



Asset Management Plan

Accepted by Council - July 2022

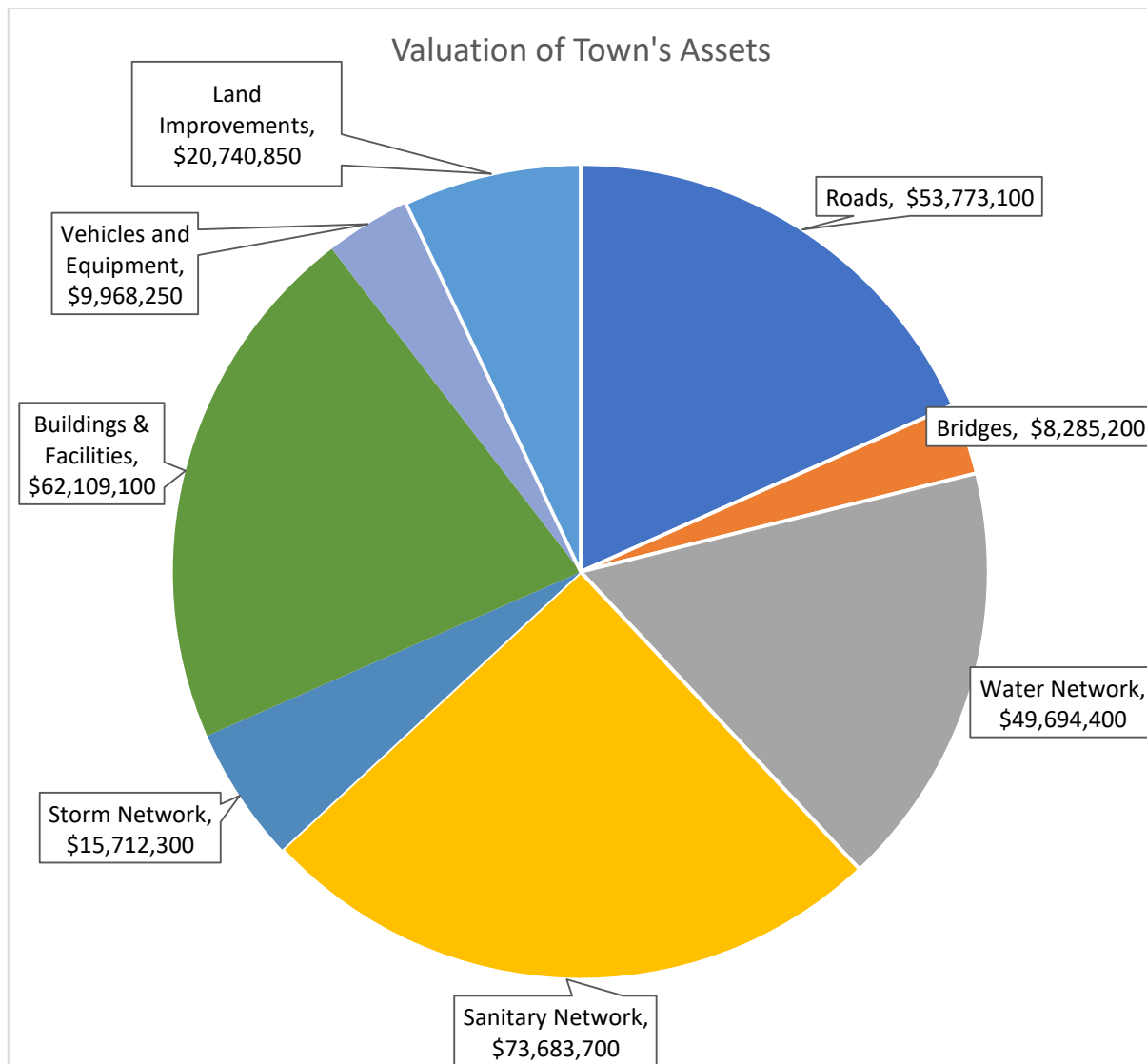
Approved Update - July 2024

Executive Summary

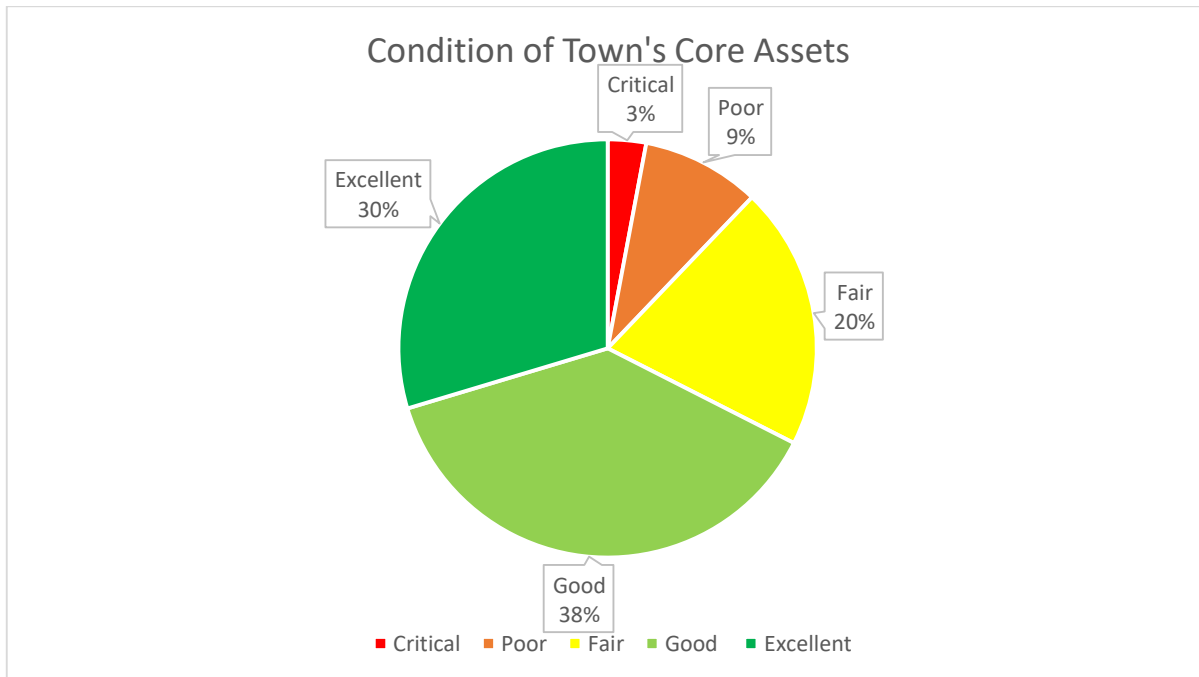
The Town of Prescott has invested in the preparation of an Asset Management Plan to measure the performance of the community's core infrastructure which provides a foundation for its economic development, competitiveness, prosperity, reputation and the overall quality of life for its residents.

This Asset Management Plan (AMP) meets all of the requirements of Ontario Regulation 588/17 – Asset Management Planning for Municipal Infrastructure required at July 1, 2024. It will serve as a strategic, tactical, and financial tool to ensure that the management of the Town's infrastructure follows sound asset management practices and principles, while optimizing available resources.

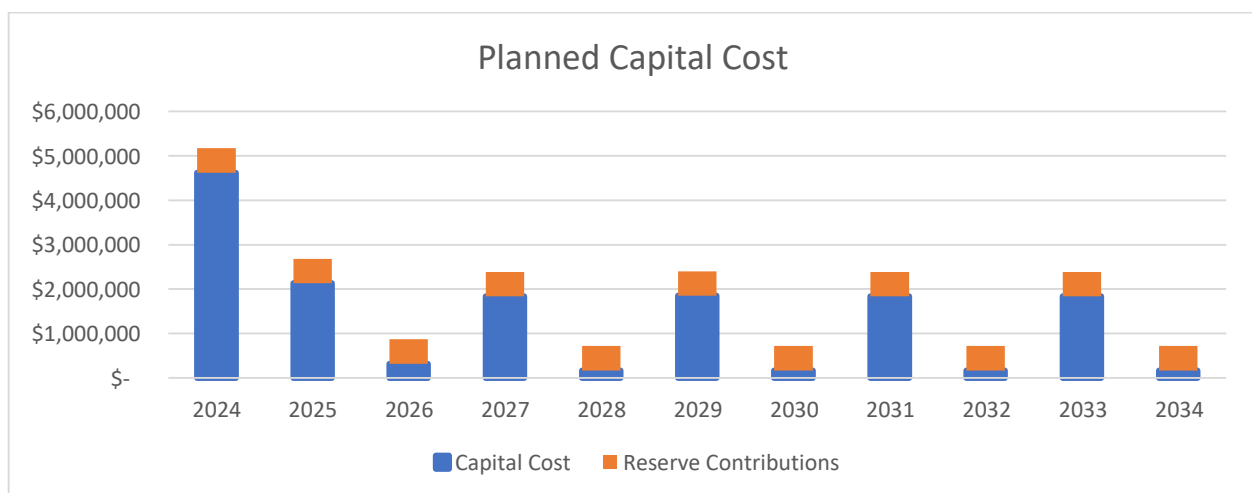
The AMP provides a summary of the Town's assets, measurement of the current level of service, and a 10-year capital plan to address the Town's immediate infrastructure needs. The following figure illustrates a breakdown of the Town's infrastructure.



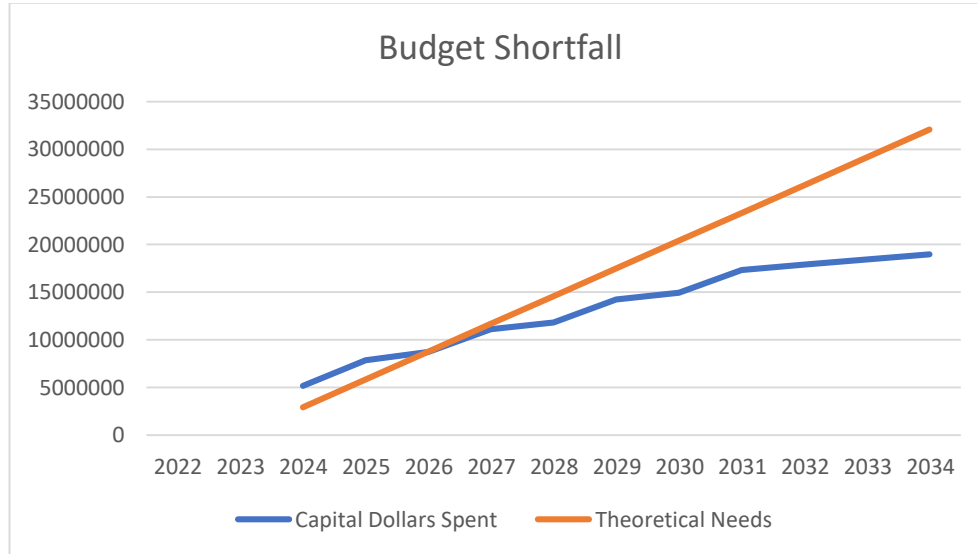
A combination of visual condition assessments and aged-based assessments have been used to provide an overall assessment of the Town's infrastructure as illustrated in the following figure.



The Town has planned capital costs for the next ten years which includes the replacement of the Prescott Water Tower, road projects, capital projects at the water treatment plant and water pollution control plant, and engineering studies for the improvement of the Town's infrastructure. In addition to the planned capital expenditures, the Town places a total of \$550,000 in reserves to offset future water and wastewater projects and approximately \$450,000 in reserves to offset other asset projects.



A comparison of the planned capital expenditures plus the capital reserve contributions to the theoretical replacement cost for all of the Town's core infrastructure identified a shortfall of approximately \$13.1M over the next ten years as illustrated by the following figure.



Please note the evaluation does not take into consideration funding possibilities which will assist in reducing the burden of paying for the capital projects.

Key Statistics

\$294 million

Value of infrastructure as of 2023

88%

Percentage of Town's core infrastructure
in fair condition or better

3%

Percentage of Town's core infrastructure
in critical condition (in needs of
replacement)

\$310

Estimated annual infrastructure deficit
per capita

60%

Percentage of annual infrastructure
funding needs currently being met

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1. Introductions

Municipalities throughout Ontario, own, operate and maintain a diverse portfolio of infrastructure assets that in turn provide a varied number of services to their residents. The infrastructure, in essence, is a conduit for the various public services the municipality provides, e.g. the roads supply transportation network service, the water infrastructure supplies safe potable water service, etc. The goal of asset management is to minimize the costs for providing these services over their lifetime, while offering a plan to manage risks.

1.1. Relationship to Other Plans

An asset management plan (AMP) is a key component of the municipality's planning process linking with multiple other corporate plans and documents. For example:

- The Official Plan – The AMP should utilize and influence the land use policy directions for long-term growth and development as provided through the Official Plan.
- Long Term Financial Plan – The AMP should both utilize and conversely influence the financial forecasts within the long-term financial plan.
- Capital Budget – The decision framework and infrastructure needs identified in the AMP form the basis on which future capital budgets are prepared.
- Infrastructure Master Plans & Growth Management Plan. The AMP will utilize goals and will influence projections from infrastructure master plans and growth management plan.
- By-Laws, standards, and policies – The AMP will influence and utilize policies and by-laws related to infrastructure management practices and standards.
- Regulations – The AMP must recognize and abide by industry and senior government regulations.
- Business Plans – The service levels, policies, processes, and budgets defined in the AMP are incorporated into business plans as activity budgets, management strategies, and performance measures.

1.2. Overview

This Asset Management Plan meets all provincial requirements as outlined in Asset Management Planning for Municipal Infrastructure - Ontario Regulation 588/17. As such, the following key sections and content are included:

1. Executive Summary
2. Asset Management Policy and Strategies
3. Inventory of the Assets
4. Current Levels of Service
5. Desired Levels of Service (To be Completed by July 2025)
6. Lifecycle Management Strategy
7. Financial Strategy (To be Completed by July 2025)

The following asset classes are included in core infrastructure:

- Roads
- Bridges
- Water Network
- Sanitary Sewer Network
- Storm Sewer Network

The following asset classes are included in non-core infrastructure:

- Buildings
- Vehicles and Equipment
- Land Improvements

1.3. Objectives

The Asset Management Plan provides structure and guidance for the Town of Prescott, for the life cycle planning of their infrastructure to meet the desired level of service for the residence of the Town.

1.4. Limitations and Constraints

The inventory of the assets provides a summary of all assets. Where possible the current condition of those assets was established based on physical inspection of the assets. Parts of some of the system's conditions have been assumed based on the age of the inventory until the asset has been inspected. Additionally, the Town is constantly working to improve the data quality as part of the desired level of service to be provided.

1.5. Compliance with O.Reg. 588/17 – Asset Management Planning for Municipal Infrastructure

The Town of Prescott is developing their Asset Management Plan in lines with the requirements of Asset Management Planning for Municipal Infrastructure, Ontario Regulation 588/17 (The Regulation). The Regulation has a phased in approach which is summarized in the following tables.

Table 1: O.Reg. 588/17 – Phases and Deadlines

Phase	Deadline ¹	Activity
1	July 1, 2019	Prepare and Publish a Strategic Asset Management Policy
2	July 1, 2022	Develop an Asset Management Plan for Core municipal Infrastructure Assets.
3	July 1, 2024	Develop an Asset Management Plan for all other municipal infrastructure

4	July 1, 2025	Develop an Expanded Asset Management Plan for all infrastructure Assets
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1 Deadlines were extended by the Province of Ontario as a result of the impacts on COVID-19 pandemic.

The compliance deadline for Asset Management Plans for the various municipal assets is provided in the table below.

Table 2: Town's Asset Inventory and Associated Deadlines

Phase	Deadline	Town's Asset
2	July 1, 2022	Road Network Bridges and Culverts Prescott Water Treatment Plant Prescott Water Tower Wastewater Collection System Five Sewage Pumping Stations Prescott Wastewater Treatment Plant Storm Sewer System
3	July 1, 2024	Buildings and Facilities Vehicles and Equipment Land Improvements

1.6. Structure

The Town's Asset Management Plan is structured as follows:

Table 3: Components of an Asset Management Plan

Section	Description
Executive Summary	Overview of the Asset Management Plan
Introduction and Content	<ul style="list-style-type: none"> Objectives of Asset Management Principles of Asset Management Data and Methodology (Condition and Financial) Infrastructure Report Card Description
State of Local Infrastructure	<ul style="list-style-type: none"> Provides full inventory, condition rating, useful life consumption data, and the backlog and upcoming infrastructure needs for each asset class
Level of Service	<ul style="list-style-type: none"> Describes Key Performance Indicators for the various Town assets Identifies factors that can impact the level of service provided by the Town
Lifecycle Management Strategy	<ul style="list-style-type: none"> Defines actions to be taken by the Town to maintain their asset inventory up-to-date Describes how the information from the Town's asset management plan is used to generate the 10-year financial needs forecast Describe the Town's approach to risk management for potential failures of the various assets
Financial Strategy	<ul style="list-style-type: none"> Provide Current Funding Position Provide Financial Profile for Rate Funded Assets Forecast annual revenues and capital needs to identify funding shortfalls

1.7. Supporting Documentation

The Asset Management Plan is to be read with the Town of Prescott's planning and budget documents. Supporting documents include:

- Town of Prescott Strategic Asset Management Policy
- The 2018 Official Plan
- The 2023 Official Plan
- The 2020 Town of Prescott Strategic Plan
- Development Charges
- Community Improvement Program
- Other related by-laws and economic plans

2. Asset Management Policies and Strategies

On June 24, 2019, the Council of the Town of Prescott approved the Town's Asset Management Policy, Policy #: FN-200-01 (Appendix A). The policy sets the following vision and goal for asset management within the Town:

The Town will proactively manage its assets to achieve:

- Effective delivery of service
- Supporting sustainability and economic development
- Employing prudent financial planning and decision-making methodologies

The goals of this of this policy are to:

- Provide a framework for implementing asset management to enable a consistent and strategic approach at all levels of the organization
- Provide guidance to staff responsible for the asset management program

In addition, the Policy defines the roles and responsibilities for Council and individuals within the Town for the management of the Town's infrastructure assets.

3. Levels of Service

3.1. Background

The level of service (LOS) is a measurement of the quality of service that the Town is providing to the community. O.Reg. 588/17 establishes two categories for LOS:

- Community Level of Service: a description of how customers expect to receive the service. As the customer's expectations may vary from customer to customer this group of matrixes are subjective and difficult to directly measure.
- Technical Level of Service: a measurable attribute that reflects the assets' ability to achieve the desired community level of service.

This update to the Town's Asset Management Plan concentrates on developing an understanding of the current level of service for all Town assets. Following the development of this plan, the Town will work towards identifying the proposed level of service which will meet the community's expectation with a full understanding of the financial implications of striving for the proposed level of service.

3.2. Objective

The approach was based on the following key industry state of the infrastructure documents:

- A Guide to Asset Management for Municipalities in Ontario, Municipal Finance Officers' Association of Ontario, 2018
- Developing an Asset Register, AMONTario
- Other Ontario Municipal State of the Infrastructure reports

3.3. Scope

Through the implementation of various condition assessment techniques an inventory of the current assets and their condition has been compiled for the following asset classes:

1. Road Network: Urban and rural paved
2. Bridges: Bridges with a span greater than 3m
3. Water Network: Water mains, hydrants, valves, facilities
4. Sanitary Sewer Network: Sanitary sewer mains, manholes, facilities
5. Storm Sewer Network: Storm sewer mains, catch basins, manholes
6. Buildings and Facilities
7. Vehicles and Equipment
8. Land Improvements

3.4. Approach






The following subsections provide a description of how each asset category's inventory and condition was established to support the plan.

