



“Level of Service Framework”

Prepared for:

The Township of East Hawkesbury

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Glossary of Terms

Level of Service	Technical Level of Service (TLoS) is measured through a performance condition indexes, remaining useful life, inspections or various asset attributes including number of deficiencies.
Baseline weight	Baseline Weight is a numeric value assigned to each asset category as a starting position or handicapping. Baseline weight enables the municipality to prioritize the asset category with relationship to other municipal assets
PoF	Probability of failure (POF) is a rationalized value for level of service, derived from a number of factors including, the condition rating of an asset, the remaining useful life, the priority and network value of the asset.
CoF	Consequence of failure (COF) is rationalized from 5 key attributes associated to risk. These are; environmental, financial, Health and safety, Legal and Operational conditions. These conditions, descriptions and details outline the severity of the consequence associated with each attribute
Risk	Risk is a combination as PoF and CoF which identifies the ramifications associated with a lack of action
Risk Matrix	Risk matrix corresponds to conditions ranging from negligible to serious <ul style="list-style-type: none">• Very High Risk: Maximum risk mitigation measures should be in place, together with recovery plans, and availability of critical spares.• High Risk: risk mitigation measures should be in place providing layers of deterrence, high probability of detection, and rapid effective response. Insurance coverage is essential but may not be able to provide adequate coverage to prevent significant liability.• Moderate Risk: Risk should be managed by the introduction of mitigation strategies and operational procedures.• Low Risk: Minimal risk mitigation measures necessary. Risk should be managed through operational procedures, or accepted as a low business risk.
MMS O.Reg. 239/02	Minimum maintenance standards were developed to provide municipalities with a defence against liability from actions arising with regard to levels of care on roads and bridges. Regulation 239/02, which came into force on November 1, 2002, contains the minimum maintenance standards
O.Reg. 588/17	On January 1, 2018, Ontario Regulation 588/17: Asset Management Planning for Municipal Infrastructure came into effect. The regulation sets out requirements for municipal asset management planning to help municipalities better understand their infrastructure needs and inform infrastructure planning and investment decisions

Phase-in schedule

July 1, 2019: Date for municipalities to have a finalized strategic asset management policy that promotes best practices and links asset management planning with budgeting, operations, maintenance and other municipal planning activities.

July 1, 2022: Date for municipalities to have an approved asset management plan for core assets (roads, bridges and culverts, water, wastewater and stormwater management systems) that identifies current levels of service and the cost of maintaining those levels of service.

July 1, 2023: Date for municipalities to have an approved asset management plan for all municipal infrastructure assets that identifies current levels of service and the cost of maintaining those levels of service.

July 1, 2024: Date for municipalities to have an approved asset management plan for all municipal infrastructure assets that builds upon the requirements set out in 2023. This includes an identification of proposed levels of service, what activities will be required to meet proposed levels of service, and a strategy to fund these activities

Objectives as defined by the Ontario reg. 588/17

A municipality's asset management plan must include for each asset category, the current levels of service being provided, determined in accordance with qualitative descriptions and technical metrics based on data from at most the two calendar years prior to the year in which all information required under this section is included in the asset management plan.

For each asset category, a summary of the assets in the category, the replacement cost of the assets in the category, the average age of the assets in the category, determined by assessing the average age of the components of the assets, the information available on the condition of the assets in the category, and a description of the municipality's approach to assessing the condition of the assets in the category, based on recognized and generally accepted good engineering practices where appropriate.

For each asset category, the lifecycle activities that would need to be undertaken to maintain the current levels of service for each of the 10 years following the year for which the current levels of service are determined and the costs of providing those activities based on an assessment of the following: The full lifecycle of the assets, the options for which lifecycle activities could potentially be undertaken to maintain the current levels of service and the risks associated with the options.

Council Responsibility

- Member of council play an important role in validating municipal level of service. Not only through the policies that they adopt, the yearly review and the ongoing involvement when levels are adversely affected.
- Council must be educated on the asset management strategies which comprise of lifecycle events in order to reduce risk impact.
- Council's responsibility is to provide direction to staff while supporting qualified staff in their choices.
- The frequency of these reviews should be established and followed by staff as part of the Asset Management Policy
- Validate and support the amount of time it will take to reach expected Levels of Service

Asset Management Components

Accurate and detailed asset inventory

- a summary of the assets in the category
- condition of the assets in the category
- the average age of the assets in the category
- operations, such as increased maintenance schedules

Lifecycle Management

- The options for which lifecycle activities could potentially be undertaken to maintain the current levels of service.
- The lifecycle activities undertaken for the lowest cost to maintain the current levels of service
- Lifecycle management and financial strategy that sets out the following information with respect to the assets in each asset category for the 10-year period.

Level of Service

- Establishing Level of services
- The risks associated with the options

Financial Controls

- An estimate of the annual costs for each of the 10 years of undertaking the lifecycle activities separated into capital expenditures and significant operating costs.
- the replacement cost of the assets in the category
- If based on the funding projected to be available, the municipality identifies a funding shortfall for the lifecycle activities
- An identification of the annual funding projected to be available to undertake lifecycle activities and an explanation of the options examined by the municipality to maximize the funding projected to be available.

Municipal Engagement

- municipal residents and other interested parties to provide input
- Service request associated to location, deficiency type, action required and associated photos. Input deficiency, create work orders, and manage the repairing, the deadlines and follow up comments.

Level of Service Policies

The core purpose of a Township is to provide services to residents and other stakeholders. Physical assets are simply a portion of what is required to deliver the various levels of service as determined by the Township. The Township needs to ensure that the infrastructure performs to meet the level of service goals at an affordable and sustainable cost. An objective of Levels of Service analysis is to find a balance between the expected levels of service and the cost of providing that level of service. Determining municipal level of service policies requires first developing a baseline for acceptable and affordable levels of service. This is done by first examining present-day service levels, community needs, regulatory or legal obligations and the cost of service delivery. Once present-day service levels have been examined, this baseline can be compared against level of service expectations.

The Process

Levels of Service analysis may involve:

1. Developing
 - Customer vs. Technical Levels of Service
 - Current vs. Expected Levels of Service
 - Use of performance measures
 - Financial validation

2. Communication
 - Receive input from staff
 - Receive input from citizens
 - Communicate the Levels of Service to stakeholders
 - Council approval of Levels of Service strategies

3. Update
 - Updating the Levels of Service Analysis on a yearly basis

Level of Service Overview

LoS is a balance between user expectations for overall quality, performance, availability and safety versus affordability.

Level of Service requires asset category, performance measurement, a current measurement, a target measurement, an achievement date, an approximate cost and a priority assigned to each performance measurement.

AMPs typically comprise of theoretical models which need to be vetted against operational models concluding with practical realities. LoS can be considered the practical component of an AMP. Operational and practical data is used to establish and validate LoS which in turn will feed into the financial component. This closed-loop approach will either validate the AMP or indicate required changes to the financial strategy. LoS is a key driver which influences asset management decisions, and depending on asset type can be either condition or age based.

LoS outlines the overall quality, performance, availability and safety of the service being provided. LoS contains a number of distinct categories:

- Service Identification
- Financial
- Municipal risk
- Community Expectations
- Technical component
- Strategic component

Community

Community levels of service outline the overall quality, performance, availability and safety of the service being provided. Level of service is a balance between user (customer) expectations for overall quality, performance, availability and safety of infrastructure assets with a cost that is affordable.

LoS should reflect the priorities and expectations of the community. At some point it is necessary to ensure that the services provided does in fact reflect the community's priorities and expectations. It may also be important to determine if the services provided are at a level that the community finds acceptable or if those service levels should be increased or decreased.

Technical levels of service outline the operating, maintenance, rehabilitation, renewal and upgrade activities expected to occur. Level of service is a balance between user (customer) expectations for overall quality, performance, availability and safety of infrastructure assets with a cost that is affordable. Concurrent with the development/revision of customer levels of service, technical levels of service must be considered that also look at the risk associated with providing the service. Proposed targets for community and technical levels of service should be included as part of the asset management. Performance measures should be developed and the actual results achieved reported annually.

