	\$ 15,670 \$	30,000	good	2
PW01458	Chipper Head 2010		Equipment	Public Works	12470B Lanark Rd.	2010	20	12	2030	\$ 52,704	\$ 28,109	\$ 24,595 \$	60,000	good	3
PW01551	2015 John Deere Grader		Vehicle	Public Works	12470B Lanark Rd.	2016	15	13	2031	\$ 158,964	\$ 13,773	\$ 145,191 \$	160,000	good	4
PW01555	2017 Trailers Plus Float		Equipment	Public Works	12470B Lanark Rd.	2017	15	14	2032	\$ 35,669	\$ 2,378	\$ 33,291 \$	36,000	good	4



Detailed Summary of Municipal Assets - Vehicles and Equipment Asset Management Plan (2018)

Asset ID ¹	Asset Name 1	Note	Detailed Asset Description (Equipment/ Vehicle) ¹	Operating Department ¹	Location ¹	Year in Service ¹	Asset Life Expectancy (years) ^{1, 2}	Remaining Useful Life (from 2018) 1	Projected Replacement or Upgrade Year	Current Value (2018 Closing Cost Balance) 1	2018 Accumulated Amortization 1	2018 Net Book Value 1	Replacement and/or Upgrade Cost ³	Condition (good / fair / poor) 3	Level of Service (1 to 5) ⁴
PW01558	Used 4X4 1/2 Ton Truck 2014		Vehicle	Public Works	12470B Lanark Rd.	2018	15	15	2033	\$ 23,620	; -	\$ 23,620	\$ 25,000	good	2
PW01564	Backhoe 2018 John Deere		Equipment	Public Works	12470B Lanark Rd	2018	15	15	2033	\$ 112,603	; -	\$ 112,603	\$ 115,000	good	4
FR01496	Griffith Tanker #97-33		Vehicle	Fire	25991C Hwy 41 Griffith	2008	25	15	2033	\$ 135,443	54,177	\$ 81,265	\$ 250,000	good	5
FR01505	Generator		Equipment	Fire	Old Fire Tower Road	2013	20	15	2033	\$ 5,755	5 1,439	\$ 4,316	\$ 6,000	good	5
GG01511	Phone/Data System		Equipment	General Government	19 Parnell St	2013	20	15	2033	\$ 16,716 \$	\$ 4,179	\$ 12,537	\$ 17,000	good	3
FR01531	2014 International Spartan tanker/pumper		Vehicle	Fire	12740A Lanark Rd.	2015	20	17	2035	\$ 224,030	33,604	\$ 190,425	\$ 350,000	good	5
PW01299	Hoist (Calabogie Garbage)		Equipment	Public Works	12470B Lanark Rd.	2006	30	18	2036	\$ 5,170 \$	\$ 4,136	\$ 1,034	\$ 7,500	good	2
FR01547	Rescue Van 2019 model		Vehicle	Fire	12470A Lanark Rd.	2018	20	20	2038	\$ 122,000	; -	\$ 122,000	\$ 122,000	good	5
FR01504	Fire Radio Tower		Equipment	Fire	Old Fire Tower Road	2013	25	20	2038	\$ 65,506	6 16,377	\$ 49,130	\$ 65,000	good	5
PR01565	Generator - Griffith Hall		Equipment	Parks and Recreation	25991B Hwy 41 Griffith	2018	20	20	2038	\$ 14,118		\$ 14,118	\$ 20,000	good	
FR01526	MAC-27000 Concrete Water Storage Cistern		Equipment	Fire	25991C Hwy 41 Griffith	2015	25	22	2040	\$ 25,696	3,084	\$ 22,612	\$ 25,000	good	5

Notes:
Data from Township of Greater Madawaska, Tangible Capital Asset Detail (2017).
Based on information supplied by Township of Greater Madawaska.
Level of Service: 1 = very low priority, 5 = very high priority.

Selected Focus Item.

Asset ID 1	Asset Name 1	Detailed Asset Description 1	Operating Department 1	Component	Location 1	Projected Replacement or Upgrade Year	Replacement and/or Upgrade Cost 3	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
				Structural	574 Norway	2034	5,000	-	-	-	-	-	-	-	-	-	-
EN01443	Attendant/WEEE Buildings	Buildings	Environment	Mechanical	Lake Rd.	2034	2,000	-	-	-	-	-	-	-	-	-	-
				Electrical		2034	3,000	-	-	-	-	-	-	-	-	-	-
				Structural		2023	50,000	-	-	-	-	50,000	-	-	-	-	-
5000040	Fire Otation #4 Oalahaaia	Duitationa	F ire	Mechanical	12470A	2026	15,000	-	-	-	-	-	-	-	15,000	-	-
FR00043	Fire Station #1 Calabogie	Buildings	Fire	Energy Upgrades	Lanark Rd.	2024	25,000	-	-	-	-	-	25,000	-	-	-	-
				Electrical		2030	15,000	-	-	-	-	-	-	-	-	-	-
				Structural	25991C	2022	50,000	-	-	-	50,000	-	-	-	-	-	-
FR00054	Fire Station #2 Griffith	Buildings	Fire	Mechanical	Highway #41	2025	15,000	-	-	-	-	-	-	15,000	-	-	-
				Electrical		2030	7,500	-	-	-	-	-	-	-	-	-	-
				Structural		2020	50,000	-	50,000	-	-	-	-	-	-	-	-
GG01494	Municipal Office	Buildings	General Govt	Mechanical	19 Parnell	2023	50,000	-	-	-	-	50,000	-	-	-	-	-
	manicipal enice	Dananigo		Generator	St.	2019	15,000	15,000									
				Electrical		2019	11,000	11,000	-	-	-	-	-	-	-	-	-
				Structural	25991C	2020	35,000	-	35,000	-	-	-	-	-	-	-	-
GG00052	Municipal Office - Griffith	Buildings	General Govt	Mechanical	Highway #41	2020	2,000	-	2,000	-	-	-	-	-	-	-	-
				Electrical		2020	5,000	-		-	-	-	-	-	-	-	-
			Parks and	Structural	5179	2032	50,000	-	-	-	-	-	-	-	-	-	-
PR00048	Barnet Cottage	Buildings	Recreation	Mechanical	Calabogie	2035	n/a	-	-	-	-	-	-	-	-	-	-
				Electrical	Rd.	2035	n/a	-	-	-	-	-	-	-	-	-	-
			Parks and	Structural	5179	2019	7,000	7,000	-	-	-	-	-	-	-	-	-
PR01455	Barnet Cottage Upgrades	Buildings	Recreation	Mechanical	Calabogie Rd.	n/a	n/a	-	-	-	-	-	-	-	-	-	-
			Darka and	Electrical	Ku.	n/a	n/a	-	-	-	-	-	-	-	-	-	-
	Barnet Park Boat Launch	Buildings	Parks and Recreation	Structural	Calabogie	2022	75,000	-	-	-	-	-	-	-	-	-	-
				Structural		2019	7,000	7,000	-	-	-	-	-	-	-	-	-
			Parks and	Mechanical		2025	25,000	-	-	-	-	-	-	25,000	-	-	-
PR00039	Calabogie Community Hall	Buildings	Recreation	Energy Upgrades	574 Mill St.	2025	25,000	-	-	-	-	-	-	25,000	-	-	-
				Electrical		2026	25,000	-	-	-	-	-	-	-	25,000	-	-
			Darka and	Structural	5179	2032	5,000	-	-	-	-	-	-	-	-	-	-
PR00050	Gazebo - Barnet	Buildings	Parks and Recreation	Mechanical	Calabogie	n/a	n/a	-	-	-	-	-	-	-	-	-	-
			, loor out on	Electrical	Rd.	n/a	n/a	-	-	-	-	-	-	-	-	-	-
				Structural		2027	25,000	-	-	-	-	-	-	-	-	25,000	-
PR00060	Griffith Community Hall	Buildings	Parks and	Mechanical Energy	25991B	2043	25,000	-	-	-	-	-	-	-	-	-	-
			Recreation	Upgrades	Highway #41	2030	25,000	-	-	-	-	-	-	-	-	-	-
				Electrical		2026	10,000	-	-	-	-	-	-	-	10,000	-	-
				Structural		2028	20,000	-	-	-	-	-	-	-	-	-	20,000
PR01457 &	Calabogie Rink & Boards	Buildings	Parks and	Structural (Roof)	574 Mill St.	2019	16,000	16,000	-	-	-	-	-	-	-	-	-
PR01512	-	-	Recreation	Mechanical		2025	10,000	-	-	-	-	-	-	10,000	-	-	-
				Electrical		2020	30,000	-	30,000		-	-	-	-	-	-	-
				Structural		2041	123,115	-	-	-	-	-	-	-	-	-	-
	Calabogie Storage Building	Buildings	Parks and	Additional Capital	574 Mill St.	2047	31,890	-	-	-	-	-	-	-	-	-	-
	Calabogic Clorage Duilding	Dandings	Recreation	Mechanical		2032	<u> </u>	-	-	-	-	-	-	-	-	-	-
			1	Electrical	1	2035	15,000	-	-	-	-	-	-	-	-	-	-