3.5. Deriving Asset Condition

Asset condition is a measurement of the physical state of an asset. The establishment of the condition of an asset forms the basis of the Asset Management Plan. An incomplete or incorrect representation of the condition of an asset will mislead the long-term financial planning and decision making regarding the asset.

The method in which establishes the condition of each asset category will be different, however, the rating system on which it is based will be as follows:

Table 4: Condition Grading Scale

Colour Indicator	Description
	Excellent: No noticeable defects
	Good: Minor Deterioration
	Fair: Deterioration evident, function is affected
	Poor: Serious deterioration, function is inadequate
	Critical: No longer functional. General or complete failure

The Town utilizes a combination of both formal (I.e. Road Needs Studies, OSIM Reports, etc.) and informal condition assessment techniques (I.e. CCTV, watermain break records, etc.) to determine the existing condition of its assets.

3.6. Deriving Replacement Costs

The valuation of all assets is based on the replacement cost or reconstruction of an asset which results in the maximization of the useful service life of the asset. Where possible a unit cost will be applied to the asset which has been determined based on recent construction projects in Eastern Ontario. Where unit costs cannot be established, replacement costs will be based on inflation indexes for non-residential building construction in Ontario, as provided by Statistics Canada.

3.7. Estimating Expected Service Life

The estimated useful life of an asset is the period of time over which the Town expects the asset to be available for use and remain in service before requiring replacement. The estimated expected service life of all assets was assigned according to the experience of the Town with similar assets and/or existing industry standards.

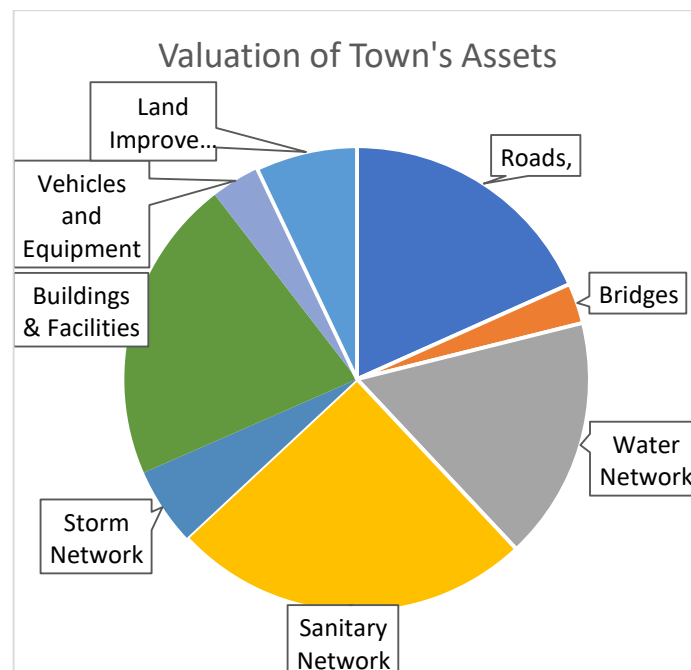
3.8. Asset Overview

The Town of Prescott's infrastructure is composed of two categories, core and non-core. The core assets include road network, bridge structure, water network, sanitary network, and storm network. The non-core assets including buildings and facilities, vehicles and equipment, and land improvements. The following figures represents the total replacement value of the Town's assets.

3.9. Overview of Total Replacement Cost of Town's Assets

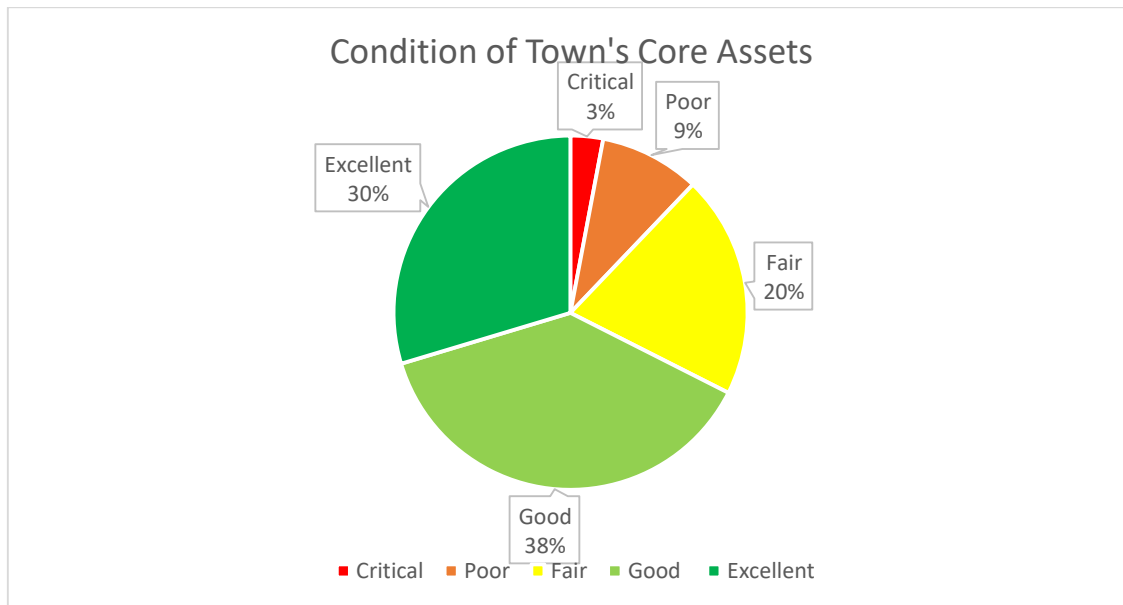
This version of the Town's Asset Management includes all asset categories: road network, bridges, water network, sanitary network, and storm network, buildings and facilities, vehicles and equipment, and land improvements. The Town owns assets with a total replacement value of approximately \$294M. The breakdown of these assets by category is as follows:

Figure 1 – Town's Total Asset Replacement Value



The following sections provide supporting information for the condition of all assets, based on the grading scale presented in Section 3.5, and summarized in the following figure.

Figure 2 – Town's Infrastructure Consolidated Condition



3.10. Roads Network

3.10.1. What do we Own?

The Town owns three classes of road and one class of sidewalks.

Table 5: Road Classes

Asset Type	Description
Municipal Road	9.0m wide, 150mm GA, 300mm GB, 50mm HL4 asphalt
Local Street	9.0m wide, 150mm GA, 300mm GB, 50mm HL4 asphalt
Arterial Street	15m wide, 150mm GA, 300mm GB. 2 lifts of asphalt
Sidewalks	1.2m side concrete sidewalk

As shown in the following table, the entire road network is comprised of approximately 32 km of road, based on the information extracted from Streetlogix.

Table 6: Road Network Inventory

Asset Type	Asset Component	Quantity (m)
Road Network	Municipal Roads	1,475
	Local Street	26,726
	Arterial Street	4,175
	Traffic Lights	3 Intersections

		5 Controlled Crosswalks
	Streetlights	676 poles
Sidewalks	Combination of Concrete and Brick	40,617 m ²

3.10.2. Expected Useful Service Life

“Useful Service Life” is the industries best estimate of the expected period of time an asset can be used for their intended purpose. Depending on the maintenance and rehabilitation efforts over the course of the life span of an asset, the useful service life can be extended. The useful service life is used to determine replacement needs of individual assets.

The following table provides a comparison of the expected service life compared to the actual average age of the Town’s road network.

Table 7: Road Network – Useful Service Life

Asset Component	Estimated Useful Life (Years)	Average Age (Years)	Average Service Life Remaining (Years)
Municipal Roads	60	20	40
Local Streets	60	32	28
Arterial Streets	80	30	50
Streetlights	30	14	16
Sidewalks	60	32	28

3.10.3. What is it Worth?

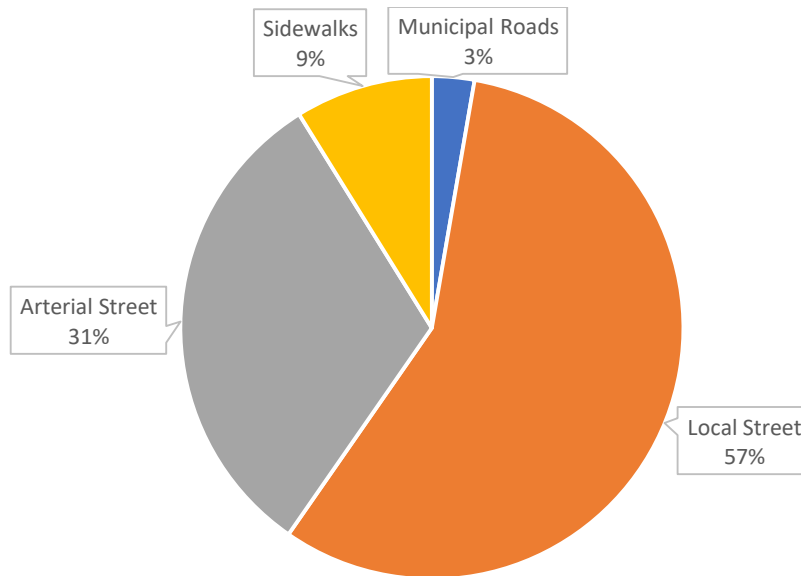
The estimated replacement value of the road network, in 2023 dollars, is approximately \$54M.

Table 8: Valuation of Road Network

Asset Type	Asset Component	Quantity (m)	Replacement Cost
Road Network	Municipal Roads	1,475	\$1,379,800
	Local Street	26,726	\$28,937,300
	Arterial Street	4,175	\$15,996,300
	Streetlights	676 (ea)	\$2,028,000
	Traffic Light	3 Intersections 5 Controlled Crosswalks	\$930,000
	Sidewalks	40,617 m ²	\$4,501,700
	NET REPLACEMENT VALUE		\$53,773,100

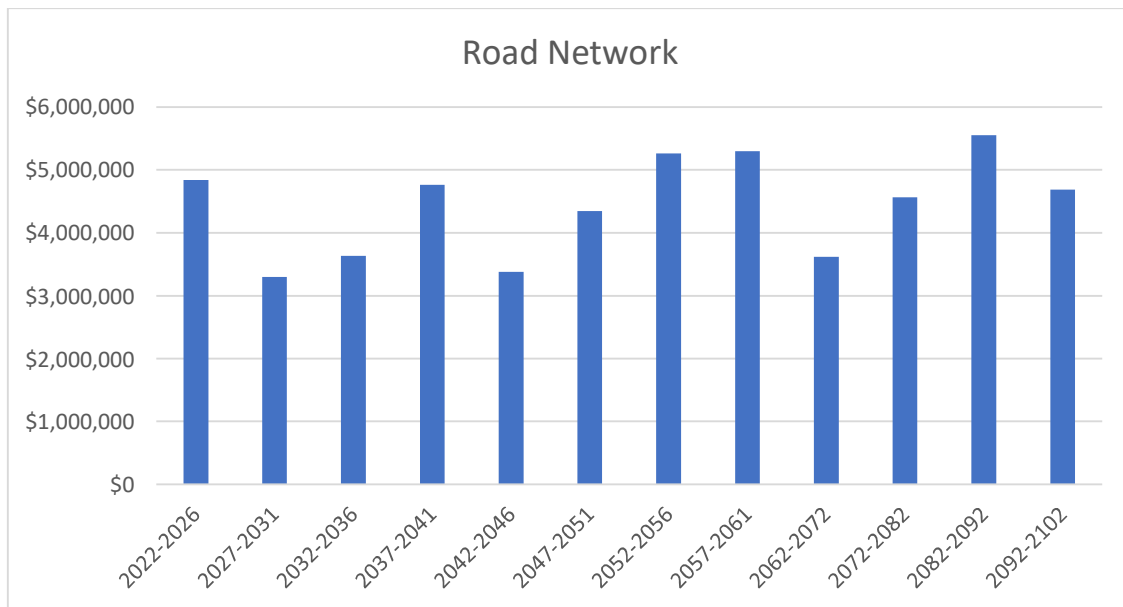
The pie chart below provides a breakdown of each of the network components to the overall system value.

Figure 3 – Road Network Components



Based on the PCI for the roads, the following chart demonstrates the future replacement requirements for the Prescott Road Network. Considerations for the needs of the underground infrastructure are to be taken when planning the road network capital projects.

Figure 4 – Estimated Future Capital Costs for Town’s Road Network



Current funding levels for the road infrastructure is approximately \$1M per year and the current Town allocated funds are sufficient to meet the road network needs.

3.10.4. What Condition is it in?

To establish the condition of the road network, the Town undertakes daily road patrols in which staff collects information on conditions of the road network. In addition, the Town undertakes a comprehensive road needs study every five years, in which the paved roads are scanned, and a Pavement Condition Index (PCI) is generated. The last road needs study was completed in 2022.

Overall, the roads are in good condition with each road class having the following average pavement condition index rating: local Streets (PCI average 68.5), Arterial Street (PCI average 70.9) and municipal road (PCI average 72.5). A summary of the PCI index for each road class is provided below.

Table 9: Road Network Condition Rating

Colour Indicator	Pavement Condition Index	
	Greater than 85%	Requires regular maintenance
	70% < PCI < 85%	Minor local improvements
	55% < PCI < 70%	Requires rehabilitation and continued maintenance
	25% < PCI < 55%	Requires major rehabilitation or reconstruction
	Less than 25%	Requires Reconstruction

Figure 5 – Road Network Condition by Road Class

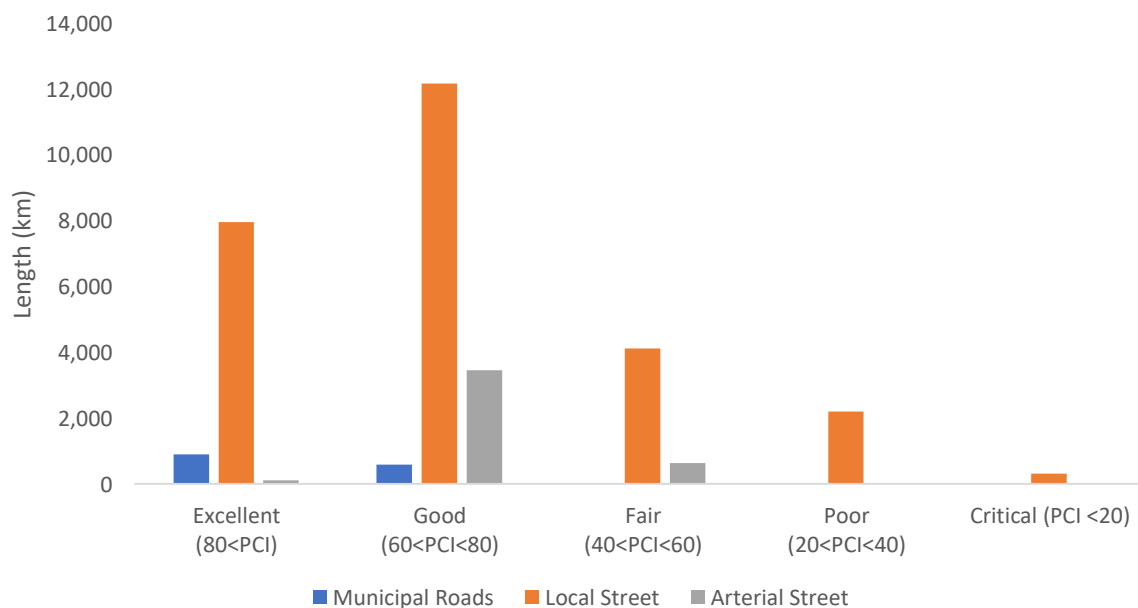
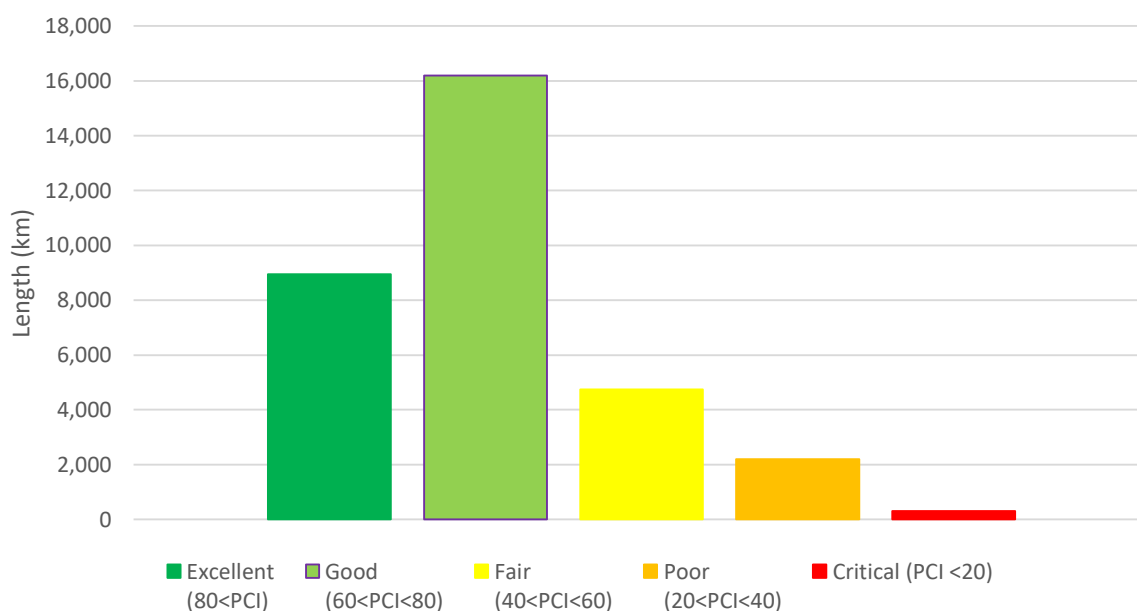


Figure 6 – Road Condition by Rating

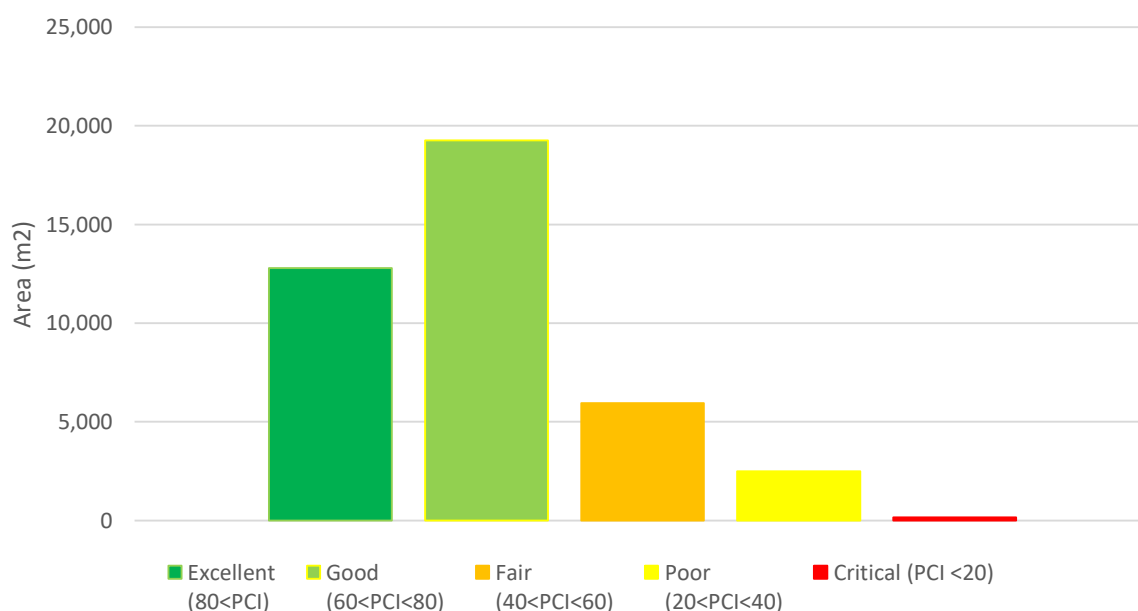


Similar to the road network, in 2020, the Town had completed a condition survey of the sidewalks, by Safesidewalks Canada. The sidewalk surface condition was assessed based on the following criteria:

Table 10: Sidewalk Surface Condition

Colour Indicator	Condition
	Minor defect and evidence of some damage and deterioration; no immediate repair required.
	Moderate defect with further deterioration expected to result in repair beginning requirement in the future.
	Significant walkway deficiency; repairs when convenient
	Severe walkway deficiency: prompt attention required.
	Extreme walkway deficiency: immediate attention required.