Financial investment

The management of physical assets, their selection, maintenance, inspection and renewal plays a key role in determining the operational performance and viability of organizations that operate assets as part of their core business. LoS typically comprise of theoretical models which need to be vetted against practical realities. Operational data is used to establish and validate LoS which in turn will feed into the financial component. This closed-loop approach will either validate the LoS strategies or indicates required changes to the financial strategy.

LOS Matrix

Determining the desired levels of service for core asset type is achieved with consideration of a number of factors including costs, user expectations and government mandated and minimum requirements.

LOS outlines the overall quality, performance, availability, and safety associated to municipal assets and services. Each asset category can have its own Key Performance Indicator, current measurements, target measurements, achievement date, approximate costs associated to each component and a priority listing based on staff and council consensus.

There are three (3) distinct categories of LoS:

- Municipal risk
- Asset Life Cycle cost implications
- Financial Options

LoS outlines the overall quality, performance, availability and safety of the service being provided. Technical levels of service (TLS) outline the operating, maintenance, rehabilitation, and renewal strategies. LoS is a balance between user expectations for overall quality, performance, availability and safety versus affordability

Technical levels of service (TLS) outline the operating, maintenance, rehabilitation, and renewal strategies. Technical levels of service outline the operating, maintenance, rehabilitation, renewal and upgrade activities expected to occur. Technical levels of service must also consider the risk associated with providing the service. Proposed targets for customer and technical levels of service must be included as part of the asset management strategy. Performance measures should be developed, and the actual results achieved reported and updated annually.

The target levels of service must be reviewed on a regular basis to determine if they are appropriate and achievable. Consideration should be given to risk and cost in the development of target levels of service.

All assets carry a level of risk for their users. Generally, when conducting risk assessment, two key factors that come into consideration are frequency of use and cost of improvement. Acceptable levels of risk may vary depending on their frequency of use.

Key performance indicators (KPI)

Summary of Performance Measures for the core Municipal Infrastructure Assets

	Waste Water	Roads	Bridges and Culverts
Condition	<ul style="list-style-type: none"> • Number of blocked sewers per 1 km length • Percentage of length cleaned • Number of waste water main back-ups relative to the age • System length tested for leakage per km length • Percentage of length CCTV inspected 	<ul style="list-style-type: none"> • Performance Condition Index (PCI) • Roughness Index (RI) • Surface condition Index (SCI) • Number of crack seal/km/year 	<ul style="list-style-type: none"> • OSIM inspections
Capacity	<ul style="list-style-type: none"> • Number of reported overflows due to capacity per 1 km length • Number of reported blocked service connections per 10 service connections • Number of connections with sanitary flooding per 10 service connections 	<ul style="list-style-type: none"> • Accommodate safe traffic flow 	<ul style="list-style-type: none"> • Bridge Condition Index (BCI)

PoF Matrix

PoF	Rating	Age Based	Condition Index	Score Card
1	Excellent	0-10% of UL	90 – 100	A
2	Good	11-25 % of UL	75 - 89	B
3	Fair	26-50 % of UL	50 - 74	C
4	Poor	51-65 % of UL	35 - 49	D
5	Severe	66 > % of UL	<34	E

Data validation / migration

Infrastructure Data

Valid and current data is the heart and soul of any LoS strategy. Assets must be defined by proper topology with unique identification allowing infrastructure data to be linked to the existing database.

Network Topology

Network topology defines the interconnection of links and, optionally, nodes at link junctions. Networks may contain loops. Network segments have a specified direction.

Accurate and updated Inventory

Key items;

- Collecting accurate and standardized inventory
- **Component breakdown**
- **Location**
- **Condition**
- **Lifecycle events**
- **Photos attachment**

The Inventory repository must store detailed attributes associated to individual assets. Each asset listing can capture a variety of information from the physical location to the more specific details such as make, model and serial number of any item. Data is enriched by progressively capturing additional detailed attributes associated to Location, Map, Attachments, Geometry, Inventory, and Conditions.

Lifecycle History

Collect historical condition ratings from Roads needs study or from other sources. This detailed information provides a visual snapshot of the trends for each road section.

Attachments: Attaching documents such as photos of assets, legal documents, and technical documents offer validation that work is either needed or being successfully implemented

Deficiencies: Input the number and type of yearly deficiencies identified on each road section. Separate those between MMS, Non MMS, and citizen received

Invoices: Have the operation staff electronically collect all invoices for work done on each road. Use this data to compare financial investments required to maintain the asset. Run yearly comparisons to see if other lifecycle events should be considered.

Lifecycle Event: The money invested on an asset is linked to the lifecycle event. As work is being completed, operation staff input the date and the new values are automatically updated to that asset.

Budget: Empower operation staff to create a high-level budget requirement

Finance: A view into the invoice expenses, funding requirement and budget allocation per asset.

Lifecycle events / condition ratings

Adoption of lifecycle strategies such as maintenance, rehabilitation, reconstruction and measure their effectiveness through the collection of condition ratings. For roads lifecycle events may include;

- Grading
- Maintenance activities
- Crack Sealing of HCB Roads
- Annual Right-of-way brushing and ditch cleaning
- Culvert flushing
- Dust suppression

Financial

Financial data is linked to the inventory for increased continuity, and offers access to lifecycle details, financial forecasting and associated levels of Risk. Year over year this will help the municipality get a better understanding of what it will cost them to maintain all of their assets and where to dedicate their funds. The expectation is to link revenue to the asset's lifecycle events as well as the PoF and CoF

Invoices

Attaching invoice and track annual maintenance associated to an asset validates necessary dollar investment. Staff will electronically collect all invoices for work done on each asset. Use this data to compare financial investments required to maintain the asset. Run yearly comparisons to see if other lifecycle events may be considered.

Lifecycle costing

Establish actual costs that a municipality validates through tenders and quotes associated with each lifecycle treatment.

Managing the deficit;

- Increasing municipal taxes
- Implementing or increasing user fees
- Accept decreased levels of service

Financial ramifications

- Capital cost
- Operational cost
- Maintenance cost
- Replacement cost

Calculating replacement cost

For linear asset replacement cost is calculated by multiplying the length of the asset times the cost of the specific lifecycle event.

For point assets the replacement cost is calculated by manufactures price list.

Data Validation and visualization

Accurate inventory

- Accurate inventory
 - Sufficient fields of information
 - Proper structure
 - Dates such as installation, replacement, useful life
- Current condition ratings utilizing any criteria such as PCI or percentage of Remaining Useful Life
- Calculating Total km of infrastructure broken down into major categories
- Connecting Components to standards
 - Road assets connected to MMS standards; Gravel, HCB, LCB
- Establishing and Validated lifecycle event strategies
 - such as maintenance, rehabilitation, reconstruction
- Consistent Condition evaluation methodology
 - Piped linear to include flushing, camera inspections, relining
- Financial constraints, validate replacement costs
 - square meter costs per unit of roads
 - linear meter costs for piped infrastructure
- Data Visualization
 - Utilizing a variety of tools to visualize location of assets.
 - This may include photos, videos, integration to corporate GIS solution as well as links into Google Maps.
- 10-year capital plan

Asset Matrix

category	Type	Confidence
roads	roads	Very Good
	Sidewalks	Very Good
Bridges and culverts	bridges	Excellent
	Culverts >3	Excellent
	Culverts <3	Very Good
Storm water	Storm lines	Good
	Catch basins	Average
	manholes	Average
	culverts	Average
Waste water	Sewer lines	Good
	Manholes	Good

Asset Condition Information

category	Type	Current Condition rating	Optimal condition rating
roads	roads	Estimated useful life	PCI
	Sidewalks	Estimated useful life	inspections
	gutters	Estimated useful life	inspections
	Point furniture	Estimated useful life	inspections
Bridges and culverts	bridges	Estimated useful life	OSIM
	Culverts >3	Estimated useful life	OSIM
	Culverts <3	Estimated useful life	inspections
Storm water	Storm lines	Estimated useful life	inspections
	Catch basins	Estimated useful life	inspections
	manholes	Estimated useful life	inspections
	culverts	Estimated useful life	inspections
Waste water	Sewer lines	Estimated useful life	inspections
	Manholes	Estimated useful life	inspections

Asset attributes

Asset category	Asset attributes	Data collection
road	Area square	✓
	Road class	✓
	Surface material	✓
	date	
storm	Length	✓
	diameter	✓
	Material	✓
	date	
sanitary	Length	✓
	diameter	✓
	Material	✓
	date	
bridges	length	✓
	span	✓
	classification	✓
	date	

Risk

Prioritization Matrix

Assigning a base line value from 10 – 50 for each municipal asset category will enable to prioritize and compare various asset categories. Is a road more important than a waterline, more important than a firetruck?