Asset ID 1	Asset Name 1	Detailed Asset Description 1	Operating Department 1	Component	Location 1	Projected Replacement or Upgrade Year	Replacement and/or Upgrade Cost 3	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
				Structural		2041	18,090	-	-	-	-	-	-	-	-	-	-
			Parks and	Mechanical		2044	44,600	-	-	-	-	-	-	-	-	-	-
PR00059	Griffith Rink and Hall	Buildings	Recreation	Energy Upgrades	15 Ginza St.	2027	10,000	-	-	-	-	-	-	-	-	10,000	-
				Electrical		2022	10,000	-	-	-	10,000	-	-	-	-	-	-
	Heritage Point Tourist		Parks and	Structural	12517	2025	15,000	-	-	-	-	-	-	15,000	-	-	-
PR00046	Information Booth	Buildings	Recreation	Mechanical	Lanark Rd.	n/a	n/a	-	-	-	-	-	-	-	-	-	-
				Electrical		n/a	n/a	-	-	-	-	-	-	-	-	-	-
55000.17	Washroom Facilities -		Parks and	Structural	12517	2041	44,219	-	-	-	-	-	-	-	-	-	-
PR00047	Heritage Building	Buildings	Recreation	Mechanical	Lanark Rd.	2041	16,700	-	-	-	-	-	-	-	-	-	-
				Electrical		2041 2025	5,900 25,000	-	-	-	-	-	-	- 25,000	-	-	
				Structural Energy	12470B	2025	15,264	-	-	-	-	-	-	25,000	-	-	-
PW00045	Garage - Calabogie	Buildings	Public Works	Mechanical	Lanark Rd.	2041	18,000	18,000		-		-	_			_	
				Electrical		2019	40,000	-	-	-	-	-	-	40,000	-	-	_
				Structural		2020	300,000	-	_	-	-	-	-	-	-	-	
PW01563	NEW Salt Shed Calabogie	Buildings	Public Works	Mechanical	12470B	n/a	-	-	-	-	-	-	-	-	-	-	-
	Ű	0		Electrical	Lanark Rd.	n/a	-	-	-	-	-	-	-	-	-	-	-
				Structural		0	15,000	-	-	-	-	-	-	-	-	-	-
PW1560	Calabogie Equipment Storage Shed	Buildings	Public Works	Additional Capital	12470B Lanark Rd.	2063	31,890	-	-	-	-	-	-	-	-	-	-
				Electrical		0	-	-	-	-	-	-	-	-	-	-	-
				Structural	25991C	2063	25,000	-	-	-	-	-	-	-	-	-	-
PW00053	Garage - Griffith	Buildings	Public Works	Mechanical	Highway #41	2023	25,000	-	-	-	-	25,000	-	-	-	-	-
				Electrical		2023	20,000	-	-	-	-	20,000	-	-	-	-	-
PW01441 &				Structural	3568	2034	10,000	-	-	-	-	-	-	-	-	-	-
PW00056	Salt Shed - Matawatchan	Buildings	Public Works	Mechanical	Matawatchan	2028	10,000	-	-	-	-	-	-	-	-	-	10,000
				Electrical	Rd.	2028	5,000	-	-	-	-	-	-	-	-	-	5,000
				Structural		2019	22,000	22,000	-	-	-	-	-	-	-	-	-
-	Medical Centre / Vacant Office	Buildings	Public Works	Mechanical	1101 Francis		25,000	-	25,000	-	-	-	-	-	-	-	-
	Unice	-		Generator	St.	2019	15,000	15,000				20.000					
				Electrical		2023	20,000	-	-	-	-	20,000	-	-	-	-	-

al 1,692,168 111,000 142,000 - 60,000 165,000 25,000 155,000 50,000 35,000 3												
	al	1,692,168	111,000	142,000	-	60,000	165,000	25,000	155,000	50.000	35,000	35,000