Figure 7 – Sidewalk Condition by Rating



3.10.5. Current Level of Service

Based on the asset inventory compiled for the road network, the Town has identified the current level of service being provided to the community. The Community and Technical Level of Service is reflected in the following table meeting the requirements of O.Reg. 588/17.

Table 11: Current Level of Service - Road Network

Level of Service Category	Matrix	Current Level of Service
Community LOS	Description, which may include maps, of the road network in the municipality and its level of connectivity.	Refer to Appendix B
	Description or images that illustrate the different levels of road class pavement condition.	Road network condition rating system is defined in Section 3.10.1
Technical LOS	Lane-km of Municipal Roads per land area ¹	0.01 km / km ²
	Lane-km of Collector Roads per land area ¹	0.24 km / km ²
	Lane-km of Collector Roads per land area ¹	0.06 km / km ²
	For paved roads in the municipality, the average pavement condition index value.	72.5 (good)
	Maintain an up-to-date Road Needs Study	Every Five Years
	Maintain a condition assessment of sidewalks	Every Five Years

1 based on 3.11 km²

3.10.6. Lifecycle Management

The Town has two levels of budgeting for the upkeep of their road network:

- Annual Operation and Maintenance Budget (Operating Budget)
 - Summer Activities including pavement patching, line painting, roadside mowing, tree trimming, road sign maintenance, street light maintenance, sidewalk repairs, etc.
 - Winter Activities including snow plowing, sanding/salting, sidewalk clearing, etc.
- Planned Rehabilitation and Replacement Budget (Capital Budget)
 - Paved road rehabilitation and replacement is scheduled based on the PCI of the road infrastructure as well as the condition of the underground infrastructure.

The current strategy is to maintain roads that are in good condition in good condition and concentrate road rehabilitation works in the areas where the underground infrastructure is in poor condition or is composed of pipe materials (i.e. clay and/or asbestosis concrete) that are fragile in nature.

3.11. Bridges

3.11.1. What do we Own?

The Town of Prescott owns a single bridge structure with a span greater than 3m: the Edward Street Bridge. It is a four-lane structure constructed as a slab on steel girder bridge with an approximate deck length of 52m and an overall width of approximately 18m.

Table 12: Bridge Inventory

Asset Type	Asset Component	Quantity (m ²)
Bridges	Bridge	917 m ²

The Edward Street Bridge has a posted speed limit of 40 km/hr. There are currently no-load restrictions on the bridge or restrictions on the types of vehicles that can utilize the bridge.

3.11.2. Expected Useful Service Life

“Useful Service Life” is the industries best estimate of the expected period of time an asset can be used for their intended purpose. Depending on the maintenance and rehabilitation efforts over the course of the life span of an asset, the useful service life can be extended. The useful service life is used to determine replacement needs of individual assets.

The following table provides a comparison of the expected service life compared to the actual average age of the Town’s bridge network

Table 13: Bridge – Useful Service Life

Asset Component	Estimated Useful Life (Years)	Average Age (Years)	Average Service Life Remaining (Years)
Bridge	70	29	41

3.11.3. What is it Worth?

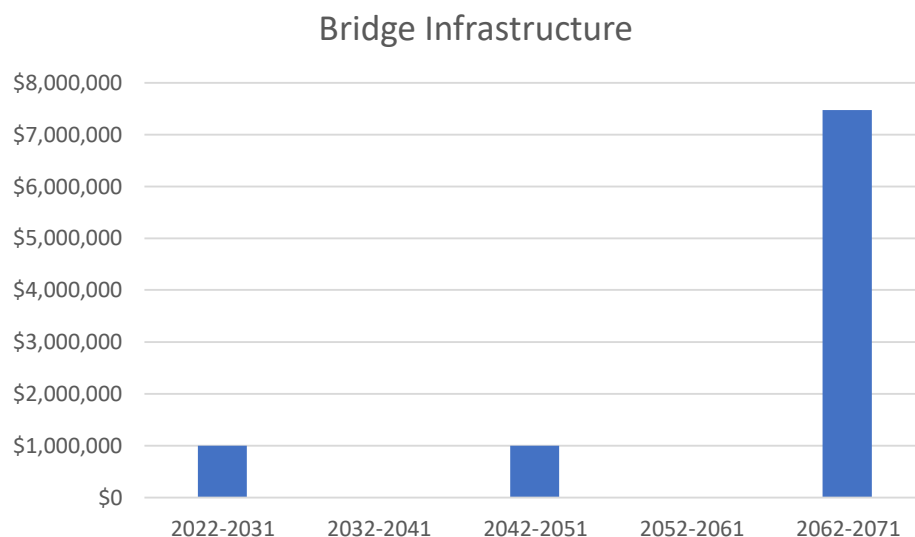
The estimated replacement value of the bridge infrastructure, in 2023 dollars, is approximately \$8.3M.

Table 14: Valuation of Bridges

Asset Type	Asset Component	Quantity (m)	Replacement Cost
Bridges	Bridge	917 m ²	\$8,285,200
	NET REPLACEMENT VALUE		\$8,285,200

Based on the history of bridge repair and the remaining useful life of the Edward Street bridge, the following chart demonstrates the future replacement requirements for the Prescott Bridge Infrastructure.

Figure 8 – Future Capital Expenses for Bridge Infrastructure



3.11.4. What Condition is it in?

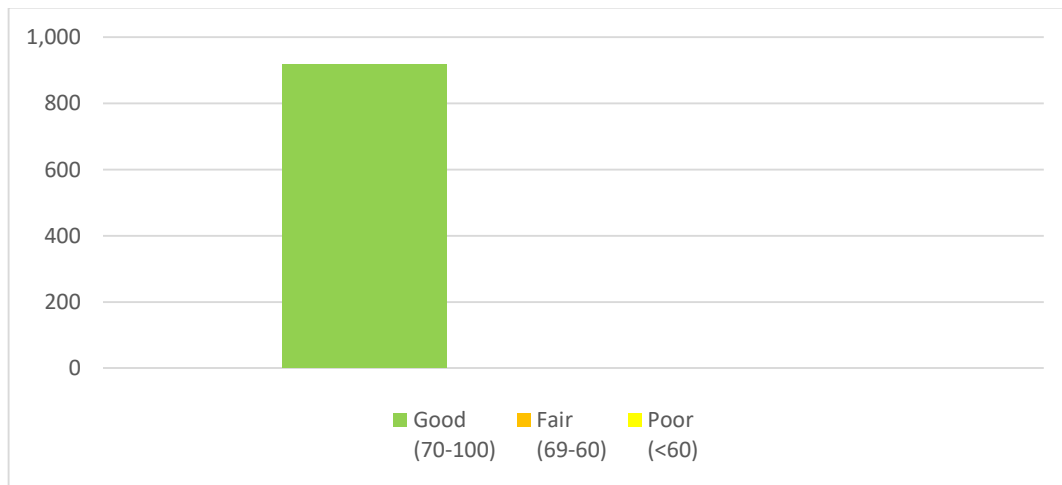
The Ministry of Transportation (MTO) requires bi-annual inspections for all bridge structures in Ontario. The inspection of these structures are to follow the MTO guidelines that are contained in the Ontario's Structure Inspection Manual (OSIM). Through the use of OSIM a Bridge Condition Index is determined for each structure. The Bridge Condition Index relates to the bridge condition in the following manner:

Table 15: OSIM Bridge Condition Index

Rating	Maintenance Schedule
Good: BCI: 70-100	Maintenance is not usually required within the next five years
Fair: BCI: 60-70	Maintenance work is usually scheduled within the next five years. This is the ideal time to schedule major bridge repairs to get the most out of bridge spending.
Poor: BCI: <60	Maintenance work is usually scheduled within one year.

The Town completed a replacement of the abutment bearings and the expansions joints in 2023 returning the bridge to an OSIM rating of good condition.

Figure 9 – Bridge Condition by Rating



3.11.5. Current Level of Service

Based on the asset inventory compiled for the bridge network, the Town has identified the current level of service being provided to the community. The Community and Technical Level of Service is reflected in the following table meeting the requirements of O.Reg. 588/17.

Table 16: Current Level of Service - Bridges

Level of Service Category	Matrix	Current Level of Service
Community LOS	Description of the traffic that is supported by municipal bridges (e.g., heavy transport vehicles, motor vehicles, emergency vehicles, pedestrians, cyclists).	No Restrictions
	Description or images of the condition of bridges and how this would affect use of the bridges.	Refer to OSIM Report
Technical LOS	Percentage of bridges in the municipality with loading or dimensional restrictions	0%
	For bridges in the municipality, the average bridge condition index value.	Good
	Completion of OSIM Report	Every Two Years

3.11.6. Lifecycle Management

The Town has two levels of budgeting for the upkeep of their bridge infrastructure:

- Annual Operation and Maintenance Budget (Operating Budget)
 - Summer Activities including pavement patching, line painting, sign maintenance, , power-washing, sidewalk repairs, etc.
 - Winter Activities including snow plowing, sanding/salting, sidewalk clearing, etc.
- Planned Rehabilitation and Replacement Budget (Capital Budget)

- Capital items are identified in the OSIM report and integrated into the 10-year capital plan to ensure the structure is maintained in good condition.

The Town undertook the following work in 2023:

- Abutment bearing replacements
- Expansion joint replacements
- Structural steel repairs
- Structural steel re-coating
- Guiderail repairs
- Sidewalk repairs

This work will improve the overall bridge condition index for the structure, with the next planned large rehabilitation work to be schedule for 2048.

3.12. Water Network

3.12.1. What do we Own?

Prescott is the owner of the Prescott Drinking Water System, which includes approximately 31 km of watermains, a water treatment plant, and an elevated tower.

Table 17: Water Network Asset Inventory

Asset Type	Asset Component	Quantity
Water Network	Watermain (15mm)	45
	Watermain (25mm)	136
	Watermain (100mm)	820
	Watermain (150mm)	14,174
	Watermain (200mm)	7,121
	Watermain (250mm)	2,115
	Watermain (300mm)	5,960
	Watermain (400mm)	703
	Services	2,153
	Fire Hydrants	206
	Valves	419
	Water Treatment Plant	1
	Water Tower	1

3.12.2. Expected Useful Service Life

“Useful Service Life” is the industries best estimate of the expected period of time an asset can be used for their intended purpose. Depending on the maintenance and rehabilitation efforts over the course of the life span of an asset, the useful service life can be extended. The useful service life is used to determine replacement needs of individual assets.

The following table provides a comparison of the expected service life compared to the actual average age of the Town’s water network.

Table 18: Water Network – Useful Service Life

Asset Type	Asset Component	Useful Life in Years
Water Network	Watermains	80
	House Services	60
	Fire Hydrants	50
	Valves	50
	Elevated Water Storage	60
	Water Treatment Facilities – Mechanical Systems	25

	Water Treatment Facilities – Electrical Systems	40
	Water Treatment Facilities – Piping Networks	80
	Water Treatment Facilities – Concrete Works	100

3.12.3. What is it Worth?

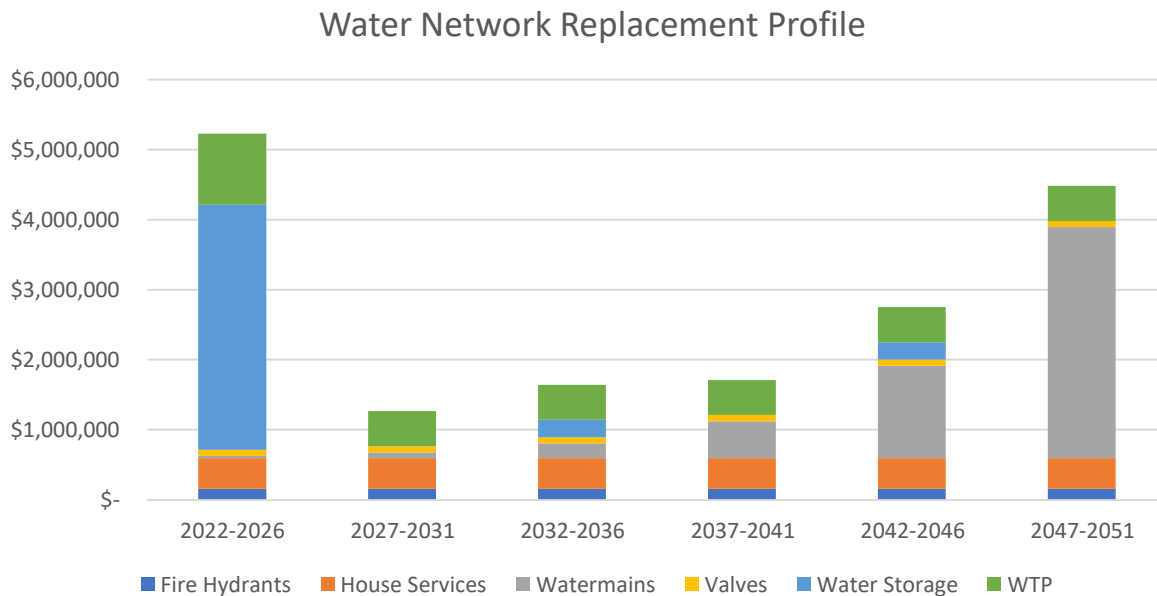
The estimated replacement value of the water network, in 2023 dollars, is approximately \$49.7 million.

Table 19: Valuation of Water Network

Asset Type	Asset Component	Quantity	Replacement Value
Water Network	Watermain (15mm)	45	\$8,700
	Watermain (25mm)	136	\$26,400
	Watermain (100mm)	820	\$181,800
	Watermain (150mm)	14174	\$4,319,800
	Watermain (200mm)	7121	\$2,959,400
	Watermain (250mm)	2115	\$1,054,800
	Watermain (300mm)	5960	\$3,467,700
	Watermain (400mm)	703	\$486,900
	Services	2153	\$7,158,800
	Fire Hydrants	211	\$1,753,800
	Valves	419	\$9,74,400
	Water Treatment Plant	1	\$23,423,800
	Water Tower	1	\$3,878,800
	Total		\$49,694,400

Based on age for the water treatment facilities, the following chart demonstrates the future replacement requirements for the Prescott Water Network.

Figure 10 – Capital Forecast for Water Network



The Town is replacing the Prescott Elevated Water Storage Tank to be completed in 2024. The Town was also successful in obtaining funding through the Investing in Canada Infrastructure Program to help offset this cost to the users of the system. The total cost of the project is \$7.5 million.

Current funding levels for the water infrastructure is approximately \$0.2M per year and the current Town allocated funds will need to increase within time to address the aging water network needs.

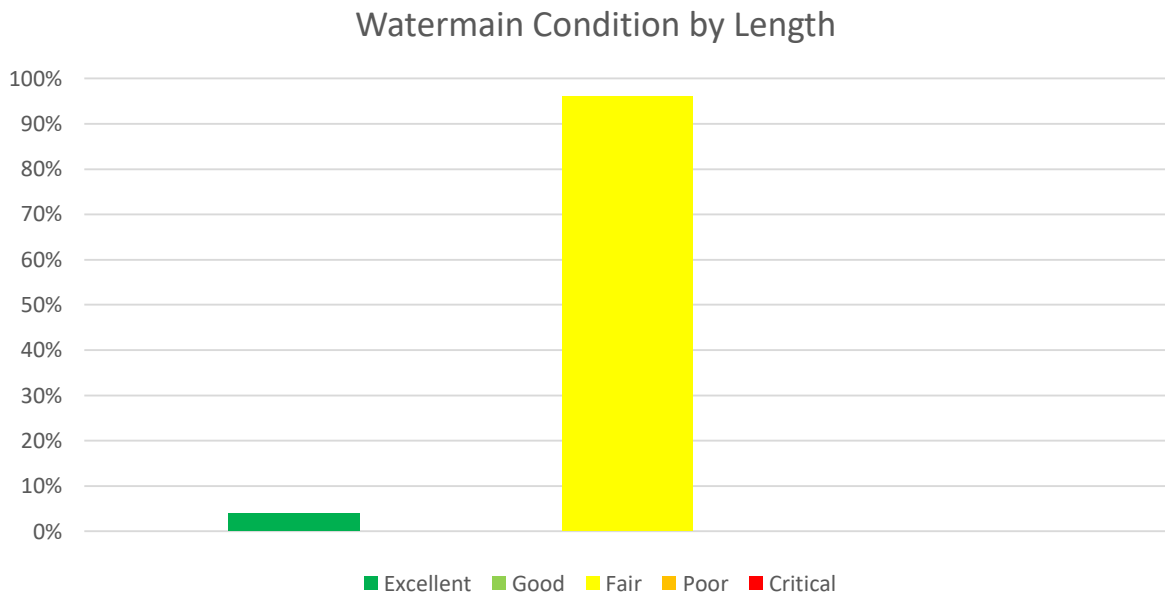
3.12.4. What Condition is it in?

The Town does not utilize a formal condition assessment process for the establishment of the condition of the water distribution network. The Town may utilize acoustic leak detection contractors to assist with maintenance strategies but only on an as needed basis. The Town has used the age of the pipe, material of the pipe, and the history of watermain breaks to help establish the condition of the water distribution system.

Condition assessments of the Prescott Water Treatment Plant and Prescott Water Tower have been undertaken and integrated into the asset management plan.

Utilizing the year of installation for the watermains and their appurtenances, and assigning a 100 years service life for watermains, we have assessed the condition of the watermains based solely on a straight line depreciation: 0-19 years of age: excellent, 20-39 years of age: good, 40-59 years of age: fair, 60-79 years of age: poor, >79 years of age: critical.

Figure 11 – Water Main Condition Assessment



In 2017, the Town completed a condition assessment of the Prescott Water Treatment Plant and the Prescott Water Tower. The water tower is in critical condition, as identified below, and the Prescott WTP has components in fair to excellent condition. Additionally, it was determined that there is inadequate water storage requirements to comply with the minimum level of water storage required by the Ministry of the Environment, Conservation and Parks (MECP) Design Guidelines for Water Supply Systems. This will be addressed by the new water tower to be completed in 2024.

Figure 12 – Water Facilities Condition Assessment



3.12.1. Current Level of Service

Based on the asset inventory compiled for the water network, the Town has identified the current level of service being provided to the community. The Community and Technical Level of Service is reflected in the following table meeting the requirements of O.Reg. 588/17.