Probability of Failure (PoF)

Begin by establishing a desired level of service. For road assets it may be a PCI rating of 75.

Not all assets deteriorate at the same level. For certain road assets PoF may be associated to PCI rating of 75, for other assets such as water it may be remaining useful life. In some cases, the deterioration may be quantitative as 2 pci per year while others may be based on asset longevity. As the assets deteriorate the probability of failure increases. POF for an asset category such as roads requires a combination of attributes including baseline weight, material, classification, condition rating and useful life. These values are normalized to a value from 1-5. The condition rating and useful life are matched against a desired level of service for a visual representation. The results are including percentage weight produce a PoF rating from 1-5

Consequence of Failure (CoF)

Not all assets pose the same level of risk. Even within the same category a road in front of a hospital, over a body of water, or a main road versus a cottage road pose different risk or consequence of failure. CoF can be derived for each asset category from the calculation of an asset category baseline weight, and 5 criteria including; safety, operational, environment, finance, and legal.

Risk Components

Environmental conditions; Values from 1- 10 with associated description and details outlining the severity of the consequence associated to the environment

Financial conditions; Values from 1- 10 with associated description and details outlining the severity of the consequence associated to the financial

Health and safety conditions; Values from 1- 10 with associated description and details outlining the severity of the consequence associated to the health and safety

Legal; Values from 1- 10 with associated description and details outlining the severity of the consequence associated to the Legal

Operational conditions; Values from 1- 10 with associated description and details outlining the severity of the consequence associated to the Operational

LoS Matrix

Current LoS Versus Expected LoS

Current Levels of Service equates to what service level is currently provided, expected Levels of Service outlines the overall objective or target Levels of Service to be reached at some point in time. The amount of time it will take to reach expected Levels of Service depends on the municipality's assumptions within the asset management planning process.

Ongoing Review, Updates and, Improvements

The frequency of these reviews should be established and followed by staff as part of the Asset Management Policy.



Transportation - Road Section

PERFORMANCE MEASUREMENT	TARGET MEASUREMENT	CURRENT MEASUREMENT	ACHIEVEMENT DATE	APPROXIMATE COST	PRIORITY
Safe Transportation Network	PCI > 60	PCI . 50	2022-02-01	50000.0000	Medium
% of fully accessible roads	1	TBD	2022-02-01		
Number of citizen requests	50 requests per year	TBD	2023-02-01		
length of cycling and pedestrian network	unknown				

Applicable legislation

The risk matrix is to be vetted against the financial costs associated in mitigating the municipal risks as well as the legislative requirements.

legislation	compliance
MMS O.Reg, 239/02	✓
Standards for bridges O.Reg, 104/97	✓
O. Reg., 588/17	✓

Roads

The regulation requirements

Column 1 Service attribute	Column 2 Community levels of service (qualitative descriptions)	Column 3 Technical levels of service (technical metrics)	
Scope	Description, which may include maps, of the road network in the municipality and its level of connectivity.	Number of lane-kilometers of each of arterial roads, collector roads and local roads as a proportion of square kilometers of land area of the municipality.	See Images Below
Quality	Description or images that illustrate the different levels of road class pavement condition.	<ol style="list-style-type: none"> 1. For paved roads in the municipality, the average pavement condition index value. 2. For unpaved roads in the municipality, the average surface condition (e.g. excellent, good, fair or poor). 	See Images below

The LOS Target

The Municipality has established a PCI rating for the target level of service for roads by classifying road segments based on surface types and the Minimum maintenance standard 389 (traffic and speed) others. The desired level of service for Municipal roads is to maintain an average weighted condition rating of for the entire road network based on each asset category such as HCB, LCB, and gravel. The municipal road network should be evaluated through completion of the 10 Year Roads Improvement Plan. The rating system consists of a number 1 through 100. For the purposes of this LOS, the following assumptions were made for road deterioration rates:

- Low Class Bituminous Roads - Condition rating reduced by 1 PCI per year
- High Class Bituminous Roads - Condition rating reduced by 2 PCI per year
- Gravel Roads - Condition rating is maintained with regular maintenance
- Earth Roads

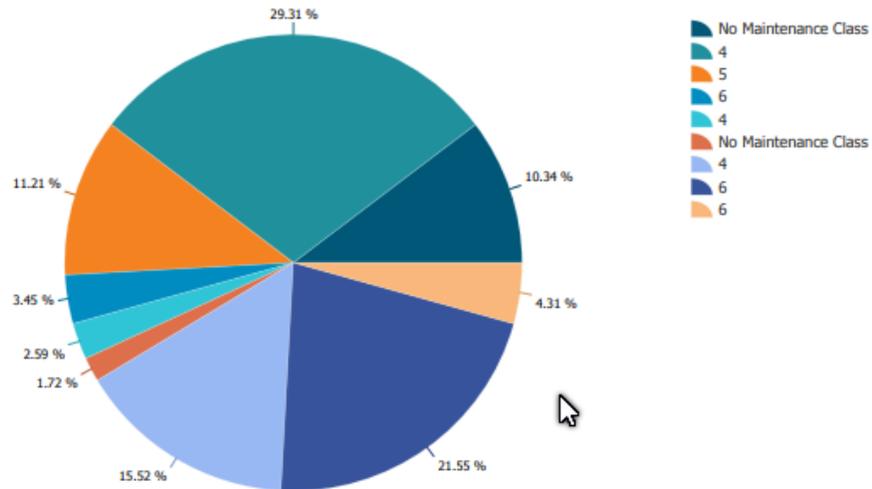
Technical level of service

Surface type	Existing PCI Rating	Target PCI Rating	Replacement cost
H.C.B. (Asphalt)	71	65	
L.C.B. (Surface Treatment)	78	65	



LINEAR ASSETS BY MAINTENANCE CLASS

Road Section



MAINTENANCE CLASS	SURFACE TYPES	No. OF ASSETS	LENGTH (In Meters)
No Maintenance Class	High Class Bituminous (HCB)	12	3601
4	High Class Bituminous (HCB)	34	58080
5	High Class Bituminous (HCB)	13	6880
6	High Class Bituminous (HCB)	4	6500
4	Low Class Bituminous (LCB)	3	9040
No Maintenance Class	Gravel	2	100
4	Gravel	18	26300
6	Gravel	25	22910
6	Earth	5	2260

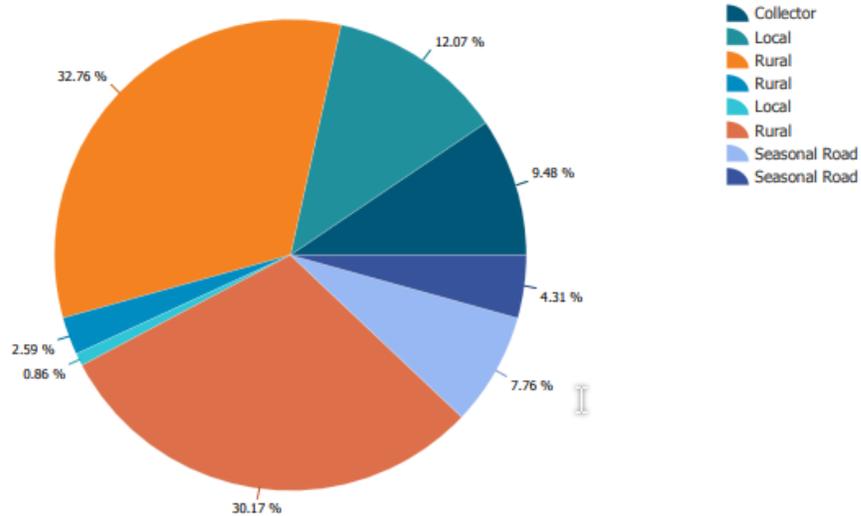
Sum Assets: 116 Sum Length: 135671 Meters