Total



Asset Management						1 1				1						1
Asset ID ¹	Asset Name ¹	Detailed Asset Description ¹	Operating Department ¹	Component	Location ¹	Note Y	ear in Service	Asset Life Expectancy (years) 1	Remaining Useful Life (from 2018) ¹	Projected Replacement or Upgrade Year	Current Value (2018 Closing Cost Balance) 1	2018 Accumulated Amortization 1	2015 Net Book Value ¹	Replacement and/or Upgrade Cost ³	Condition (good / fair / poor) 3	Level of Service (1 to 5) ⁴
				Structural			2009	25	16	2034				\$ 5,000		
EN01443	Attendant/WEEE Buildings (x3)	Buildings	Environment	Mechanical	574 Norway Lake Rd.		2009	25	16	2034	\$ 41,512	\$ 18,680	\$ 22,832	\$ 2,000	good	3
				Electrical			2009	25	16	2034				\$ 3,000		
				Structural			1984	39	5	2023				\$ 50,000		
FR00043	Fire Station #1 Calabogie	Buildings	Fire	Mechanical	- 12470A Lanark Rd.		1984	42	8	2026	\$ 46,091	\$ 31,342		\$ 15,000	fair	5
1100045		Duidings	1.00	Energy Upgrades			1984	32	-2	2024	φ 40,031	ψ 01,0τ2		\$ 25,000		
				Electrical			1984	39	5	2030				\$ 15,000		
				Structural			1990	25	-3	2022				\$ 50,000		
FR00054	Fire Station #2 Griffith	Buildings	Fire	Mechanical	25991C Highway #41		2015	10	7	2025	\$ 79,080	\$ 46,236	\$ 32,844	\$ 15,000	fair	5
				Electrical			1990	33	5	2030				\$ 7,500		
				Structural			2013	7	2	2020				\$ 50,000		
GG01494	Municipal Office GC01510, 1494, 1488,	Buildings	General Govt	Mechanical	- 19 Parnell St.		2013	10	5	2023	\$ 948,707	\$ 94,871		\$ 50,000	good	4
	0098			Generator			2019		1	2019				\$ 15,000	C C	
				Electrical		energ y audit	2013	6	1	2019				\$ 11,000		
				Structural			1984	36	2	2020				\$ 35,000		
GG00052	Municipal Office - Griffith (Nu2You Shop)	Buildings	General Govt	Mechanical	25991C Highway #41		1984	36	2	2020	\$ 76,058	\$ 51,719	\$ 24,339	\$ 2,000	fair	2
				Electrical			1984	36	2	2020				\$ 5,000		
				Structural			1962	70	14	2032				\$ 50,000		



Asset ID ¹	Asset Name ¹	Detailed Asset Description ¹	Operating Department ¹	Component	Location ¹	Note	Year in Service	Asset Life Expectancy (years) 1	Remaining Useful Life (from 2018) ¹	Projected Replacement or Upgrade Year	Current Value (2018 Closing Cost Balance) 1	2018 Accumulated Amortization 1	2015 Net Book Value ¹	Replacement and/or Upgrade Cost ³	Condition (good / fair / poor) ³	Level of Service (1 to 5) ⁴
PR00048	Barnet Cottage	Buildings	Parks and Recreation	Mechanical	5179 Calabogie Rd.		1962	73	17	2035	\$ 15,830	\$ 15,830	\$-	n/a	good	2
				Electrical			1962	73	17	2035				n/a		
				Structural		updat e washr	2010	9	1	2019				\$ 7,000		
PR01455	Barnet Cottage Upgrades	Buildings	Parks and Recreation	Mechanical	5179 Calabogie Rd.		2010	n/a	n/a	n/a	\$ 19,517	\$ 3,123	\$ 16,394	n/a	good	2
				Electrical			2010	n/a	n/a	n/a				n/a		
	Barnet Cottage Boat Launch	Buildings	Parks and Recreation	Structural	5179 Calabogie Rd.		1990	32	4	2022				\$ 75,000		
				Structural		new doors	1996	23	1	2019				\$ 7,000		
PR00039	Calaborio Community Hall	imunity Hall Buildings	Parks and Recreation	Energy Upgrades	574 Mill St.		1996	24	2	2025	\$ 264,421	\$ 111,903	\$ 152,518	\$ 25,000	good	3
PRODUSS	Calabogie Community Hall Buildings		Mechanical			1996	29	7	2025	-	φ 111,905	φ 152,516	\$ 25,000	guuu	3	
			Electrical			1996	30	8	2026				\$ 25,000			
				Structural			2007	25	14	2032				\$ 5,000		
PR00050	Gazebo - Barnet	Buildings	Parks and Recreation	Mechanical	5179 Calabogie Rd.		2007	n/a	n/a	n/a	\$ 6,206	\$ 2,731	\$ 3,475	n/a	good	2
				Electrical			2007	n/a	n/a	n/a				n/a		
				Structural			1997	30	9	2027				\$ 25,000		
PR00060,		Buildings	Parks and Recreation	Energy Upgrades	25991B Highway #41		2018	25	25	2043	\$ 200,559	\$ 82,131	\$ 118,428	\$ 25,000		3
PR01565		Buildings	Parks and Recreation	Mechanical	2399 го піўлімаў #4 i		1997	33	12	2030	_	φ ο2,131	ψ 110,420	\$ 25,000	good	3
				Electrical			1997	23	2	2026				\$ 10,000		
				Structural			2013	25	20	2028				\$ 20,000		