Table 20: Current Level of Service – Water Network

Level of Service Category	Matrix	Current Level of Service
Community LOS	Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal water system.	Refer to Appendix C
	Description, which may include maps, of the user groups or areas of the municipality that have fire flow.	Modelling in development
	Description of boil water advisories and service interruptions.	In the past five (5) years (2016-2020), there has been zero (0) boil water advisory issued.
Technical LOS	Percentage of properties connected to the municipal water system south of Highway 401.	100%
	Percentage of properties where fire flow is available.	Modeling in development
	The number of connection-days per year where a boil water advisory notice is in place compared to the total number of properties connected to the municipal water system.	In the past five (5) years (2016-2020), there has been zero (0) connection-days per year in which there was a boil water advisory in place.
	The number of connection-days per year due to water main breaks compared to the total number of properties connected to the municipal water system.	2016 – 3 days 2017 – 0 days 2018 – 6 days 2019 – 9 days 2020 – 2 days

3.12.2. Lifecycle Management

The Town has two levels of budgeting for the upkeep of their water infrastructure:

- Annual Operation and Maintenance Budget (Operating Budget)
 - Summer Activities including flushing, pressure regulator valve testing, valve exercising, etc.
 - Winter Activities including winterization of hydrants, etc.
- Planned Rehabilitation and Replacement Budget (Capital Budget)
 - Capital items are identified through the tracking of watermain breaks, and leak detection surveys and then coordinated with the road network capital projects.

3.13. Sanitary Sewer Network

3.13.1. What do we Own?

The Town's sanitary sewer network is composed of approximately 28 km of sanitary sewers, 4 sewage pumping stations and a wastewater treatment plant.

Table 21: Sanitary Network Inventory

Asset Type	Asset Component	Quantity
Sanitary Network	Sanitary Sewer (150mm)	817.2
	Sanitary Sewer (200mm)	6370.2
	Sanitary Sewer (250mm)	12313.6
	Sanitary Sewer (300mm)	5710.1
	Sanitary Sewer (350mm)	457
	Sanitary Sewer (400mm)	2240
	Sanitary Sewer (450mm)	120
	Sanitary Sewer (600mm)	505
	Sanitary Sewer (675mm)	354.6
	Sanitary Sewer (750mm)	1423.1
	Sanitary Sewer (900mm)	448
	Manholes	356
	Services	2153
	SPS	4
	Water Pollution Control Plant	1

3.13.2. Expected Useful Service Life

"Useful Service Life" is the industries best estimate of the expected period of time an asset can be used for their intended purpose. Depending on the maintenance and rehabilitation efforts over the course of the life span of an asset, the useful service life can be extended. The useful service life is used to determine replacement needs of individual assets.

The following table provides a comparison of the expected service life compared to the actual average age of the Town's sanitary network.

Table 22: Sanitary Network – Useful Service Life

Asset Type	Asset Component	Useful Life in Years
Sanitary Network	Sewers	75
	Manholes	60
	Service Connections	60
	WWTP/SPS – Mechanical	25
	WWTP/SPS – Electrical	40
	WWTP/SPS – Civil	75

3.13.3. What is it Worth?

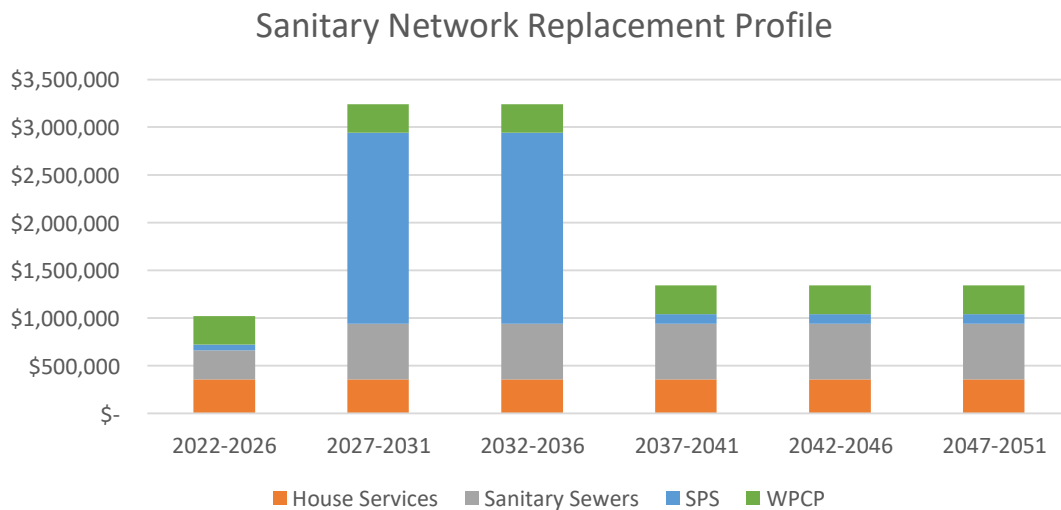
The estimated replacement value of the sanitary network, in 2023 dollars, is approximately \$73.4M.

Table 23: Valuation of Sanitary Network

Asset Type	Asset Component	Replacement Value
Sanitary Network	Sanitary Sewer (150mm)	\$294,300
	Sanitary Sewer (200mm)	\$2,647,400
	Sanitary Sewer (250mm)	\$5,458,600
	Sanitary Sewer (300mm)	\$2,847,700
	Sanitary Sewer (350mm)	\$215,200
	Sanitary Sewer (400mm)	\$1,117,100
	Sanitary Sewer (450mm)	\$66,500
	Sanitary Sewer (600mm)	\$307,800
	Sanitary Sewer (675mm)	\$245,600
	Sanitary Sewer (750mm)	\$1,182,900
	Sanitary Sewer (900mm)	\$422,000
	Manholes	\$4,734,400
	Services	\$4,772,100
	SPS	\$7,092,700
	Water Pollution Control Plant	\$42,279,400
	Total	\$73,683,700

Based on the current condition of the sanitary network, the following chart demonstrates the future replacement requirements for the Prescott Sanitary Network.

Figure 13 – Capital Forecast for Sanitary Network



Current funding levels for the sanitary infrastructure is approximately \$0.25M per year and the current Town allocated funds will need to increase within time to address the aging sanitary network needs. This capital plan includes major renovations at Sewage Pumping Station No. 5, in the years 2027-2031, and Sewage Pumping Station No. 4, in the years 2032-2036.

3.13.4. What Condition is it in?

The Town has adopted the following Key Performance Indicators (KPIs) for the evaluation of the condition of the Town's sanitary sewers. THE KPIs are based on the closed-circuit television (CCTV) inspection of the Town's infrastructure.

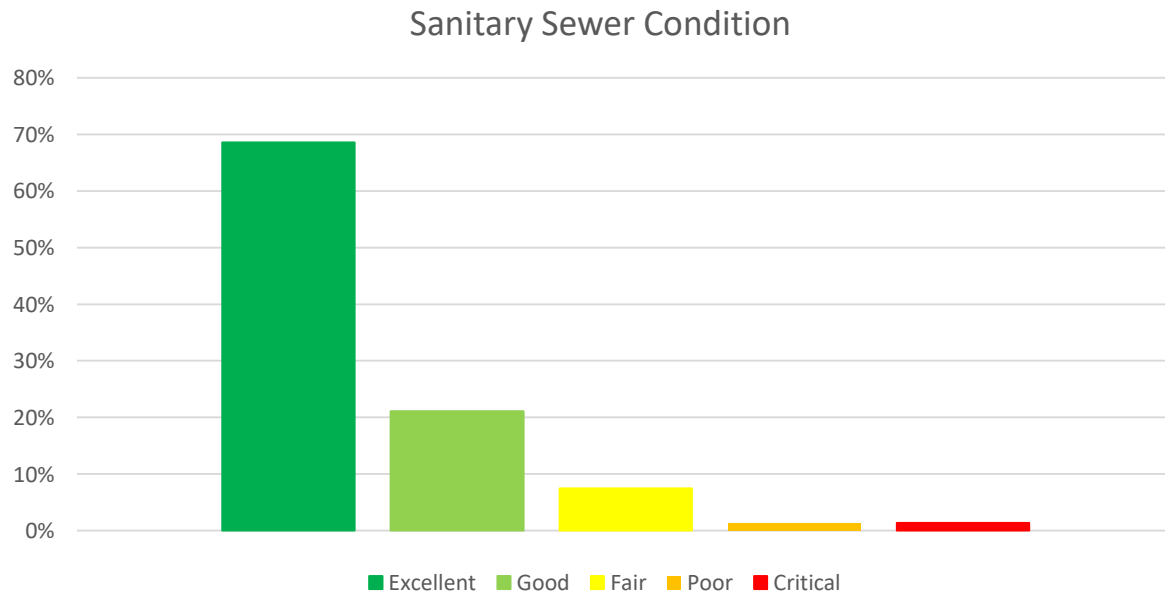
Table 24: Key Performance Factors for Assessing Condition of Sanitary Sewers

Baseline		
All Pipe less than 20 years old	1	Excellent
All pipe older than 20 years old	2	Good
Pipe Material		
AC	+1	
Steel Pipe	+1	
Structural Performance Factors		
Broken Soil Visible	+3	
Deformed Rigid (10%)	+3	
Deformed Flexible Bulging Round (25%)	+3	
Joint Offset Large	+2	
Joint Separated Large	+2	
Deformed Flexible Bulging Round (5%)	+2	
Fracture Multiple	+2	
Broken	+1	
Joint Offset Medium	+1	
Crack Multiple	+1	
Deformed Flexible Elliptical (15%)	+1	
Joint Separated Medium	+1	
Deformed Flexible Bulging Round (2%)	+1	
Miscellaneous Water Level Sag (5%)	+1	

Deposits Attached Encrustation (5%)	+1
Inflow and Infiltration Factors	
Multiple Gushers in same length of Pipe	+3
Single Medium-Large Gusher	+2
Single Small Gusher	+1

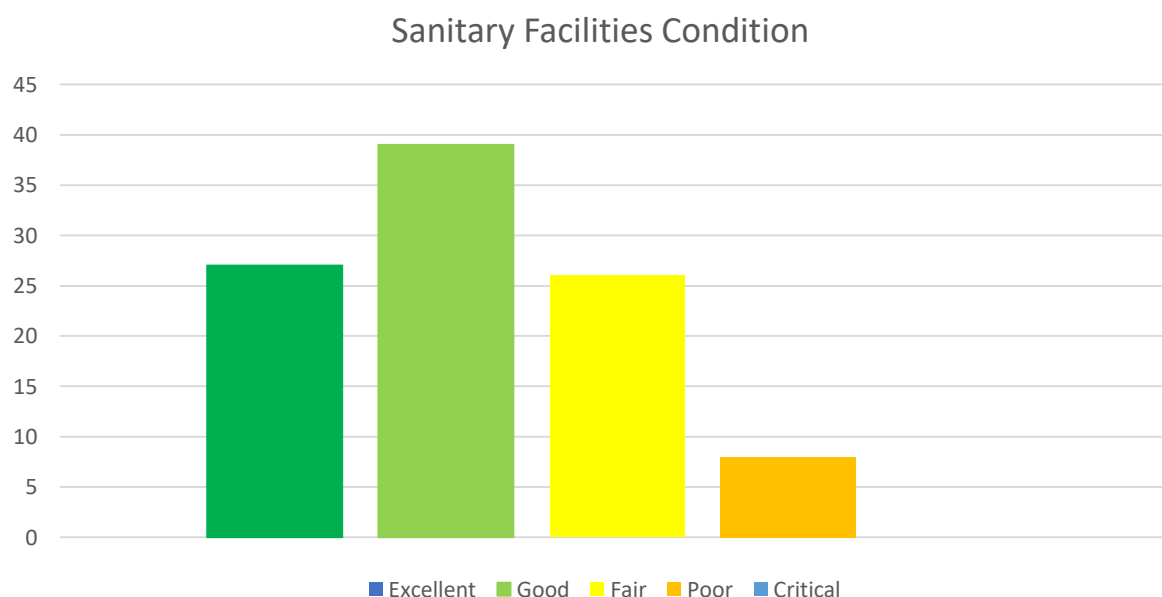
Based on the KPI and the available CCTV footage and reports for the sanitary collection system, the condition of the Town's sanitary sewers is reflected in the following figure.

Figure 14 – Sanitary Sewer Condition Assessment



In 2017, the Town completed a condition assessment of the Prescott Water Pollution Control Plant and sewage pumping stations. Most of the infrastructure is in good to fair condition.

Figure 15 – Sanitary Facilities Condition Assessment



3.13.5. Current Level of Service

Based on the asset inventory compiled for the sanitary network, the Town has identified the current level of service being provided to the community. The Community and Technical Level of Service is reflected in the following table meeting the requirements of O.Reg. 588/17.

Table 25: Current Level of Service – Sanitary Network

Level of Service Category	Matrix	Current Level of Service
Community LOS	Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal wastewater system.	Appendix D
	Description of the frequency and volume of overflows in combined sewers in the municipal wastewater system that occur in habitable areas or beaches.	Over the past five years they have been a total of 24 bypass events occurring at the SPS, for a total duration of 111 hours with a total discharge of 23,618 m ³ , representing a release of 0.37% of all wastewater treated at the Prescott WPCP. Refer to Table 20 for additional details.

	Description of the frequency and volume of overflows in combined sewers in the municipal wastewater system that occur in habitable areas or beaches.	All overflows occurred at the sewage pumping stations.
	Description of how stormwater can get into sanitary sewers in the municipal wastewater system, causing sewage to overflow into streets or backup into homes.	Stormwater can enter the sanitary network through inflow (i.e. sump pumps, footing drains, rain leader connections, etc.) or infiltration (i.e. seepage through cracks in sewers or manholes, loose joints, etc.)
	Description of how sanitary sewers in the municipal wastewater system are designed to be resilient to avoid events described above.	The Town has a comprehensive design manual to ensure that new sewers and connections comply with the highest standards.
	Description of the effluent that is discharged from sewage treatment plants in the municipal wastewater system.	Final effluent from the Prescott Water Pollution Control Plant discharges by gravity to the St. Lawrence River, in accordance with the requirements of the ECA.
Technical LOS	Percentage of properties connected to the municipal wastewater system south of Highway 401.	99.9%
	The number of connection-days per year due to wastewater backups compared to the total number of properties connected to the municipal wastewater system.	0
	The number of effluent violations per year due to wastewater discharge compared to the total number of properties connected to the municipal wastewater system.	One (1) exceedence of <i>E.coli</i> in 2018.

Table 26: Sanitary Bypass Events

Bypasses	Units	2016	2017	2018	2019	2020
# of Events		0	11	2	10	1
Duration	hours	0	74.93333	3	29.9	3.33
Volume	m3	0	18266	565	4572.36	215

3.13.6. Lifecycle Management

The Town has two levels of budgeting for the upkeep of their water infrastructure:

- Annual Operation and Maintenance Budget (Operating Budget)
 - Summer Activities including flushing, CCTV inspection, etc.
 - Winter Activities including winterization of hydrants, etc.
- Planned Rehabilitation and Replacement Budget (Capital Budget)
 - Capital items are identified through prioritizing replacement of pipe made from fragile materials (i.e. clay and/or asbestosis concrete) and CCTV surveys and then coordinated with the road network capital projects.

3.14. Storm Sewer Network

3.14.1. What do we Own?

The inventory components of the storm sewer collection network are outlined in the table below. The entire network consists of approximately 18km of storm sewers.

Table 27: Storm Sewer Network Inventory

Asset Type	Asset Component	Quantity (m)
Storm Network	Storm Sewer (200mm)	126
	Storm Sewer (2250mm)	131.5
	Storm Sewer (250mm)	1403.7
	Storm Sewer (300mm)	3576.2
	Storm Sewer (350mm)	279
	Storm Sewer (375mm)	1894.7
	Storm Sewer (400mm)	478.1
	Storm Sewer (450mm)	3808.9
	Storm Sewer (525mm)	720.7
	Storm Sewer (600mm)	984.9
	Storm Sewer (675mm)	346
	Storm Sewer (750mm)	941.9
	Storm Sewer (825mm)	282
	Storm Sewer (900mm)	1459.8
	Storm Sewer (1050mm)	1023.8
	Storm Sewer (1200mm)	112.7
	Storm Sewer (1220mm)	138.7
	Manholes	246
	Stormwater Ponds	2
	Catchbasins	493

3.14.2. Expected Useful Service Life

“Useful Service Life” is the industries best estimate of the expected period of time an asset can be used for their intended purpose. Depending on the maintenance and rehabilitation efforts over the course of the life span of an asset, the useful service life can be extended. The useful service life is used to determine replacement needs of individual assets.

The following table provides a comparison of the expected service life compared to the actual average age of the Town’s storm network.

Table 28: Storm Sewer Network – Useful Service Life

Asset Type	Asset Component	Useful Life in Years
Storm Network	Catch Basins	60

	Manholes	60
	Stormwater Ponds	50
	Storm Sewers	75

3.14.3. What is it Worth?

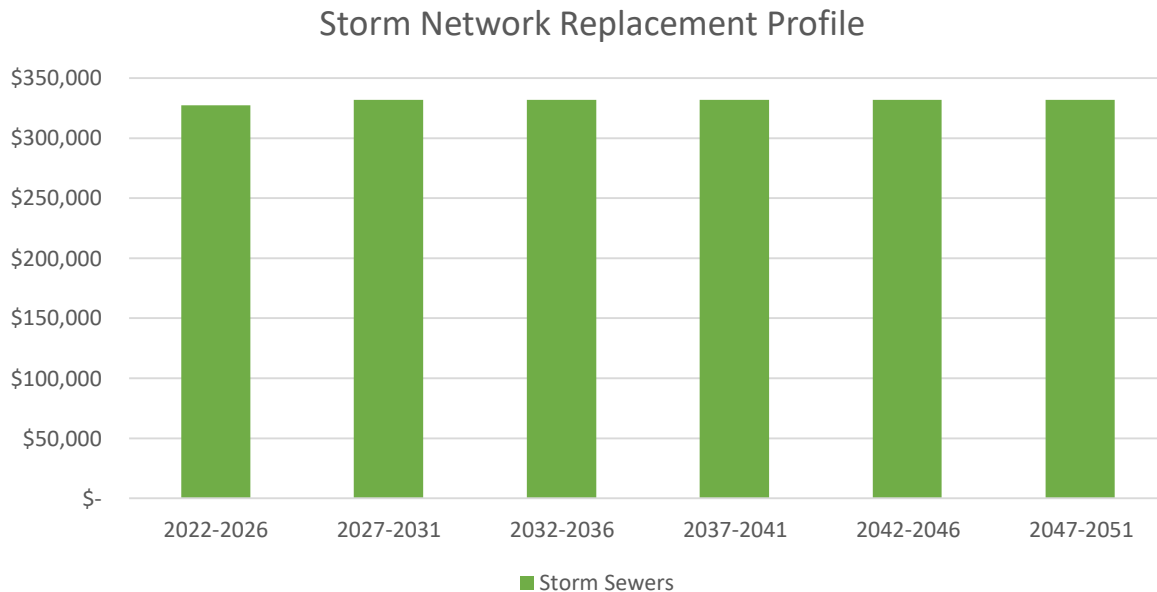
The estimated replacement value of the storm sewer network in 2023 dollars is approximately \$15.7M.

Table 29: Valuation of Storm Sewer Network

Asset Type	Asset Component	Quantity	Replacement Value
Storm Network	Storm Sewer (200mm)	126	\$52,400
	Storm Sewer (2250mm)	131.5	\$58,300
	Storm Sewer (250mm)	1403.7	\$622,300
	Storm Sewer (300mm)	3576.2	\$1,585,300
	Storm Sewer (350mm)	279	\$131,400
	Storm Sewer (375mm)	1894.7	\$944,900
	Storm Sewer (400mm)	478.1	\$251,700
	Storm Sewer (450mm)	3808.9	\$2,110,600
	Storm Sewer (525mm)	720.7	\$439,300
	Storm Sewer (600mm)	984.9	\$682,200
	Storm Sewer (675mm)	346	\$258,800
	Storm Sewer (750mm)	941.9	\$782,900
	Storm Sewer (825mm)	282	\$250,000
	Storm Sewer (900mm)	1459.8	\$1,375,100
	Storm Sewer (1050mm)	1023.8	\$1,134,600
	Storm Sewer (1200mm)	112.7	\$149,900
	Storm Sewer (1220mm)	138.7	\$188,300
	Manholes	246	\$3,271,500
	Stormwater Ponds	2	\$166,200
	Catchbasins	493	\$1,256,600
	Total		\$15,712,300

Based on the current condition of the storm network, the following chart demonstrates the future replacement requirements for the Prescott Storm Network.