Total Assets: 116 Total Length: 135671 Meters



LINEAR ASSETS BY CLASSIFICATIONS

Road Section



CLASSIFICATION	SURFACE TYPES	No. OF ASSETS	LENGTH (In Meters)
Collector	High Class Bituminous (HCB)	11	3441
Local	High Class Bituminous (HCB)	14	7090
Rural	High Class Bituminous (HCB)	38	64530
Rural	Low Class Bituminous (LCB)	3	9040
Local	Gravel	1	180
Rural	Gravel	35	40680
Seasonal Road	Gravel	9	8450
Seasonal Road	Earth	5	2260

Sum Assets: 116 Sum Length: 135671 Meters

Total Assets: 116 Total Length: 135671 Meters

Road Conditions Images

Good Condition



Fair Condition



Poor Condition



Wastewater

Column 1 Service attribute	Column 2 Community levels of service (qualitative descriptions)		Column 3 Technical levels of service (technical metrics)	
Scope	Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal wastewater system.	The Town has paper maps of municipal wastewater infrastructure.	Percentage of properties connected to the municipal wastewater system.	The town has 1462 properties of which 114 have wastewater connection Approximately 10% of residents have sewer connection
Reliability	<ol style="list-style-type: none"> 1. Description of how combined sewers in the municipal wastewater system are designed with overflow structures in place which allow overflow during storm events to prevent backups into homes. 2. Description of the frequency and volume of overflows in combined sewers in the municipal wastewater system that occur in habitable areas or beaches. 3. Description of how stormwater can get into sanitary sewers in the municipal wastewater system, causing sewage to overflow into streets or backup into homes. 4. Description of how sanitary sewers in the municipal wastewater system are designed to be resilient to avoid events described in paragraph 3. 5. Description of the effluent that is discharged from sewage treatment plants in the municipal wastewater system. 	<p>Town has no combined sewers</p> <p>0 volume of overflows</p> <p>No connection</p> <p>Based on engineering design standards</p>	<ol style="list-style-type: none"> 1. The number of events per year where combined sewer flow in the municipal wastewater system exceeds system capacity compared to the total number of properties connected to the municipal wastewater system. 2. The number of connection-days per year due to wastewater backups compared to the total number of properties connected to the municipal wastewater system. 3. The number of effluent violations per year due to wastewater discharge compared to the total number of properties connected to the municipal wastewater system. 	<p>0 days</p> <p>0 days</p> <p>0 violations</p>

Technical level of service

Waste Water	Existing Rating	Target Rating	Replacement cost
Waste Watermain	Remaining useful life	Remaining useful life > 50 years	
Manhole	Remaining useful life	Remaining useful life > 50 years	
Structures (valves)	Remaining useful life	Remaining useful life > 50 years	

Stormwater

Column 1 Service attribute	Column 2 Community levels of service (qualitative descriptions)		Column 3 Technical levels of service (technical metrics)	
Scope	Description, which may include maps, of the user groups or areas of the municipality that are protected from flooding, including the extent of the protection provided by the municipal stormwater management system.		<ol style="list-style-type: none"> 1. Percentage of properties in municipality resilient to a 100-year storm. 2. Percentage of the municipal stormwater management system resilient to a 5-year storm. 	

Technical level of service

Storm Water	Estimated useful life	Existing Rating	Target Rating	Replacement cost
Storm main	75 years	Remaining useful life	Remaining useful life > 50 years	
Manhole	75 years	Remaining useful life	Remaining useful life > 50 years	
Structures	75 years	Remaining useful life	Remaining useful life > 50 years	

BRIDGES AND CULVERTS

Column 1 Service attribute	Column 2 Community levels of service (qualitative descriptions)		Column 3 Technical levels of service (technical metrics)	
Scope	Description of the traffic that is supported by municipal bridges (e.g., heavy transport vehicles, motor vehicles, emergency vehicles, pedestrians, cyclists).	All traffic is supported	Percentage of bridges in the municipality with loading or dimensional restrictions.	All bridges have a “No Load” restriction sign
Quality	1. Description or images of the condition of bridges and how this would affect use of the bridges. 2. Description or images of the condition of culverts and how this would affect use of the culverts.	OSIM inspections are conducted No culverts >3 m are installed	1. For bridges in the municipality, the average bridge condition index value. 2. For structural culverts in the municipality, the average bridge condition index value.	BCI “85”

Bridges and structural culverts of greater than 3 meter spans consist of many different components with varying life expectancies, generally ranging from 50 to 75 years. The condition of a bridge is evaluated by completing mandatory biennial OSIM inspections which provide detailed condition ratings of all the components of each structure. The condition of the various components is described by one of four ratings, being Excellent, Good, Fair or

- No Load Posting of Structure
- Two lane crossing
- Guiderail protected with proper end treatments
- Good sight lines on the approaches to the water crossing

The following is recommended to meet desired levels of service for structures:

- Complete OSIM inspections as mandated by Ontario Regulation 104/97 Standards for Bridges
- Implement studies and repairs as outlined in OSIM reports

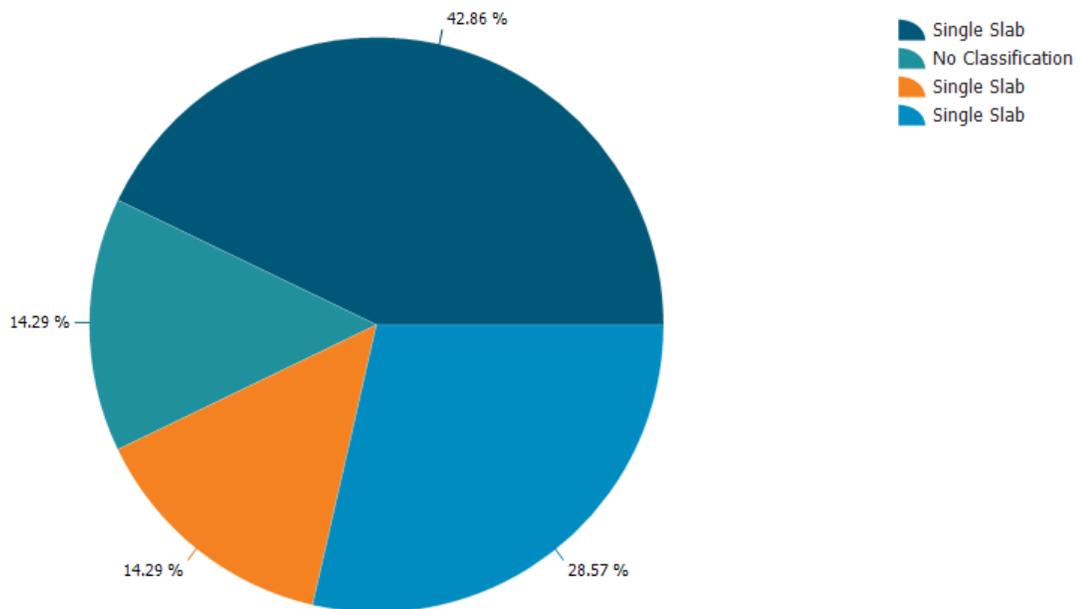
Technical level of service

Bridges and Culverts > 3 m	Estimated useful life	Existing Rating	Target Rating	Replacement cost
Bridges	75 years	85	80	\$12,868,376