Asset Management	Plan (2018)														
Asset ID ¹	Asset Name ¹	Detailed Asset Description ¹	Operating Department ¹	Component	Location ¹ Note	Year in Service	Asset Life Expectancy (years) 1	Remaining Useful Life (from 2018) ¹	Projected Replacement or Upgrade Year	Current Value (2018 Closing Cost Balance) 1	2018 Accumulated Amortization 1 20	015 Net Book Value ¹	Replacement and/or Upgrade (Cost ³	Condition (good / fair / poor) 3	Level of Service (1 to 5) ⁴
PR01457 PR01512 PR00058	Calabogie Rink & Boards	Buildings	Parks and Recreation	Structural	portab le chang 574 Mill St.	2014	5	1	2019	\$ 604,789	\$ 75,140 \$	529,648	\$ 16,000	good	2
PR01528		2 and 190		Mechanical		2013	12	7	2025	• • • • • • • • • •	•	020,010	\$ 10,000	9000	_
				Electrical		2013	7	2	2020				\$ 30,000		
				Structural		2016	25	23	2041				\$ 123,115		
	Calabogie Storage Building	Buildings	Parks and Recreation	Additional Capital	574 Mill St.	2017	30	29	2047	\$ 135,935	\$	135,935	\$ 31,890	good	2
				Mechanical		2017	15	14	2032					Ū	
				Electrical		2016	19	17	2035				\$ 15,000		
				Structural	-	2016	25	23	2041	-			\$ 18,090		
PR00059	Griffith Rink and Hall	Buildings	Parks and Recreation	Energy Upgrades PR1560	- 15 Ginza St.	2016	28	26	2044	\$ 162,402	\$ 49,729 \$	112,673	\$ 44,600	fair	2
				Mechanical		1989	38	9	2027				\$ 10,000		
				Electrical		1989	31	2	2022				\$ 10,000		
				Structural		1985	35	2	2025	_			\$ 15,000		
PR00046	Heritage Point Tourist Information Booth	Buildings	Parks and Recreation	Mechanical	12517 Lanark Rd.	1985	n/a	n/a	n/a	\$ 5,108	\$ 5,108 \$	-	n/a	good	2
				Electrical		1985	n/a	n/a	n/a				n/a		
				Structural		2016	25	23	2041				\$ 44,219		
PR00047	Washroom Facilities : Heritage Point	Buildings	Parks and Recreation	Mechanical	12517 Lanark Rd.	2016	25	23	2041	\$ 66,819	\$ 3,341 \$	63,478	\$ 16,700	good	4
				Electrical		2016	25	23	2041				\$ 5,900		
				Structural		1991	34	7	2025				\$ 25,000		



Asset Management	Asset Name ¹	Detailed Asset Description ¹	Operating Department ¹	Component	Location ¹	Note Year in Service	Asset Life Expectancy (years) 1	Remaining Useful Life (from 2018) ¹	Projected Replacement or Upgrade Year	Current Value (2018 Closing Cost Balance) 1 2018 Accur Amortiza		2015 Net Book Value ¹	Replacement and/or Upgrade Cost ³	Condition (good / fair / poor) 3	Level of Service (1 to 5) ⁴
PW00045	Garage - Calabogie	Buildings	Public Works	Energy Upgrades	12470B Lanark Rd.	2016	25	23	2041	\$ 270,002 \$	138,169	\$ 131,833	\$ 15,264	- good	2
F W00043	Garage - Galabogie	Buildings		Mechanical	124700 Lanark Ku.	1991	28	1	2019	φ 270,002 φ	130,109	φ 131,033	\$ 18,000	-	2
				Electrical		1991	34	7	2025				\$ 40,000		
				Structural					2021				\$ 300,000		
PW01563	NEW SALT SHED - Calabogie	Buildings	Public Works	Mechanical	12470B Lanark Rd.				n/a			\$-			2
				Electrical					n/a						
				Structural		2019							\$ 15,000		



Asset Managemer	nt Plan (2018)															
Asset ID ¹	Asset Name ¹	Detailed Asset Description ¹	Operating Department ¹	Component	Location ¹	Note	Year in Service	Asset Life Expectancy (years) 1	Remaining Useful Life (from 2018) ¹	Projected Replacement or Upgrade Year	Current Value (2018 Closing Cost Balance) 1	2018 Accumulated Amortization 1	2015 Net Book Value ¹	Replacement and/or Upgrade Cost ³	Condition (good / fair / poor) 3	Level of Service (1 to 5) ⁴
PW01560	Calabogie Equipment Storage Shed	Buildings	Public Works	Additional Capital	12470B Lanark Rd.	doors	2018	45	45	2063	\$ 19,485	\$	- \$ 19,489	\$ 31,890	good	2
				Electrical										\$ -		
				Structural			2018	45	45	2063				\$ 25,000		
PW00053, PW1559	Garage - Griffith	Buildings	Public Works	Mechanical	25991C Highway #41		1974	49	5	2023	\$ 33,127	\$ 29,15	2 \$ 3,97	\$ 25,000	fair	2
				Electrical			1974	49	5	2023				\$ 20,000		
				Structural			2009	25	16	2034				\$ 10,000		
PW01441 & PW00056	Salt Shed - Matawatchan	Buildings	Public Works	Mechanical	3568 Matawatchan Rd.		2009	19	10	2028	\$ 260,424	\$ 126,82	D \$ 133,604	\$ 10,000	good	3
				Electrical			2009	19	10	2028				\$ 5,000		
				Structural			1998	21	1	2019				\$ 22,000		
GG00098,	Medical Centre / Home Support/ Food	Buildings	General Govt	Mechanical	1101 Francis St./4874 Calabogie		1975	45	2	2020	\$ 253,489	\$ 200,73	5 \$ 52,754	\$ 25,000	good	4
PR01567	Bank/ Storage/ Pharmacy/Vacant Offices	Duridings		Generator	Road					2019	÷ 233,408	φ 200,73		\$ 15,000	9004	
				Electrical			1975	48	5	2023				\$ 20,000		



Asset ID ¹ Asset Name ¹ Detailed Asset Description ¹ Operating Department ¹ Component Compon	Condition (good / fair / poor) 3 Level of Service (1 to 5) ⁴	Replacement and/or Updrage	2015 Net Book Value		(2018 Closing Cost	Replacement or	i) Life		Year in Service	Note	Location ¹	Component	Operating Department ¹	4	Asset Name ¹	Asset ID ¹
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Notes:

1. Data from Township of Greater Madawaska, Tangible Capital Asset Detail (2017).

2. Based on information supplied by Township of Greater Madawaska.

3. Building Review (Structural/Electrical/Mechanical; Greenview Environmental Limited, 2013).

4. Level of Service: 1 = very low priority, 5 = very high priority.

Selected Focus Item.