Figure 16 – Capital Forecast for Storm Network



Current funding levels for the storm infrastructure is approximately \$0.06M per year and the current Town allocated funds will need to increase within time to address the aging storm network needs.

3.14.4. What Condition is it in?

The Town has adopted the following Key Performance Indicators for the evaluation of the condition of the Town's storm sewers.

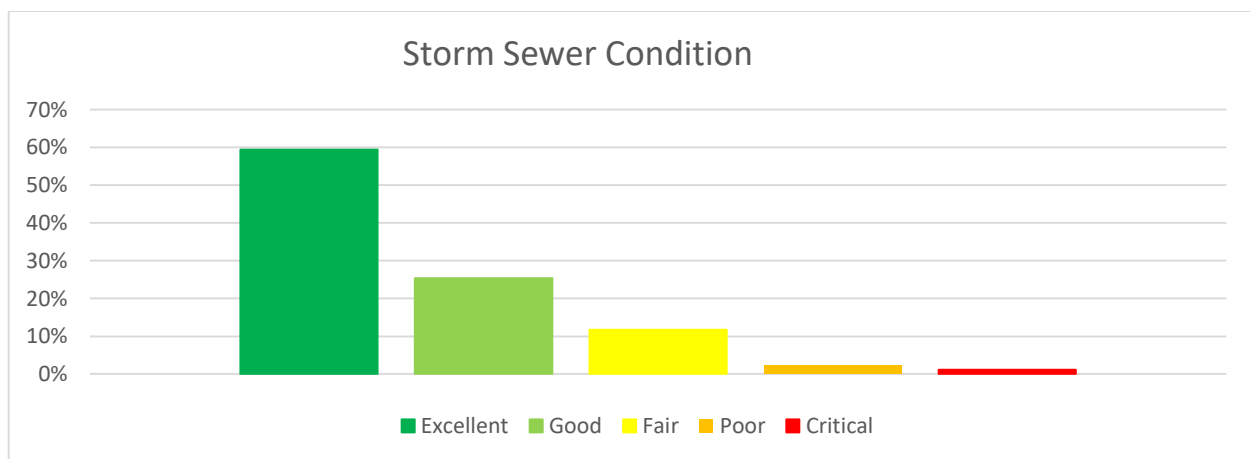
Table 30: Key Performance Factors for Assessing Condition of Stormwater Sewers

Baseline		
All Pipe less than 20 years old	1	Excellent
All pipe older than 20 years old	2	Good
Pipe Material		
AC	+1	

Steel Pipe	+1
Structural Performance Factors	
Broken Soil Visible	+3
Deformed Rigid (10%)	+3
Deformed Flexible Bulging Round (25%)	+3
Joint Offset Large	+2
Joint Separated Large	+2
Deformed Flexible Bulging Round (5%)	+2
Fracture Multiple	+2
Broken	+1
Joint Offset Medium	+1
Crack Multiple	+1
Deformed Flexible Elliptical (15%)	+1
Joint Separated Medium	+1
Deformed Flexible Bulging Round (2%)	+1
Miscellaneous Water Level Sag (5%)	+1
Deposits Attached Encrustation (5%)	+1
Inflow and Infiltration Factors	
Multiple Gushers in same length of Pipe	+3
Single Medium-Large Gusher	+2
Single Small Gusher	+1

Based on the KPI and the available CCTV footage and reports for the stormwater collection system, the condition of the Town's storm sewers is reflected in the following figure.

Figure 17 – Storm Sewer Condition Assessment



3.14.5. Current Level of Service

Based on the asset inventory compiled for the storm sewer network, the Town has identified the current level of service being provided to the community. The Community and Technical Level of Service is reflected in the following table meeting the requirements of O.Reg. 588/17.

Table 31: Current Level of Service – Storm Sewer Network

Level of Service Category	Matrix	Current Level of Service
Community LOS	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.	Appendix E
Technical LOS	Percentage of properties in municipality resilient to a 100-year storm.	Model being developed
	Percentage of the municipal stormwater management system resilient to a 5-year storm.	Model being developed

3.14.6. Lifecycle Management

The Town has two levels of budgeting for the upkeep of their stormwater infrastructure:

- Annual Operation and Maintenance Budget (Operating Budget)
 - Summer Activities including cathbasin cleanouts, stormwater pond maintenance and outlet cleaning.
- Planned Rehabilitation and Replacement Budget (Capital Budget)
 - Capital items are identified through prioritizing replacement of pipe made from fragile materials (i.e. clay and/or asbestosis concrete) and CCTV surveys and then coordinated with the road network capital projects.

3.15. Buildings and Facilities

3.15.1. What do we Own?

The inventory of building and facilities is outlined in the table below.

Table 32: Building and Facility Inventory

Asset Type	Quantity
Town Hall and Library	1
Fire Hall	1
Leo Boivin Community Centre	1
Alaine Chartrand Community Centre	1
Public Works	2
Parks, Recreation, & Cultural	15

3.15.2. Expected Useful Service Life

“Useful Service Life” is the industries best estimate of the expected period of time an asset can be used for their intended purpose. Depending on the maintenance and rehabilitation efforts over the course of the life span of an asset, the useful service life can be extended. The useful service life is used to determine replacement needs of individual assets.

The following table provides a comparison of the expected service life compared to the actual average age of the Town’s Buildings and Facilities.

Table 33: Building and Facility– Useful Service Life

Asset Type	Expected Useful Life in Years	Average Age
Town Hall and Library	40	92
Fire Hall	40	6
Leo Boivin Community Centre	40	57
Alaine Chartrand Community Centre	40	1
Public Works	40	33
Parks, Recreation, & Cultural	15-40	44

3.15.3. What is it Worth?

The estimated replacement value of the buildings and facilities in 2023 dollars is approximately \$62.1M.

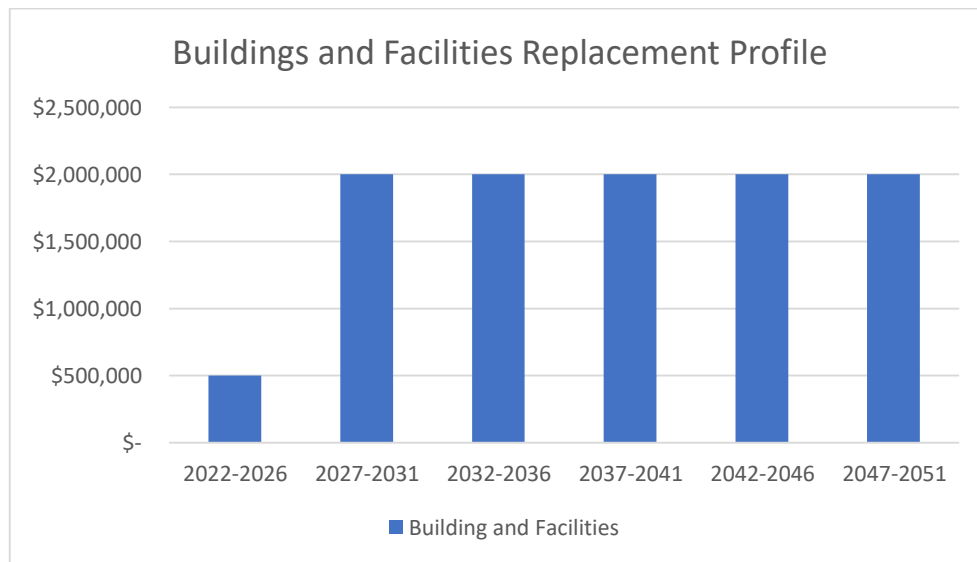
Table 34: Valuation of Building and Facility Inventory

Asset Type	Estimated Replacement Value
Town Hall and Library	\$10,914,900
Fire Hall	\$8,649,600
Leo Boivin Community Centre	\$11,452,200
Alaine Chartrand Community Centre	\$22,550,000

Public Works	\$4,414,000
Parks, Recreation, & Cultural	\$4,128,400
Total	\$62,109,100

Based on the current condition of the buildings and facilities, the following chart demonstrates the future replacement requirements for the Buildings and Facilities.

Figure 35 – Capital Forecast for Buildings and Facilities

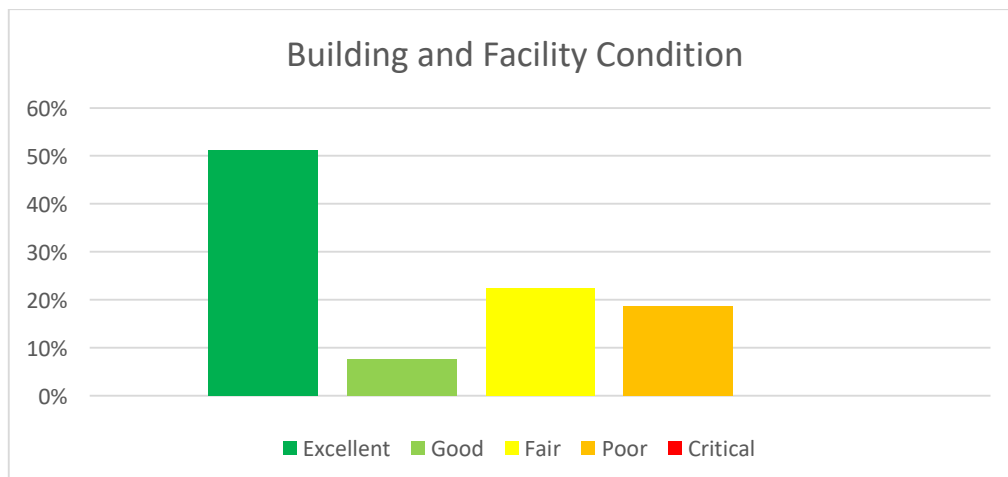


Current funding levels for the replacement of building and facilities is approximately \$0.25M per year and the current Town allocated funds will need to increase within time to address the aging facilities.

3.15.4. What Condition is it in?

The Town has undertaken condition assessments of all major buildings and facilities. Based on those assessments the condition of the Town's Buildings and Facilities is reflected in the following figure.

Figure 18 – Building and Facility Condition Assessment



3.15.5. Current Level of Service

Based on the asset inventory compiled for the building and facilities, the Town has identified the current level of service being provided to the community.

Table 37: Current Level of Service – Buildings and Facilities

Level of Service Category	Matrix	Current Level of Service
Safe & Regulatory	Facilities are safe for occupants and do not cause a hazard to the public	All building and facilities are safe for occupants and do not cause a hazard to the public
Performance	There are long-term plans in place for the renewal and replacement of all facilities	In-Progress
Percentage of individual buildings and facilities available for productive use	As buildings and facilities age or are repurposes, some parts portions may no longer be available for productive use.	All individual buildings and facilities can fully utilized for productive use with the exception of the Leo Boivin Community Centre which is has pertain portions no longer being utilized due to condition.

3.15.6. Lifecycle Management

The Town has two levels of budgeting for the upkeep of the buildings and facilities:

- Maintenance / Rehabilitation
 - Municipal buildings are subject to regular inspections to compliant with health & safety requirements
 - Back-up generators testing are completed by municipal staff on a regular basis as applicable
 - Replacement or building systems as required based on condition
- Replacement
 - Capital items are identified through prioritizing replacement of pipe made from fragile materials (i.e. clay and/or asbestosis concrete) and CCTV surveys and then coordinated with the road network capital projects.

3.16. Vehicles and Equipment

3.16.1. What do we Own?

The inventory of Vehicles and Equipment is outlined in the table below.

Table 38: Vehicles and Equipment Inventory

Asset Type	Quantity
Fire Department Vehicles	5
Fire Department Equipment	18
Operations Department Vehicles	12
Operations Equipment	22
Recreation and Culture Equipment	17
Administrative Equipment	11

3.16.2. Expected Useful Service Life

“Useful Service Life” is the industries best estimate of the expected period of time an asset can be used for their intended purpose. Depending on the maintenance and rehabilitation efforts over the course of the life span of an asset, the useful service life can be extended. The useful service life is used to determine replacement needs of individual assets.

The following table provides a comparison of the expected service life compared to the actual average age of the Town’s Vehicles and Equipment.

Table 39: Vehicles and Equipment – Useful Service Life

Asset Type	Expected Useful Life in Years	Average Age
Fire Department Vehicles	20	13
Fire Department Equipment	10	6
Operations Department Vehicles	10	8
Operations Equipment	15	8
Recreation and Culture Equipment	15	7
Administrative Equipment	10	9

3.16.3. What is it Worth?

The estimated replacement value of the buildings and facilities in 2023 dollars is approximately \$10M.

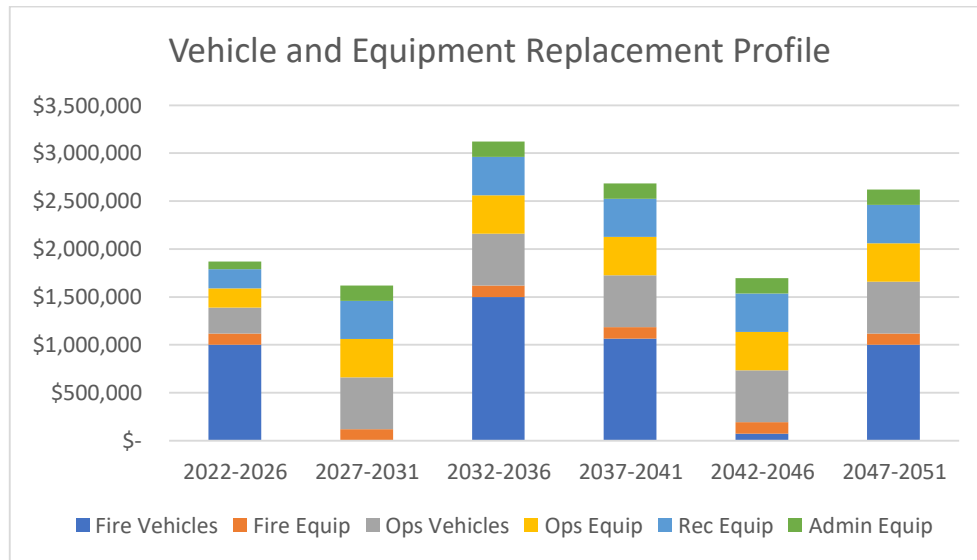
Table 40: Valuation of Vehicles and Equipment

Asset Type	Estimated Replacement Value
Fire Department Vehicles	\$3,390,000
Fire Department Equipment	\$599,000
Operations Department Vehicles	\$1,355,000
Operations Equipment	\$1,482,250

Recreation and Culture Equipment	\$2,702,000
Administrative Equipment	\$440,000
Total	\$9,968,250

Based on the current condition of the buildings and facilities, the following chart demonstrates the future replacement requirements for Vehicles and Equipment.

Figure 41 – Capital Forecast for Vehicles and Equipment

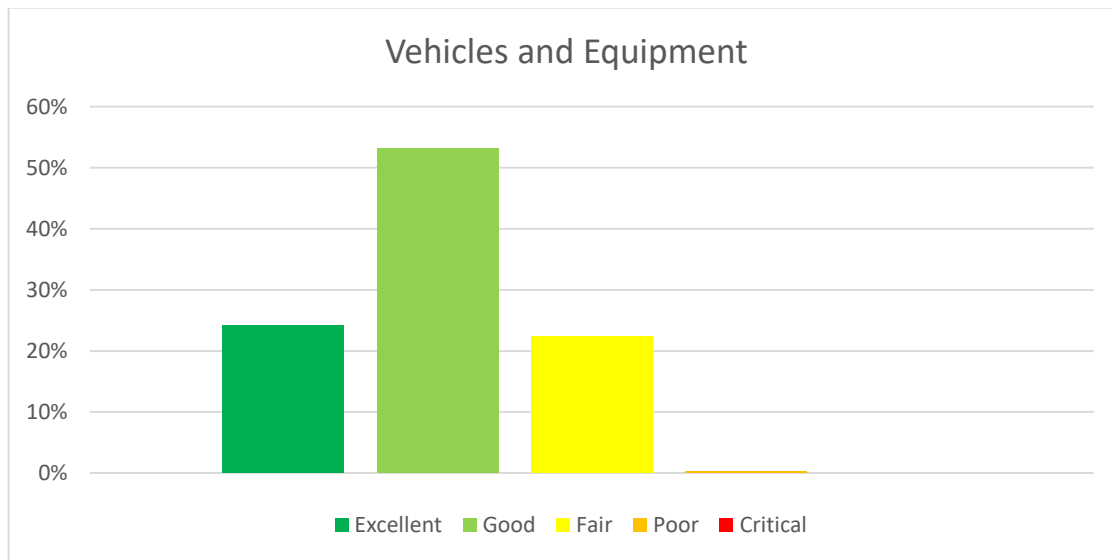


Current funding levels for the Vehicles and Equipment is approximately \$400,000 per year and the current Town allocated funds will need to increase within time to address the aging vehicles and equipment.

3.16.4. What Condition is it in?

The Town has a review all vehicles and equipment. Based on those reviews, the condition of the Town's vehicles and equipment is reflected in the following figure.

Figure 42 – Vehicles and Equipment Condition Assessment



3.16.5. Current Level of Service

Based on the asset inventory compiled for the vehicles and equipment, the Town has identified the current level of service being provided to the community.

Table 43: Current Level of Service – Vehicles and Equipment

Level of Service Category	Description	Current Level of Service
Accessibility & Reliability	Vehicles and Equipment are in good repair and are available for use during service hours	All Vehicles and Equipment is in good repair and are available for use during service hours
Safe & Regulatory	Vehicles and Equipment is safe for use by staff and adheres to regulatory requirements	All Vehicles and Equipment is safe for use by staff and adhere to regulatory requirements
Performance	There are long-term plans in place for the renewal and replacement of all Vehicles and Equipment	In-Progress
Percentage of Vehicles and Equipment that is available for productive use	As vehicles and equipment age they are often taken out of service and therefore not available for use.	All vehicles and equipment are available for productive use.
Optimization of annual repair cost versus cost to replace analysis		In-Progress

3.16.6. Lifecycle Management

The Town has two levels of budgeting for the upkeep of the buildings and facilities:

- Maintenance / Rehabilitation
 - Municipal Visual inspections based on MTO checklist and safety book completed during regular circle checks
 - Regular Vehicle maintenance, mostly identified defects and deficiencies are repaired and rehabilitated
 - Defects and deficiencies in machinery and equipment for other department identified in regular checks are repaired and rehabilitated
 - Safety inspections, oil and lubes checks, and pumping testing are completed on an a regular basis are required for fire vehicles
 - Fire Services equipment is subject to a much more rigorous inspection and maintenance program compared to most other departments
 - Operational inspections for fire vehicles are completed regularly
 - Regular maintenance including oil change, plow maintenance, light replacements are completed as-needed
- Replacement
 - Fire trucks with pump or carrying water are replaced based on Fire Underwriters Survey Schedule
 - Other vehicles are replaced based on maintenance costs, service history, parts availability, and technicians' recommendations
 - The replacement of machinery and equipment depends on identified deficiencies, equipment ages, and technicians' recommendations

3.17. Land Improvements

3.17.1. What do we Own?

The inventory of Land Improvements is outlined in the table below.