POINT ASSETS BY CLASSIFICATIONS

Bridge



CLASSIFICATION	SURFACE TYPES	No. OF ASSETS	LENGTH (In Meters)
Single Slab	Reinforced Concrete	6	139.8
No Classification	Steel	2	45
Single Slab	Steel	2	16
Single Slab	Precast Concrete	4	55.5

Sum Assets: 14

Sum Length: 256.3 Meters

Total Assets: 14

Total Length: 256.3 Meters

Appendix A

Bridge Inventory

A	B	C	D	E	F	G	H	I	J	K	L	M
ASSET SUB TYPE	ASSET NAME	ASSET ID	CONDITION	NETWORK VALUE	LIFE EXPECTANCY	DATE INSTALLED	REPLACEMENT YEAR	REMAINING LIFE(In Years)	USEFUL LIFE RATING	CURRENT CONDITION RATING	PURCHASE PRICE	COMMENTS
Bridge	Concession 7 Road East Bridge	00008	FAIR	100	75	1950-01-01	2025	3	POOR	70	\$1,230,909.00	NO LOAD POSTED
Bridge	Channon Bridge	00007	FAIR	100	75	1955-01-01	2030	8	POOR	70	\$1,418,314.00	NO LOAD POSTED
Bridge	Eugène Brunette Bridge	00005	GOOD	100	75	1960-01-01	2035	13	POOR	80	\$3,097,600.00	NO LOAD POSTED
Bridge	Concession 9 Rd. Bridge	00009	GOOD	100	75	1962-01-01	2037	15	FAIR	80	\$370,976.00	NO LOAD POSTED
Bridge	Conc. 1 Road East Bridge	00012	FAIR	100	75	1972-01-01	2047	25	FAIR	70	\$509,400.00	NO LOAD POSTED
Bridge	Petite Quatorze Bridge	00006	GOOD	100	75	1973-01-01	2048	26	FAIR	80	\$1,022,208.00	NO LOAD POSTED
Bridge	Pattee Road Bridge	00002	GOOD	100		1974-06-01				80	\$774,323.00	NO LOAD POSTED
Bridge	Duplantie Bridge	00004	GOOD	100	75	1980-01-01	2055	33	FAIR	80	\$1,831,456.00	NO LOAD POSTED
Bridge	Golf Road Bridge	00003	FAIR	100	75	1982-01-01	2057	35	GOOD	70	\$760,523.00	NO LOAD POSTED
Bridge	Mill Street Bridge	00010	GOOD	100	75	1991-01-01	2066	44	GOOD	80	\$482,993.00	NO LOAD POSTED
Bridge	Concession 2 road bridge	00011	EXCELLENT	100	75	2007-06-01	2082	60	VERY GOOD	90	\$681,813.00	NO LOAD POSTED
Bridge	Green Lane Road Bridge	00001	GOOD	100	75	2013-06-01	2088	66	VERY GOOD	80	\$687,861.00	NO LOAD POSTED
Bridge	Lemieux Road Bridge	00014	EXCELLENT	100		2021-06-01				90		REPLACED BY CULVERT 2021, NO LOAD POSTED
Bridge	Conc. 6 Road Bridge	00013	EXCELLENT	100		2021-06-01				90		REPLACED IN 2021, NO LOAD POSTED