Land Improvements

Asset ID 1	Asset ID 1	Operating Department 1	Location 1	Projected Replacement or Upgrade Year	Replacement and/or Upgrade Cost 2	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
EN01323	ROADWAY GRIFFITH WASTE SITE	Environment	6 Finns Rd.	2050	60,000	-	-	-	-	-	-	-	-	-	-
EN01323	ROADWAY MT ST PATRICK WASTE SITE	Environment	134 Flat Rd.	2050	50,000	-	-	-	-	-	-	-	-	-	-
EN01323	ROADWAY - NORWAY LAKE TRANSFER STATION	Environment	574 Norway Lake Rd.	2049	95,000	-	-	-	-	-	-	-	-	-	-
EN01323	Retaining Wall (NL & MSP)	Environment	574 Norway Lake Rd.	2039	10,000	-	-	-	-	-	-	-	-	-	-
EN01323	BEAR FENCE	Environment	574 Mill St	2037	6,000	-	-	-	-	-	-	-	-	-	-
EN01323	NORWAY LAKE SITE	Environment	574 Norway Lake Rd.	2049	-	-	-	-	-	-	-	-	-	-	-
EN01323	NORWAY LAKE TRANSFER STATION	Environment	574 Norway Lake Rd.	2035	-	-	-	-	-	-	-	-	-	-	-
EN01323	ENTRANCE NORWAY LAKE WASTE SITE	Environment	574 Norway Lake Rd.	2027	-	-	-	-	-	-	-	-	-	-	-
EN01323	PAVED PARKING	Fire	12470A Lanark Rd.	2034	5,000	-	-	-	-	-	-	-	-	-	-
EN01323	OLD LIBRARY PARKING LOT (Paved)	General Government	4984 Calabogie Rd.	2024	30,000	-	-	-	-	-	30,000	-	-	-	-
EN01323	Library - New Elevator and Accessible Washroom	Library	12629 Lanark Rd	2019	39,530	39,530	-	-	-	-	-	-	-	-	-
EN01323	OLD MUNICIPAL OFFICE PARKING LOT	General Government	1101 Francis St.	2025	10,000	-	-	-	-	-	-	10,000	-	-	-
EN01323	Municipal Office	General Government	19 Parnell St.	2019	53,180	53,180	-	-	-	-	-	-	-	-	-
EN01323	RETAINING WALL OLD CALABOGIE MUNICIPAL OFFICE	General Government	1101 Francis St.	2034	25,000	-	-	-	-	-	-	-	-	-	-
EN01323	SEPTIC SYSTEM - OLD MUNICIPAL OFFICE CALABOGIE	General Government	1101 Francis St.	2024	15,000	-	-	-	-	-	15,000	-	-	-	-
EN01323	PAVED PARKING CAL COMM HALL	Parks and Recreation	574 Mill St.	2031	20,000	-	-	-	-	-	-	-	-	-	-
EN01323	LOUIS CHARBONNEAU MEMORIAL BALL PARK	Parks and Recreation	574 Mill St.	2040	40,000	-	-	-	-	-	-	-	-	-	-
EN01323	SEPTIC - GRIFFITH RINK/HALL	Parks and Recreation	15 Ginza St.	2025	15,000	-	-	-	-	-	-	15,000	-	-	-
EN01323	SEPTIC TANK - CALABOGIE COMM HALL	Parks and Recreation	574 Mill St.	2024	20,000	-	-	-	-	-	20,000	-	-	-	-
EN01323	WELLS (2) CALABOGIE COMMUNITY HALL	Parks and Recreation	574 Mill St.	2045	20,100	-	-	-	-	-	-	-	-	-	-
EN01323	GRIFFITH GARAGE PAVED PARKING AREA	Public Works	25991C Hwy 41	2025	15,000	-	-	-	-	-	-	15,000	-	-	-
EN01323	PAVED IN FRONT OF CALABOGIE ROADS GARAGE	Public Works	12470B Lanark Rd.	2035	15,000	-	-	-	-	-	-	-	-	-	-
EN01323	Aggregate Pit Expansion - Black Donald	Public Works	Near Hydro Dam Road	2024	45,000	-	-	-	-	-	45,000	-	-	-	-
EN01323	ENTRANCE BLACK DONALD WASTE SITE	Environment	34 Hydro Dam Rd.	0	-	-	-	-	-	-	-	-	-	-	
				Total	588,810	92,710	-	-	-		65,000	40,000	-	-	



Detailed Summary of Municipal Assets - Land Improvements Asset Management Plan (2018)

Asset ID ¹	Asset Name ¹	Note	Detailed Asset Description ¹	Operating Department ¹	Location ¹	Year in Service	Asset Life Expectancy (years) ¹	Remaining Useful Life (from 2018) ¹	Projected Replacement or Upgrade Year	Current Value (2018 Closing Cost Balance) 1	2018 Accumulated Amortization ¹	2018 Net Book Value 1	Replacement and/or Upgrade Cost ²	Condition (good / fair / poor) 2	Level of Service (1 to 5) ³
EN01323	ROADWAY GRIFFITH WASTE SITE		Land Improvement	Environment	6 Finns Rd.	2010	40	32	2050	\$ 24,119	\$ 10,720	\$ 13,399	\$ 60,000	good	2
EN01321	ROADWAY MT ST PATRICK WASTE SITE		Land Improvement	Environment	134 Flat Rd.	2010	40	32	2050	\$ 1,182	\$ 525	\$ 657	\$ 50,000	good	3
EN01449	ROADWAY - NORWAY LAKE TRANSFER STATION		Land Improvement	Environment	574 Norway Lake Rd.	2009	40	31	2049	\$ 82,942	\$ 29,859	\$ 53,083	\$ 95,000	good	3
EN01317	Retaining Wall (NL & MSP)		Land Improvement	Environment	574 Norway Lake Rd.	1999	40	21	2039	\$ 7,262	\$ 3,449	\$ 3,812	\$ 10,000	good	3
EN01311	BEAR FENCE		Land Improvement	Environment	574 Mill St	2017	20	19	2037	\$ 5,546	\$ 277	\$ 5,269	\$ 6,000	good	
EN01444	NORWAY LAKE SITE		Land Improvement	Environment	574 Norway Lake Rd.	2009	40	31	2049	\$ 323,526	\$ 72,791	\$ 250,735			
EN01471	NORWAY LAKE TRANSFER STATION		Land Improvement	Environment	574 Norway Lake Rd.	2010	25	17	2035	\$ 22,749	\$ 7,280	\$ 15,469			
EN01320	ENTRANCE NORWAY LAKE WASTE SITE		Land Improvement	Environment	574 Norway Lake Rd.	1982	45	9	2027	\$ 1,637	\$ 1,310	\$ 327			
FR00044	PAVED PARKING		Land Improvement	Fire	12470A Lanark Rd.	1993	41	16	2034	\$ 2,509	\$ 2,509	\$-	\$ 5,000	good	4
GG00175	OLD LIBRARY PARKING LOT (Paved)		Land Improvement	General Government	4984 Calabogie Rd.	1999	25	6	2024	\$ 20,742	\$ 15,764	\$ 4,978	\$ 30,000	fair	3
	Library - New Elevator and Accessible Washroom		Land Improvement	Library	12629 Lanark Rd	2019		1	2019				\$ 39,530		
GG00176	OLD MUNICIPAL OFFICE PARKING LOT		Land Improvement	General Government	1101 Francis St.	1987	38	7	2025	\$ 7,009	\$ 7,009	\$-	\$ 10,000	fair	3
	Municipal Office		Land Improvement	General Government	19 Parnell St.	2013	6	1	2019				\$ 53,180	Good	4
GG00114	RETAINING WALL OLD CALABOGIE MUNICIPAL OFFICE		Land Improvement	General Government	1101 Francis St.	1999	35	16	2034	\$ 5,041	\$ 3,831	\$ 1,210	\$ 25,000	fair	4
GG00116	SEPTIC SYSTEM - OLD MUNICIPAL OFFICE CALABOGIE		Land Improvement	General Government	1101 Francis St.	1999	25	6	2024	\$ 10,676	\$ 8,114	\$ 2,562	\$ 15,000	fair	4
PR00040	PAVED PARKING CAL COMM HALL		Land Improvement	Parks and Recreation	574 Mill St.	2006	25	13	2031	\$ 12,767	\$ 6,128	\$ 6,639	\$ 20,000	fair	3
PR00105, PR00181	LOUIS CHARBONNEAU MEMORIAL BALL PARK		Land Improvement	Parks and Recreation	574 Mill St.	1995	45	22	2040	\$ 29,808	\$ 27,554	\$ 2,254	\$ 40,000	fair	2
PR00124	SEPTIC - GRIFFITH RINK/HALL		Land Improvement	Parks and Recreation	15 Ginza St.	1989	36	7	2025	\$ 9,466	\$ 9,466	\$-	\$ 15,000	fair	4
PR00102	SEPTIC TANK - CALABOGIE COMM HALL		Land Improvement	Parks and Recreation	574 Mill St.	1999	25	6	2024	\$ 5,000	\$ 3,800	\$ 1,200	\$ 20,000	fair	4
PR00103	WELLS (2) CALABOGIE COMMUNITY HALL		Land Improvement	Parks and Recreation	574 Mill St.	1995	50	27	2045	\$ 8,387	\$ 3,858	\$ 4,529	\$ 20,100	good	4
PW00184	GRIFFITH GARAGE PAVED PARKING AREA		Land Improvement	Public Works	25991C Hwy 41	2004	21	7	2025	\$ 10,647	\$ 5,962	\$ 4,685	\$ 15,000	poor	2
PW00177	PAVED IN FRONT OF CALABOGIE ROADS GARAGE		Land Improvement	Public Works	12470B Lanark Rd.	1990	45	17	2035	\$ 10,200	\$ 6,347	\$ 3,853	\$ 15,000	fair	2