Table 44: Land Improvements Inventory

Asset Type	Quantity
Waterfront Break Walls	4
Waterfront erosion protection	Various areas along waterfront
Recreational (Boat Ramp, Tennis Courts, Amphitheatre, pathways, parks)	10
Parking Lots	7

3.17.2. Expected Useful Service Life

“Useful Service Life” is the industries best estimate of the expected period of time an asset can be used for their intended purpose. Depending on the maintenance and rehabilitation efforts over the course of the life span of an asset, the useful service life can be extended. The useful service life is used to determine replacement needs of individual assets.

The following table provides a comparison of the expected service life compared to the actual average age of the Land Improvements.

Table 45: Land Improvements – Useful Service Life

Asset Type	Expected Useful Life in Years	Average Age
Waterfront Break Walls	80	32
Waterfront erosion protection	80	50
Recreational (Boat Ramp, Tennis Courts, Amphitheatre, pathways, parks)	50	36
Parking Lots	40	38

3.17.3. What is it Worth?

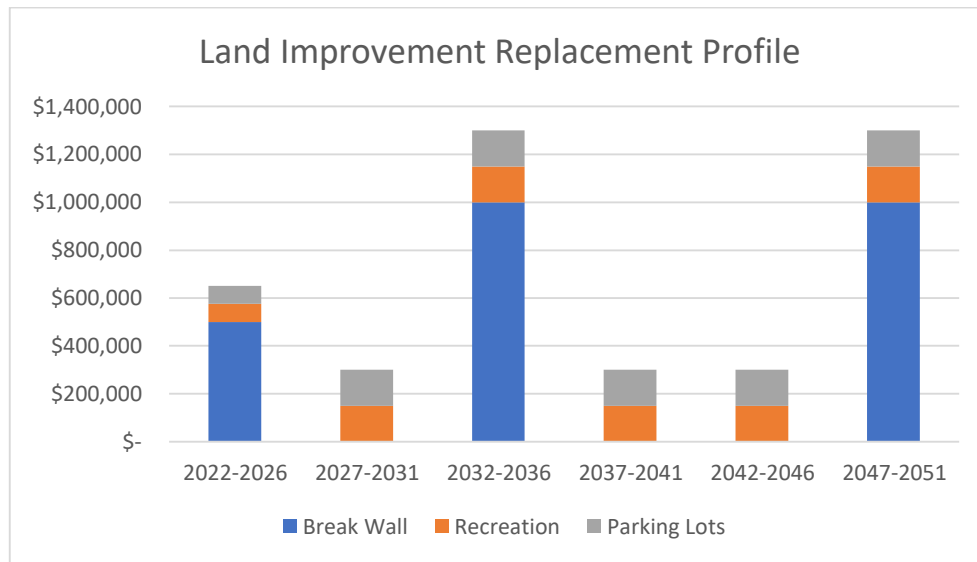
The estimated replacement value of the land improvements in 2023 dollars is approximately \$20.7M.

Table 46: Valuation of Land Improvements

Asset Type	Estimated Replacement Value
Waterfront Break Walls	\$16,000,000
Waterfront erosion protection	Valuation model being developed
Recreational (Boat Ramp, Tennis Courts, Amphitheatre, pathways, parks)	\$3,102,100
Parking Lots	\$1,638,750
Total	\$20,740,850

Based on the current condition of the Land Improvements, the following chart demonstrates the future replacement requirements for them.

Figure 47 – Capital Forecast for Land Improvements

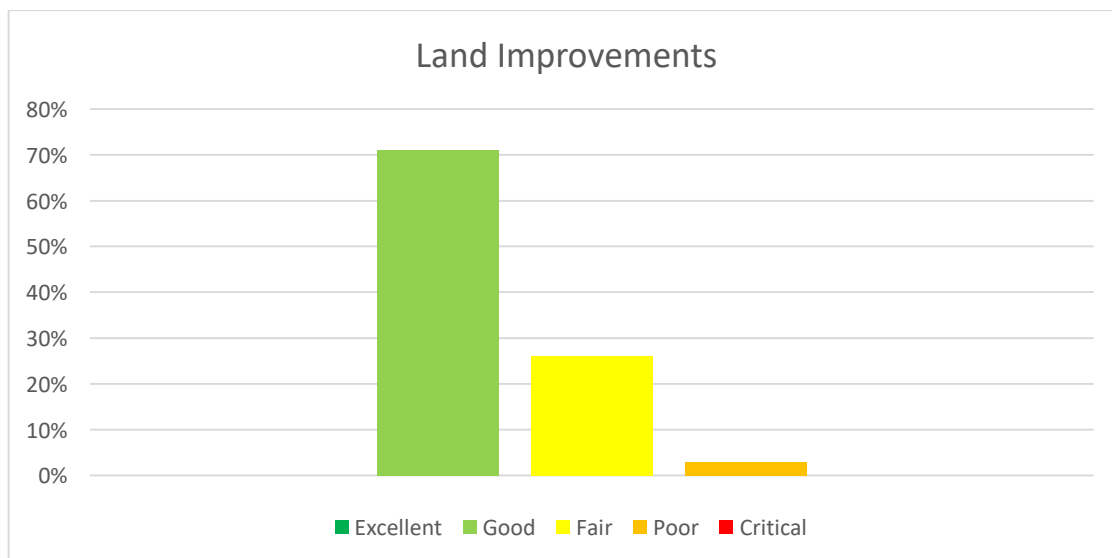


Current funding levels for Land Improvements is approximately \$25,000 per year and the current Town allocated funds will need to increase within time to address the aging land improvements.

3.17.4. What Condition is it in?

The Town has reviewed the condition land improvements. Based on those review the condition of the Town's Land Improvements are reflected in the following figure.

Figure 48 – Land Improvements Condition Assessment



3.17.5. Current Level of Service

Based on the asset inventory compiled for land improvements, the Town has identified the current level of service being provided to the community.

Table 49: Current Level of Service – Land Improvements

Level of Service Category	Description	Current Level of Service
Safe & Regulatory	Land Improvements are safe for use by staff and the public and adheres to regulatory requirements	All Land Improvements are safe for use by staff and the public and adhere to regulatory requirements
Performance	There are long-term plans in place for the renewal and replacement of all Land Improvements	In-Progress
Percentage of Land Improvements that are available for productive use	As Land Improvements age it may become necessary to reduce access to them due to poor or unsafe conditions.	All land improvements are available for productive use.

3.17.6. Lifecycle Management

The Town has two levels of budgeting for the upkeep of the buildings and facilities:

- Maintenance / Rehabilitation
 - Maintenance for land improvement include sweeping, clearing, and repairs performed on a regular basis
 - Regular inspections and maintenance
- Replacement
 - Assets with lower value are not replaced until they reach their end-of-life. Capital projects are dependent on funding availability.

4. Desired Level of Service

*To be part of 2025 Asset Management Plan Update

5. Lifecycle Management Strategy

5.1. Lifecycle Management Strategies

The purpose of developing a lifecycle strategy, for each of the asset categories, is to assist the Town staff with planning for various activities requires for the upkeep of the Town's assets. The strategy should address which activity should be performed and when the activity should be performed in order to maximize and/or extend the useful life of an asset. The lifecycle management activities can be grouped into one of three event types:

Table 50: Life Cycle Management Strategies

Event Type	Description	Cost
Maintenance	Activities that prevent defects and/or the deterioration of assets	\$
Rehabilitation	Activities that rectify defects and/or deficiencies that are already present and reducing the useful service life of the asset.	\$\$
Replacement	The removal of an existing asset with a new asset.	\$\$\$

5.2. Current Funding Levels

To identify the state of the municipality's infrastructure today and the projected state in the future if current funding levels and management practices remain status quo.

The analysis and subsequent communication tools will outline future asset requirements, will start the development of tactical implementation plans, and ultimately assist the organization to provide cost effective sustainable services to the current and future community.

5.2.1. Planned Capital Expenses

The Town has prepared the following 10-year capital plan to identify both replacement and rehabilitation needs for their core infrastructure.

Table 32: 10 Year Capital Plan

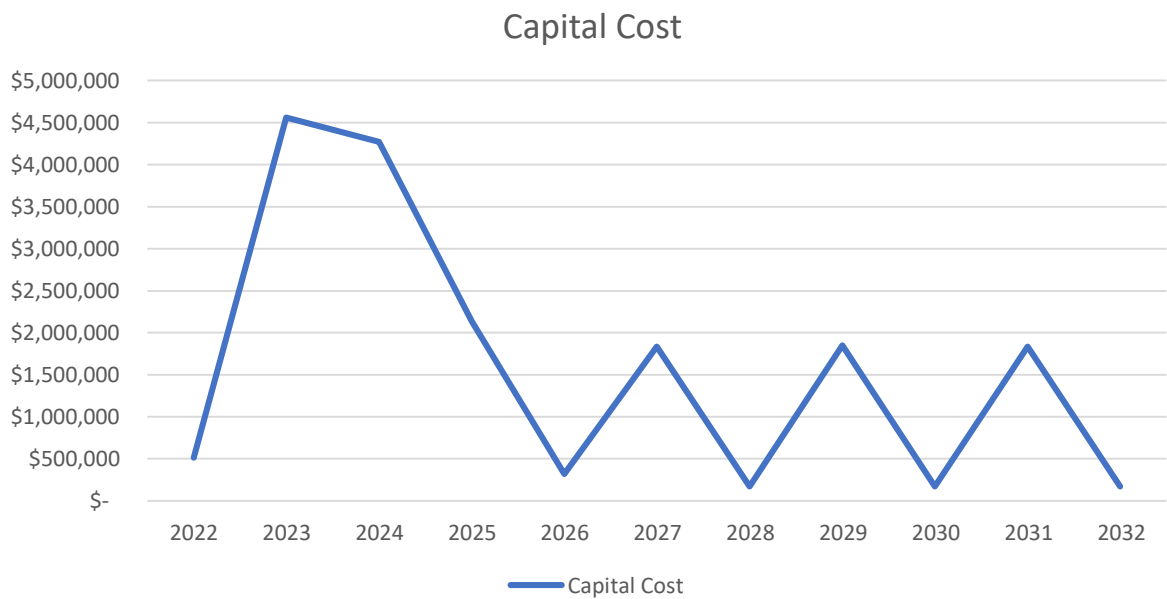
Project Name	Asset Category	Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Dibble Street East Renovation	E	Design Engineer Services										
	R	Construction Component										
	W	Construction Component										
	S	Construction Component										
	ST	Construction Component										
	G	Construction Component										
	E	Contract Administration Services										
Prescott Water Tower	E	Design Engineer Services										
	W	Construction Component	\$2,000,000									
	G	Construction Component	\$1,800,000									
	E	Contract Administration Services	\$60,000									
Edward Street Bridge	E	Design Engineer Services										
	R	Construction Component										
	G	Construction Component										
	E	Contract Administration Services										
East Street Reconstruction	E	Design Engineer Services	\$170,000									
	R	Construction Component		\$494,000								
	W	Construction Component		\$338,000								
	S	Construction Component		\$295,000								
	ST	Construction Component		\$320,000								
	G	Construction Component		\$255,000								
	E	Contract Administration Services		\$128,000								
Park and Duke Street Reconstruction	E	Design Engineer Services			\$170,000							
	R	Construction Component				\$494,000						
	W	Construction Component				\$338,000						
	S	Construction Component				\$295,000						
	ST	Construction Component				\$320,000						
	G	Construction Component				\$255,000						
	E	Contract Administration Services				\$128,000						
Henry Street Reconstruction	E	Design Engineer Services					\$170,000					
	R	Construction Component						\$494,000				
	W	Construction Component						\$338,000				
	S	Construction Component						\$295,000				
	ST	Construction Component						\$320,000				
	G	Construction Component						\$255,000				
	E	Contract Administration Services						\$128,000				
King Street (Phase 1) Reconstruction	E	Design Engineer Services							\$170,000			
	R	Construction Component								\$494,000		
	W	Construction Component								\$338,000		
	S	Construction Component								\$295,000		

	ST	Construction Component								\$320,000		
	G	Construction Component								\$255,000		
	E	Contract Administration Services								\$128,000		
King Street (Phase 2) Reconstruction	E	Design Engineer Services									\$170,000	
	R	Construction Component										\$494,000
	W	Construction Component										\$338,000
	S	Construction Component										\$295,000
	ST	Construction Component										\$320,000
	G	Construction Component										\$255,000
	E	Contract Administration Services										\$128,000
Water Network	W	WTP - Filter surface wash replace # 1, 2 & 3	\$350,000									
	W	WTP - PLC CPU										
	W	WTP - SCADA - HMI										
Sanitary Network	SA	WWTP - SCADA - HMI										
		WWTP - Sludge Cover	\$100,000									
		WWTP - Equalization Tank Cover	\$65,000									
		WWTP - Grease Dewatering										
		Pump Station Communications / Integration	\$60,000									
Engineering Studies	E	Road Needs Study	\$10,000					\$10,000				
	E	Safe Sidewalks Study	\$5,000					\$5,000				
	E	OSIM Reporting		\$3,000		\$3,000		\$3,000		\$3,000		
	E	Schedule "C" EA for Prescott WPCP		\$150,000								
	E	Schedule "C" EA for Prescott WTP			\$150,000							
	E	Transportation Master Plan		\$150,000								

Abbreviations: (E) Engineering, (R) Road Network, (B) Bridge, (W) Water Network, (SA) Sanitary Network, (ST) Storm Network, (G) General Construction

The 10 Year Capital Plan spending is summarized in the following table.

Table 33: 10 Year Annual Capital Spending Summary



5.3. Desired Funding Levels

*To be part of 2025 Asset Management Plan Update

6. Financing Strategy

*To be part of 2025 Asset Management Plan Update

Appendix A

Town of Prescott's Strategic Asset Management Planning Policy



Policy Type:	Finance
Policy #:	FN-200-01
Approved by Council:	July 2019
Last Reviewed:	July 2024

Asset Management Policy

Policy

The Corporation of the Town of Prescott is committed to providing services to residents in a fiscally responsible manner that support a healthy and vibrant community. With this commitment in mind, assets must be managed in a way that allows the Town to achieve its goals, plans and policies.

The asset management plans and progress made on the plans will be considered annually in the development of the Town's capital budgets, operating budgets, and long-term financial plans.

Staff will reference the asset management plan to determine forecasted spending needs identified in the plan, verify progress made on the plan to identify potential gaps, and prioritize spending needs, based on the gaps identified in the plan and recent developments, for the year to be budgeted for.

Asset management planning will be aligned with the Town's Official Plan. The asset management plans will reflect how the community is projected to change and the related asset impact. The Town will achieve this by consulting with those responsible for managing the assets to analyze the future costs and viability of projected changes. Methods, assumptions, and data used in the selection of projected changes should be documented to support the recommendations in the Asset Management Plan.

Climate change and environmental impact will be considered as part of the Town's risk management approach embedded in local asset management planning methods. This approach will balance the potential cost of vulnerabilities to climate change impact and other risks with the cost of reducing these vulnerabilities. The decision making process will also consider the environmental impact of choosing particular materials or assets and seek to reduce the overall environmental impact over the life and disposal of the asset. A balance will be struck in the levels of service delivered through operations, maintenance schedules, disaster response plans, contingency funding, and capital investments. The Town will continue to work with our partners in regard to climate change mitigation and adaptation.

The Town recognizes the need for stakeholder input into the planning process and will foster informed dialogue using the best available information.

Definitions

In this policy the following definitions are used:



Policy Type:	Finance
Policy #:	FN-200-01
Approved by Council:	July 2019
Last Reviewed:	July 2024

Asset Management Policy

Asset management Plan - Means a strategic document that states how a group of assets are to be managed over a period of time. The plan describes the characteristics and condition of infrastructure assets, the levels of service expected from them, planned actions to ensure the assets are providing the expected level of service, and financing strategies to implement the planned actions.

Capitalization Thresholds – The Town’s Asset Management Policy applies to all assets whose role in service delivery requires deliberate management by the Town. The Service-focus intent of this policy differentiates its requirements for identifying assets from the capitalization thresholds which are developed for the purposes of financial reporting. For this reason, the capitalization threshold developed for financial reporting will not be the guide in selecting the assets covered by the asset management planning process.

Infrastructure - Means municipal tangible capital assets primarily for public use or benefit in Ontario.

Purpose

The purpose of this policy is to establish consistent standards and guidelines for management of the Town’s assets applying sound technical, social, and economic principles that consider present and future needs of users, and the service expected from the assets. This means balancing the total lifecycle cost of ownership and service levels that best meet the needs of the community while being cognizant of the risk of failure that is acceptable. The standards and guidelines must adhere to the following:

Vision and Goals

The Town will proactively manage its assets to achieve:

- Effective delivery of service
- Supporting sustainability and economic development
- Employing prudent financial planning and decision making methodologies

The goals of this of this policy are to:

- Provide a framework for implementing asset management to enable a consistent and strategic approach at all levels of the organization
- Provide guidance to staff responsible for the asset management program

Statutory Requirements



Policy Type:	Finance
Policy #:	FN-200-01
Approved by Council:	July 2019
Last Reviewed:	July 2024

Asset Management Policy

The Infrastructure for Jobs and Prosperity Act, 2015 sets out principles to guide asset management planning in municipalities in Ontario. The Town of Prescott will strive to incorporate the following principles whenever possible into the day to day operation of the Town.

Forward looking: The Towns shall take a long-term view while considering demographic and economic trends in the Region.

Budgeting and planning: The Town shall take into account any applicable budgets or fiscal plans, such as fiscal plans released under the Fiscal Transparency and Accountability Act, 2004 and Budgets adopted under Part VII of the Municipal Act, 2001.

Customer Focused: The Town will have clearly defined levels of service and apply asset management practices to maintain the confidence of customer in how the Town's assets are managed.

Service Focused: The Town will consider all the assets in a service context and take into account a coordinated approach to optimizing those assets.

Risk Based: The Town will manage the risks associated with attaining the desired level of service by focusing resources, expenditures, and priorities based upon risk assessments, and the corresponding cost/benefit, recognizing that public safety is paramount.

Prioritizing: The Town shall clearly identify infrastructure priorities which will drive investment decisions.

Economic Development: The Town shall promote economic competitiveness, productivity, job creation, and training opportunities.

Transparency: The Town shall be evidence-based and transparent. Additionally, subject to any prohibition under an Act or otherwise by law on the collection, use, or disclosure of information, the Town shall make decisions with respect to infrastructure based on information that is publicly available or made available to the public and share information with implications on infrastructure and investment decisions with the Government and broader public sector entities.

Consistency: The Town shall ensure the continued provision of core public services.



Policy Type:	Finance
Policy #:	FN-200-01
Approved by Council:	July 2019
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Asset Management Policy

Environmental conscious; the Town shall minimize the impact of infrastructure on the environment by respecting and helping maintain ecological and biological diversity, by augmenting resilience to effects of climate change and by endeavouring to make use of acceptable recycled aggregates.

Health and safety: The Town shall ensure that the health and safety of workers involved in the construction and maintenance of infrastructure assets is protected.

Community focused: The Town shall promote community benefits, being the supplementary social and economic benefits arising from an infrastructure project that are intended to improve the well-being of a community affected by the project, such as local job creation and training opportunities, improvement of public spaces within the community, and promoting accessibility for persons with disabilities.

Value Based Affordability: The Town will chose practices, interventions, and operations that aim at reducing the total life cycle costs of an asset, while maintaining the acceptable level of service. Decisions are based on balancing the level of service, with risks, and costs.

Innovation: the Town shall create opportunities to make use of innovative technologies, services and practices, particularly where doing so would utilize technology, techniques, and practices developed in Ontario.