Road Inventory

ROAD ID	ASSET NAME	FROM	TO	LENGTH (m)	WIDTH	MATERIALS	AREA (m ²)	CLASSIFICATION	MAINTENANCE CLASS	CONDITION	DATE INSTALLED	CURRENT CONDITION RATING
RD278	Clermont Road	From 580m East	Quebec boundary	810	5 m	Earth	4050	Seasonal Road	6	FAIR	1950-01-01	50
RD279	West of Grande Montee Rd - Part 2	180m West of Grande Montee Road	River Bank	190	10 m	Earth	1900	Seasonal Road	6	FAIR	1950-01-01	50
RD276	McLennan Road	East End	580m East	580	5 m	Earth	2900	Seasonal Road	6	FAIR	1950-01-01	50
RD267	McLennan Road	McLennan Road	County Road 10	100	5 m	Earth	500	Seasonal Road	6	FAIR	1950-01-01	50
RD272	Clermont Road	Grande Montee Road	580m East	580	5 m	Earth	2900	Seasonal Road	6	FAIR	1950-01-01	50
RD273	West of Grande Montee Rd - Part 1	Grande Montee Road	180m West	190	10 m	Gravel, Stone or Other Loose Top	1900	Seasonal Road	6	FAIR	1950-01-01	70
RD220	Castors Road	Montee la Grande	East End	610	6 m	Gravel, Stone or Other Loose Top	3660	Seasonal Road	6	FAIR	1950-01-01	70
RD207	Lafrance Road	Grande Montee Road	East End	280	6 m	Gravel, Stone or Other Loose Top	1680	Seasonal Road	6	FAIR	1950-01-01	70
RD265	Ranger Road	Concession Road 1	Concession Road 2	1800	5 m	Gravel, Stone or Other Loose Top	9000	Seasonal Road	6	FAIR	1950-01-01	70
RD269	Concession 6 Road	Clermont Road	Westerly	120	6.8 m	Gravel, Stone or Other Loose Top	816	Seasonal Road	6	FAIR	1950-01-01	70
RD280	Concession 6 Road	Grande Montee Road	Westerly	120	6.5 m	Gravel, Stone or Other Loose Top	780	Seasonal Road	6	SEVERE	1950-01-01	10
RD266	Stephens Rd.(Boundary Rd) 1/2 of cost	County Road 10 Road	Happy Hallow Road	1740	5 m	Gravel, Stone or Other Loose Top	8700	Seasonal Road	6	FAIR	1950-01-01	70
RD232	McLennan Road	County Road 10	McLennan Road	145	5 m	Gravel, Stone or Other Loose Top	725	Rural	6	FAIR	1950-01-01	70
RD223	Concession 6 Road	County Road 14	East End	2150	6.8 m	Gravel, Stone or Other Loose Top	14620	Rural	6	FAIR	1950-01-01	70
RD206	St-Thomas Montee	Grande Montee Road	Quebec boundary	470	6.7 m	Gravel, Stone or Other Loose Top	3149	Rural	6	FAIR	1950-01-01	70
RD219	Lalonde-Martineau Road	County Road 18	North End	780	6 m	Gravel, Stone or Other Loose Top	4680	Rural	6	FAIR	1950-01-01	70
RD214	Tittley Road	North Glangery Boundary	County Road 18	900	6.8 m	Gravel, Stone or Other Loose Top	6120	Rural	6	FAIR	1950-01-01	70
RD198	Conway Road	Concession Road 2	Concession Road 1	1400	7 m	Gravel, Stone or Other Loose Top	9800	Rural	4	FAIR	1950-01-01	70
RD208	Maple Row Road	County Road 10	Concession 6 Road	2000	8.2 m	Gravel, Stone or Other Loose Top	16400	Rural	4	FAIR	1950-01-01	70
RD215	Gibbs Road	County Road 18	Petit Quatorze Road	2100	7 m	Gravel, Stone or Other Loose Top	14700	Rural	4	FAIR	1950-01-01	70
RD228	Duplantie Road	County Road 10	Concession Road 5	380	6.8 m	Gravel, Stone or Other Loose Top	2584	Rural	4	FAIR	1950-01-01	70
RD484	Concession 2 Road	Conway Road	Cunning Road	260	7 m	Gravel, Stone or Other Loose Top	1820	Rural	4	GOOD	1950-01-01	85
RD227	Concession 5 Road	Duplantie Road	Grande Montee Road	2120	7 m	Gravel, Stone or Other Loose Top	14840	Rural	4	FAIR	1950-01-01	70
RD485	Concession 2 Road	Cunning Road	Grande Montee Road	1500	7 m	Gravel, Stone or Other Loose Top	10500	Rural	4	GOOD	1950-01-01	85
RD221	Concession 5 Road	Grande Montee Road	Quebec Boundary	870	7 m	Gravel, Stone or Other Loose Top	6090	Rural	4	FAIR	1950-01-01	70
RD204	Concession 1 Road	Grande Montee Road	Nixon Road	2540	6.5 m	Gravel, Stone or Other Loose Top	16510	Rural	4	FAIR	1950-01-01	70
RD434	Concession 2 Road	Ranger Road	Conway Road	1950	7 m	Gravel, Stone or Other Loose Top	13650	Rural	4	GOOD	1950-01-01	85
RD234	Cunning Road	Concession Road 3	Concession Road 2	2230	6.5 m	Gravel, Stone or Other Loose Top	14495	Rural	4	EXCELLENT	1950-01-01	95
RD500	Clermont Road	North Glangery Boundary	Concession 7	200	7 m	Gravel, Stone or Other Loose Top	1400	Rural	4	FAIR	1950-01-01	70
RD201	Nixon Road	Concession 1	Domaine Road	1730	7 m	Gravel, Stone or Other Loose Top	12110	Rural	4	FAIR	1950-01-01	70
RD209	Clermont Road	Concession 7 Road	Concession 6 Road	1950	7 m	Gravel, Stone or Other Loose Top	13650	Rural	4	FAIR	1950-01-01	70
RD222	Concession 5 Road	East End	Duplantie Road	820	6.8 m	Gravel, Stone or Other Loose Top	5576	Rural	4	FAIR	1950-01-01	70
RD270	Lemieux Road	Concession Road 9	Petit Quatorze Road	890	7 m	Gravel, Stone or Other Loose Top	6230	Seasonal Road	4	FAIR	1950-01-01	70
RD195	Greenlane Road (West)	Champlain Boundary	Champlain Boundary	2500	7 m	Gravel, Stone or Other Loose Top	17500	Rural	4	FAIR	1950-01-01	55
RD218	Lemieux Road	Petit Quatorze Road	County Road 18	1400	7 m	Gravel, Stone or Other Loose Top	9800	Rural	4	FAIR	1950-01-01	70
RD271	Petit Quatorze Road	County Road 14	Lemieux Road	2700	6.5 m	Gravel, Stone or Other Loose Top	17550	Seasonal Road	6	FAIR	1950-01-01	50
RD211	Petit Quatorze Road	MacDonald Road	County Road 14	2310	7 m	Gravel, Stone or Other Loose Top	16170	Rural	6	FAIR	1950-01-01	70
RD203	Moore Road	1200m North	Concession 3 Road	920	6.7 m	Gravel, Stone or Other Loose Top	6164	Rural	4	FAIR	1950-01-01	70
RD497	Happy Hallow Road	Stephens Road	East End	100	6.5 m	Gravel, Stone or Other Loose Top	650	Rural	6	FAIR	1950-01-01	70
RD233	Stardale Road (East)	Cunning Road	West End	1870	6.5 m	Gravel, Stone or Other Loose Top	12155	Rural	6	FAIR	1950-01-01	70
RD229	Sabourin Rd.(Boundary Rd.) 1/2 of cost	Concession Road 7	North Glangery Boundary	1020	5 m	Gravel, Stone or Other Loose Top	5100	Rural	6	FAIR	1950-01-01	70