Detailed Summary of Municipal Assets - Land Improvements Asset Management Plan (2018)

Asset ID ¹	Asset Name ¹	Note	Detailed Asset Description ¹	Operating Department ¹	Location ¹	Year in Service	Asset Life Expectan (years) ¹	cy Remaining Useful Life (from 2018) ¹	Projected Replacement or Upgrade Year	Current Value (2018 Closing Cost Balance) 1	2018 Accumulated Amortization ¹	2018 Net Book Value 1	Replacement and/or Upgrade Cost ²	Condition (good / fair / poor) 2	Level of Service (1 to 5) ³
-	Aggregate Pit Expansion - Black Donald		Land Improvement	Public Works	Near Hydro Dam Road	2009	15	6	2024	\$-	\$-	\$-	\$ 45,000	good	4
EN01319	ENTRANCE BLACK DONALD WASTE SITE		Land Improvement	Environment	34 Hydro Dam Rd.	1982							\$ -	fair	2
EN01322	ENTRANCE MATAWATCHAN WASTE SITE		Land Improvement	Environment	3508 Matawatchan Rd.	1978							\$ -	fair	2
PR00179	BARNET ENTRANCE AND PARKING AREA		Land Improvement	Parks and Recreation	5179 Calabogie Rd.	1967							\$ -	fair	3
PR00182	CALABOGIE COMMUNITY HALL PARKING LOT		Land Improvement	Parks and Recreation	574 Mill St	1996							\$ -	fair	3
PR01296	GRAVEL PARKING LOT GRIFFITH RINK		Land Improvement	Parks and Recreation	15 Ginza St.	1989	-	-	-	\$-	\$-	\$ -	\$ -	fair	3
PR00180	TOURIST BOOTH PARKING ENT/LOT		Land Improvement	Parks and Recreation	12517 Lanark Rd.	1982	-	-	-	\$-	\$-	\$ -	\$ -	fair	2
-	Eagles Nest Parking Lot		Land Improvement	Parks and Recreation	-	2014	-	-	-	\$-	\$-	\$ -	\$ -	fair	2
PW00042	PAVED PARKING 2004 12740B Lanark Road		Land Improvement	Public Works	1274B Lanark Rd.	1993 like FR00044?				\$ 8,817	\$ 8,817	\$-			
PW00178	GRAVEL ENTRANCE MATAW. SALT SHED		Land Improvement	Public Works	3568 Matawatchan Rd.	1985	-	-	-	\$ 5,230	\$ 3,835	\$ 1,395	\$	fair	3
PW00185	GRIFFITH GARAGE GRAVEL PARKING AREA		Land Improvement	Public Works	25991C Hwy 41	1983	-	-	-	\$ 9,296	\$ 7,230	\$ 2,066	\$ -	fair	2

Notes:
Data from Township of Greater Madawaska, Tangible Capital Asset Detail (2017).
Based on information supplied by Township of Greater Madawaska.
Level of Service: 1 = very low priority, 5 = very high priority.
Costs for maintenance of gravel parking lots included in annual Roads budgets.

Selected Focus Item.