In addition the Town must adhere to the requirements outlined in the Minimum Maintenance Standards currently in force and any other legislation specific to the Municipality.

Existing Plans and Policies

The Town has developed and adopted an Official Plan, an Emergency Management Plan, a Multi-Year Accessibility Plan, a Community Improvement Plan, an Asset Management Plan, and Recreation Master Plan. These plans were designed to meet the legislative requirements and work together to achieve the Town's mission of providing innovation and excellence in service delivery. These plans will be reviewed regularly by staff and annual spending requirements in support of the plans' objectives will be incorporated into the budgeting process. All of the Town's plans rely to some extent on the physical assets owned by the Town and the commitment of staff to ensure their strategic use. This includes the long term maintenance, repair, and replacement of existing assets along with the acquisition of new assets to meet the evolving needs in the Town.



Policy Type:	Finance
Policy #:	FN-200-01
Approved by Council:	July 2019
Last Reviewed:	July 2024

Asset Management Policy

In addition, the existing Town policies complement the planning documents by providing details for the implementation of strategic objectives.

Guiding Principles

The policy requires the commitment of key stakeholders within the Town's organization to ensure the policy contains a clear plan that can be implemented, reviewed and updated.

Council, on behalf of the citizens, are entrusted with the responsibility of overseeing the management of the assets. They will approve the Asset Management Planning documents and required updates every five years. They will review management's implementation of the plan as part of the annual budget process. They will support efforts to improve the plan and ensure it includes changes necessitated by updates to other Town strategic documents.

Staff will oversee the policy implementation and ensure both the Asset Management Plan and the Asset Management Policy are in compliance with Provincial Asset Management regulations. Management will ensure that current year and long range asset requirements are incorporated into the budget presented to Council annually. Management will update the Policy and Plan to reflect changes as needed and present them for Council approval at least every five years. These changes will include those reflected in the updates to the Development Charges Study, Roads Needs Study, Structural assessment reports, and all other condition assessments commissioned for assets covered by the plan.

Roles and Responsibilities

The Town's Asset Management Program requires a wide range of participation to ensure that it is executed and used effectively for the management of Town assets. The following parties have duties and responsibilities in the asset management program:

Council

- Approve the Asset Management Policy and direction of the Asset Management Program.
- Maintain adequate organization and financial resources to support the core practices of the Asset Management Program.



Policy Type:	Finance
Policy #:	FN-200-01
Approved by Council:	July 2019
Last Reviewed:	July 2024

Asset Management Policy

- Prioritize effective stewardship of assets in relation to establishing Township policies and plans and future budgets.
- Establish and monitor levels of service.

Senior Management Team

- Develop policy and update as required.
- Provide corporate oversight to goals and provide direction in support of the Asset Management Program.
- Provide departmental staff coordination
- Develop and monitor levels of service and make recommendations to Council.
- Track, analyze and report on the Asset Management Program's progress and results.

Chief Administrative Officer / Treasurer

- Provide organization-wide leadership in Asset Management practices and concepts.
- Ensure senior management team staff coordination and participation.
- Manage policy and policy updates.
- Coordinate, data management, and track Asset Management program implementation and progress.

Director of Operations

- Provide leadership in Asset Management practices and concepts of municipal infrastructure assets.
- Develop the Asset Management Program component for assessing existing infrastructure and planning requirements for the lifecycle evaluation of these assets.



Policy Type:	Finance
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Asset Management Policy

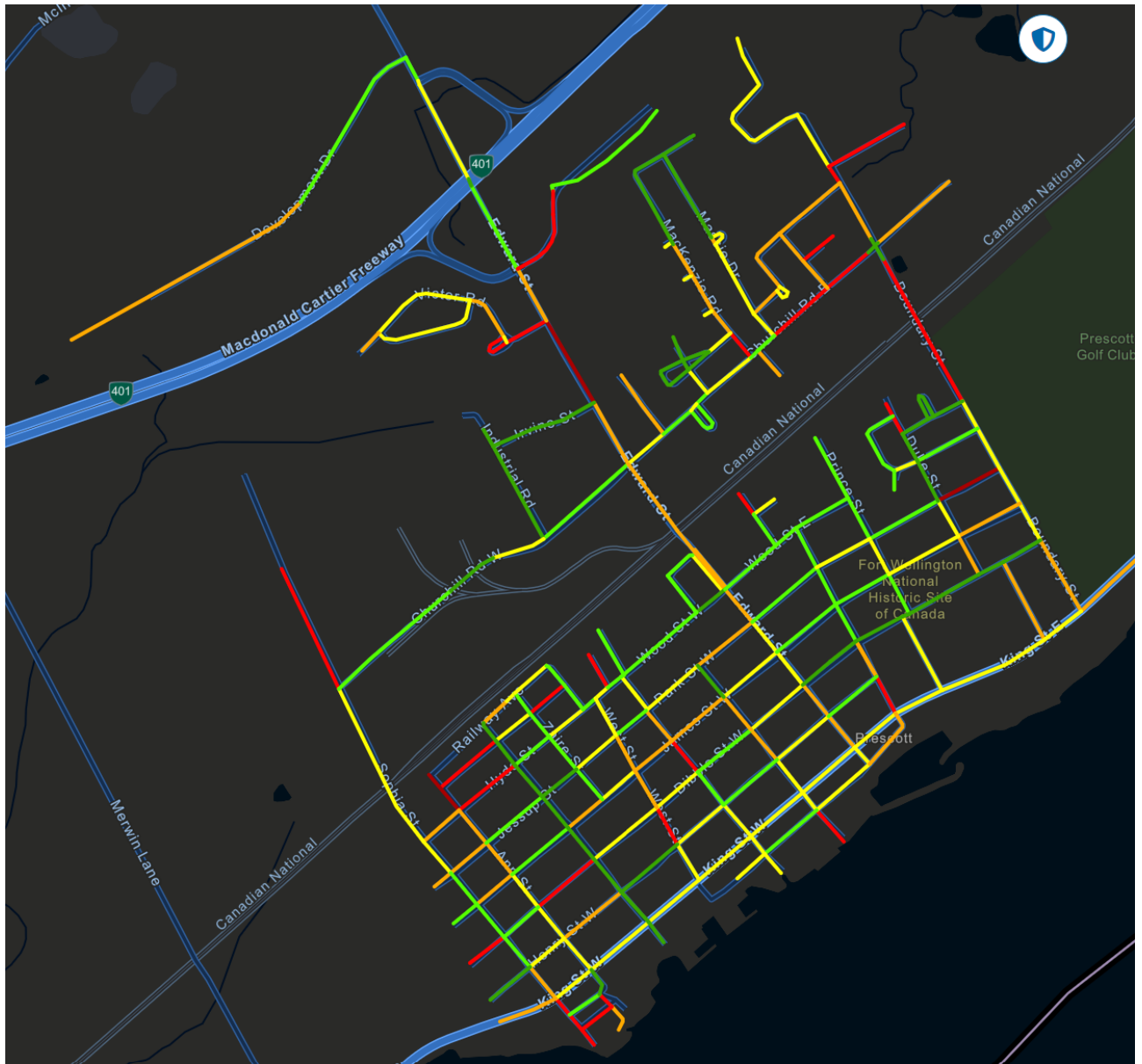
- Monitor levels of service.
- Coordinate, data management, and track Asset Management program implementation and progress.
- Coordinate and track Asset Management program for assets.

Departmental Staff

- Utilize the new business processes and technology tools developed as part of the Asset Management Program.
- Participate in implementation task teams to carry-out Asset Management activities.
- Implement and maintain the desired level of service.

Appendix B

Road Network Figures



Appendix C

Water Network Figures



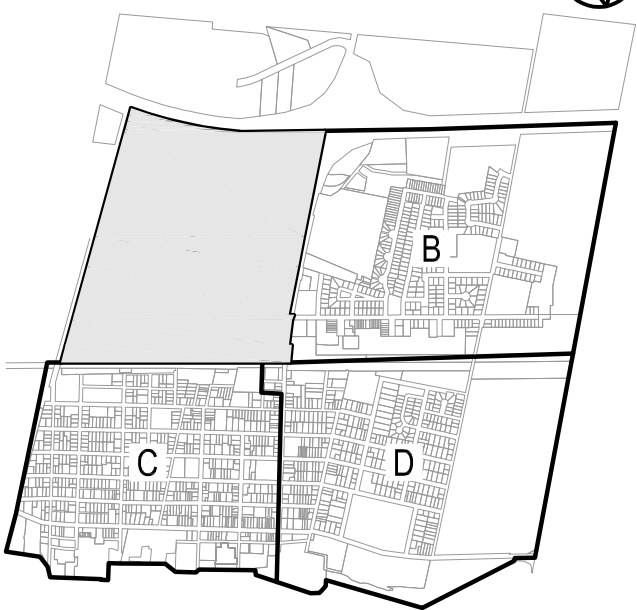
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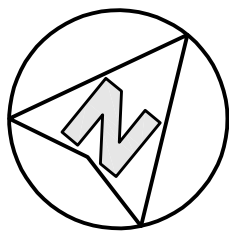
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- DI EXISTING DUCTILE IRON PIPE
- PVC EXISTING POLYVINYL CHLORIDE PIPE

KEYPLAN



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PRESCOTT
EST 1784
THE FORT TOWN

PROJECT:

**PRESCOTT WATER
AND SEWER ATLAS**

TITLE:

WATERMAIN ATLAS

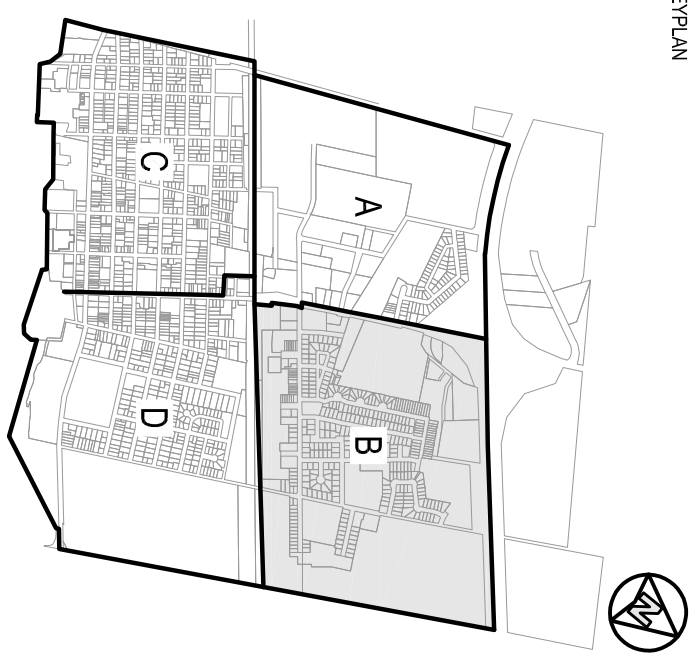
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DRAWN BY: E.M./K.B.W.	DRAWING NO.
CHECKED BY: M.M.	C3.1



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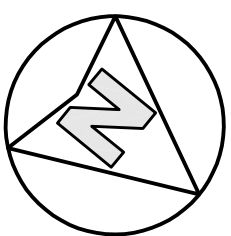
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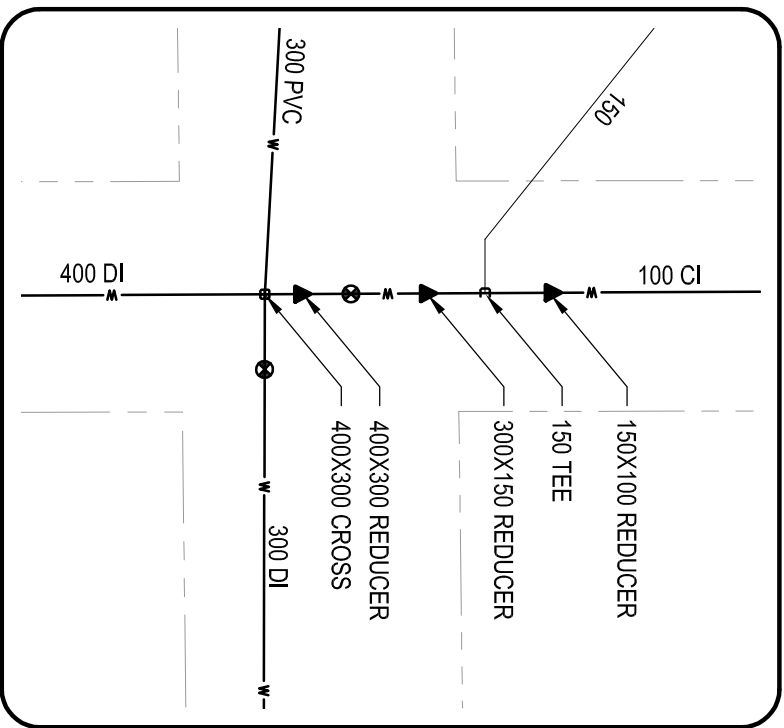
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E.M./K.B.W.	
CHECKED BY:	
M.M.	C3.2



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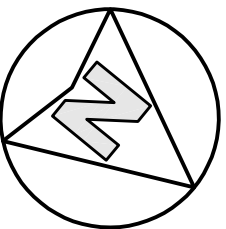
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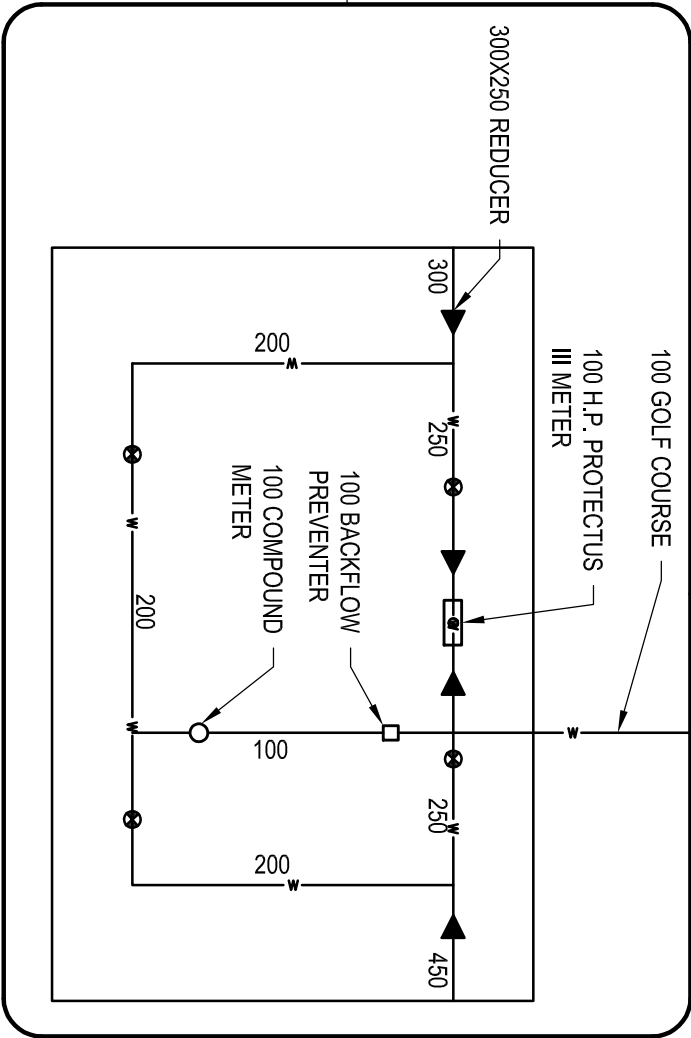
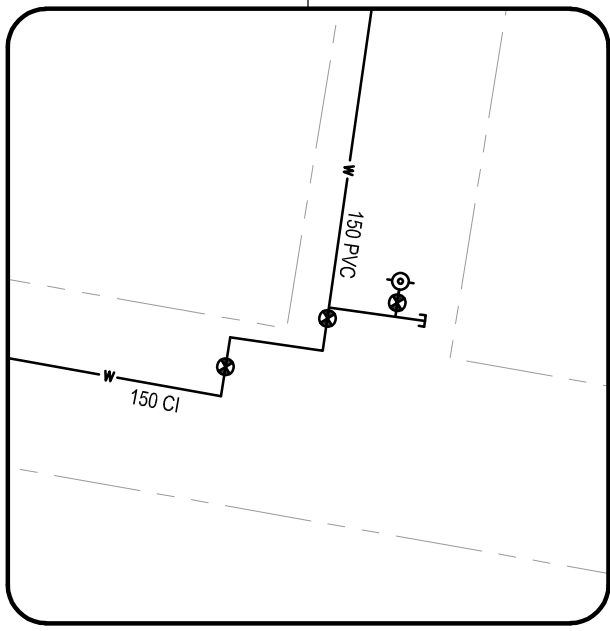
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**PRESCOTT WATER
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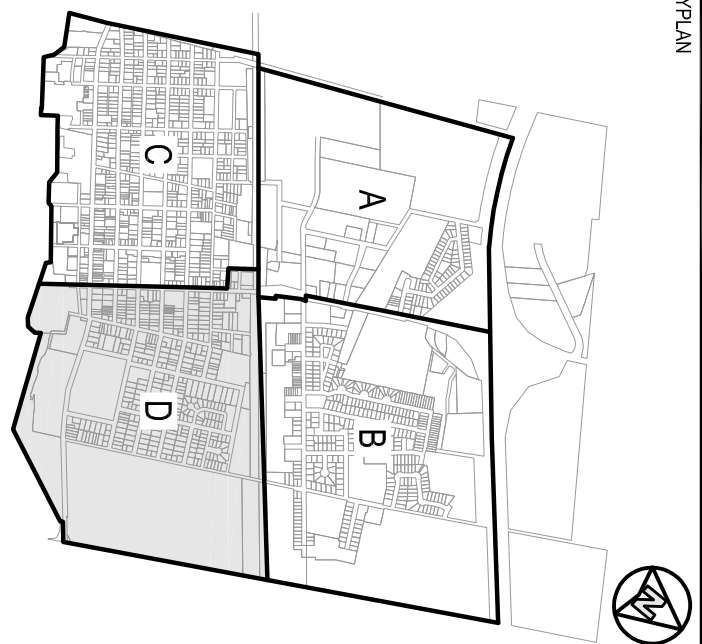
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- LEGEND:**
- EXISTING PROPERTY LINE
 - EXISTING WATERMAIN
 - EXISTING HYDRANT
 - EXISTING VALVE
 - NOMINAL PIPE DIAMETER
 - EXISTING COPPER PIPE
 - EXISTING CAST IRON PIPE
 - EXISTING DUCTILE IRON PIPE
 - EXISTING POLYETHYLENE GLYCOL (PE) PIPE



DATE	NO.	REVISION
2020/07/13	1	UPDATED WATERMAIN LAYOUT

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PRESOTT
EST. 1974
THE HORT TOWN