RD499	Petit Quatorze Road	Gibbs Road	MacDonald Road	325	6.5 m	Gravel, Stone or Other Loose Top	2112.5	Rural	6	FAIR	1950-01-01	70
RD230	Happy Hallow Road	County Road 10 Road	West End	220	5 m	Gravel, Stone or Other Loose Top	1100	Rural	6	FAIR	1950-01-01	70
RD217	Lemieux Road	Green Road	Concession Road 9	1250	6 m	Gravel, Stone or Other Loose Top	7500	Rural	6	FAIR	1950-01-01	70
RD213	Concession 2 Road	Maple Row Road	Clermont Road	1000	6.8 m	Gravel, Stone or Other Loose Top	6800	Rural	6	FAIR	1950-01-01	70
RD226	Villeneuve Road	Grande Montee Road	780m East	780	6.8 m	Gravel, Stone or Other Loose Top	5304	Rural	6	FAIR	1950-01-01	70
RD216	MacDonald Road	Petit Quatorze Road	740m South	740	6.7 m	Gravel, Stone or Other Loose Top	4958	Rural	6	FAIR	1950-01-01	70
RD200	Cole Avenue	Grande Montee Road	Des Outaouais Road	180	5 m	Gravel, Stone or Other Loose Top	900	Local	6	FAIR	1950-01-01	70
RD231	Happy Hallow Road	Stephens Road	Champlain Boundary	420	6.5 m	Gravel, Stone or Other Loose Top	2730	Rural	6	FAIR	1950-01-01	70
RD212	Petit Quatorze Road	North Glangery Boundary	Gibbs Road	790	6.5 m	Gravel, Stone or Other Loose Top	5135	Rural	6	FAIR	1950-01-01	70
RD396	Pattee Road	Dandy Road	Gourley Road	1465	6.5 m	Hot Mix	9522.5	Rural	4	FAIR	2010-08-01	50
RD294	Pattee Road	Champlain Boundary	Dandy Road	3950	6.5 m	Hot Mix	25675	Rural	4	FAIR	2003-07-01	50
RD302	Concession 3 Road	County Road 14	Moore Road	2460	6.5 m	Hot Mix	15990	Rural	4	FAIR	2002-07-01	60
RD492	Domaine Road	Nixon Road	Nixon Road	160	9 m	Hot Mix	1440	Rural	4	GOOD	2016-07-01	100
RD325	Des Eglises Street	Labrosse Street	South End	150	7.3 m	Hot Mix	1095	Local	4	FAIR	1900-07-01	55
RD486	Concession 3 Road	Nixon Road	Moore Road	70	6.5 m	Hot Mix	455	Rural	4	EXCELLENT	2021-06-01	80
RD307	Concession 9 Road	County Road 14	Lemieux Road	2570	6.4 m	Hot Mix	16448	Rural	4	FAIR	2001-07-01	55
RD495	Grande Montee Road	Castors Road	Concession Road 7	580	10 m	Hot Mix	5800	Rural	4	FAIR	2020-07-01	70
RD311	Concession 1 Road	Nixon Road	County Road 14	2540	6.5 m	Hot Mix	16510	Rural	4	FAIR	1994-07-01	70
RD319	Domaine Road	Grande Montee Road	Nixon Road	3610	6.7 m	Hot Mix	24187	Rural	4	GOOD	2016-07-01	80
RD235	Cunning Road	County Road 10	Stardale Road	1450	6.5 m	Hot Mix	9425	Rural	4	EXCELLENT	2020-07-01	95
RD487	Concession 3 Road	Cunning Road	Cunning Road	190	6.5 m	Hot Mix	1235	Rural	4	FAIR	2010-01-01	60
RD308	Greenlane Road (East)	Dandy Road	Greenlane Road dead end	1200	6.5 m	Hot Mix	7800	Rural	4	FAIR	2010-06-01	55
RD491	Dandy Road (HWY 12)	Stardale Road	County Road 10	2300	12.75 m	Hot Mix	29525	Rural	4	EXCELLENT	2018-05-28	95
RD297	Stardale Road (West)	Champlain Boundary	Champlain Boundary	2900	6.5 m	Hot Mix	18840	Rural	4	FAIR	1980-07-01	55
RD410	Grande Montee Road	Grande Montee Road	County Road 18	150	10 m	Hot Mix	1500	Rural	4	FAIR	2017-06-01	70
RD479	Grande Montee Road	Villeneuve Road	Castors Road	2220	10 m	Hot Mix	22200	Rural	4	FAIR	2020-07-01	70
RD309	Concession 1 Road	County Road 14	Ranger Road	2600	6.5 m	Hot Mix	16900	Rural	4	FAIR	1993-07-01	70
RD313	Concession 3 Road	Nixon Road	Grande Montee Road	2540	6.5 m	Hot Mix	16510	Rural	4	EXCELLENT	2021-06-01	100
RD488	Cunning Road	Stardale Road	Concession Road 3	870	6.5 m	Hot Mix	5655	Rural	4	EXCELLENT	2020-07-01	95
RD458	Dandy Road (HWY 12)	HWY 17	Pattee Road	710	12.75 m	Hot Mix	9052.5	Rural	4	EXCELLENT	2018-05-28	95
RD295	Concession 1 Road	Conway Road	Gourley Road	605	6.5 m	Hot Mix	3932.5	Rural	4	FAIR	1976-07-01	70
RD489	Dandy Road (HWY 12)	Greenlane Road	Pattee Road	2040	12.75 m	Hot Mix	26010	Rural	4	EXCELLENT	2018-05-28	95
RD202	Nixon Road	Domaine Road	Concession 3 Road	2140	6.7 m	Hot Mix	14338	Rural	4	EXCELLENT	2020-06-01	95
RD435	Moore Road	County Road 10	1200m North	1220	7.3 m	Hot Mix	8986	Rural	4	GOOD	2000-07-01	75
RD496	Grande Montee Road	Clermont Road	Grande Montee Road	1500	10 m	Hot Mix	15000	Rural	4	FAIR	2020-07-01	70
RD494	Grande Montee Road	Concession Road 5	Villeneuve Road	610	10 m	Hot Mix	6100	Rural	4	FAIR	2020-07-01	70
RD397	Concession 1 Road	Ranger Road	Conway Road	1870	6.5 m	Hot Mix	12155	Rural	4	FAIR	2010-08-01	70
RD316	Grande Montee Road	Concession Road 7	Clermont Road	1600	10 m	Hot Mix	16000	Rural	4	FAIR	2020-07-01	70
RD445	Concession 3 Road	Cunning Road	County Road 14	4910	6.5 m	Hot Mix	31915	Rural	4	FAIR	2010-01-01	60
RD493	Grande Montee Road	County Road 10	Concession Road 5	135	10 m	Hot Mix	1350	Rural	4	FAIR	2020-07-01	70
RD490	Dandy Road (HWY 12)	Greenlane Road	Stardale Road	2500	12.75 m	Hot Mix	31875	Rural	4	EXCELLENT	2018-05-28	95
RD298	Concession 2 Road	County Road 14	Ranger Road	2500	7 m	Hot Mix	17500	Rural	4	GOOD	1999-07-01	85
RD225	Grande Montee Road	County Road 18	Grande Montee Road	135	9 m	Hot Mix	1215	Rural	4	FAIR	2020-07-01	70
RD499	Mill Street	County Road 10	St Jean Street	130	7.3 m	Hot Mix	949	Local	5	EXCELLENT	2017-10-01	95
RD293	Gourley Road	Front Road	HWY 17	2320	6.5 m	Hot Mix	16936	Rural	5	FAIR	2000-07-01	60
RD291	Des Erables Street	Front Road	North End	90	5.2 m	Hot Mix	468	Local	5	FAIR	1985-07-01	55
RD322	Ferry Road	Principale Street	North End	160	9 m	Hot Mix	1440	Local	5	SEVERE	1988-07-01	25
RD328	St-Paul Street	Labrosse Street	North End	220	9.5 m	Hot Mix	2090	Local	5	EXCELLENT	1991-07-01	100
RD323	Interprovinciale Street	Grande Montee Road	Rue Tisseur	220	5.8 m	Hot Mix	1276	Local	5	EXCELLENT	2020-06-01	95
RD320	Des Cedres Street	Principale Street	Des Pines Street	710	8.3 m	Hot Mix	5893	Local	5	POOR		