Asset ID 1	Asset ID 1	Projected Replacement or Upgrade Year 2	Replacement and/or Upgrade Cost 1, 4	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
0	Garbage Compaction Rolloff #1	2029	10,000	-	-	-	-	-	-	-	-	-	-
EN01314	Blue Box Rolloff	2021	10,000	-	-	10,000	-	-	-	-	-	-	-
0	Garbage Rolloff (non-compaction)	2023	10,000	-	-	-	-	10,000	-	-	-	-	-
EN01446	tationary Compactor #1 (Garbage) - T-250 HI	2029	75,000	-	-	-	-	-	-	-	-	-	-
EN01447	tationary Compactor #2 (Garbage) - T-250 HI	2029	75,000	-	-	-	-	-	-	-	-	-	-
EN01448	Stationary Compactor #3 (OCC) - T-250 HD	2029	75,000	-	-	-	-	-	-	-	-	-	-
0	Garbage Compaction Rolloff #2	2029	10,000	-	-	-	-	-	-	-	-	-	-
EN01312	Blue Box Compaction Rolloff (OCC)	2029	10,000	-	-	-	-	-	-	-	-	-	-
EN01306	Blue Box Rolloff (Mixed Containers)	2029	10,000	-	-	-	-	-	-	-	-	-	-
EN01307	Blue Box Rolloff (Mixed Fibres)	2029	10,000	-	-	-	-	-	-	-	-	-	-
EN01315	C&D Waste Rolloff #1	2029	10,000	-	-	-	-	-	-	-	-	-	-
EN01316	C&D Waste Rolloff #2	2029	10,000	-	-	-	-	-	-	-	-	-	-
0	Stationary Compactor (Garbage) - T-250 HD	2030	75,000	-	-	-	-	-	-	-	-	-	-
0	Garbage Compaction Rolloff	2030	10,000	-	-	-	-	-	-	-	-	-	-
0	Blue Box Rolloff (OCC)	2030	10,000	-	-	-	-	-	-	-	-	-	-
0	Blue Box Rolloff (Mixed Containers)	2030	10,000	-	-	-	-	-	-	-	-	-	-
0	Blue Box Rolloff (Mixed Fibres)	2030	10,000	-	-	-	-	-	-	-	-	-	-
-	C&D Waste Rolloff	2030	10,000	-	-	-	-	-	-	-	-	-	-
0	Stationary Compactor (Garbage) - T-250 HD	2030	75,000	-	-	-	-	-	-	-	-	-	-
0	Garbage Compaction Rolloff	2030	14,000	-	-	-	-	-	-	-	-	-	-
0	Blue Box Rolloff (OCC)	2030	14,000	-	-	-	-	-	-	-	-	-	-
0	Blue Box Rolloff (Mixed Containers)	2030	14,000	-	-	-	-	-	-	-	-	-	-
0	Blue Box Rolloff (Mixed Fibres)	2030	14,000	-	-	-	-	-	-	-	-	-	-
0	Organics Rolloff	2033	7,500	-	-	-	-	-	-	-	-	-	-
0	Organics Rolloff	2033	7,500	-	-	-	-	-	-	-	-	-	-
EN00087	LANDFILL SITE - MT ST PATRICK	2034	125,000	-	-	-	-	-	-	-	-	-	-
EN01521	2 x 50 yard Roll Off Bins	2038	20,000	-	-	-	-	-	-	-	-	-	-
-	k WDS Closure Costs (Annual Contributions t	n/a	112,500	-	-	-	-	-	-	-	-	-	-
EN00096	LANDFILL SITE - MATAWATCHAN	Closed/Rehab	-	-	-	-	-	-	-	-	-	-	-
EN00097	LANDFILL SITE - GRIFFITH	Closed/Rehab	-	-	-	-	-	-	-	-	-	-	-
EN00085	LANDFILL SITE - NORWAY LAKE	Closed/Rehab	-	-	-	-	-	-	-	-	-	-	-
0	LANDFILL SITE - BLACK DONALD	2020	50,000	-	50,000	-	-	-	-	-	-	-	-
EN01313	Blue Box Rolloff	2021	10,000	-	-	10,000	-	-	-	-	-	-	-
		Total	903,500	-	50,000	20,000	-	10,000	-	-	-	-	-



Asset ID ¹	Asset Name 1	Note	Volume	Detailed Asset Description ¹	Waste Disposal Site Location	Address ¹	Remaining Capacity ² (m ³)	Year in Service	Asset Life Expectancy (years) ¹	Remaining Useful Life (from 2018) ¹	Projected Replacement or Upgrade Year ²	Last Topographic Survey ^{1, 2}	Current Value (2018 Closing Cost Balance) 1, 3	2018 Accumulated Amortization 1 2018 Net Book Value	Replacement and/or Upgrade Cost ^{1,4}	Condition (good / fair / poor) ⁵	Level of Service (1 to 5) ⁶
	LANDFILL SITE - BLACK DONALD		-	Site	Black Donald WDS	34 Hydro Dam Rd.	9,576	Prior to 1980	6	-	2020	2014	\$ 1	\$ - \$	1 \$ 50,000	good	4
EN01313	Blue Box Rolloff		40 yard ³	Transfer Station Equipment	n/a	134 Flat Rd.	-	2002	19	3	2021	-	\$ 7,518	\$ 7,518 -	\$ 10,000	good	1
EN01314	Blue Box Rolloff		40 yard ³	Transfer Station Equipment	n/a	574 Norway Lake Rd.	-	2002	19	3	2021	-	\$ 7,518	\$ 7,518 -	\$ 10,000	good	1
	Garbage Rolloff (non-compaction)		40 yard ³	Transfer Station Equipment	Norway Lake WDS	574 Norway Lake Rd.	-	2009	14	5	2023	-	-		\$ 10,000	poor	4
	Garbage Compaction Rolloff #1		50 yard ³	Transfer Station Equipment	Norway Lake WDS	574 Norway Lake Rd.	-	2009	20	11	2029	-	-		\$ 10,000	good	4
EN01446	Stationary Compactor #1 (Garbage) - T-250 HD		-	Transfer Station Equipment	Norway Lake WDS	574 Norway Lake Rd.	-	2009	20	11	2029	-	\$ 69,773	\$ 34,887 \$ 34,88	7 \$ 75,000	good	4
EN01447	Stationary Compactor #2 (Garbage) - T-250 HD		-	Transfer Station Equipment	Norway Lake WDS	574 Norway Lake Rd.	-	2009	20	11	2029	-	\$ 69,773	\$ 34,887 \$ 34,88	7 \$ 75,000	good	4
EN01448	Stationary Compactor #3 (OCC) - T-250 HD		-	Transfer Station Equipment	Norway Lake WDS	574 Norway Lake Rd.	-	2009	20	11	2029	-	\$ 69,773	\$ 34,887 \$ 34,88	7 \$ 75,000	good	4
	Garbage Compaction Rolloff #2		50 yard ³	Transfer Station Equipment	Norway Lake WDS	574 Norway Lake Rd.	-	2009	20	11	2029	-	-		\$ 10,000	good	4
EN01312	Blue Box Compaction Rolloff (OCC)		50 yard ³	Transfer Station Equipment	Norway Lake WDS	574 Norway Lake Rd.	-	2009	20	11	2029	-		-	\$ 10,000	good	4
EN01306	Blue Box Rolloff (Mixed Containers)		50 yard ³	Transfer Station Equipment	Norway Lake WDS	574 Norway Lake Rd.	-	2009	20	11	2029	-		-	\$ 10,000	good	4
EN01307	Blue Box Rolloff (Mixed Fibres)		50 yard ³	Transfer Station Equipment	Norway Lake WDS	574 Norway Lake Rd.	-	2009	20	11	2029	-		-	\$ 10,000	good	4
EN01315	C&D Waste Rolloff #1		50 yard ³	Transfer Station Equipment	Norway Lake WDS	574 Norway Lake Rd.	-	2009	20	11	2029	-		-	\$ 10,000	good	4
EN01316	C&D Waste Rolloff #2		50 yard ³	Transfer Station Equipment	Norway Lake WDS	574 Norway Lake Rd.	-	2009	20	11	2029	-		-	\$ 10,000	good	4
	Stationary Compactor (Garbage) - T-250 HD		-	Transfer Station Equipment	Griffith WDS	6 Finns Rd.	-	2010	20	12	2030	-		-	\$ 75,000	good	4
	Garbage Compaction Rolloff		50 yard ³	Transfer Station Equipment	Griffith WDS	6 Finns Rd.	-	2010	20	12	2030	-	-		\$ 10,000	good	4
	Blue Box Rolloff (OCC)		50 yard ³	Transfer Station Equipment	Griffith WDS	6 Finns Rd.	-	2010	20	12	2030	-	-		\$ 10,000	good	4
	Blue Box Rolloff (Mixed Containers)		50 yard ³	Transfer Station Equipment	Griffith WDS	6 Finns Rd.	-	2010	20	12	2030	-	-		\$ 10,000	good	4
	Blue Box Rolloff (Mixed Fibres)		50 yard ³	Transfer Station Equipment	Griffith WDS	6 Finns Rd.	-	2010	20	12	2030	-	-		\$ 10,000	good	4