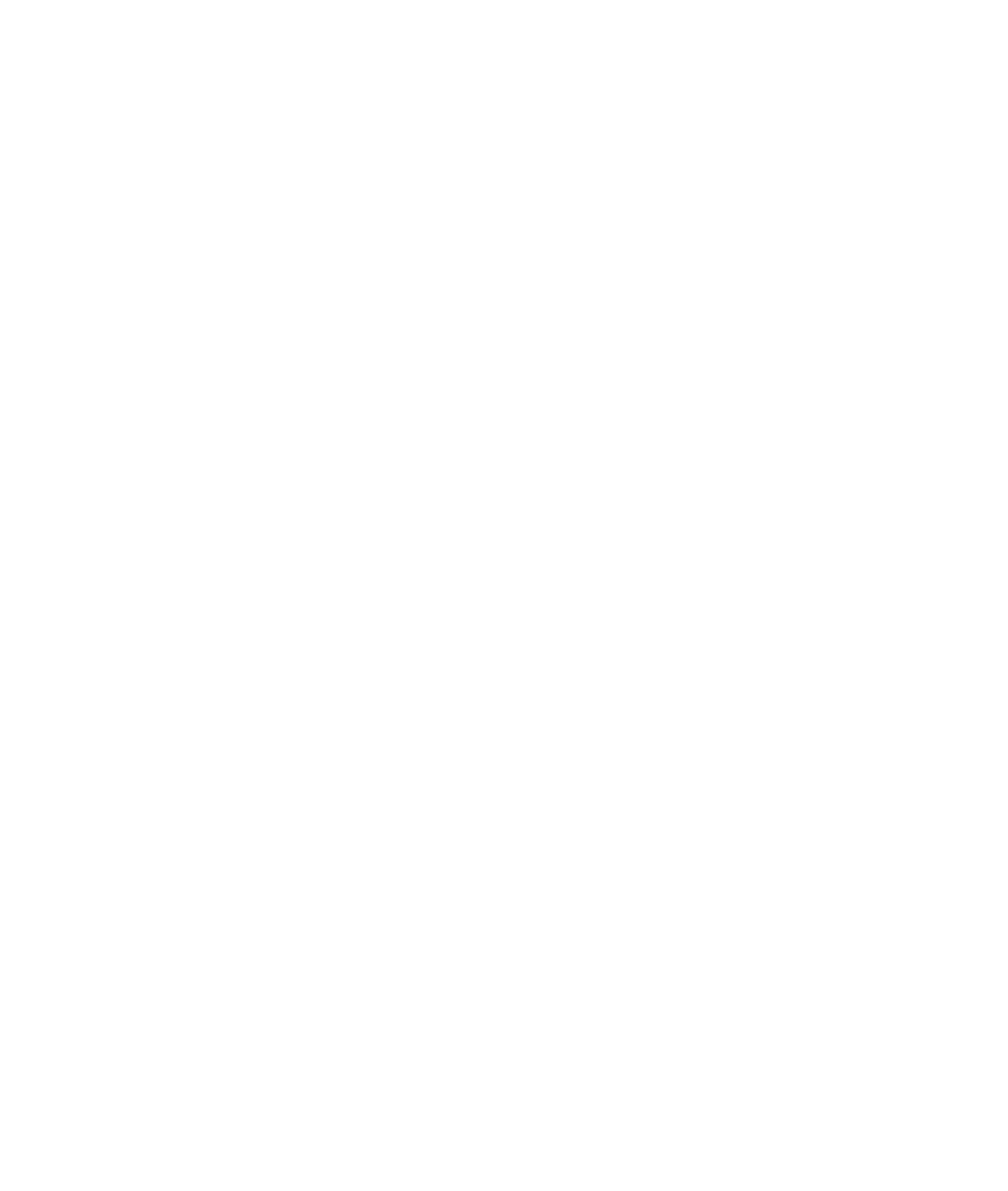
PROJECT:
**PRESOTT WATER
AND SEWER ATLAS**

TITLE:
WATERMAIN ATLAS

SCALE:	1/8" = 1'
DESIGNED BY:	DATE:
E.M.	2017/08/16
DRAWN BY:	DRAWING NO.
E.M./K.B.W.	
CHECKED BY:	
M.M.	

Appendix D

Sanitary Network Figures

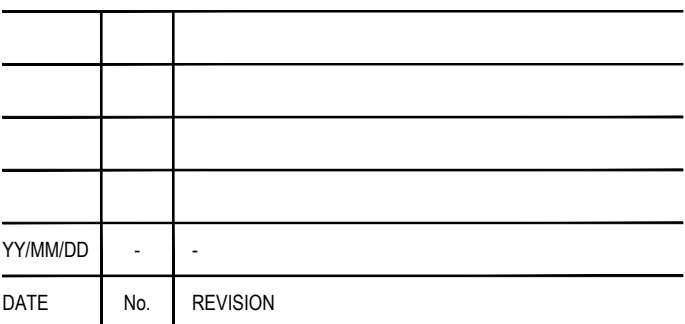


11/2021/21040 - Presentt AMPI60 Duv6.2 Cwll3.0 Non-irradiation Symman/17158.C4.1-3.Sanitary Attlee dunn Apr 20 2022.2.2/om BV-(d dam Dnanel)



SA EXISTING SANITARY SEWER
 FM EXISTING SANITARY FORCEMAIN
 ● EXISTING SANITARY MANHOLE
 ► DIRECTION OF FLOW
 200 PIPE SIZE DIAMETER
 A2700 MANHOLE NUMBER

PIPE CONDITION FROM CAMERA INSPECTION ASSESSMENT:
 — INSPECTED/NO COMMENTS
 — EXCELLENT
 — GOOD
 — FAIR
 — POOR
 — IMMEDIATE ACTION REQUIRED



PRESCOTT
EST 1784
THE FORT TOWN

PRESCOTT WATER AND SEWER ATLAS

SANITARY SEWER ATLAS

C1.2

M:\2021\21049 - Prescott ANPI\6.0 Dwg\6.2 Civil\3.0 Non-production\3.1 FGS\Inspection Summary\17158-C1-1-3-Sanitary_Atlas.dwg Apr 20, 2022-2:24pm BY:(Adam.Poaps)



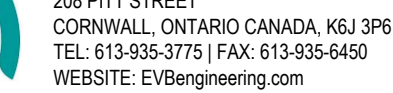
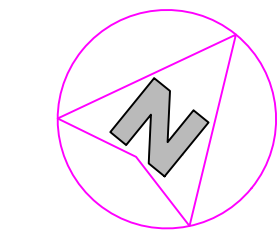
SA	EXISTING SANITARY SEWER
FM	EXISTING SANITARY FORCEMAIN
●	EXISTING SANITARY MANHOLE
►	DIRECTION OF FLOW
200	PIPE SIZE DIAMETER
A2700	MANHOLE NUMBER

PIPE CONDITION FROM CAMERA INSPECTION ASSESSMENT:

Yellow	INSPECTED/NO COMMENTS
Green	EXCELLENT
Blue	GOOD
Purple	FAIR
Orange	POOR
Red	IMMEDIATE ACTION REQUIRED

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THE FORT TOWN

PRESCOTT WATER AND SEWER ATLAS

SANITARY SEWER ATLAS

C1.4

Appendix E

Storm Network Figures



New Manhole No.	Old Manhole No.	T/G (m)	North Invert (m)	South Invert (m)	West Invert (m)	East Invert (m)
A6075	ST5115					
A6080	ST5117					
A6085	ST5118					
A6090	ST5116					
A6095	ST5102					
A6100	ST5103					
A6105	ST5206					
A6110	ST5119					
A6115	ST801					
A6120	ST5201					
A6125	ST5202					
A6130	ST5203					
A6135	ST5204					
A6140	ST803					
A6145	ST804					
A6150	ST5107					
A6155						
A6160	ST5108					
	ST5109					
	ST5110					

LEGEND:

- ST

EXISTING STORM SEWER
- O

EXISTING STORM MANHOLE
- ▣

EXISTING CATCHBASIN
- EXISTING CATCHBASIN MANHOLE
- ▶

DIRECTION OF FLOW
- 200

PIPE SIZE DIAMETER
- D5120

MANHOLE NUMBER
- PIPE CONDITION FROM CAMERA INSPECTION ASSESSMENT:

INSPECTED/NO COMMENTS

EXCELLENT

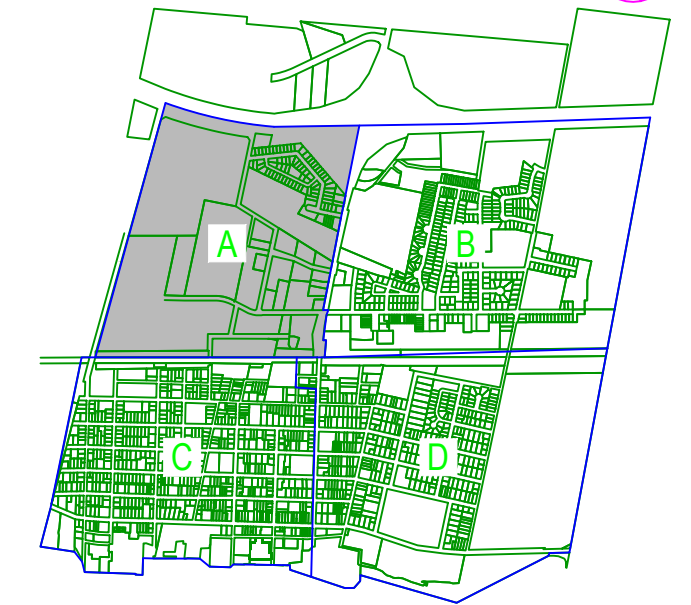
GOOD

FAIR

POOR

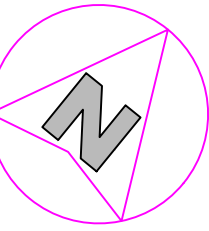
IMMEDIATE ACTION REQUIRED

KEYPLAN



YYMMDD	No.	REVISION

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CLIENT:

PRESCOTT
EST. 1784
THE FORT TOWN

PROJECT:

**PRESCOTT WATER
AND SEWER ATLAS**

TITLE:

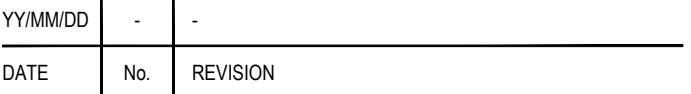
STORM SEWER ATLAS

SCALE: 1:2000	JOB NO: 17158
DESIGNED BY: E.M.	DATE: 2017/08/16
DRAWN BY: E.M./K.B.W.	DRAWING NO.
CHECKED BY: M.M.	C2.1

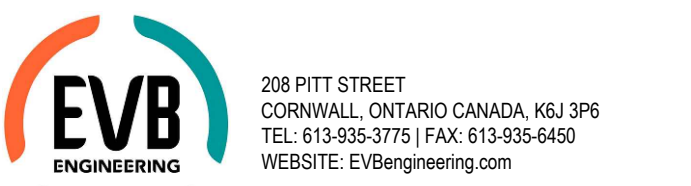
ST	EXISTING STORM SEWER
OT	EXISTING STORM MANHOLE
CB	EXISTING CATCHBASIN
CH	EXISTING CATCHBASIN MANHOLE
►	DIRECTION OF FLOW
200	PIPE SIZE DIAMETER
D5120	MANHOLE NUMBER

PIPE CONDITION FROM CAMERA INSPECTION ASSESSMENT:

—	INSPECTED/NO COMMENTS
—	EXCELLENT
—	GOOD
—	FAIR
—	POOR
—	IMMEDIATE ACTION REQUIRED



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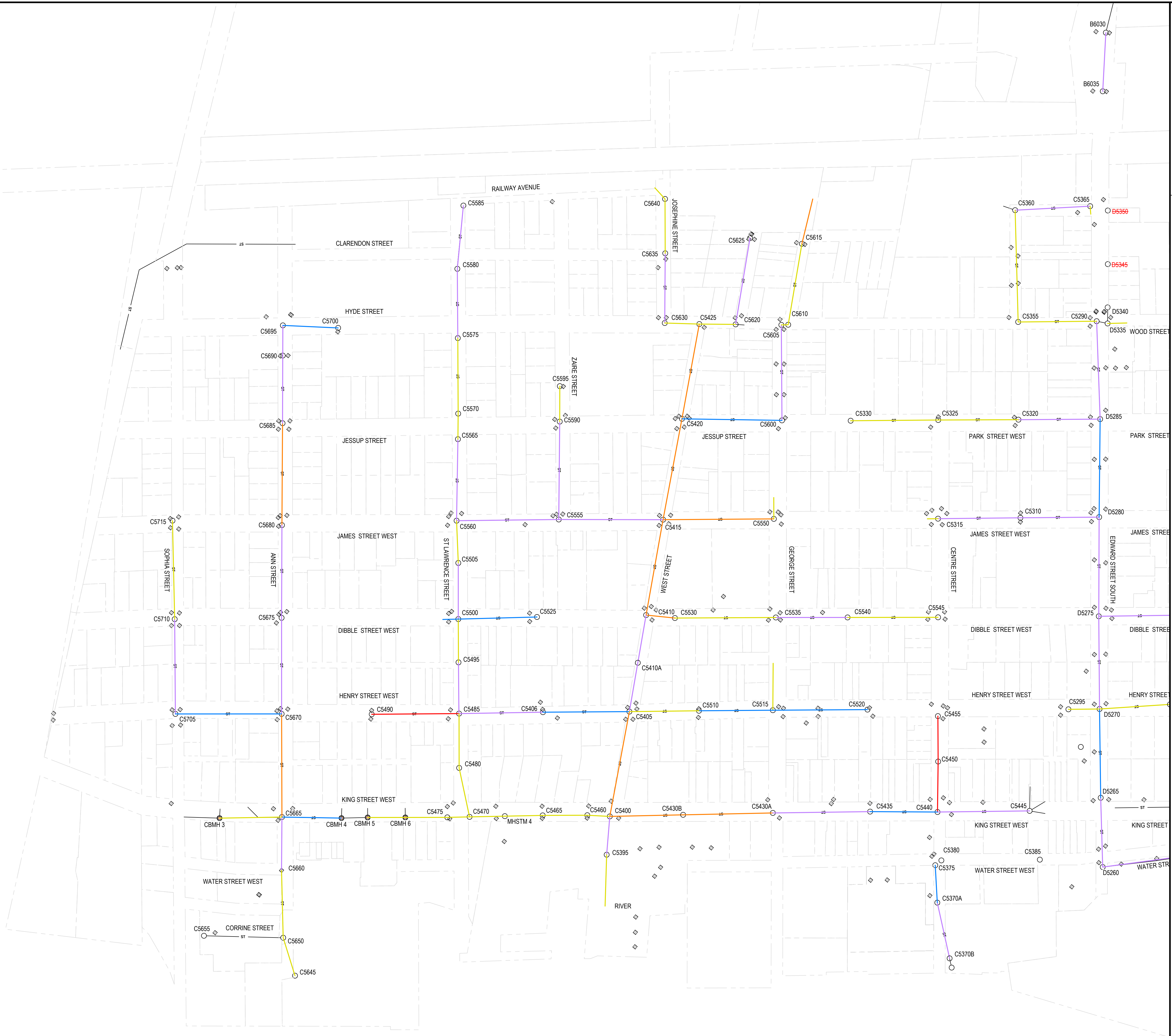
PROJECT: PRESCOTT WATER AND SEWER ATLAS

TITLE:

STORM SEWER ATLAS

SCALE: 1:2000	JOB NO: 17158
DESIGNED BY: E.M.	DATE: 2017/08/16
DRAWN BY: E.M./K.B.W.	DRAWING NO.
CHECKED BY: M.M.	C2.2

New Manhole No.	Old Manhole No.	T/G (m)	North Invert (m)	South Invert (m)	West Invert (m)	East Invert (m)
C5295	ST408					
C5310	ST415					
C5315	ST426					
C5320	ST417					
C5325	ST418					
C5330	ST419					
C5335	ST423					
C5360	ST424					
C5365	ST425					
C5370	ST301					
C5375	ST302					
C5380	ST303					
C5385	ST304					
C5390	-					
C5395	ST201					
C5400	ST202					
C5405	ST214					
C5410	ST224					
C5415	ST231					
C5420	ST235					
C5425	ST239					
C5430	ST209					
C5435	ST210					
C5440	ST211					
C5445	ST212					
C5450	ST213					
C5455	-					
C5460	ST203					
C5465	ST204					
C5470	ST106	80.75	78.34		78.22	78.22
C5475	ST118					
C5480	-	81.67	79.53	79.45		
C5485	ST216	82.73	81.08	81.09	80.74	80.55
C5490	ST217					
C5495	ST435	84.25	82.22	82.18		
C5500	ST428	86.23	83.24	83.13	83.32	83.33
C5505	ST427	89.32	89.61	86.73		
C5510	ST219					
C5515	ST220					
C5520	ST221					
C5525	ST225					
C5530	ST227					
C5535	ST228					
C5540	ST229					
C5545	ST230					
C5550	ST234					
C5555	ST232					
C5560	ST233	91.90	89.54	89.63	89.47	89.43
C5565	ST429	95.78	94.12	93.00		
C5570	ST430	96.71	94.44	94.37		
C5575	ST431	97.23	95.49	95.23		
C5580	ST432	96.50	94.74	94.77		
C5585	ST433	95.23	94.06	93.88	93.87	
C5590	ST236					
C5595	ST237					
C5600	ST238					
C5605	ST245					
C5610	ST246					
C5615	ST248					
C5620	ST243					
C5625	ST244					
C5630	ST240					
C5635	ST241					
C5640	ST242					
C5645	OUTLET					
C5650	ST101					
C5655	ST117					
C5660	ST102					
C5665	ST103					
C5670	ST107					
C5675	ST109					
C5680	ST111					
C5685	ST113					
C5690	ST114					
C5695	ST115					
C5700	ST116					
C5705	ST108					
C5710	ST110					
C5715	ST112					



LEGEND:

ST

○

□

●

200

D5120

EXISTING STORM SEWER

EXISTING STORM MANHOLE

EXISTING CATCHBASIN

EXISTING CATCHBASIN MANHOLE

DIRECTION OF FLOW

PIPE SIZE DIAMETER

MANHOLE NUMBER

PIPE CONDITION FROM CAMERA INSPECTION ASSESSMENT:

INSPECTED/NO COMMENTS

EXCELLENT

GOOD

FAIR

POOR

IMMEDIATE ACTION REQUIRED

KEYPLAN

DATE	No.	REVISION

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CLIENT:

PROJECT:

PRESCOTT WATER AND SEWER ATLAS

TITLE:

STORM SEWER ATLAS

SCALE: 1:2000	JOB NO: 17158
DESIGNED BY: E.M.	DATE: 2017/08/16
DRAWN BY: E.M./K.B.W.	DRAWING NO.
CHECKED BY: M.M.	

C2.3

New Manhole No.	Old Manhole No.	T/G (m)	North Invert (m)	South Invert (m)	West Invert (m)	East Invert (m)
D5000	OUTLET					
D5005	ST601					
D5010	ST602					
D5015	ST603					
D5020	ST604					
D5025	ST5005					
D5030	ST606					
D5035	ST607					
D5040	ST608					
D5045	ST609					
D5050	ST610					
D5055	ST5001					
D5060	ST5002					
D5065	ST5003					
D5070						
D5075	ST5008					
D5080	ST5011					
D5085	ST5012					
D5090	ST5014					
D5095	ST5021					
D5100	ST5029					
D5105	ST5036					
D5110	ST5046					
D5115	ST5545					
D5120	ST5044					
D5125	ST5043					
D5130	ST5035					
D5135	ST5034					
D5140	ST5032					
D5145	ST5033					
D5150	ST5037					
D5155	ST5038					
D5160	ST5039					
D5165	ST4040					
D5170	ST5047					
D5175	ST5048					
D5180	ST5049					
D5185	ST5025					
D5190	ST5023					
D5195	ST4167					
D5200	ST5027					
D5205	ST5028					
D5210	ST5018					
D5215	ST5020					
D5220	ST5030					
D5225	ST5200					
D5230	ST5015					
D5235	ST4137					
D5240	ST5004					
D5245	ST401					
D5250	ST403					
D5255	ST4040					
D5260	ST402					
D5265	ST406					
D5270	ST407					
D5275	ST409					
D5280	ST4144/414					
D5285	ST435					
D5290	ST420					
D5300	ST410					
D5305	ST411					
D5335	ST422					
D5340	ST434					
D5345	-					
D5350	-					