Storm

ASSET NAME	FROM	TO	LENGTH (m)	WIDTH	MATERIALS	AREA (m ²)	MAINTENANCE CLASS	WARD	MAINTAINED BY	DATE INSTALLED	REPLACEMENT YEAR	REMAINING LIFE (In Years)	USEFUL LIFE RATING	ASSET RELATIONSHIP (ROAD ID)
STMLN_020	INLET	CBMH	50	900 mm	Steel	45	801 - 1000 mm	VILLAGE OF CHUTE - A - BLONDEAU	EH 50% / UCPR 50%	1994-01-01	2034	12	FAIR	CNTY106
STMLN_022	CBMH	OUTLET	43	900 mm	Steel	38.7	801 - 1000 mm	VILLAGE OF CHUTE - A - BLONDEAU	EH 50% / UCPR 50%	1994-01-01	2034	12	FAIR	CNTY106
STMLN_021	CBMH	CBMH	67	900 mm	Concrete	60.3	801 - 1000 mm	VILLAGE OF CHUTE - A - BLONDEAU	EH 50% / UCPR 50%	1994-01-01	2034	32	GOOD	CNTY106
STMLN_040	MH8	CB12	51	900 mm	Concrete	45.9	801 - 1000 mm	VILLAGE OF CHUTE - A - BLONDEAU	EAST HAWKESBURY	1993-01-01	2053	31	GOOD	RD321
STMLN_012	CBMH9	CBMH10	81	750 mm	Concrete	60.75	501 - 800 mm	VILLAGE OF CHUTE - A - BLONDEAU	EH 50% / UCPR 50%	1984-01-01	2044	22	GOOD	CNTY108
STMLN_036	MH4	MH5	67	550 mm	Concrete	36.85	501 - 800 mm	VILLAGE OF CHUTE - A - BLONDEAU	EAST HAWKESBURY	1993-10-01	2053	31	GOOD	RD320
STMLN_031	CBMH8	CBMH9	80	750 mm	Concrete	60	501 - 800 mm	VILLAGE OF CHUTE - A - BLONDEAU	EH 50% / UCPR 50%	1984-01-01	2044	22	GOOD	CNTY108
STMLN_029	CBMH6	CBMH7	41	600 mm	Concrete	24.6	501 - 800 mm	VILLAGE OF CHUTE - A - BLONDEAU	EH 50% / UCPR 50%	1984-01-01	2044	22	GOOD	CNTY107
STMLN_028	CBMH5	CBMH6	62	600 mm	Concrete	37.2	501 - 800 mm	VILLAGE OF CHUTE - A - BLONDEAU	EH 50% / UCPR 50%	1984-01-01	2044	22	GOOD	CNTY107
STMLN_030	CBMH7	CBMH8	67	750 mm	Concrete	50.25	501 - 800 mm	VILLAGE OF CHUTE - A - BLONDEAU	EH 50% / UCPR 50%	1984-01-01	2044	22	GOOD	CNTY108
STMLN_007	MH5	MH6	102	675 mm	Concrete	68.85	501 - 800 mm	VILLAGE OF CHUTE - A - BLONDEAU	EAST HAWKESBURY	1993-01-01	2053	31	GOOD	RD320
STMLN_027	CBMH4	CBMH5	50	450 mm	Concrete	22.5	301 - 500 mm	VILLAGE OF CHUTE - A - BLONDEAU	EH 50% / UCPR 50%	1984-01-01	2044	22	GOOD	CNTY106
STMLN_034	MH2	MH3	65	450 mm	Concrete	29.25	301 - 500 mm	VILLAGE OF CHUTE - A - BLONDEAU	EAST HAWKESBURY	1993-01-01	2053	31	GOOD	RD320
STMLN_026	CBMH3	CBMH4	68	375 mm	Concrete	25.5	301 - 500 mm	VILLAGE OF CHUTE - A - BLONDEAU	EH 50% / UCPR 50%	1984-01-01	2044	22	GOOD	CNTY106
STMLN_017	MHCB5	MHCB4	104	375 mm	Concrete	39	301 - 500 mm	VILLAGE OF CHUTE - A - BLONDEAU	EH 50% / UCPR 50%	1994-01-01	2054	32	GOOD	CNTY106
STMLN_023	CB	CBMH1	33	450 mm	Concrete	14.85	301 - 500 mm	VILLAGE OF CHUTE - A - BLONDEAU	EH 50% / UCPR 50%	1984-01-01	2044	22	GOOD	CNTY106
STMLN_018	MHCB4	MHCB2	89	375 mm	Concrete	33.375	301 - 500 mm	VILLAGE OF CHUTE - A - BLONDEAU	EH 50% / UCPR 50%	1994-01-01	2054	32	GOOD	CNTY106
STMLN_035	MH3	MH4	63	450 mm	Concrete	28.35	301 - 500 mm	VILLAGE OF CHUTE - A - BLONDEAU	EAST HAWKESBURY	1993-01-01	2053	31	GOOD	RD320
STMLN_016	DCB	MHCB5	104	375 mm	Concrete	39	301 - 500 mm	VILLAGE OF CHUTE - A - BLONDEAU	EH 50% / UCPR 50%	1994-01-01	2054	32	GOOD	CNTY106
STMLN_038	MH6	MH7	48	300 mm	Concrete	14.4	0 - 300 mm	VILLAGE OF CHUTE - A - BLONDEAU	EAST HAWKESBURY	1993-01-01	2053	31	GOOD	RD320
STMLN_169_CR14			405	0 mm	Concrete	0	0 - 300 mm	VILLAGE OF ST-EUGENE	EH 50% / UCPR 50%	1960-07-01	2020	-2	VERY POOR	
STMLN_019	CB1	CBMH	100	300 mm	Concrete	30	0 - 300 mm	VILLAGE OF CHUTE - A - BLONDEAU	EH 50% / UCPR 50%	1994-01-01	2054	32	GOOD	CNTY106
STMLN_167_LABROSSE			11144	0 mm	Concrete	0	0 - 300 mm	VILLAGE OF ST-EUGENE	EH 50% / UCPR 50%	1960-07-01	2020	-2	VERY POOR	
STMLN_053	CBMH9	CBMH10	83	300 mm	Concrete	24.9	0 - 300 mm	VILLAGE OF CHUTE - A - BLONDEAU	EH 50% / UCPR 50%	1993-01-01	2053	31	GOOD	RD320
STMLN_171_Fatima	LABROSSE	SOUTH END	218	0 mm	Concrete	0	0 - 300 mm	VILLAGE OF ST-EUGENE	EAST HAWKESBURY	1961-07-01	2021	-1	VERY POOR	RD380
STMLN_173_MILL			99	0 mm	Concrete	0	0 - 300 mm	VILLAGE OF ST-EUGENE	EAST HAWKESBURY	1962-07-01	2022	0	POOR	RD459
STMLN_170_ST PAUL			122	0 mm	Concrete	0	0 - 300 mm	VILLAGE OF ST-EUGENE	EAST HAWKESBURY	1991-01-07	2051	29	GOOD	RD384
STMLN_042	MH9	MH8	95	300 mm	Concrete	28.5	0 - 300 mm	VILLAGE OF CHUTE - A - BLONDEAU	EAST HAWKESBURY	1993-01-01	2053	31	GOOD	RD321
STMLN_174_CR14			169	0 mm	Concrete	0	0 - 300 mm	VILLAGE OF STE-ANNE-DE-PRESCOTT	EH 50% / UCPR 50%	1965-07-01	2025	3	POOR	
STMLN_172_ST JEAN	MILL ST	LEBROSSE	259	0 mm	Concrete	0	0 - 300 mm	VILLAGE OF ST-EUGENE	EAST HAWKESBURY	1962-07-01	2022	0	POOR	
STMLN_025	CBMH2	CBMH3	76	300 mm	Concrete	22.8	0 - 300 mm	VILLAGE OF CHUTE - A - BLONDEAU	EH 50% / UCPR 50%	1984-01-01	2044	22	GOOD	CNTY106
STMLN_168_LABROSSE			1114	0 mm	Concrete	0	0 - 300 mm	VILLAGE OF ST-EUGENE	EH 50% / UCPR 50%	1990-07-01	2050	28	GOOD	
STMLN_166_CAB	Sportsfield	CB	107	250 mm	Concrete	26.75	0 - 300 mm	VILLAGE OF CHUTE - A - BLONDEAU	EAST HAWKESBURY	1994-01-01	2054	32	GOOD	
STMLN_043	CB12	CBMH7	63	300 mm	Concrete	18.9	0 - 300 mm	VILLAGE OF CHUTE - A - BLONDEAU	EAST HAWKESBURY	1993-01-01	2053	31	GOOD	RD321
STMLN_175_CR18			710	0 mm	Concrete	0	0 - 300 mm	VILLAGE OF STE-ANNE-DE-PRESCOTT	EH 50% / UCPR 50%	1965-07-01	2025	3	POOR	
STMLN_024	CBMH1	CBMH2	71	300 mm	Concrete	21.3	0 - 300 mm	VILLAGE OF CHUTE - A - BLONDEAU	EH 50% / UCPR 50%	1984-01-01	2044	22	GOOD	CNTY106
STMLN_041	CB12	OUTLET	63	900 mm	Concrete	56.7	801 - 1000 mm	VILLAGE OF CHUTE - A - BLONDEAU	EAST HAWKESBURY	1993-01-01	2053	31	GOOD	RD321
STMLN_039	MH6	MH8	105	900 mm	Concrete	94.5	801 - 1000 mm	VILLAGE OF CHUTE - A - BLONDEAU	EAST HAWKESBURY	1993-01-01	2053	31	GOOD	RD321

Sewerline

ASSET TYPE	ASSET SUB-TYPE	ASSET NAME	ASSET ID	FROM	TO	ASSET DEF. ABBREVIATION	LENGTH (m)	WIDTH	MATERIALS	AREA (m2)	CLASSIFICATION	DATE INSTALLED	WARD
Sanitary Network	Sewerline (Waste Water)	1	1					0 mm					
Sanitary Network	Sewerline (Waste Water)	SWL_002_PRINCIPALE	SWL_002	MH 00002	MH 00003		101	200 mm	Polyvinyl chloride	20.2	DR 35	2008-12-08	VILLAGE OF CHUTE- A - BLONDEAU
Sanitary Network	Sewerline (Waste Water)	SWL_010_DES PINS	SWL_010	MH 00007	MH 00006	RD321	120	200 mm	Polyvinyl chloride	24	DR 35	2008-12-08	VILLAGE OF CHUTE- A - BLONDEAU
Sanitary Network	Sewerline (Waste Water)	SWL_008_DES PINS	SWL_008	MH 00008	MH 00007	RD321	120	200 mm	Polyvinyl chloride	24	DR 35	2008-12-08	VILLAGE OF CHUTE- A - BLONDEAU
Sanitary Network	Sewerline (Waste Water)	SWL_006_DES PINS	SWL_006	MH 00010	MH 00009	RD321	60	200 mm	Polyvinyl chloride	12	DR 35	2008-12-08	VILLAGE OF CHUTE- A - BLONDEAU
Sanitary Network	Sewerline (Waste Water)	SWL_007_DES PINS	SWL_007	MH 00009	MH 00008	RD321	124.5	200 mm	Polyvinyl chloride	24.9	DR 35	2008-12-08	VILLAGE OF CHUTE- A - BLONDEAU
Sanitary Network	Sewerline (Waste Water)	SWL_003_PRINCIPALE	SWL_003	MH 00003	MH 00002		119	200 mm	Polyvinyl chloride	23.8	DR 35	2008-12-08	VILLAGE OF CHUTE- A - BLONDEAU
Sanitary Network	Sewerline (Waste Water)	SWL_012_DES CEDRES	SWL_012	MH 00005			120	200 mm	Polyvinyl chloride	24	DR 35	2008-12-08	VILLAGE OF CHUTE- A - BLONDEAU
Sanitary Network	Sewerline (Waste Water)	SWL_004_PRINCIPALE	SWL_004	MH 00002	MH 00001		120.9	200 mm	Polyvinyl chloride	24.18	DR 35	2008-12-08	VILLAGE OF CHUTE- A - BLONDEAU
Sanitary Network	Sewerline (Waste Water)	SWL_011_DES PINS	SWL_011	MH 00011	MH 00010	RD321	65	200 mm	Polyvinyl chloride	13	DR 35	2008-12-08	VILLAGE OF CHUTE- A - BLONDEAU