Asset ID ¹	Asset Name ¹	Note Volume	Detailed Asset Description ¹	Waste Disposal Site Location	Address ¹	Remaining Capacity ² (m ³)	Year in Service	Asset Life Expectancy (years) ¹	Remaining Useful Life (from 2018) ¹	Projected Replacement or Upgrade Year ²	Last Topographic Survey ^{1, 2}	Current Value (2018 Closing Cost Balance) 1, 3	2018 Accumulated Amortization 1	2018 Net Book Value 1	Replacement and/or Upgrade Cost ^{1,4}	Condition (good / fair / poor) ⁵	Level of Service (1 to 5) ⁶
-	C&D Waste Rolloff	50 yard ³	Transfer Station Equipment	Griffith WDS	6 Finns Rd.	-	2010	20	12	2030	-	-	-	-	\$ 10,000	good	4
	Stationary Compactor (Garbage) - T-250 HD	-	Transfer Station Equipment	Mount St. Patrick WDS	134 Flat Rd.	-	2010	20	12	2030	-			-	\$ 75,000	good	4
	Garbage Compaction Rolloff	50 yard ³	Transfer Station Equipment	Mount St. Patrick WDS	134 Flat Rd.	-	2010	20	12	2030	-	-	-	-	\$ 14,000	good	4
	Blue Box Rolloff (OCC)	50 yard ³	Transfer Station Equipment	Mount St. Patrick WDS	134 Flat Rd.	-	2010	20	12	2030	-	-	-	-	\$ 14,000	good	4
	Blue Box Rolloff (Mixed Containers)	50 yard ³	Transfer Station Equipment	Mount St. Patrick WDS	134 Flat Rd.	-	2010	20	12	2030	-	-	-	-	\$ 14,000	good	4
	Blue Box Rolloff (Mixed Fibres)	50 yard ³	Transfer Station Equipment	Mount St. Patrick WDS	134 Flat Rd.	-	2010	20	12	2030	-	-	-	-	\$ 14,000	good	4
	Organics Rolloff	20 m ³	Transfer Station Equipment	Griffith WDS	6 Finns Rd.		2013	20	15	2033					\$ 7,500	good	4
	Organics Rolloff	20 m ³	Transfer Station Equipment	Norway Lake WDS	574 Norway Lake Rd.	-	2013	20	15	2033	-	-	-	-	\$ 7,500	good	4
EN00087	LANDFILL SITE - MT ST PATRICK	-	Site	Mount St. Patrick WDS	134 Flat Rd.	38,898	Prior to 1980	20	-	2034	2014	\$ 33,200	\$-	\$ 33,200	\$ 125,000	good	4
EN01521	2 x 50 yard Roll Off Bins	50 yard ³	Public Works	Calabogie	574 Norway Lake Rd.	0	2018	20	20	2038	n/a	\$ 16,180	0	\$ 16,180	\$ 20,000.00	good	4
EN00096	LANDFILL SITE - MATAWATCHAN	-	Site	Matawatchan WDS	3508 Matawatchan Rd.	0	Prior to 1980	0	-	Closed/Rehab	Closed/Rehat	\$ 1,375	\$-	\$ 1,375	\$	good	4
EN00097	LANDFILL SITE - GRIFFITH	-	Site	Griffith WDS	6 Finns Rd.	0	Prior to 1980	0	-	Closed/Rehab	Closed/Rehat	\$ 750	\$-	\$ 750	\$-	good	4
EN00085	LANDFILL SITE - NORWAY LAKE	-	Site	Norway Lake WDS	574 Norway Lake Rd.	0	Prior to 1980	0	-	Closed/Rehab	Closed/Rehat	\$ 8,750	\$-	\$ 8,750	\$-	good	4
-	Mt St Patrick WDS Closure Costs (Annual Contributions to Reserves)	-	Closure Cost	Mount St. Patrick WDS	134 Flat Rd.	-	n/a	20	-	n/a	n/a	\$-	\$-	\$-	\$ 112,500	-	-
-	Black Donald WDS Closure Costs (Annual Contributions to Reserves)	-	Closure Cost	Black Donald WDS	34 Hydro Dam Rd.	-	n/a	6	-	n/a	n/a	\$-	\$-	\$-	\$ 137,500	-	-

Notes:

1. Data from Township of Greater Madawaska, Tangible Capital Asset Detail (2017).

2. Data from Annual Monitoring Reports (Greenview Environmental Management, 2017).

3. The Township of Greater Madawaska currently has \$340,000 in reserves for Closure and Post Closure of municipal landfills and for any site development related to expansion.

4. Replacement Cost assumes \$150,000 for site expansion costs (permitting and approvals) and \$100,000 for site preparation (i.e. clearing, grubbing, etc.).

5. Based on information supplied by Township of Greater Madawaska.

6. Level of Service: 1 = very low priority, 5 = very high priority.

Selected Focus Item.